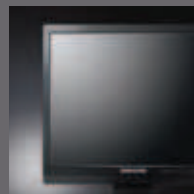
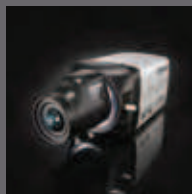
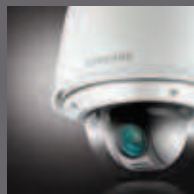


# SAMSUNG T O T A L SECURITY SOLUTION

Video Surveillance • Access Control • Intrusion Alarm

2011 New Products





# Samsung Total Security Solution

With the worldwide threat of crime and terrorism increasing daily, the demand for high quality video surveillance systems is also growing rapidly. Users are demanding new capabilities and greater efficiency from their security systems. Samsung Techwin is dedicated to the goal of producing high performance products that introduce features and capabilities that push the boundaries of what can be done with those products. We are redefining what you should expect from total security solution.



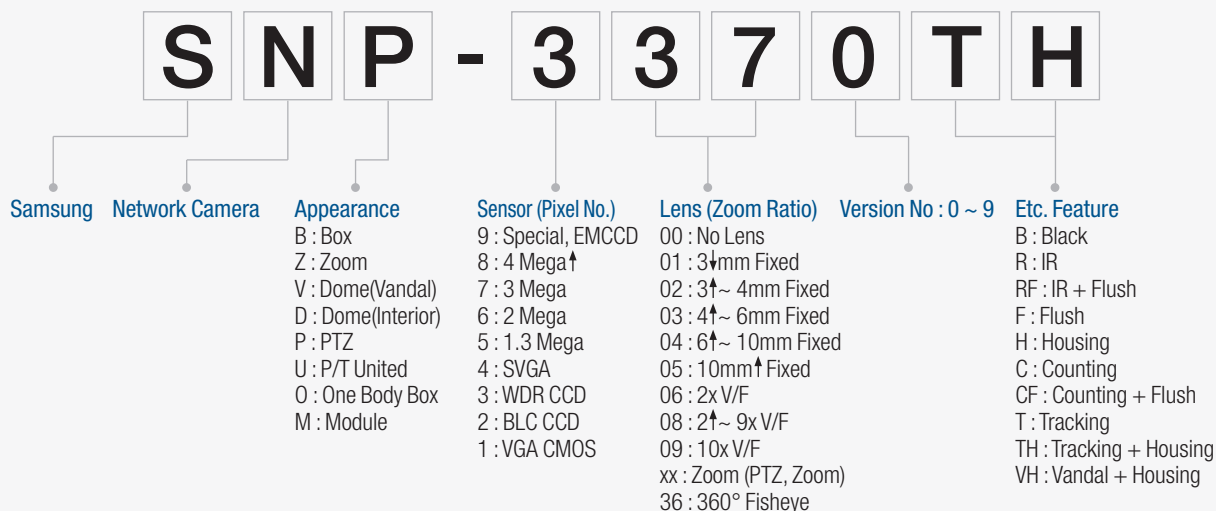
## Your Source for Professional Security Solution

Samsung Techwin was founded in 1977 as Part of Samsung's Machinery and Heavy Industries Group. This group has specialized in a wide range of high technology products such as semiconductor manufacturing systems, turbine engines, and defense systems. The need for advanced optical and image processing technologies came from the company's activities in these areas. After years of successful development of advanced optics and digital processing technology, the Security Solution division was created to provide commercial security products from these technologies. What you see in this catalog is not just another version of video security products produced from off the shelf components. Samsung Techwin's security solution products are based upon cutting edge technologies that are unique in the security industry. When you try our products you will experience the difference that these technologies provide.



# Product Numbering Rule

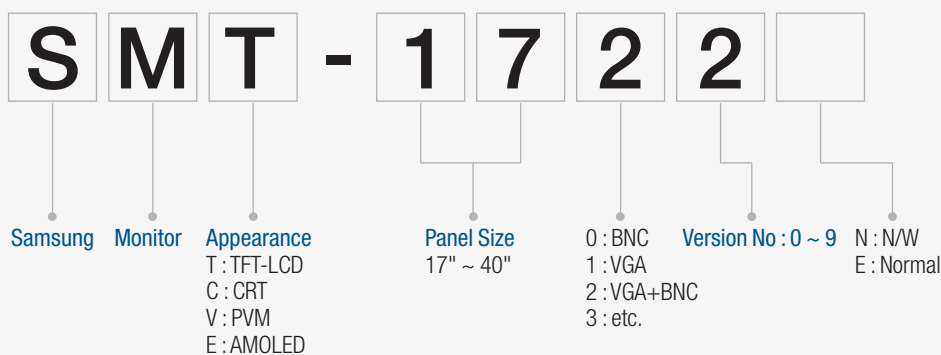
## Network Camera



## Analog Camera

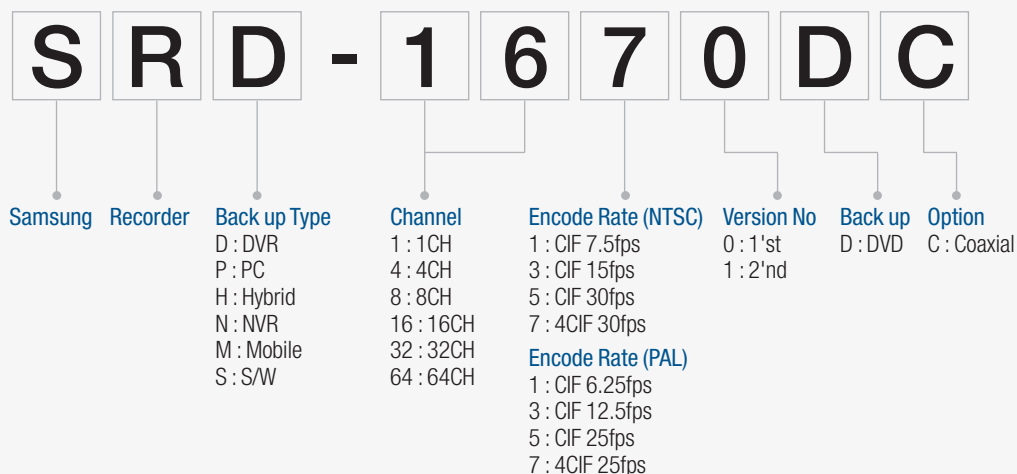


## Monitor

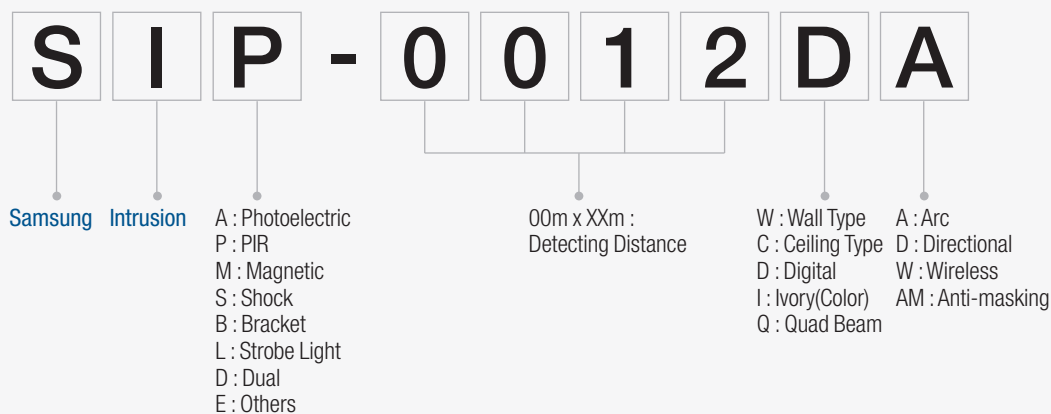


# Product Numbering Rule

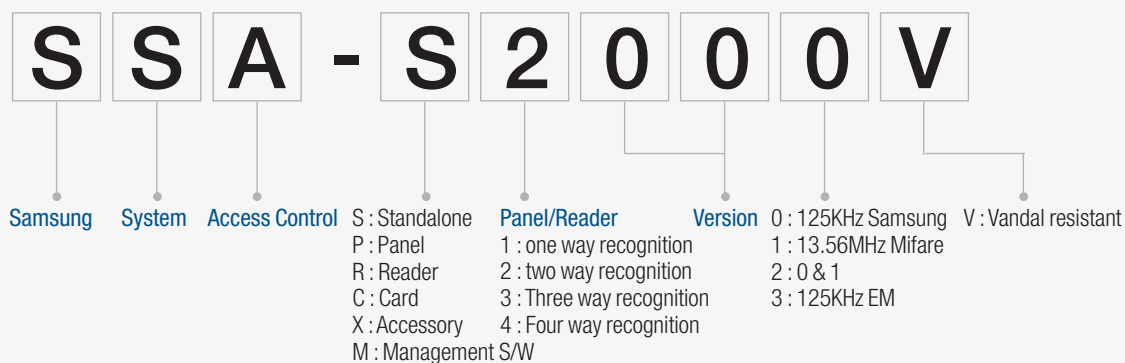
## DVR / NVR



## Intrusion Alarm & Sensor



## Access Control System








# Product Line up





## NETWORK

|   |   |    |
|---|---|----|
|    |  <b>SNB-7000</b>         | 16 |
|    | <b>SNB-5000</b>   | 17 |
|    | <b>SNB-3000</b>   | 18 |
|    | <b>SNB-2000</b>   | 19 |
|    | <b>SNB-1000</b>   | 20 |
|    |  <b>SNZ-5200</b>         | 21 |
|    | <b>SNO-5080R</b>  | 22 |
|    |  <b>SND-7080/7080F</b>   | 23 |
|    | <b>SND-5080/5080F</b>   | 24 |
|    | <b>SND-3080C/3080CF</b>   | 25 |
|   | <b>SND-3080/3080F</b>   | 26 |
|  | <b>SND-1010</b>   | 27 |
|  |  <b>SNV-7080</b>       | 28 |
|  | <b>SNV-5080</b>   | 29 |
|  | <b>SNV-5010</b>   | 30 |
|  | <b>SNV-3120</b>   | 31 |
|  | <b>SNV-3080</b>   | 32 |
|  | <b>SNP-5200/5200H</b>   | 33 |
|  | <b>SNP-3430H</b>  | 34 |
|  | <b>SNP-3370TH/3301H</b>   | 35 |
|  | <b>SNP-3370/3301</b>  | 36 |
|  | <b>SNP-3120/3120V/3120VH</b>  | 37 |
|  | <b>SRN-6450/3250</b>  | 38 |
|  |  <b>SRN-1670D/470D</b> | 39 |
|  |  <b>SPE-400B/1600R</b> | 40 |
|  |  <b>SPE-400</b>        | 41 |

## NETWORK

|   |  |    |
|---|--|----|
|  | <b>SPE-100</b>   | 42 |
|  | <b>NET-i viewer</b>  | 43 |
|  | <b>NET-i ware</b>  | 44 |
|  |  <b>SmartViewer</b> | 45 |

## CAMERA




|  |   |    |
|--|---|----|
|     | <b>SCB-4000</b>   | 55 |
|     | <b>SCB-3001</b>   | 56 |
|     | <b>SCB-3000</b>   | 57 |
|     | <b>SCB-2001</b>   | 58 |
|     | <b>SCB-2000</b>   | 59 |
|    | <b>SCB-1000</b>   | 60 |
|   | <b>SUB-2000</b>   | 61 |
|   | <b>SCZ-3430/2430</b>  | 62 |
|  | <b>SCZ-3370/2370</b>  | 63 |
|   | <b>SCZ-3250/2250</b>  | 64 |
|   | <b>SCO-2370</b>   | 65 |
|   | <b>SCO-2080</b>   | 66 |
|   | <b>SCO-2120R</b>  | 67 |
|   | <b>SCO-2080R</b>  | 68 |
|   | <b>SCB-3021/3020/2020</b>   | 69 |
|   |  <b>SCB-2010</b> | 70 |
|   |  <b>SCD-3081</b> | 71 |
|   | <b>SCD-3080/2080</b>  | 72 |
|   | <b>SCD-2080E/2060E</b>  | 73 |
|   | <b>SCD-2020/2040/2021</b>   | 74 |
|   | <b>SCD-2010/2030</b>  | 75 |

# Product Line up

## CAMERA

|   |                       |     |
|---|-----------------------|-----|
|    | SCD-2080R             | 76  |
|    | SCD-2020R             | 77  |
|    | SCD-2010F             | 78  |
|    | SUD-3080/3080F        | 79  |
|    | SUD-2080/2080F        | 80  |
|    | SCV-3120              | 81  |
|    | SCV-2120              | 82  |
|    | SCV-3080/2080         | 83  |
|    | SCV-2060              | 84  |
|   | SCV-2081R             | 85  |
|  | SCV-2080R             | 86  |
|  | SCV-2010F             | 87  |
|  | SCP-3430H/2430H       | 88  |
|  | SCP-3430/2430         | 89  |
|  | SCP-3370TH/3370H/3370 | 90  |
|  | SCP-2370TH/2370H/2370 | 91  |
|  | SCP-2330H/2330        | 92  |
|  | SCP-2270H/2270        | 93  |
|  | SCP-3250H/2250H       | 94  |
|  | SCP-3250/2250         | 95  |
|  | SCP-3120/3120V/3120VH | 96  |
|  | SCP-2120              | 97  |
|  | SCU-2370              | 98  |
|  | SCU-9051              | 99  |
|  | SCB-9051/9050         | 100 |





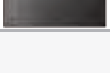
## LENS

|  |                              |     |
|--|------------------------------|-----|
|  | SLA-12240/880                | 104 |
|  | SLA-3580DN/2810D/550DA/612DN | 105 |
|   | SLA-M2882/M3180DN            | 106 |

## DVR

|  |                       |     |
|--|-----------------------|-----|
|    | SRD-1670/1670D/1670DC | 111 |
|    | SRD-1650/1650D/1650DC | 112 |
|    | SRD-1630/1630D/1630DC | 113 |
|    | SRD-1610/1610D/1610DC | 114 |
|    | SRD-1652D/852D        | 115 |
|   | SRD-870/870D/870DC    | 116 |
|  | SRD-850/850D/850DC    | 117 |
|  | SRD-830/830D/830DC    | 118 |
|  | SRD-470/470D          | 119 |
|  | SRD-450               | 120 |
|  | SVS-5R/5E             | 121 |

## MONITOR

|   |                      |     |
|---|----------------------|-----|
|  | SMT-3223             | 125 |
|  | SMT-2231             | 126 |
|  | SMT-1923/1922        | 127 |
|  | SMT-1912/1712        | 128 |
|  | SMT-1723/1722        | 129 |
|  | SMS-4600M/4610M/4620 | 130 |

# Product Line up




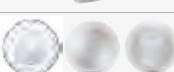


## CONTROLLER

|   |          |     |
|---|----------|-----|
|  | SPC-6000 | 132 |
|  | SPC-1010 | 133 |
|  | SPC-2000 | 134 |
|  | SPC-300  | 135 |









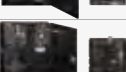




## PERIPHERAL

|   |                         |     |
|---|-------------------------|-----|
|    | SHP-3700H<br>SHP-3700F  |     |
|    | STB-370NPC              | 137 |
|  | SBP-300WM1              |     |
|  | SBP(SCX)-300WM/300CM    |     |
|  | SBP(SCX)-300HM1/300HM   |     |
|  | SBP(SCX)-300LM          |     |
|  | SBP(SCX)-300PM/300KM    | 138 |
|  | STB-300PP/300PW         |     |
|  | STB-40PF                |     |
|  | SBP-43/37               | 139 |
|  | SHB-4300H/4300H1/4300H2 |     |
|  | SHB-4200H/4200          |     |
|  | STH-500/200             | 140 |
|  | SBU-500WM/220PM         |     |
|  | STB-400                 |     |
|  | STB-4150V               | 141 |
|  | SCU-VAC                 |     |
|  | SCU-VAC1                |     |
|  | SPU-100TR               | 142 |
|  | SPU-400                 |     |
|  | SPU-400R                | 143 |

## INTRUSION ALARM SYSTEM

|   |                                   |     |
|---|-----------------------------------|-----|
|   | <b>NEW</b><br>SIC-0800/0400       | 156 |
|   | SIA-0010I/0010/0030/<br>0060/0120 | 157 |
|    | SIA-0030D/0060D/0120D             | 158 |
|    | SIA-0100Q/0200Q                   | 159 |
|    | <b>NEW</b><br>SIT-1212W           | 160 |
|    | SIP-1212W                         | 161 |
|   | SIP-0800DC                        |     |
|   | SIP-0012DA/1201DD                 | 162 |
|   | SIM-0001/0002/SIS-0001            |     |
|  | SIL-0001/SIE-0001                 | 163 |

## ACCESS CONTROL SYSTEM

|  |  |     |
|--|--|-----|
|   | SSA-S3010/S3020/S3040<br>SSA-S3011/S3021/S3041 | 170 |
|   | SSA-S2100/S2101                                | 171 |
|  | SSA-S2000/S2000V<br>SSA-S1000/S1000V           | 172 |
|   | SSA-R2010/R2020/R2040<br>SSA-R2011/R2021/R2041 | 173 |
|   | SSA-R2000/R2001/R2003<br>SSA-R2000V/R2001V     | 174 |
|   | SSA-R1000/R1001/R1003<br>SSA-R1100/R1101/R1103 | 175 |
|   | SSA-R1000V/R1001V<br>SSA-R1100V/R1101V         | 176 |
|  | SSA-P420(T)/P421(T)<br>SSA-P400(T)/P401(T)     | 177 |
|  | SSA-P112(T)/P102(T)                            | 178 |
|   | SSA-X100                                       | 179 |
|  | SSA-C100/C200/C110/C120<br>SSA-X500            | 180 |
|   | SSA-M1000/M1100                                | 181 |
|   | SSA-M2000/M2100                                | 182 |

SAMSUNG

# NETWORK

Samsung Total Security Solution

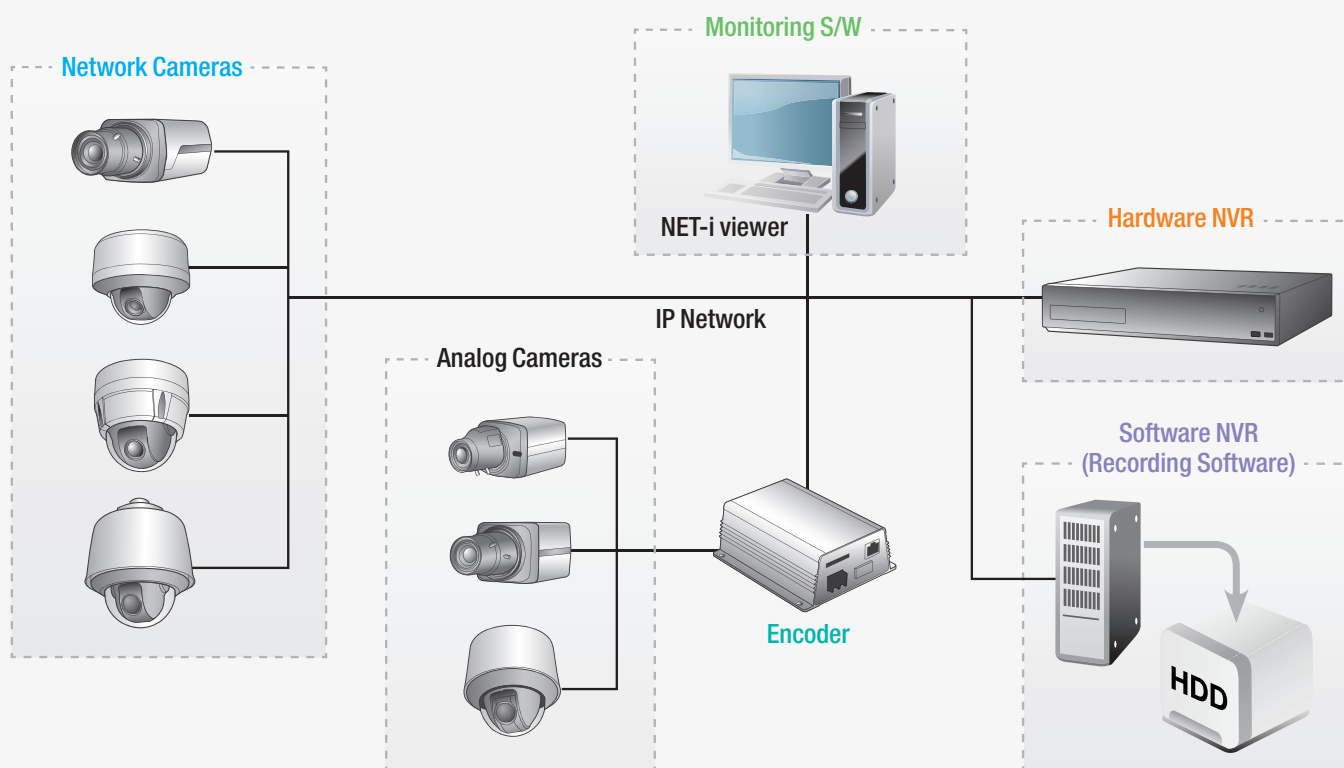




# Network Solution

## iPOLiS at a Glance

Samsung provides one-stop IP video surveillance solution ; Network Camera, Encoder, NVR, Monitoring Software, Hardware NVR, and Software NVR (Recording Software). Based on its cutting edge technology earned from long history in video surveillance industry, iPOLiS supports users with convenient & easy management and outstanding functions.



### Network Cameras

Network cameras communicate with monitoring/recording tools via IP network. Samsung is expanding its line ups for network cameras, based on its excellent technological background. Various types of network cameras which are equipped with useful functions.

### Network Video Encoder

To comprise surveillance system in network dose not mean having to change analog cameras were already installed. The encoder digitize the analog video signal into network so that the video from analog cameras can be transmitted via IP network.

### Monitoring Software

A common PC can be used as a monitoring device by installing NET-i, Samsung network monitoring software. Familiar operation and easy-to-use GUI will benefit users.

### Hardware NVR

Unlike DVR that digitize the analog video feeds, NVR receive digitized video images from IP network. While the DVR has to be located near the analog feeds, the NVR can be located anywhere on a network and users can simply access the recorded video.

### Software NVR (Recording Software)






NET-i ware, network recording software of Samsung, provides video streaming, recording and event management functions. Users can record video continuously, on schedule, on alarm and/or on motion detection.






# Network Selection

|                                    |   |   |   |   |   |
|------------------------------------|--|--|--|--|--|
| <b>Image Sensor</b>                | 1/2.8" 3M PS CMOS  | 1/3" 1.3M PS CMOS  | 1/3" Super HAD PS CCD  | 1/3" Super HAD PS CCD  | 1/4" PS CMOS   |
| <b>Min. Illumination</b>           | Color : 1Lux (50 IRE)<br>B/W : 0.08Lux (50 IRE)  | Color : 0.3Lux (50 IRE)<br>B/W : 0.01Lux (50 IRE)  | Color : 0.4Lux (50 IRE)<br>B/W : 0.04Lux (50 IRE)  | Color : 0.4Lux (50 IRE)<br>B/W : 0.4Lux (50 IRE)   | Color : 1.4Lux (50 IRE)  |
| <b>Day &amp; Night</b>             | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (Software)   | N/A  |
| <b>Wide Dynamic Range</b>          | Yes (* 2M mode only)   | N/A  | Yes  | N/A  | N/A  |
| <b>Analog Out</b>                  | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | N/A  |
| <b>Focal Length</b>                | N/A  | N/A  | N/A  | N/A  | N/A  |
| <b>Zoom Ratio</b>                  | N/A  | N/A  | N/A  | N/A  | N/A  |
| <b>Video Compression</b>           | H.264, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   |
| <b>Streaming</b>                   | Multiple streaming   | Multiple streaming   | Dual streaming   | Dual streaming   | Multiple streaming   |
| <b>Max. Resolution</b>             | 2048 x 1536  | 1280 x 1024  | NTSC : 704 x 480, PAL : 704 x 576  | NTSC : 704 x 480, PAL : 704 x 576  | 640 x 480  |
| <b>Max. Frame Rate</b>             | 20fps at 3M  | 30fps at HD (720p)   | NTSC : 30fps, PAL : 25fps  | NTSC : 30fps, PAL : 25fps  | NTSC : 30fps, PAL : 25fps  |
| <b>Audio I/O</b>                   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | N/A  | N/A  |
| <b>Audio Compression</b>           | G.711 u-law  | G.711 u-law  | G.711 u-law  | N/A  | N/A  |
| <b>Memory Slot</b>                 | Yes (SD/SDHC)  | Yes (SD/SDHC)  | Yes (SD/SDHC)  | N/A  | N/A  |
| <b>Alarm I/O</b>                   | 1 / 1  | 1 / 1  | 2 / 2  | 2 / 2  | 1 / 1  |
| <b>Intelligent Video Analytics</b> | N/A  | Yes  | Yes  | N/A  | N/A  |
| <b>Network Protocol</b>            | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |
| <b>Security</b>                    | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                           | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  | HTTPS(SSL) login authentication, Digest login authentication, User access log  | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                           |
| <b>Operating Temperature</b>       | -10°C ~ +50°C (+14°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   | 0°C ~ +50°C (+32°F ~ +122°F)   |
| <b>Operating Humidity</b>          | 20% ~ 80% RH   | 20% ~ 80% RH   | 20% ~ 80% RH   | 20% ~ 80% RH   | 20% ~ 80% RH   |
| <b>Power Requirement</b>           | 24V AC, 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  | 12V DC, PoE (IEEE802.3af)  |






|                                    |   |   |   |   |   |
|------------------------------------|--|--|--|--|--|
| <b>Image Sensor</b>                | 1/3" 1.3M PS CMOS  | 1/3" 1.3M PS CMOS  | 1/2.8" 3M PS CMOS  | 1/3" 1.3M PS CMOS  | 1/3" Super HAD PS CCD  |
| <b>Min. Illumination</b>           | Color : 0.7Lux (50 IRE)<br>B/W : 0.08Lux (50 IRE)  | Color : 0.3Lux (50 IRE)<br>B/W : 0Lux (50 IRE, IR LED on)  | Color : 1Lux (50 IRE)<br>B/W : 0.08Lux (50 IRE)  | Color : 0.3Lux (50 IRE)<br>B/W : 0.01Lux (50 IRE)  | Color : 0.4Lux (50 IRE)<br>B/W : 0.4Lux (50 IRE)   |
| <b>Day &amp; Night</b>             | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (Software)   |
| <b>Wide Dynamic Range</b>          | N/A  | N/A  | Yes (* 2M mode only)   | N/A  | Yes  |
| <b>Analog Out</b>                  | CVBS 1.0Vp-p   | DIP connector type   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   |
| <b>Focal Length</b>                | 4.45 ~ 89mm  | 2.8 ~ 10mm   | 3 ~ 8.5mm (Motorized V/F lens)   | 2.8 ~ 10mm   | 2.8 ~ 11mm   |
| <b>Zoom Ratio</b>                  | 20x  | 3.6x   | 2.8x   | 3.6x   | 3.9x   |
| <b>Video Compression</b>           | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   |
| <b>Streaming</b>                   | Multiple streaming   | Multiple streaming   | Multiple streaming   | Multiple streaming   | Dual streaming   |
| <b>Max. Resolution</b>             | 1280 x 1024  | 1280 x 1024  | 2048 x 1536  | 1280 x 1024  | NTSC : 704 x 480, PAL : 704 x 576  |
| <b>Max. Frame Rate</b>             | 30fps at all resolutions   | 30fps at HD (720p)   | 20fps at 3M  | 30fps at HD (720p)   | NTSC : 30fps, PAL : 25fps  |
| <b>Audio I/O</b>                   | Mic / Line in, Line out (Bi-directional audio)   | N/A  | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | N/A  |
| <b>Audio Compression</b>           | G.711 u-law  | N/A  | G.711 u-law  | G.711 u-law  | N/A  |
| <b>Memory Slot</b>                 | Yes (SD/SDHC)  | N/A  | Yes (SD/SDHC)  | Yes (SD/SDHC)  | Yes (SD/SDHC)  |
| <b>Alarm I/O</b>                   | 1 / 1  | 1 / 1  | 1 / 1  | 1 / 1  | 2 / 2  |
| <b>Intelligent Video Analytics</b> | Yes  | Yes  | N/A  | Yes  | People counting  |
| <b>Network Protocol</b>            | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |
| <b>Security</b>                    | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                           | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                           | HTTPS(SSL) login authentication, Digest login authentication, User access log  | HTTPS(SSL) login authentication, Digest login authentication, User access log  |
| <b>Protection</b>                  | N/A  | IP66 Grade, Vandal-resistant   | N/A  | N/A  | N/A  |
| <b>Operating Temperature</b>       | -10°C ~ +50°C (+14°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   |
| <b>Operating Humidity</b>          | 20% ~ 80% RH   | Less than 90% RH (Waterproof)  | 20% ~ 80% RH   | 20% ~ 80% RH   | 20% ~ 80% RH   |
| <b>Power Requirement</b>           | 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  |





# Network Selection

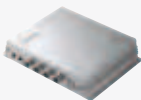




|                             |   |   |   |   |   |
|-----------------------------|--|--|--|--|--|
| Image Sensor                | 1/3" Super HAD PS CCD  | 1/4" PS CMOS   | 1/2.8" 3M PS CMOS  | 1/3" 1.3M PS CMOS  | 1/3" 1.3M PS CMOS  |
| Min. Illumination           | Color : 0.4Lux (50 IRE)<br>B/W : 0.4Lux (50 IRE)   | Color : 1.4Lux (50 IRE)  | Color : 1Lux (50 IRE)<br>B/W : 0.08Lux (50 IRE)  | Color : 0.3Lux (50 IRE)<br>B/W : 0.01Lux (50 IRE)  | Color : 1Lux (50 IRE)  |
| Day & Night                 | Yes (Software)   | N/A  | Yes (IR cut filter)  | Yes (IR cut filter)  | N/A  |
| Wide Dynamic Range          | Yes  | N/A  | Yes (* 2M mode only)   | N/A  | N/A  |
| Analog Out                  | CVBS 1.0Vp-p   | N/A  | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | DIP connector type   |
| Focal Length                | 2.8 ~ 11mm   | 2.9mm  | 3 ~ 8.5mm (Motorized V/F lens)   | 2.8 ~ 10mm   | 3mm  |
| Zoom Ratio                  | 3.9x   | N/A  | 2.8x   | 3.6x   | N/A  |
| Video Compression           | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   |
| Streaming                   | Dual streaming   | Multiple streaming   | Multiple streaming   | Multiple streaming   | Multiple streaming   |
| Max. Resolution             | NTSC : 704 x 480, PAL : 704 x 576  | 640 x 480  | 2048 x 1536  | 1280 x 1024  | 1280 x 1024  |
| Max. Frame Rate             | NTSC : 30fps, PAL : 25fps  | NTSC : 30fps, PAL : 25fps  | 20fps at 3M  | 30fps at HD (720p)   | 30fps at HD (720p)   |
| Audio I/O                   | N/A  | N/A  | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | N/A  |
| Audio Compression           | N/A  | N/A  | G.711 u-law  | G.711 u-law  | N/A  |
| Memory Slot                 | Yes (SD/SDHC)  | N/A  | Yes (SD/SDHC)  | Yes (SD/SDHC)  | N/A  |
| Alarm I/O                   | 2 / 2  | 1 / 1  | 1 / 1  | 1 / 1  | N/A  |
| Intelligent Video Analytics | N/A  | N/A  | N/A  | Yes  | Yes  |
| Network Protocol            | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |
| Security                    | HTTPS(SSL) login authentication, Digest login authentication, User access log  | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                           | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                           | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  |
| Protection                  | N/A  | N/A  | IP66 Grade, Vandal-resistant   | IP66 Grade, Vandal-resistant   | IP66 Grade, Vandal-resistant   |
| Operating Temperature       | -10°C ~ +50°C (+14°F ~ +122°F)   | 0°C ~ +50°C (+32°F ~ +122°F)   | -40°C ~ +50°C (-40°F ~ +122°F)   | -40°C ~ +50°C (-40°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   |
| Operating Humidity          | 20% ~ 80% RH   | 20% ~ 80% RH   | Less than 90% RH (Waterproof)  | Less than 90% RH (Waterproof)  | Less than 90% RH (Waterproof)  |
| Power Requirement           | 24V AC, 12V DC, PoE (IEEE802.3af)  | 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  | 12V DC, PoE (IEEE802.3af)  |

|                             |   |   |   |   |   |
|-----------------------------|--|--|--|--|--|
| Image Sensor                | 1/4" Ex-view HAD PS CCD  | 1/3" Super HAD PS CCD  | 1/3" 1.3M PS CMOS  | 1/3" 1.3M PS CMOS  | 1/4" Ex-view HAD PS CCD  |
| Min. Illumination           | Color : 0.7Lux (50 IRE)<br>B/W : 0.07Lux (50 IRE)  | Color : 0.4Lux (50 IRE)<br>B/W : 0.04Lux (50 IRE)  | Color : 0.7Lux (50 IRE)<br>B/W : 0.08Lux (50 IRE)  | Color : 0.7Lux (50 IRE)<br>B/W : 0.08Lux (50 IRE)  | Color : 0.7Lux (50 IRE)<br>B/W : 0.07Lux (50 IRE)  |
| Day & Night                 | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (IR cut filter)  |
| Wide Dynamic Range          | Yes  | Yes  | N/A  | N/A  | Yes  |
| Analog Out                  | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   |
| Focal Length                | 3.69 ~ 44.32mm   | 2.8 ~ 11mm   | 4.45 ~ 89mm  | 4.45 ~ 89mm  | 3.2 ~ 138.5mm  |
| Zoom Ratio                  | 12x  | 3.9x   | 20x  | 20x  | 43x  |
| Video Compression           | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   |
| Streaming                   | Multiple streaming   | Dual streaming   | Multiple streaming   | Multiple streaming   | Multiple streaming   |
| Max. Resolution             | NTSC : 704 x 480, PAL : 704 x 576  | NTSC : 704 x 480, PAL : 704 x 576  | 1280 x 1024  | 1280 x 1024  | NTSC : 704 x 480, PAL : 704 x 576  |
| Max. Frame Rate             | NTSC : 30fps, PAL : 25fps  | NTSC : 30fps, PAL : 25fps  | 30fps at all resolutions   | 30fps at all resolutions   | NTSC : 30fps, PAL : 25fps  |
| Audio I/O                   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   |
| Audio Compression           | G.711 u-law  | G.711 u-law  | G.711 u-law  | G.711 u-law  | G.711 u-law  |
| Memory Slot                 | Yes (SD/SDHC)  | Yes (SD/SDHC)  | Yes (SD/SDHC)  | Yes (SD/SDHC)  | Yes (SD/SDHC)  |
| Alarm I/O                   | 1 / 1  | 2 / 2  | 4 / 2  | 4 / 2  | 8 / 4  |
| Intelligent Video Analytics | Yes  | Yes  | Yes  | Yes  | Yes  |
| Network Protocol            | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |
| Security                    | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                           | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                           | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log, 802.1x authentication                           |
| Protection                  | IP66 Grade, Vandal-resistant   | IP66 Grade, Vandal-resistant   | N/A  | IP66 Grade   | IP66 Grade   |
| Operating Temperature       | -40°C ~ +50°C (-40°F ~ +122°F)   | -40°C ~ +50°C (-40°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   | -50°C ~ +50°C (-58°F ~ +122°F)   | -50°C ~ +50°C (-58°F ~ +122°F)   |
| Operating Humidity          | Less than 90% RH (Waterproof)  | Less than 90% RH (Waterproof)  | 20% ~ 80% RH   | Less than 90% RH (Waterproof)  | Less than 90% RH (Waterproof)  |
| Power Requirement           | 24V AC, 12V DC, PoE (IEEE802.3af)  | 24V AC, 12V DC, PoE (IEEE802.3af)  | 24V AC, PoE+ (IEEE802.3at)   | 24V AC, PoE+ (IEEE802.3at)   | 24V AC, PoE+ (IEEE802.3at)   |

# Network Selection

|                             | SNP-3370TH/3301H   | SNP-3370/3301  | SNP-3120   | SNP-3120V  | SNP-3120VH   |
|-----------------------------|--|--|--|--|--|
|                             |       |       |   |   |   |
| Image Sensor                | 1/4" Vertical double density interline CCD   | 1/4" Vertical double density interline CCD   | 1/4" Ex-view HAD PS CCD  | 1/4" Ex-view HAD PS CCD  | 1/4" Ex-view HAD PS CCD  |
| Min. Illumination           | Color : 0.7Lux (50 IRE)<br>B/W : 0.03Lux (50 IRE)                                      | Color : 0.7Lux (50 IRE)<br>B/W : 0.03Lux (50 IRE)                                      | Color : 0.7Lux (50 IRE)<br>B/W : 0.07Lux (50 IRE)  | Color : 0.7Lux (50 IRE)<br>B/W : 0.07Lux (50 IRE)  | Color : 0.7Lux (50 IRE)<br>B/W : 0.07Lux (50 IRE)  |
| Day & Night                 | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (IR cut filter)  | Yes (IR cut filter)  |
| Wide Dynamic Range          | Yes  | Yes  | Yes  | Yes  | Yes  |
| Analog Out                  | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   | CVBS 1.0Vp-p   |
| Focal Length                | SNP-3370TH : 3.5 ~ 129.5mm / SNP-3301H : 3.5 ~ 105mm                                   | SNP-3370 : 3.5 ~ 129.5mm / SNP-3301 : 3.5 ~ 105mm                                      | 3.69 ~ 44.32mm   | 3.69 ~ 44.32mm   | 3.69 ~ 44.32mm   |
| Zoom Ratio                  | SNP-3370TH : 37x / SNP-3301H : 30x   | SNP-3370 : 37x / SNP-3301 : 30x  | 12x  | 12x  | 12x  |
| Video Compression           | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   | H.264, MPEG-4, MJPEG   |
| Streaming                   | Multiple streaming   | Multiple streaming   | Multiple streaming   | Multiple streaming   | Multiple streaming   |
| Max. Resolution             | NTSC : 704 x 480, PAL : 704 x 576  | NTSC : 704 x 480, PAL : 704 x 576  | NTSC : 704 x 480, PAL : 704 x 576  | NTSC : 704 x 480, PAL : 704 x 576  | NTSC : 704 x 480, PAL : 704 x 576  |
| Max. Frame Rate             | NTSC : 30fps, PAL : 25fps  | NTSC : 30fps, PAL : 25fps  | NTSC : 30fps, PAL : 25fps  | NTSC : 30fps, PAL : 25fps  | NTSC : 30fps, PAL : 25fps  |
| Audio I/O                   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   | Mic / Line in, Line out (Bi-directional audio)   |
| Audio Compression           | ADPCM  | ADPCM  | G.711 u-law  | G.711 u-law  | G.711 u-law  |
| Memory Slot                 | Yes (SD/SDHC)  | Yes (SD/SDHC)  | Yes (SD/SDHC)  | Yes (SD/SDHC)  | Yes (SD/SDHC)  |
| Alarm I/O                   | 4 / 2  | 4 / 2  | 2 / 2  | 2 / 2  | 2 / 2  |
| Intelligent Video Analytics | Auto tracking (SNP-3370TH)   | Yes  | Yes  | Yes  | Yes  |
| Network Protocol            | IPv4, TCP/IP, UDP/IP, RTP, RTSP, TP, HTTP, DHCP, FTP, SMTP, ICMP, IGMP, ARP, DNS, DDNS | IPv4, TCP/IP, UDP/IP, RTP, RTSP, TP, HTTP, DHCP, FTP, SMTP, ICMP, IGMP, ARP, DNS, DDNS | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF | IPv4/IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |
| Security                    | Password protection, IP address filtering, User access log                             | Password protection, IP address filtering, User access log                             | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  | HTTPS(SSL) login authentication, Digest login authentication, IP address filtering, User access log  |
| Protection                  | IP66 Grade   | N/A  | N/A  | IP66 Grade   | IP66 Grade   |
| Operating Temperature       | -50°C ~ +50°C (-58°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)   | -50°C ~ +50°C (-58°F ~ +122°F)   | -50°C ~ +50°C (-58°F ~ +122°F)   |
| Operating Humidity          | Less than 90% RH (Waterproof)  | 20% ~ 80% RH   | 20% ~ 80% RH   | Less than 90% RH (Waterproof)  | Less than 90% RH (Waterproof)  |
| Power Requirement           | 24V AC   | 24V AC   | 24V AC, PoE+ (IEEE802.3at)   | 24V AC, PoE+ (IEEE802.3at)   | 24V AC, PoE+ (IEEE802.3at)   |

|          | Network Video Recorder  |   |   | Network Video Encoder / Extension Rack   |
|----------|---|---|---|--|
|          | SRN-6450/3250   | SRN-1670D   | SRN-470D  | SPE-400B/1600R   |
|          |    |                                      |                                     |   |
| Features | - H.264, MPEG-4, MJPEG multiple codec<br>- CIF high resolution images at 1920fps(N), 1600fps(P) in real-time (SRN-6450)<br>- CIF high resolution images at 960fps(N), 800fps(P) in real-time (SRN-3250)<br>- Up to 20TB using external storage option | - H.264, MJPEG dual codec<br>- 4CIF high resolution images at 480fps(N), 400fps(P) in real-time<br>- DVD writer support | - H.264, MJPEG dual codec<br>- 4CIF high resolution images at 120fps(N), 100fps(P) in real-time<br>- DVD writer support | - Max. 30(25)fps at 4CIF resolution<br>- H.264, MPEG-4, MJPEG multiple codec<br>- Multiple streaming simultaneously<br>- 10/100/1000BASE-T<br>- SPE-1600R : extension rack, 4 slots for SPE-400B |

|          | Network Video Encoder   |   | Central Management Software   | Recording Software  | DVR Management Software  |
|----------|---|---|---|---|--|
|          | SPE-400   | SPE-100   | NET-i viewer  | NET-i ware  | SmartViewer  |
|          |    |    |    |    |   |
| Features | - Max. 30(25)fps at 4CIF resolution<br>- H.264, MPEG-4, MJPEG multiple codec<br>- Multiple streaming simultaneously<br>- 10/100/1000BASE-T<br>- SD memory, Bi-directional audio support | - Max. 30(25)fps at 4CIF resolution<br>- H.264, MPEG-4, MJPEG multiple codec<br>- Multiple streaming simultaneously<br>- 10/100BASE-T<br>- PoE, SD memory, Bi-directional audio support | - Up to 64 channels simultaneous real-time live monitoring in single PC<br>- Supports various video format (H.264, MPEG-4, MJPEG)<br>- Supports various video resolution (Megapixel, 4CIF, Half D1, VGA, CIF)<br>- Supports various search and playback options | - Up to 64 Network cameras recording<br>- Support various video format recording (H.264, MPEG-4, MJPEG)<br>- Various video resolution recording (Megapixel, 4CIF, Half D1, VGA, CIF)<br>- Up to 480fps(N), 400fps(P) recording at 4CIF resolution | - Monitoring maximum of 36 videos from connected cameras<br>- Play up to 16 videos simultaneously<br>- Support full screen mode<br>- Support range back up (integrated viewer) |



# Network Terms & Features

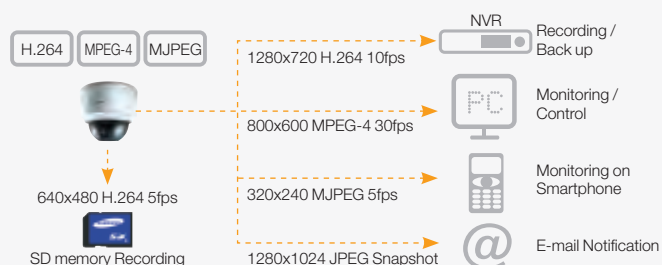
## HD (High Definition) Surveillance

Samsung HD network cameras provides Full HD (1920 x 1080) and HD (1280 x 720) resolution based on the HDTV standard, this creates exceptional image quality that far exceeds the quality of images currently available on normal CCTV systems.



## Multiple Codec & Streaming Performance

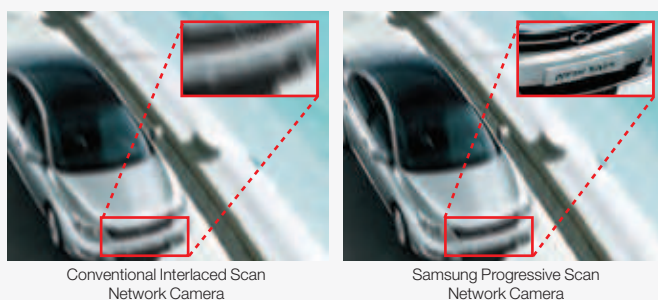
Samsung network cameras support simultaneously streaming of multiple video compression technologies such as H.264, MPEG-4 and MJPEG. This facilitates multiple purposes monitoring such as real-time, high-quality or high-efficiency recording, mobile monitoring, E-mail notification and SD memory recording.



\* Some camera models support dual streaming.

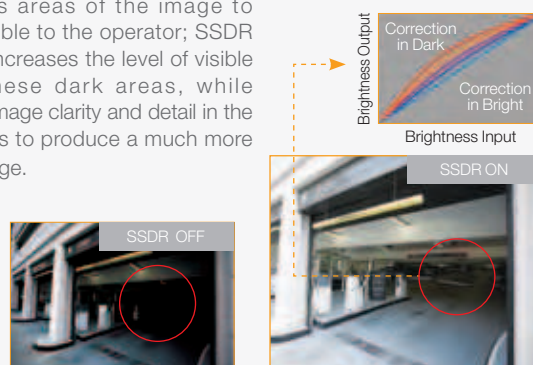
## Progressive Scan

Samsung network camera's progressive scan feature enables images of moving objects to be clearly and noiselessly captured allowing detail to be plainly seen.



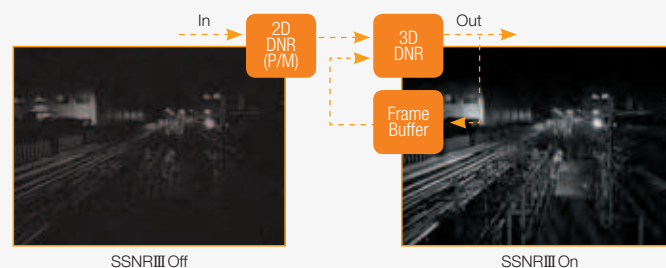
## SSDR (Samsung Super Dynamic Range)

Samsung's network cameras all include SSDR technology. Contrasting light causes areas of the image to appear invisible to the operator; SSDR technology increases the level of visible detail in these dark areas, while maintaining image clarity and detail in the brighter areas to produce a much more balanced image.



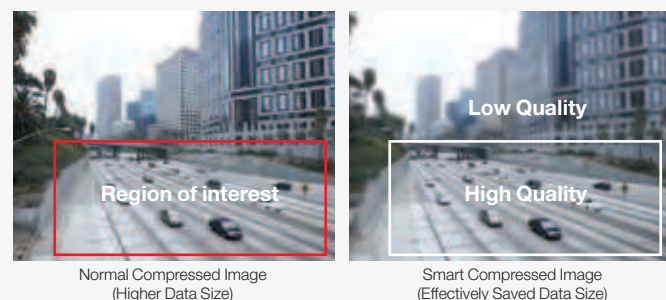
## SSNRIII (Samsung Super Noise ReductionIII)

The third generation SSNRIII technology utilizes both an adaptive 2D filter that reduces the noise that can be found in low light images and an adaptive 3D filter which reduces noise caused by movement. The resulting image created by Samsung network camera is sharper (reduced blur) and clearer (reduced noise) when viewing in low light condition.



## Smart Codec - ROI (Regions of Interest)

In the majority of scenes viewed by a surveillance camera only a proportion of the image is of interest to the operator. With the continued increase in resolution and therefore data sizes there is an increased amount of "Wasted Data" created. Samsung's use of smart codec technology in their network cameras allow them to be programmed to capture in greater detail the real ROI, such as moving objects, human faces, doors or windows than the remaining of the scene. This smart codec feature produces lower data sizes while clearly highlighting the ROI.

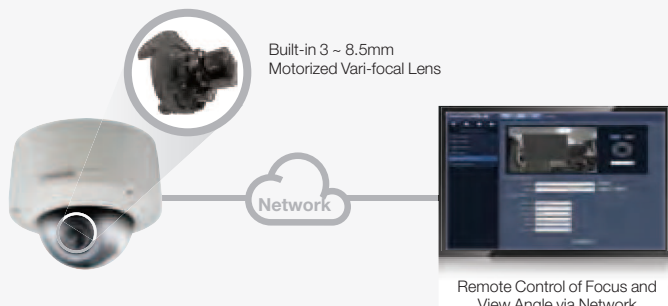


\* Smart codec feature is supported at 3M Full HD cameras only.

# Network Terms & Features

## Remote Focus Control

Samsung has incorporated motorized vari-focal lens in their network dome cameras. Users can adjust the focus and view angle of camera very easily through the network from a remote site without having to visit the installation and open the camera's housing.



\* Motorized lens is built-in at 3M Full HD dome cameras only.

## Powerful 20x HD Optical Zoom

Samsung HD zoom network cameras provide a powerful 20x HD optical zoom performance, so that user can view the scene in much greater clarity. While in playback the digital zoom will reveal still more detail when compared with a conventional SD zoom.



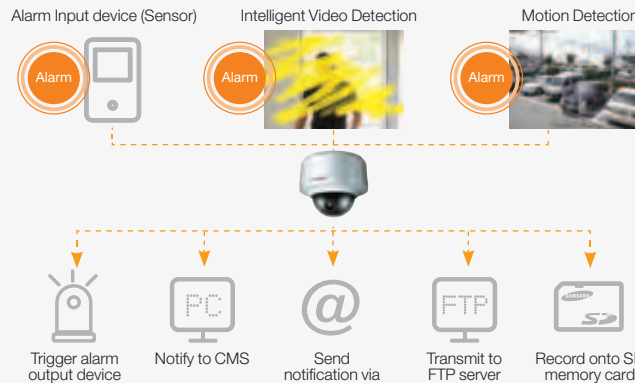
## Built-in Intelligent Video Analytics



\* Some network cameras support motion detection only.

## Alarm Event Control

Various alarm sources including alarm input ports, motion detection, intelligent video detection can make the camera trigger alarm outputs, transmit and/or record Pre/Post images to a FTP server or onto the SD memory card. Alarm notification with images can also be sent via E-mail.



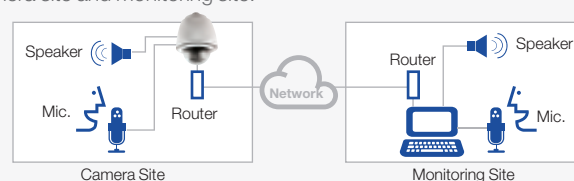
## ONVIF(Open Network Video Interface Forum) Conformance

Samsung is the full member of ONVIF and Samsung network camera is conforming to and following the ONVIF specification.



## Bi-directional Audio Communication

Full duplex bi-directional audio allows interactive communication between camera site and monitoring site.



## SD Memory Card Slot

Samsung network cameras have a built-in SD/SDHC memory card slot which makes it possible to store important video without any external equipment when an event condition occurs.



## Analog Video Output for Easy Installation

Samsung network camera provides analog video out port enabling analog monitor device connection for easy installation.



## PoE (Power over Ethernet)

Power over Ethernet (PoE) feature offers an easy, fast and cost-effective solution for supplying power to Samsung network cameras without the need to install power outlets and electrical cabling.



(Some network PTZ cameras support PoE+ standard for higher power supplying.)



# Core Technologies

## WiseNet Advanced DSP series



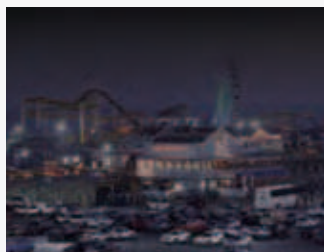
WiseNet (Up to 1.3M)



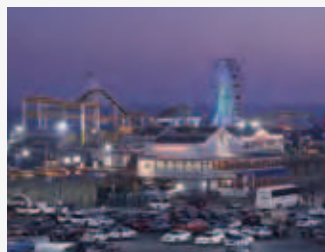
WiseNetII (Up to 3M)

### Max. 3Megapixel Resolution (WiseNetII)

Samsung WiseNetII network cameras provide max. 3Megapixel (2048 x 1536) resolutions. Higher resolution images allow to catch details clear so that the application place such as banks where need high surveillance may need network cameras supports megapixel resolution. (WiseNet network camera line-up supports max. 1.3Megapixel pixel resolutions.)



Conventional Network Camera



WiseNetII Network Camera

### 16 : 9 HD (720p) Full HD (1080p)

Samsung WiseNetII network cameras provide 16 : 9 Full HD and HD resolutions based on HDTV standard.



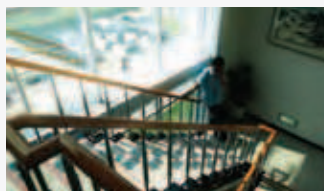
16 : 9 HD (720p)



Full HD (1080p)

### WDR (Wide Dynamic Range)

The WiseNetII DSP's WDR technology compensates for backlight problems effectively, by applying an optimum fusion ratio when combining the long exposure method used in bright areas and the short exposure method used in dark areas. It carries out a precise analysis on the picture to get detailed information from the dark areas without any saturation from the bright areas. (\* WDR function is supported in 2M mode only)



WDR Off



WDR On

## WiseNet | WiseNet II

### SSDR (Samsung Super Dynamic Range)

Samsung WiseNet series network cameras provide SSDR technology to increase the level of visible detail in the dark areas, while maintaining image clarity and detail in the brighter portions of the image.



SSDR Off



SSDR On

### SSNRIII (Samsung Super Noise ReductionIII)

The third generation SSNR technology utilizes both an adaptive 2D filter reducing noise in the brightness of the image and an adaptive 3D filter reducing noise caused by movement. The result is that Samsung WiseNet series Network Cameras remove noise and greatly reduce motion blur in low light.



SSNRIII Off



SSNRIII On

### HLC (Highlight Compensation)

HLC function is Samsung's unique BLC technology that detects if any strong spots of light exist and compensates for the area as needed to produce clearer images. Spotlight BLC is especially effective for reading the number-plates of cars in streets or parking lots at night.



HLC Off



HLC On

# SNB-7000

3Megapixel Full HD Network Camera

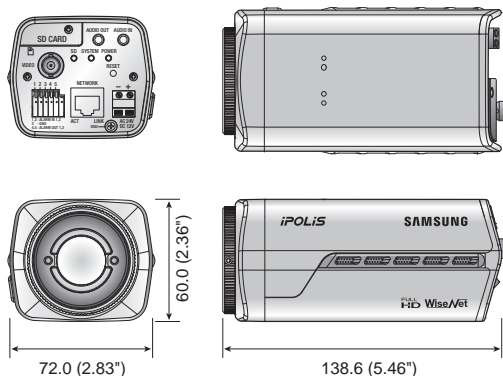


## Key Features

- Max. 3M (2048 x 1536) resolution
- 16 : 9 Full HD (1080p) resolution support
- H.264, MJPEG dual codec
- WDR (supported in 2M mode only)
- Smart compression (ROI encoding)

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SNB-7000N/P  |
|----------------------------------|--|
| <b>VIDEO</b>                     |  |
| Imaging Device                   | 1/2.8" 3M PS CMOS  |
| Total Pixels                     | 2,144(H) x 1,588(V)  |
| Effective Pixels                 | 2,096(H) x 1,561(V)  |
| Scanning System                  | Progressive  |
| Min. Illumination (TBD)          | Color : 1Lux (F1.2, 50IRE), 0.017Lux (Sens-up 60x)<br>B/W : 0.08Lux (F1.2, 50IRE), 0.001Lux (Sens-up 60x)  |
| S / N Ratio                      | 50dB   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation  |
| <b>LENS</b>                      |  |
| Lens Type                        | Manual / DC auto iris  |
| Mount Type                       | C / CS   |
| <b>OPERATIONAL</b>               |  |
| Camera Title                     | Off / On (Displayed up to 15 characters)   |
| Day & Night                      | Auto (ICR) / Color / B/W   |
| Backlight Compensation           | Off / BLC / HLC / WDR  |
| Wide Dynamic Range               | Off / On (* 2M mode only)  |
| Contrast Enhancement             | SSDR (Samsung Super Dynamic Range) (Off / On)  |
| Digital Noise Reduction          | SSNR III (2D+3D noise filter) (Off / On)   |
| Motion Detection                 | Off / On (4 programmable zones)  |
| Privacy Masking                  | Off / On (1ea 4 point polygonal + 16ea rectangular zones)  |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 60x)  |
| Gain Control                     | Off / Low / Medium / High  |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |
| Electronic Shutter Speed         | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |
| Flip / Mirror                    | Off / On   |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |
| Remote Control Interface         | RS-485   |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D   |
| <b>NETWORK</b>                   |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |
| Video Compression Format         | H.264, MJPEG   |
| Resolution                       | 3M mode : 2048 x 1536, 1920 x 1080P(Full HD), 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720P(HD), 1024 x 768, 800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180        |
|                                  | 2M mode : 1920 x 1080P (Full HD), 1280 x 1024, 1280 x 960, 1280 x 720P (HD), 1024 x 768, 800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180                                |
| Max. Framerate                   | 3M mode : Max. 20fps, 2M mode : Max. 30fps   |
|                                  | * When WDR on, Max. framerate is Max. 15fps  |
| Video Quality Adjustment         | H.264 : Compression level, Target bitrate level control  |
|                                  | MJPEG : Quality level control  |
| Bitrate Control Method           | H.264 : CBR or VBR, MJPEG : VBR  |
| Streaming Capability             | Multiple streaming (Up to 6 profiles)  |
| Audio I/O                        | Mic / Line in, Line out  |
| Audio Compression Format         | G.711 u-law  |
| Audio Communication              | Bi-directional audio   |
| IP                               | IPv4, IPv6   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF   |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication   |
|                                  | IP address filtering, User access log, 802.1x authentication   |
| Streaming Method                 | Unicast / Multicast  |
| Max. User Access                 | 10 users at unicast mode   |
| Memory Slot                      | SD/SDHC memory slot  |
| ONVIF Conformance                | Yes  |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS  |
|                                  | Supported Browser : Internet Explorer 7.0 or Higher, Firefox, Google Chrome, Apple Safari  |
| Central Management Software      | NET-i viewer   |
| <b>ENVIRONMENTAL</b>             |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH  |
| <b>ELECTRICAL</b>                |  |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |
| Power Consumption                | Max. 7W  |
| <b>MECHANICAL</b>                |  |
| Color / Material                 | Dark gray / Metal  |
| Dimensions (WxHxD)               | 72.0 x 60.0 x 138.6mm (2.83" x 2.36" x 5.46")  |
| Weight                           | 440g (0.97 lb)   |

# SNB-5000

1.3Megapixel HD Network Camera



Product Design : 85%  
Features and Functions : 85%  
Ease of Installation : 80%  
IVA Performance : 85%  
Video Performance : 87%  
Overall Rating : 84%

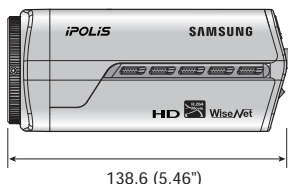
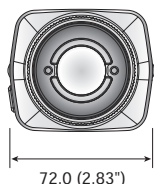


## Key Features

- Max. 1.3M (1280 x 1024) resolution
- 16 : 9 HD (720p) resolution support
- H.264, MPEG-4, MJPEG multiple codec
- PoE, SD memory, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SNB-5000N/P  |
|----------------------------------|--|
| <b>VIDEO</b>                     |  |
| Imaging Device                   | 1/3" 1.3M PS CMOS  |
| Total Pixels                     | 1,384(H) x 1,076(V)  |
| Effective Pixels                 | 1,329(H) x 1,049(V)  |
| Scanning System                  | Progressive  |
| Min. Illumination                | Color : 0.3Lux (F1.2, 50IRE), 0.005Lux (Sens-up 60x)<br>B/W : 0.01Lux (F1.2, 50IRE), 0.0002Lux (Sens-up 60x)   |
| S / N Ratio                      | 50dB   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation  |
| <b>LENS</b>                      |  |
| Lens Type                        | Manual / DC auto iris  |
| Mount Type                       | C / CS   |
| <b>OPERATIONAL</b>               |  |
| Camera Title                     | Off / On (Displayed up to 15 characters)   |
| Day & Night                      | Auto (ICR) / Color / B/W   |
| Backlight Compensation           | Off / BLC / HLC  |
| Contrast Enhancement             | SSDR (Samsung Super Dynamic Range) (Off / On)  |
| Digital Noise Reduction          | SSNR III (2D+3D noise filter) (Off / On)   |
| Motion Detection                 | Off / On (4 programmable zones)  |
| Privacy Masking                  | Off / On (12 programmable zones)   |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 60x)  |
| Gain Control                     | Off / Low / Medium / High / Manual   |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |
| Electronic Shutter Speed         | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |
| Flip / Mirror                    | Off / On   |
| Intelligent Video Analytics      | Scene change, Virtual line, Enter / Exit, Appear / Disappear   |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |
| <b>NETWORK</b>                   |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |
| Resolution                       | 1280 x 1024, 1280 x 720P (HD), 800 x 600, 640 x 480, 320 x 240   |
| Max. Framerate                   | 22fps (1280 x 1024), 30fps (720P HD)   |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |
| Audio I/O                        | Mic / Line in, Line out  |
| Audio Compression Format         | G.711 u-law  |
| Audio Communication              | Bi-directional audio   |
| IP                               | IPv4, IPv6   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF                                       |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |
| Streaming Method                 | Unicast / Multicast  |
| Max. User Access                 | 10 users at unicast mode   |
| Memory Slot                      | SD/SDHC memory slot  |
| ONVIF Conformance                | Yes  |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari   |
| Central Management Software      | NET-i viewer   |
| <b>ENVIRONMENTAL</b>             |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH  |
| <b>ELECTRICAL</b>                |  |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |
| Power Consumption                | Max. 6W  |
| <b>MECHANICAL</b>                |  |
| Color / Material                 | Dark gray / Metal  |
| Dimensions (WxHxD)               | 72.0 x 60.0 x 138.6mm (2.83" x 2.36" x 5.46")  |
| Weight                           | 440g (0.97 lb)   |



# SNB-3000

4CIF WDR Network Camera

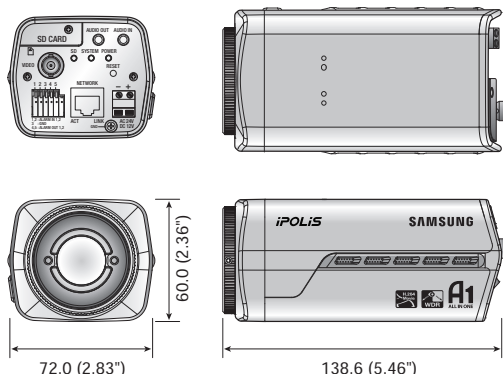


## Key Features

- Max. 30(25)fps at 4CIF resolution
- H.264, MPEG-4, MJPEG multiple codec
- PoE, SD memory, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SNB-3000N  | SNB-3000P  |
|----------------------------------|--|--|
| VIDEO                            |  |  |
| Imaging Device                   | 1/3" Super HAD PS CCD  |  |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)                                    |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)                                    |
| Scanning System                  | Progressive (If WDR on, Interlaced scan)   |  |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz                           |
| Horizontal Resolution            | Color : 600TV lines  |  |
| Min. Illumination                | Color : 0.4Lux (F1.2, 50IRE), 0.001Lux (Sens-up 512x)<br>B/W : 0.04Lux (F1.2, 50IRE), 0.0001Lux (Sens-up 512x)                                     |  |
| S / N Ratio                      | 52dB   |  |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |  |
| LENS                             |  |  |
| Lens Type                        | Manual / DC auto iris  |  |
| Mount Type                       | C / CS   |  |
| OPERATIONAL                      |  |  |
| On Screen Display                | English, French, Spanish, Portuguese, Japanese   | English, French, German, Spanish, Italian, Chinese |
| Camera Title                     | Off / On (Displayed up to 54 characters)   |  |
| Day & Night                      | Auto / Day / Night (IR cut filter)   |  |
| Backlight Compensation           | Off / BLC / WDR  |  |
| Wide Dynamic Range               | 128x   | 160x   |
| Contrast Enhancement             | XDR (eXtended Dynamic Range) - Off / Low / Middle / High   |  |
| Digital Noise Reduction          | Motion adaptive 2D+3D noise filter (Off / Low / Middle / High / User)  |  |
| Digital Image Stabilization      | Off / On   |  |
| Motion Detection                 | Off / On (4 programmable zones)  |  |
| Privacy Masking                  | Off / On (12 polygonal programmable zones, 4 point polygonal method)   |  |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 512x)   |  |
| Gain Control                     | AGC (Low / Middle / High)  |  |
| White Balance                    | ATW1 / ATW2 / AWC / 3200K / 5600K  |  |
| Electronic Shutter Speed         | Off / Auto (1/100 ~ 1/10Ksec)  | Off / Auto (1/120 ~ 1/10Ksec)                      |
| Digital Zoom                     | 16x  |  |
| Flip / Mirror                    | Off / On   |  |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom   |  |
| Intelligent Video Analytics      | Scene change, Virtual line, Enter / Exit, Appear / Disappear   |  |
| PIP                              | Off / On   |  |
| Alarm I/O                        | Input 2ea / Output 2ea (Relay)   |  |
| NETWORK                          |  |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |  |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |  |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240  | 704 x 576, 640 x 480, 352 x 288                    |
| Max. Framerate                   | 30fps  | 25fps  |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |  |
| Streaming Capability             | Dual streaming (MPEG-4 + MJPEG or H.264 + MJPEG)   |  |
| Audio I/O                        | Mic / Line in, Line out  |  |
| Audio Compression Format         | G.711 u-law  |  |
| Audio Communication              | Bi-directional audio   |  |
| IP                               | IPv4, IPv6   |  |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |  |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |  |
| Streaming Method                 | Unicast / Multicast  |  |
| Max. User Access                 | 10 users at unicast mode   |  |
| Memory Slot                      | SD/SDHC memory slot  |  |
| ONVIF Conformance                | Yes  |  |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean   |  |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7<br>Supported Browser : Internet Explorer 6.0 or Higher   |  |
| Central Management Software      | NET-i viewer   |  |
| ENVIRONMENTAL                    |  |  |
| Operating Temperature / Humidity | -10℃ ~ +50℃ (+14ℱ ~ +122ℱ) / 20% ~ 80% RH  |  |
| ELECTRICAL                       |  |  |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |  |
| Power Consumption                | Max. 8W  |  |
| MECHANICAL                       |  |  |
| Color / Material                 | Silver / Metal   |  |
| Dimensions (WxHxD)               | 72.0 x 60.0 x 138.6mm (2.83" x 2.36" x 5.46")  |  |
| Weight                           | 300g (0.66 lb)   |  |

# SNB-2000

4CIF Network Camera

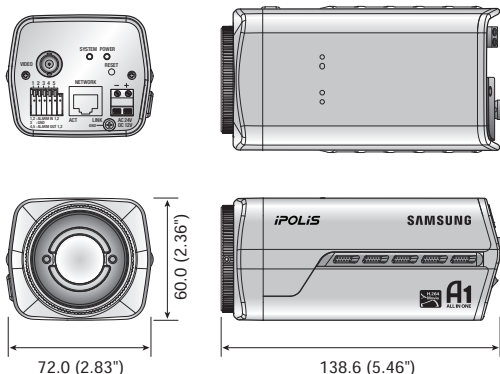


## Key Features

- Max. 30(25)fps at 4CIF resolution
- H.264, MPEG-4, MJPEG multiple codec
- PoE

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SNB-2000N  | SNB-2000P                       |
|----------------------------------|--|---------------------------------|
| VIDEO                            |  |                                 |
| Imaging Device                   | 1/3" Super HAD PS CCD  |                                 |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)                 |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)                 |
| Scanning System                  | Progressive  |                                 |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz        |
| Horizontal Resolution            | Color : 600TV lines  |                                 |
| Min. Illumination                | Color : 0.4Lux (F1.2, 50IRE), 0.001Lux (Sens-up 512x)<br>B/W : 0.4Lux (F1.2, 50IRE), 0.001Lux (Sens-up 512x)                                       |                                 |
| S / N Ratio                      | 52dB   |                                 |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |                                 |
| LENS                             |  |                                 |
| Lens Type                        | Manual / DC auto iris  |                                 |
| Mount Type                       | C / CS   |                                 |
| OPERATIONAL                      |  |                                 |
| Camera Title                     | Off / On (Displayed up to 54 characters)   |                                 |
| Day & Night                      | Auto / Day / Night (Software method)   |                                 |
| Backlight Compensation           | Off / BLC  |                                 |
| Contrast Enhancement             | XDR (eXtended Dynamic Range) - Off / Low / Middle / High   |                                 |
| Digital Noise Reduction          | Motion adaptive 2D+3D noise filter (Off / Low / Middle / High / User)  |                                 |
| Digital Image Stabilization      | Off / On   |                                 |
| Motion Detection                 | Off / On (4 programmable zones)  |                                 |
| Privacy Masking                  | Off / On (12 polygonal programmable zones, 4 point polygonal method)   |                                 |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 512x)   |                                 |
| Gain Control                     | AGC (Low / Middle / High)  |                                 |
| White Balance                    | ATW1 / ATW2 / AWC / 3200K / 5600K  |                                 |
| Electronic Shutter Speed         | Off / Auto (1/100 ~ 1/10Ksec)  | Off / Auto (1/120 ~ 1/10Ksec)   |
| Digital Zoom                     | 16x  |                                 |
| Flip / Mirror                    | Off / On   |                                 |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom   |                                 |
| PIP                              | Off / On   |                                 |
| Alarm I/O                        | Input 2ea / Output 2ea (Relay)   |                                 |
| NETWORK                          |  |                                 |
| Ethernet                         | RJ-45 (10/100BASE-T)   |                                 |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |                                 |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240  | 704 x 576, 640 x 480, 352 x 288 |
| Max. Framerate                   | 30fps  | 25fps                           |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |                                 |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |                                 |
| Streaming Capability             | Dual streaming (MPEG-4 + MJPEG or H.264 + MJPEG)   |                                 |
| IP                               | IPv4, IPv6   |                                 |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |                                 |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>User access log  |                                 |
| Streaming Method                 | Unicast / Multicast  |                                 |
| Max. User Access                 | 10 users at unicast mode   |                                 |
| ONVIF Conformance                | Yes  |                                 |
| Web Language                     | English, French, German, Spanish, Italian, Chinese, Korean   |                                 |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7<br>Supported Browser : Internet Explorer 6.0 or Higher   |                                 |
| Central Management Software      | NET-i viewer   |                                 |
| ENVIRONMENTAL                    |  |                                 |
| Operating Temperature / Humidity | -10℃ ~ +50℃ (+14ℱ ~ +122ℱ) / 20% ~ 80% RH  |                                 |
| ELECTRICAL                       |  |                                 |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |                                 |
| Power Consumption                | Max. 7W  |                                 |
| MECHANICAL                       |  |                                 |
| Color / Material                 | Silver / Metal   |                                 |
| Dimensions (WxHxD)               | 72.0 x 60.0 x 138.6mm (2.83" x 2.36" x 5.46")  |                                 |
| Weight                           | 300g (0.66 lb)   |                                 |

# SNB-1000



VGA Network Camera

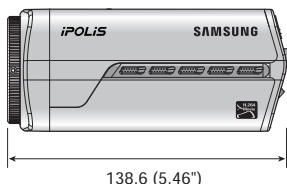
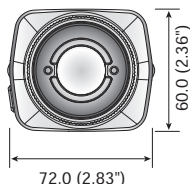
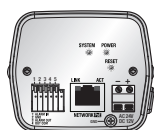


## Key Features

- Max. 30(25)fps at VGA resolution
- H.264, MPEG-4, MJPEG multiple codec
- Multiple streaming simultaneously

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SNB-1000N  |       | SNB-1000P |
|----------------------------------|--|-------|-----------|
| VIDEO                            |  |       |           |
| Imaging Device                   | 1/4" PS CMOS   |       |           |
| Total Pixels                     | 656(H) x 488(V)  |       |           |
| Effective Pixels                 | 640(H) x 480(V)  |       |           |
| Scanning System                  | Progressive  |       |           |
| Min. Illumination                | Color : 1.4Lux (F1.2, 50IRE), 0.18Lux (Sens-up 8x)   |       |           |
| S / N Ratio                      | 50dB   |       |           |
| LENS                             |  |       |           |
| Lens Type                        | Fixed iris   |       |           |
| Mount Type                       | C / CS   |       |           |
| OPERATIONAL                      |  |       |           |
| Day & Night                      | Auto   |       |           |
| Motion Detection                 | Off / On (4 programmable zones)  |       |           |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 8x)   |       |           |
| Gain Control                     | 2x, 4x, 8x, 16x, 32x   |       |           |
| White Balance                    | Auto / Manual  |       |           |
| Flip / Mirror                    | Off / On   |       |           |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |       |           |
| NETWORK                          |  |       |           |
| Ethernet                         | RJ-45 (10/100BASE-T)   |       |           |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |       |           |
| Resolution                       | 640 x 480, 320 x 240   |       |           |
| Max. Framerate                   | 30fps  | 25fps |           |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |       |           |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |       |           |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |       |           |
| IP                               | IPv4, IPv6   |       |           |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |       |           |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log, 802.1x Authentication                       |       |           |
| Streaming Method                 | Unicast / Multicast  |       |           |
| Max. User Access                 | 5 users at unicast mode  |       |           |
| ONVIF Conformance                | Yes  |       |           |
| Webpage Language                 | English, French, German, Spanish, Italian, Korean<br>Chinese, Russian, Japanese, Danish, Swedish, Portuguese                                       |       |           |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari         |       |           |
| Central Management Software      | NET-i viewer   |       |           |
| ENVIRONMENTAL                    |  |       |           |
| Operating Temperature / Humidity | 0°C ~ +50°C (+32°F ~ +122°F) / 20% ~ 80% RH  |       |           |
| ELECTRICAL                       |  |       |           |
| Input Voltage / Current          | 12V DC, 500mA / PoE (IEEE802.3af)  |       |           |
| Power Consumption                | Max. 2.5W  |       |           |
| MECHANICAL                       |  |       |           |
| Color / Material                 | Silver / Metal   |       |           |
| Dimensions (WxHxD)               | 72.0 x 60.0 x 138.6mm (2.83" x 2.36" x 5.46")  |       |           |
| Weight                           | 370g (0.82 lb)   |       |           |



# SNZ-5200



1.3Megapixel HD 20x Network Zoom Camera

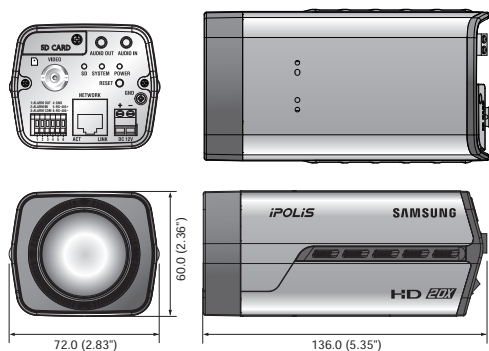


## Key Features

- Max. 1.3M (1280 x 1024) resolution
- 16 : 9 HD (720p) resolution support
- 4.45 ~ 89mm (20x) optical zoom, 16x digital zoom
- H.264, MPEG-4, MJPEG multiple codec
- PoE, SD memory, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SNZ-5200N/P  |
|----------------------------------|--|
| <b>VIDEO</b>                     |  |
| Imaging Device                   | 1/3" 1.3M PS CMOS  |
| Total Pixels                     | 1,384(H) x 1,076(V)  |
| Effective Pixels                 | 1,329(H) x 1,049(V)  |
| Scanning System                  | Progressive  |
| Min. Illumination                | Color : 0.7Lux (F1.2, 50IRE), 0.01Lux (Sens-up 60x, 50IRE)<br>B/W : 0.08Lux (F1.6, 50IRE), 0.001Lux (Sens-up 60x, 50IRE)   |
| S / N Ratio                      | 52dB   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation  |
| <b>LENS</b>                      |  |
| Focal Length (Zoom Ratio)        | 4.45 ~ 89mm (20x)  |
| Max. Aperture Ratio              | F1.6(Wide) / F2.9(Tele)  |
| Angular Field of View            | H : 56.56°(Wide) ~ 3.10°(Tele) / V : 43.32°(Wide) ~ 2.34°(Tele)  |
| Min. Object Distance             | 1m (3.28ft)  |
| Focus Control                    | AF / One-shot AF / Manual (Remote control via Network)   |
| Lens Type                        | DC auto iris   |
| Mount Type                       | Board-in type  |
| <b>PAN / TILT / ROTATE</b>       |  |
| Preset                           | 128ea  |
| <b>OPERATIONAL</b>               |  |
| Camera Title                     | Off / On (Displayed up to 15 characters)   |
| Day & Night                      | Auto (ICR) / Color / B/W   |
| Backlight Compensation           | Off / BLC / HLC  |
| Contrast Enhancement             | SSDR (Samsung Super Dynamic Range) (Off / On)  |
| Digital Noise Reduction          | SSNR III (2D+3D noise filter) (Off / On)   |
| Digital Image Stabilization      | Off / On   |
| Motion Detection                 | Off / On (4 programmable zones)  |
| Privacy Masking                  | Off / On (8 programmable zones)  |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 60x)  |
| Gain Control                     | Off / Low / Medium / High / Manual   |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |
| Electronic Shutter Speed         | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |
| Digital Zoom                     | 16x  |
| Flip / Mirror                    | Off / On   |
| Intelligent Video Analytics      | Scene change, Virtual line, Enter / Exit, Appear / Disappear   |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |
| Remote Control Interface         | RS-485   |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D   |
| <b>NETWORK</b>                   |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |
| Resolution                       | 1280 x 1024, 1280 x 720P (HD), 1024 x 768, 800 x 600, 640 x 480, 320 x 240   |
| Max. Framerate                   | 30fps  |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |
| Audio I/O                        | Mic / Line in, Line out  |
| Audio Compression Format         | G.711 u-law  |
| Audio Communication              | Bi-directional audio   |
| IP                               | IPv4, IPv6   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF                                       |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log, 802.1x authentication   |
| Streaming Method                 | Unicast / Multicast  |
| Max. User Access                 | 10 users at unicast mode   |
| Memory Slot                      | SD/SDHC memory slot  |
| ONVIF Conformance                | Yes  |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari   |
| Central Management Software      | NET-i viewer   |
| <b>ENVIRONMENTAL</b>             |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / 20 ~ 80% RH   |
| <b>ELECTRICAL</b>                |  |
| Input Voltage / Current          | 12V DC, PoE (IEEE802.3af)  |
| Power Consumption                | 12V DC : Max. 8W, PoE : Max. 7.5W  |
| <b>MECHANICAL</b>                |  |
| Color / Material                 | Dark gray / Metal  |
| Dimensions (WxHxD)               | 72.0 x 60.0 x 136.0mm (2.83" x 2.36" x 5.35")  |
| Weight                           | 540g (1.19 lb)   |

## SNO-5080R

1.3Megapixel HD Weatherproof Network IR Camera

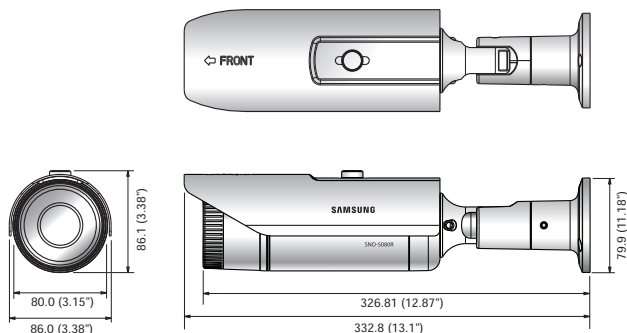


## Key Features

- Max. 1.3M (1280 x 1024) resolution
- 16 : 9 HD (720p) resolution support
- 2.8 ~ 10mm (3.6x) varifocal lens
- H.264, MPEG-4, MJPEG multiple codec
- IR LED (31ea), PoE

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SNO-5080RN/P   |
|----------------------------------|--|
| <b>VIDEO</b>                     |  |
| Imaging Device                   | 1/3" 1.3M PS CMOS  |
| Total Pixels                     | 1,384(H) x 1,076(V)  |
| Effective Pixels                 | 1,329(H) x 1,049(V)  |
| Scanning System                  | Progressive  |
| Min. Illumination                | Color : 0.3Lux (F1.2, 50IRE), 0.005Lux (Sens-up 60x)<br>B/W : 0Lux (F1.2, 50IRE, IR LED on)  |
| S / N Ratio                      | 50dB   |
| Video Output                     | DIP connector type, 704 x 480(N), 704 x 576(P), for installation   |
| <b>LENS</b>                      |  |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (3.6x) Vari-focal   |
| Max. Aperture Ratio              | F1.2   |
| Angular Field of View            | H : 94.6°(Wide) ~ 28.8°(Tele), V : 68.4°(Wide) ~ 21.6°(Tele)   |
| Focus Control                    | Manual   |
| Lens Type                        | DC auto iris   |
| Mount Type                       | Board-in type  |
| <b>OPERATIONAL</b>               |  |
| IR LED                           | 31ea   |
| Viewable Length                  | 30m  |
| Camera Title                     | Off / On (Displayed up to 15 characters)   |
| Day & Night                      | Auto (ICR) / Color / B/W   |
| Backlight Compensation           | Off / BLC / HLC  |
| Contrast Enhancement             | SSDR (Samsung Super Dynamic Range) (Off / On)  |
| Digital Noise Reduction          | SSNR III (2D+3D noise filter) (Off / On)   |
| Motion Detection                 | Off / On (4 programmable zones)  |
| Privacy Masking                  | Off / On (12 programmable zones)   |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 60x)  |
| Gain Control                     | Off / Low / Medium / High / Manual   |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |
| Electronic Shutter Speed         | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |
| Flip / Mirror                    | Off / On   |
| Intelligent Video Analytics      | Scene change, Virtual line, Enter / Exit, Appear / Disappear   |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |
| <b>NETWORK</b>                   |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |
| Resolution                       | 1280 x 1024, 1280 x 720P (HD), 1024 x 768, 800 x 600, 640 x 480, 320 x 240   |
| Max. Framerate                   | 22fps (1280 x 1024), 30fps (720P HD)   |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |
| IP                               | IPv4, IPv6   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF                                       |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |
| Streaming Method                 | Unicast / Multicast  |
| Max. User Access                 | 10 users at unicast mode   |
| ONVIF Conformance                | Yes  |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari   |
| Central Management Software      | NET-i viewer   |
| <b>ENVIRONMENTAL</b>             |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |
| Ingress Protection               | IP66 Grade (Waterproof)  |
| <b>ELECTRICAL</b>                |  |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |
| Power Consumption                | Max. 11W   |
| <b>MECHANICAL</b>                |  |
| Color / Material                 | Dark gray / Metal  |
| Dimensions (WxHxD)               | 86.0 x 86.1 x 332.8mm (3.39" x 3.39" x 13.1")  |
| Weight                           | 1.3Kg (2.87 lb)  |

## SND-7080/7080F



3Megapixel Full HD Network Dome Camera



SND-7080

SND-7080F

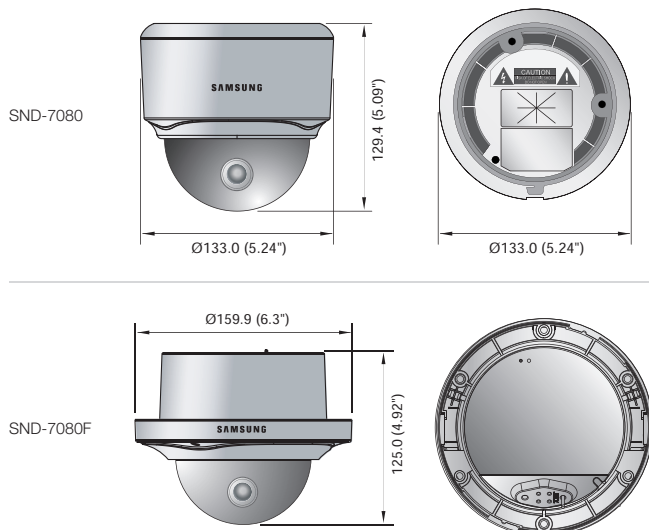


## Key Features

- Max. 3M (2048 x 1536) resolution
- 16 : 9 Full HD (1080p) resolution support
- 3 ~ 8.5mm (2.8x) motorized varifocal lens
- H.264, MJPEG dual codec
- WDR (supported in 2M mode only)
- Smart compression (ROI encoding)

## Dimensions

Unit : mm (inch)



## Technical Specifications

## SND-7080(F)N/P

| VIDEO                            |  |
|----------------------------------|--|
| Imaging Device                   | 1/2.8" 3M PS CMOS  |
| Total Pixels                     | 2,144(H) x 1,588(V)  |
| Effective Pixels                 | 2,096(H) x 1,561(V)  |
| Scanning System                  | Progressive  |
| Min. Illumination (TBD)          | Color : 1Lux (F1.2, 50IRE), 0.017Lux (Sens-up 60x)<br>B/W : 0.08Lux (F1.2, 50IRE), 0.001Lux (Sens-up 60x)  |
| S / N Ratio                      | 50dB   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation  |
| LENS                             |  |
| Focal Length (Zoom Ratio)        | 3 ~ 8.5mm (2.8x) Motorized vari-focal  |
| Max. Aperture Ratio              | F1.2   |
| Angular Field of View            | H : 100°(Wide) ~ 35.3°(Tele), V : 74.6°(Wide) ~ 26°(Tele)  |
| Min. Object Distance             | 0.5m (1.64ft)  |
| Focus Control                    | Remote control via network (Manual, One-shot AF)   |
| Lens Type                        | DC auto iris   |
| Mount Type                       | Board-in type  |
| PAN / TILT / ROTATE              |  |
| Pan Range                        | 0° ~ 355°  |
| Tilt Range                       | 0° ~ 90°   |
| Rotate Range                     | 0° ~ 355°  |
| OPERATIONAL                      |  |
| Camera Title                     | Off / On (Displayed up to 15 characters)   |
| Day & Night                      | Auto (ICR) / Color / B/W   |
| Backlight Compensation           | Off / BLC / HLC / WDR  |
| Wide Dynamic Range               | Off / On (* 2M mode only)  |
| Contrast Enhancement             | SSDR (Samsung Super Dynamic Range) (Off / On)  |
| Digital Noise Reduction          | SSNR III (2D+3D noise filter) (Off / On)   |
| Motion Detection                 | Off / On (4 programmable zones)  |
| Privacy Masking                  | Off / On (1ea 4 point polygonal + 16ea rectangular zones)  |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 60x)  |
| Gain Control                     | Off / Low / Medium / High  |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |
| Electronic Shutter Speed         | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |
| Flip / Mirror                    | Off / On   |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |
| NETWORK                          |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |
| Video Compression Format         | H.264, MJPEG   |
| Resolution                       | 3M mode : 2048 x 1536, 1920 x 1080P(Full HD), 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720P(HD), 1024 x 768, 800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180  |
|                                  | 2M mode : 1920 x 1080P (Full HD), 1280 x 1024, 1280 x 960, 1280 x 720P (HD), 1024 x 768, 800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180  |
| Max. Framerate                   | 3M mode : Max. 20fps, 2M mode : Max. 30fps<br>* When WDR on, Max. framerate is Max. 15fps  |
| Video Quality Adjustment         | H.264 : Compression level, Target bitrate level control<br>MJPEG : Quality level control   |
| Bitrate Control Method           | H.264 : CBR or VBR, MJPEG : VBR  |
| Streaming Capability             | Multiple streaming (Up to 6 profiles)  |
| Audio I/O                        | Mic / Line in, Line out  |
| Audio Compression Format         | G.711 u-law  |
| Audio Communication              | Bi-directional audio   |
| IP                               | IPv4, IPv6   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF<br>HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log, 802.1x authentication |
| Security                         | Unicast / Multicast  |
| Streaming Method                 | Unicast / Multicast  |
| Max. User Access                 | 10 users at unicast mode   |
| Memory Slot                      | SD/SDHC memory slot  |
| ONVIF Conformance                | Yes  |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek   |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 7.0 or Higher, Firefox, Google Chrome, Apple Safari<br>NET-i viewer   |
| ENVIRONMENTAL                    |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH  |
| ELECTRICAL                       |  |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |
| Power Consumption                | Max. 7W  |
| MECHANICAL                       |  |
| Color / Material                 | Ivory / Plastic  |
| Dimensions (WxH)                 | SND-7080 : Ø133.0 x 129.4mm (Ø5.24" x 5.09")<br>SND-7080F : Ø159.9 x 125.0mm (Ø6.3" x 4.92") (Flush mounting type)   |
| Weight                           | SND-7080 : 700g (1.54 lb), SND-7080F : 800g (1.76 lb)  |

## SND-5080/5080F



1.3Megapixel HD Network Dome Camera



SND-5080

SND-5080F

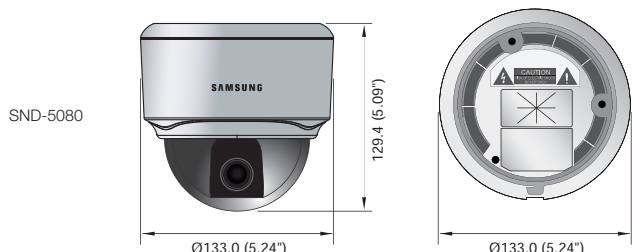


## Key Features

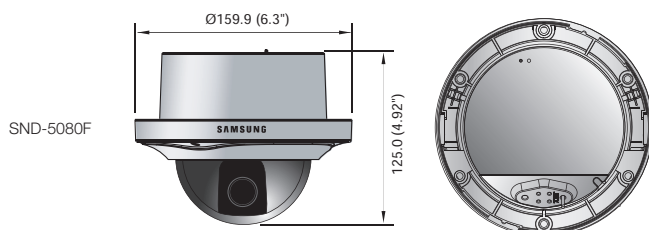
- Max. 1.3M (1280 x 1024) resolution
- 16 : 9 HD (720p) resolution support
- 2.8 ~ 10mm (3.6x) varifocal lens
- H.264, MPEG-4, MJPEG multiple codec
- PoE, SD memory, bi-directional audio support

## Dimensions

Unit : mm (inch)



SND-5080



SND-5080F

## Technical Specifications

## SND-5080(F)N/P

| SND-5080(F)N/P                   |  |
|----------------------------------|--|
| <b>VIDEO</b>                     |  |
| Imaging Device                   | 1/3" 1.3M PS CMOS  |
| Total Pixels                     | 1,384(H) x 1,076(V)  |
| Effective Pixels                 | 1,329(H) x 1,049(V)  |
| Scanning System                  | Progressive  |
| Min. Illumination                | Color : 0.3Lux (F1.2, 50IRE), 0.005Lux (Sens-up 60x)<br>B/W : 0.01Lux (F1.2, 50IRE), 0.0002Lux (Sens-up 60x)   |
| S / N Ratio                      | 50dB   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation  |
| <b>LENS</b>                      |  |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (3.6x) Vari-focal   |
| Max. Aperture Ratio              | F1.2   |
| Angular Field of View            | H : 94.6°(Wide) ~ 28.8°(Tele), V : 68.4°(Wide) ~ 21.6°(Tele)   |
| Lens Type                        | DC auto iris   |
| Mount Type                       | Board-in type  |
| <b>PAN / TILT / ROTATE</b>       |  |
| Pan Range                        | 0° ~ 355°  |
| Tilt Range                       | 0° ~ 90°   |
| Rotate Range                     | 0° ~ 355°  |
| <b>OPERATIONAL</b>               |  |
| Camera Title                     | Off / On (Displayed up to 15 characters)   |
| Day & Night                      | Auto (ICR) / Color / B/W   |
| Backlight Compensation           | Off / BLC / HLC  |
| Contrast Enhancement             | SSDR (Samsung Super Dynamic Range) (Off / On)  |
| Digital Noise Reduction          | SSNRIII (2D+3D noise filter) (Off / On)  |
| Motion Detection                 | Off / On (4 programmable zones)  |
| Privacy Masking                  | Off / On (12 programmable zones)   |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 60x)  |
| Gain Control                     | Off / Low / Medium / High / Manual   |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |
| Electronic Shutter Speed         | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |
| Flip / Mirror                    | Off / On   |
| Intelligent Video Analytics      | Scene change, Virtual line, Enter / Exit, Appear / Disappear   |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |
| <b>NETWORK</b>                   |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |
| Resolution                       | 1280 x 1024, 1280 x 720P (HD), 1024 x 768, 800 x 600, 640 x 480, 320 x 240   |
| Max. Framerate                   | 22fps (1280 x 1024), 30fps (720P HD)   |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |
| Audio I/O                        | Mic / Line in, Line out  |
| Audio Compression Format         | G.711 u-law  |
| Audio Communication              | Bi-directional audio   |
| IP                               | IPv4, IPv6   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF                                       |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |
| Streaming Method                 | Unicast / Multicast  |
| Max. User Access                 | 10 users at unicast mode   |
| Memory Slot                      | SD/SDHC memory slot  |
| ONVIF Conformance                | Yes  |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari   |
| Central Management Software      | NET-i viewer   |
| <b>ENVIRONMENTAL</b>             |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH  |
| <b>ELECTRICAL</b>                |  |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |
| Power Consumption                | Max. 7W  |
| <b>MECHANICAL</b>                |  |
| Color / Material                 | White / Plastic  |
| Dimensions (WxH)                 | SND-5080 : Ø133.0 x 129.4mm (Ø5.24" x 5.09")<br>SND-5080F : Ø159.9 x 125.0mm (Ø6.3" x 4.92") (Flush mounting type)   |
| Weight                           | SND-5080 : 523g (1.15 lb), SND-5080F : 650g (1.43 lb)  |



## SND-3080C/3080CF



4CIF People Counting Network Dome Camera



SND-3080C

SND-3080CF



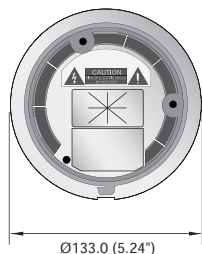
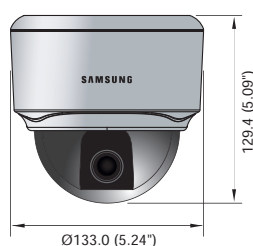
## Key Features

- Max. 30(25)fps at 4CIF resolution
- 2.8 ~ 11mm (3.9x) varifocal lens
- H.264, MPEG-4, MJPEG multiple codec
- PoE, SD memory, people counting

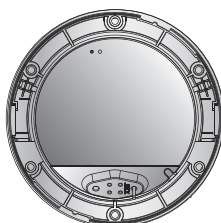
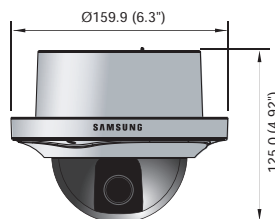
## Dimensions

Unit : mm (inch)

SND-3080C



SND-3080CF



## Technical Specifications

|                                  | SND-3080C(F)N  | SND-3080C(F)P                   |
|----------------------------------|--|---------------------------------|
| VIDEO                            |  |                                 |
| Imaging Device                   | 1/3" Super HAD PS CCD  |                                 |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)                 |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)                 |
| Scanning System                  | Progressive (If WDR on, Interlaced scan)   |                                 |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz        |
| Horizontal Resolution            | Color : 600TV lines  |                                 |
| Min. Illumination                | Color : 0.4Lux (F1.2, 50IRE), 0.001Lux (Sens-up 512x)<br>B/W : 0.4Lux (F1.2, 50IRE), 0.001Lux (Sens-up 512x)                                       |                                 |
| S / N Ratio                      | 52dB   |                                 |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |                                 |
| LENS                             |  |                                 |
| Focal Length (Zoom Ratio)        | 2.8 ~ 11mm (3.9x) Vari-focal   |                                 |
| Max. Aperture Ratio              | F1.2   |                                 |
| Angular Field of View            | H : 94.6°(Wide) ~ 28.8°(Tele), V : 68.4°(Wide) ~ 21.6°(Tele)   |                                 |
| Lens Type                        | DC auto iris   |                                 |
| Mount Type                       | Board-in type  |                                 |
| PAN / TILT / ROTATE              |  |                                 |
| Pan Range                        | 0° ~ 355°  |                                 |
| Tilt Range                       | 0° ~ 90°   |                                 |
| Rotate Range                     | 0° ~ 355°  |                                 |
| OPERATIONAL                      |  |                                 |
| Camera Title                     | Off / On (Displayed up to 54 characters)   |                                 |
| Day & Night                      | Auto / Day / Night (Software method)   |                                 |
| Backlight Compensation           | Off / BLC / WDR  |                                 |
| Wide Dynamic Range               | 128x   | 160x                            |
| Contrast Enhancement             | XDR (eXtended Dynamic Range) - Off / Low / Middle / High   |                                 |
| Digital Noise Reduction          | Motion adaptive 2D+3D noise filter (Off / Low / Middle / High / User)  |                                 |
| Digital Image Stabilization      | Off / On   |                                 |
| Motion Detection                 | Off / On (4 programmable zones)  |                                 |
| Privacy Masking                  | Off / On (12 polygonal programmable zones, 4 point polygonal method)   |                                 |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 512x)   |                                 |
| Gain Control                     | AGC (Low / Middle / High)  |                                 |
| White Balance                    | ATW1 / ATW2 / AWC / 3200K / 5600K  |                                 |
| Electronic Shutter Speed         | Off / Auto (1/100 ~ 1/10Ksec)  | Off / Auto (1/120 ~ 1/10Ksec)   |
| Digital Zoom                     | 16x  |                                 |
| Flip / Mirror                    | Off / On   |                                 |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom   |                                 |
| Intelligent Video Analytics      | People counting (Line-based counting, Area-based counting)   |                                 |
| PIP                              | Off / On   |                                 |
| Alarm I/O                        | Input 2ea / Output 2ea (Relay)   |                                 |
| NETWORK                          |  |                                 |
| Ethernet                         | RJ-45 (10/100BASE-T)   |                                 |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |                                 |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240  | 704 x 576, 640 x 480, 352 x 288 |
| Max. Framerate                   | 30fps  | 25fps                           |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |                                 |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |                                 |
| Streaming Capability             | Dual streaming (MPEG-4 + MJPEG or H.264 + MJPEG)   |                                 |
| IP                               | IPv4, IPv6   |                                 |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |                                 |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>User access log  |                                 |
| Streaming Method                 | Unicast / Multicast  |                                 |
| Max. User Access                 | 10 users at unicast mode   |                                 |
| Memory Slot                      | SD/SDHC memory slot  |                                 |
| ONVIF Conformance                | Yes  |                                 |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean   |                                 |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7<br>Supported Browser : Internet Explorer 6.0 or Higher   |                                 |
| Central Management Software      | NET-i viewer   |                                 |
| ENVIRONMENTAL                    |  |                                 |
| Operating Temperature / Humidity | -10℃ ~ +50℃ (+14℉ ~ +122℉) / 20% ~ 80% RH  |                                 |
| ELECTRICAL                       |  |                                 |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |                                 |
| Power Consumption                | Max. 7W  |                                 |
| MECHANICAL                       |  |                                 |
| Color / Material                 | White / Plastic  |                                 |
| Dimensions (WxH)                 | SND-3080C : Ø133.0 x 129.4mm (Ø5.24" x 5.09")<br>SND-3080CF : Ø159.9 x 125.0mm (Ø6.3" x 4.92") (Flush mounting type)                               |                                 |
| Weight                           | SND-3080C : 523g (1.15 lb), SND-3080CF : 650g (1.43 lb)  |                                 |

## SND-3080/3080F



4CIF WDR Network Dome Camera



SND-3080

SND-3080F

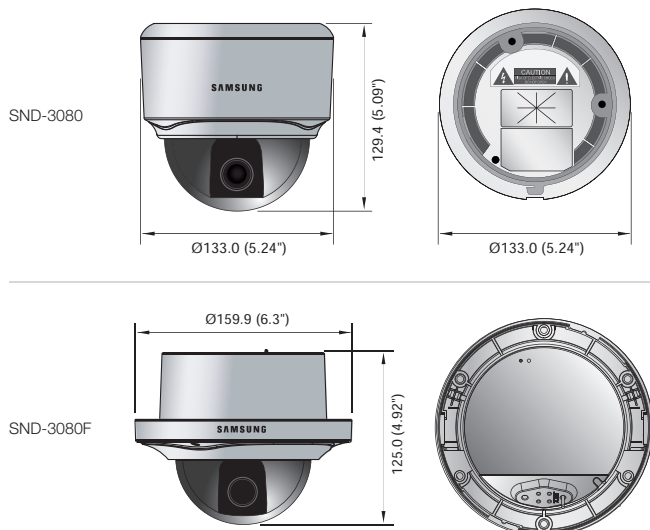


## Key Features

- Max. 30(25)fps at 4CIF resolution
- 2.8 ~ 11mm (3.9x) varifocal lens
- H.264, MPEG-4, MJPEG multiple codec
- PoE, SD memory

## Dimensions

Unit : mm (inch)



## Technical Specifications

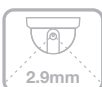
|                                  | SND-3080(F)N   | SND-3080(F)P                    |
|----------------------------------|--|---------------------------------|
| VIDEO                            |  |                                 |
| Imaging Device                   | 1/3" Super HAD PS CCD  |                                 |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)                 |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)                 |
| Scanning System                  | Progressive (If WDR on, Interlaced scan)   |                                 |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz        |
| Horizontal Resolution            | Color : 600TV lines  |                                 |
| Min. Illumination                | Color : 0.4Lux (F1.2, 50IRE), 0.001Lux (Sens-up 512x)<br>B/W : 0.4Lux (F1.2, 50IRE), 0.001Lux (Sens-up 512x)                                       |                                 |
| S / N Ratio                      | 52dB   |                                 |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |                                 |
| LENS                             |  |                                 |
| Focal Length (Zoom Ratio)        | 2.8 ~ 11mm (3.9x) Vari-focal   |                                 |
| Max. Aperture Ratio              | F1.2   |                                 |
| Angular Field of View            | H : 94.6°(Wide) ~ 28.8°(Tele), V : 68.4°(Wide) ~ 21.6°(Tele)   |                                 |
| Lens Type                        | DC auto iris   |                                 |
| Mount Type                       | Board-in type  |                                 |
| PAN / TILT / ROTATE              |  |                                 |
| Pan Range                        | 0° ~ 355°  |                                 |
| Tilt Range                       | 0° ~ 90°   |                                 |
| Rotate Range                     | 0° ~ 355°  |                                 |
| OPERATIONAL                      |  |                                 |
| Camera Title                     | Off / On (Displayed up to 54 characters)   |                                 |
| Day & Night                      | Auto / Day / Night (Software method)   |                                 |
| Backlight Compensation           | Off / BLC / WDR  |                                 |
| Wide Dynamic Range               | 128x   | 160x                            |
| Contrast Enhancement             | XDR (eXtended Dynamic Range) - Off / Low / Middle / High   |                                 |
| Digital Noise Reduction          | Motion adaptive 2D+3D noise filter (Off / Low / Middle / High / User)  |                                 |
| Digital Image Stabilization      | Off / On   |                                 |
| Motion Detection                 | Off / On (4 programmable zones)  |                                 |
| Privacy Masking                  | Off / On (12 polygonal programmable zones, 4 point polygonal method)   |                                 |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 512x)   |                                 |
| Gain Control                     | AGC (Low / Middle / High)  |                                 |
| White Balance                    | ATW1 / ATW2 / AWC / 3200K / 5600K  |                                 |
| Electronic Shutter Speed         | Off / Auto (1/100 ~ 1/10Ksec)  | Off / Auto (1/120 ~ 1/10Ksec)   |
| Digital Zoom                     | 16x  |                                 |
| Flip / Mirror                    | Off / On   |                                 |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom   |                                 |
| PIP                              | Off / On   |                                 |
| Alarm I/O                        | Input 2ea / Output 2ea (Relay)   |                                 |
| NETWORK                          |  |                                 |
| Ethernet                         | RJ-45 (10/100BASE-T)   |                                 |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |                                 |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240  | 704 x 576, 640 x 480, 352 x 288 |
| Max. Framerate                   | 30fps  | 25fps                           |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |                                 |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |                                 |
| Streaming Capability             | Dual streaming (MPEG-4 + MJPEG or H.264 + MJPEG)   |                                 |
| IP                               | IPv4, IPv6   |                                 |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |                                 |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>User access log  |                                 |
| Streaming Method                 | Unicast / Multicast  |                                 |
| Max. User Access                 | 10 users at unicast mode   |                                 |
| Memory Slot                      | SD/SDHC memory slot  |                                 |
| ONVIF Conformance                | Yes  |                                 |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean   |                                 |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7<br>Supported Browser : Internet Explorer 6.0 or Higher   |                                 |
| Central Management Software      | NET-i viewer   |                                 |
| ENVIRONMENTAL                    |  |                                 |
| Operating Temperature / Humidity | -10℃ ~ +50℃ (+14℉ ~ +122℉) / 20% ~ 80% RH  |                                 |
| ELECTRICAL                       |  |                                 |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |                                 |
| Power Consumption                | Max. 7W  |                                 |
| MECHANICAL                       |  |                                 |
| Color / Material                 | White / Plastic  |                                 |
| Dimensions (WxH)                 | SND-3080 : Ø133.0 x 129.4mm (Ø5.24" x 5.09")<br>SND-3080F : Ø159.9 x 125.0mm (Ø6.3" x 4.92") (Flush mounting type)                                 |                                 |
| Weight                           | SND-3080 : 523g (1.15 lb), SND-3080F : 650g (1.43 lb)  |                                 |



## SND-1010



VGA Network Dome Camera

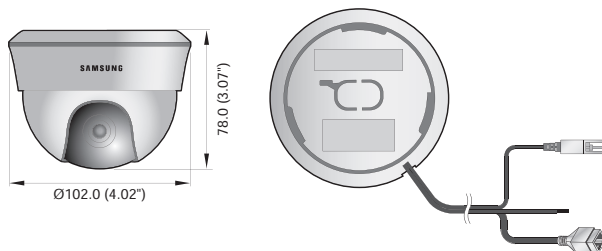


## Key Features

- Max. 30(25)fps at VGA resolution
- Built-in 2.9mm fixed lens
- H.264, MPEG-4, MJPEG multiple codec
- Multiple streaming simultaneously

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SND-1010N   | SND-1010P |
|----------------------------------|---|-----------|
| VIDEO                            |   |           |
| Imaging Device                   | 1/4" PS CMOS  |           |
| Total Pixels                     | 656(H) x 488(V)   |           |
| Effective Pixels                 | 640(H) x 480(V)   |           |
| Scanning System                  | Progressive   |           |
| Min. Illumination                | Color : 1.4Lux (F1.2, 50IRE), 0.18Lux (Sens-up 8x)  |           |
| S / N Ratio                      | 50dB  |           |
| LENS                             |   |           |
| Focal Length (Zoom Ratio)        | 2.9mm   |           |
| Max. Aperture Ratio              | F2.0  |           |
| Angular Field of View            | H : 68°, V : 50°, D : 85°   |           |
| Lens Type                        | Fixed Iris  |           |
| Mount Type                       | Board-in type   |           |
| OPERATIONAL                      |   |           |
| Day & Night                      | Auto  |           |
| Motion Detection                 | Off / On (4 programmable zones)   |           |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 8x)  |           |
| Gain Control                     | 2x, 4x, 8x, 16x, 32x  |           |
| White Balance                    | Auto / Manual   |           |
| Flip / Mirror                    | Off / On  |           |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)  |           |
| NETWORK                          |   |           |
| Ethernet                         | RJ-45 (10/100BASE-T)  |           |
| Video Compression Format         | H.264, MPEG-4, MJPEG  |           |
| Resolution                       | 640 x 480, 320 x 240  |           |
| Max. Framerate                   | 30fps   | 25fps     |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control   |           |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR  |           |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)  |           |
| IP                               | IPv4, IPv6  |           |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTSP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |           |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log, 802.1x Authentication                        |           |
| Streaming Method                 | Unicast / Multicast   |           |
| Max. User Access                 | 5 users at unicast mode   |           |
| ONVIF Conformance                | Yes   |           |
| Webpage Language                 | English, French, German, Spanish, Italian, Korean<br>Chinese, Russian, Japanese, Danish, Swedish, Portuguese  |           |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari          |           |
| Central Management Software      | NET-i viewer  |           |
| ENVIRONMENTAL                    |   |           |
| Operating Temperature / Humidity | 0°C ~ +50°C (+32°F ~ +122°F) / 20% ~ 80% RH   |           |
| ELECTRICAL                       |   |           |
| Input Voltage / Current          | 12V DC, 500mA / PoE (IEEE802.3af)   |           |
| Power Consumption                | Max. 2.5W   |           |
| MECHANICAL                       |   |           |
| Color / Material                 | White / Plastic   |           |
| Dimensions (WxH)                 | Ø102.0 x 78.0mm (Ø4.02" x 3.07")  |           |
| Weight                           | 200g (0.44 lb)  |           |

# SNV-7080



3Megapixel Full HD Vandal-Resistant Network Dome Camera

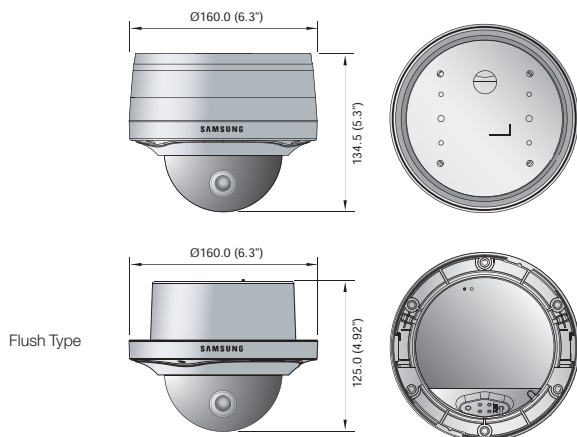


## Key Features

- Max. 3M (2048 x 1536) resolution
- 16 : 9 Full HD (1080p) resolution support
- 3~8.5mm (2.8x) motorized varifocal lens
- H.264, MJPEG dual codec
- WDR (supported in 2M mode only)
- Smart compression (ROI encoding)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBP-300WM SBP-300CM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

## Technical Specifications

|                                    | SNV-7080N/P  |
|------------------------------------|--|
| <b>VIDEO</b>                       |  |
| Imaging Device                     | 1/2.8" 3M PS CMOS  |
| Total Pixels                       | 2,144(H) x 1,588(V)  |
| Effective Pixels                   | 2,096(H) x 1,561(V)  |
| Scanning System                    | Progressive  |
| Min. Illumination (TBD)            | Color : 1Lux (F1.2, 50IRE), 0.017Lux (Sens-up 60x)<br>B/W : 0.08Lux (F1.2, 50IRE), 0.001Lux (Sens-up 60x)  |
| S / N Ratio                        | 50dB   |
| Video Output                       | CVBS : 1.0 Vp-p / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation  |
| <b>LENS</b>                        |  |
| Focal Length (Zoom Ratio)          | 3 ~ 8.5mm (2.8x) Motorized vari-focal  |
| Max. Aperture Ratio                | F1.2   |
| Angular Field of View              | H : 100°(Wide) ~ 35.3°(Tele), V : 74.6°(Wide) ~ 26°(Tele)  |
| Min. Object Distance               | 0.5m (1.64ft)  |
| Focus Control                      | Remote control via network (Manual, One-shot AF)   |
| Lens Type                          | DC auto iris   |
| Mount Type                         | Board-in type  |
| <b>PAN / TILT / ROTATE</b>         |  |
| Pan Range                          | 0° ~ 355°  |
| Tilt Range                         | 0° ~ 90°   |
| Rotate Range                       | 0° ~ 355°  |
| <b>OPERATIONAL</b>                 |  |
| Camera Title                       | Off / On (Displayed up to 15 characters)   |
| Day & Night                        | Auto (ICR) / Color / B/W   |
| Backlight Compensation             | Off / BLC / HLC / WDR  |
| Wide Dynamic Range                 | Off / On (* 2M mode only)  |
| Contrast Enhancement               | SSDR (Samsung Super Dynamic Range) (Off / On)  |
| Digital Noise Reduction            | SSNR III (2D+3D noise filter) (Off / On)   |
| Motion Detection                   | Off / On (4 programmable zones)  |
| Privacy Masking                    | Off / On (1ea 4 point polygonal + 16ea rectangular zones)  |
| Sens-up (Frame Integration)        | Off / Auto (2x ~ 60x)  |
| Gain Control                       | Off / Low / Medium / High  |
| White Balance                      | ATW / AWC / Manual / Indoor / Outdoor  |
| Electronic Shutter Speed           | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |
| Flip / Mirror                      | Off / On   |
| Alarm I/O                          | Input 1ea / Output 1ea (Relay)   |
| <b>NETWORK</b>                     |  |
| Ethernet                           | RJ-45 (10/100BASE-T)   |
| Video Compression Format           | H.264, MJPEG   |
| Resolution                         | 3M mode : 2048 x 1536, 1920 x 1080P(Full HD), 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720P(HD), 1024 x 768, 800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180  |
|                                    | 2M mode : 1920 x 1080P (Full HD), 1280 x 1024, 1280 x 960, 1280 x 720P (HD), 1024 x 768, 800 x 600, 800 x 450, 640 x 480, 640 x 360, 320 x 240, 320 x 180  |
| Max. Framerate                     | 3M mode : Max. 20fps, 2M mode : Max. 30fps<br>* When WDR on, Max. framerate is Max. 15fps  |
| Video Quality Adjustment           | H.264 : Compression level, Target bitrate level control<br>MJPEG : Quality level control   |
| Bitrate Control Method             | H.264 : CBR or VBR, MJPEG : VBR  |
| Streaming Capability               | Multiple streaming (Up to 6 profiles)  |
| Audio I/O                          | Mic / Line in, Line out  |
| Audio Compression Format           | G.711 u-law  |
| Audio Communication                | Bi-directional audio   |
| IP                                 | IPv4, IPv6   |
| Protocol                           | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF<br>HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log, 802.1x authentication |
| Security                           |  |
| Streaming Method                   | Unicast / Multicast  |
| Max. User Access                   | 10 users at unicast mode   |
| Memory Slot                        | SD/SDHC memory slot  |
| ONVIF Conformance                  | Yes  |
| Webpage Language                   | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek   |
| Web Viewer                         | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 7.0 or Higher, Firefox, Google Chrome, Apple Safari<br>NET-i viewer   |
| <b>CENTRAL MANAGEMENT SOFTWARE</b> |  |
| <b>ENVIRONMENTAL</b>               |  |
| Operating Temperature / Humidity   | -40°C ~ +50°C (-40°F ~ +122°F) / Less than 90% RH  |
| Ingress Protection                 | IP66 Grade (Waterproof)  |
| <b>ELECTRICAL</b>                  |  |
| Input Voltage / Current            | 12V DC, 24V AC, PoE (IEEE802.3af)  |
| Power Consumption                  | Max. 7W (Heater off), Max. 11W (Heater on)   |
| <b>MECHANICAL</b>                  |  |
| Color / Material                   | Ivory / Aluminum   |
| Dimensions (WxH)                   | Ø160.0 x 134.5mm (Ø6.3" x 5.3")  |
| Weight                             | 1.4Kg (3.09 lb)  |

# SNV-5080



1.3Megapixel HD Vandal-Resistant Network Dome Camera

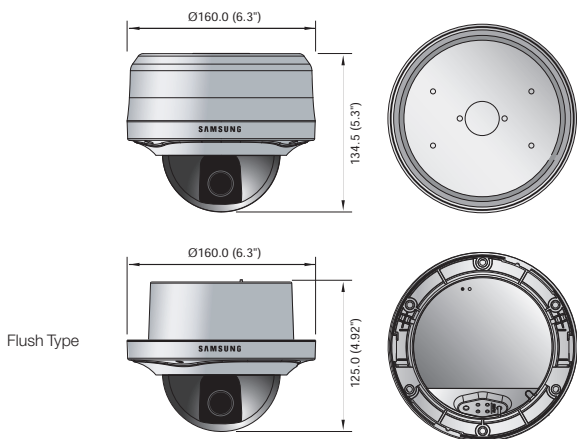


## Key Features

- Max. 1.3M (1280 x 1024) resolution
- 16 : 9 HD (720p) resolution support
- 2.8 ~ 10mm (3.6x) varifocal lens
- H.264, MPEG-4, MJPEG multiple codec
- PoE, SD memory, IP66, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SCX-300WM SCX-300CM SCX-300HM1 SCX-300LM SCX-300PM SCX-300KM

## Technical Specifications

### SNV-5080N/P

| SNV-5080N/P                      |  |
|----------------------------------|--|
| <b>VIDEO</b>                     |  |
| Imaging Device                   | 1/3" 1.3M PS CMOS  |
| Total Pixels                     | 1,384(H) x 1,076(V)  |
| Effective Pixels                 | 1,329(H) x 1,049(V)  |
| Scanning System                  | Progressive  |
| Min. Illumination                | Color : 0.3Lux (F1.2, 50IRE), 0.005Lux (Sens-up 60x)<br>B/W : 0.01Lux (F1.2, 50IRE), 0.0002Lux (Sens-up 60x)   |
| S / N Ratio                      | 50dB   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation  |
| <b>LENS</b>                      |  |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (3.6x) Vari-focal   |
| Max. Aperture Ratio              | F1.2   |
| Angular Field of View            | H : 94.6°(Wide) ~ 28.8°(Tele), V : 68.4°(Wide) ~ 21.6°(Tele)   |
| Lens Type                        | DC auto iris   |
| Mount Type                       | Board-in type  |
| <b>PAN / TILT / ROTATE</b>       |  |
| Pan Range                        | 0° ~ 355°  |
| Tilt Range                       | 0° ~ 90°   |
| Rotate Range                     | 0° ~ 355°  |
| <b>OPERATIONAL</b>               |  |
| Camera Title                     | Off / On (Displayed up to 15 characters)   |
| Day & Night                      | Auto (ICR) / Color / B/W   |
| Backlight Compensation           | Off / BLC / HLC  |
| Contrast Enhancement             | SSDR (Samsung Super Dynamic Range) (Off / On)  |
| Digital Noise Reduction          | SSNRIII (2D+3D noise filter) (Off / On)  |
| Motion Detection                 | Off / On (4 programmable zones)  |
| Privacy Masking                  | Off / On (12 programmable zones)   |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 60x)  |
| Gain Control                     | Off / Low / Medium / High / Manual   |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |
| Electronic Shutter Speed         | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |
| Flip / Mirror                    | Off / On   |
| Intelligent Video Analytics      | Scene change, Virtual line, Enter / Exit, Appear / Disappear   |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |
| <b>NETWORK</b>                   |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |
| Resolution                       | 1280 x 1024, 1280 x 720P (HD), 1024 x 768, 800 x 600, 640 x 480, 320 x 240   |
| Max. Framerate                   | 22fps (1280 x 1024), 30fps (720P HD)   |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |
| Audio I/O                        | Mic / Line in, Line out  |
| Audio Compression Format         | G.711 u-law  |
| Audio Communication              | Bi-directional audio   |
| IP                               | IPv4, IPv6   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF                                       |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |
| Streaming Method                 | Unicast / Multicast  |
| Max. User Access                 | 10 users at unicast mode   |
| Memory Slot                      | SD/SDHC memory slot  |
| ONVIF Conformance                | Yes  |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari   |
| Central Management Software      | NET-i viewer   |
| <b>ENVIRONMENTAL</b>             |  |
| Operating Temperature / Humidity | -40°C ~ +50°C (-40°F ~ +122°F) / Less than 90% RH  |
| Ingress Protection               | IP66 Grade (Waterproof)  |
| <b>ELECTRICAL</b>                |  |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |
| Power Consumption                | Max. 8W (Heater off), Max. 11W (Heater on)   |
| <b>MECHANICAL</b>                |  |
| Color / Material                 | Light gray / Aluminum  |
| Dimensions (WxH)                 | Ø160.0 x 134.5mm (Ø6.3" x 5.3")  |
| Weight                           | 1.28Kg (2.82 lb)   |

# SNV-5010

## 1.3Megapixel HD Vandal-Resistant Network Flat Camera

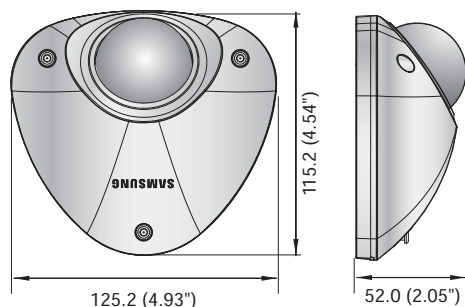


### Key Features

- Max. 1.3M (1280 x 1024) resolution
- 16 : 9 HD (720p) resolution support
- Built-in 3mm fixed lens
- H.264, MPEG-4, MJPEG multiple codec
- PoE, IP66

### Dimensions

Unit : mm (inch)



### Technical Specifications

|                                  | SNV-5010N/P  |
|----------------------------------|--|
| <b>VIDEO</b>                     |  |
| Imaging Device                   | 1/3" 1.3M PS CMOS  |
| Total Pixels                     | 1,384(H) x 1,076(V)  |
| Effective Pixels                 | 1,329(H) x 1,049(V)  |
| Scanning System                  | Progressive  |
| Min. Illumination                | Color : 1Lux (F1.8, 50IRE), 0.016Lux (Sens-up 60x)   |
| S / N Ratio                      | 50dB   |
| Video Output                     | DIP connector, 704 x 480(N), 704 x 576(P), for installation  |
| <b>LENS</b>                      |  |
| Focal Length (Zoom Ratio)        | 3mm  |
| Max. Aperture Ratio              | F1.8   |
| Angular Field of View            | H : 91.2°, V : 72.3°   |
| Lens Type                        | Fixed iris   |
| Mount Type                       | Board-in type  |
| <b>PAN / TILT / ROTATE</b>       |  |
| Pan Range                        | -10° ~ 10°   |
| Tilt Range                       | 0° ~ 90°   |
| <b>OPERATIONAL</b>               |  |
| Camera Title                     | Off / On (Displayed up to 15 characters)   |
| Backlight Compensation           | Off / BLC / HLC  |
| Contrast Enhancement             | SSDR (Samsung Super Dynamic Range) (Off / On)  |
| Digital Noise Reduction          | SSNR III (2D+3D noise filter) (Off / On)   |
| Motion Detection                 | Off / On (4 programmable zones)  |
| Privacy Masking                  | Off / On (12 programmable zones)   |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 60x)  |
| Gain Control                     | Off / Low / Medium / High / Manual   |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |
| Electronic Shutter Speed         | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |
| Flip / Mirror                    | Off / On   |
| Intelligent Video Analytics      | Scene change, Virtual line, Enter / Exit, Appear / Disappear   |
| <b>NETWORK</b>                   |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |
| Resolution                       | 1280 x 1024, 1280 x 720P (HD), 1024 x 768, 800 x 600, 640 x 480, 320 x 240   |
| Max. Framerate                   | 22fps (1280 x 1024), 30fps (720P HD)   |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |
| IP                               | IPv4, IPv6   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF                                       |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |
| Streaming Method                 | Unicast / Multicast  |
| Max. User Access                 | 10 users at unicast mode   |
| ONVIF Conformance                | Yes  |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari   |
| Central Management Software      | NET-i viewer   |
| <b>ENVIRONMENTAL</b>             |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (-14°F ~ +122°F) / Less than 90% RH  |
| Ingress Protection               | IP66 Grade (Waterproof)  |
| <b>ELECTRICAL</b>                |  |
| Input Voltage / Current          | 12V DC, PoE (IEEE802.3af)  |
| Power Consumption                | Max. 6W  |
| <b>MECHANICAL</b>                |  |
| Color / Material                 | Ivory / Aluminum   |
| Dimensions (WxHxD)               | 125.2 x 52.0 x 115.2mm (4.93" x 2.05" x 4.54")   |
| Weight                           | 435g (0.96 lb)   |

# SNV-3120



4CIF 12x Vandal-Resistant Network Dome Camera

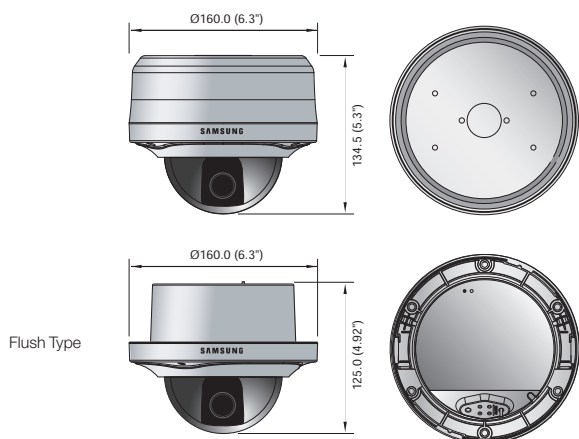


## Key Features

- Max. 30(25)fps at 4CIF resolution
- 3.69 ~ 44.32mm (12x) optical zoom, 16x digital zoom
- H.264, MPEG-4, MJPEG multiple codec
- PoE, SD memory, IP66, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SCX-300WM SCX-300CM SCX-300HM1 SCX-300LM SCX-300PM SCX-300KM

## Technical Specifications

|                                  | SNV-3120N  | SNV-3120P                                  |
|----------------------------------|--|--|
| VIDEO                            |  |  |
| Imaging Device                   | 1/4" Ex-view HAD PS CCD  |  |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)                            |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)                            |
| Scanning System                  | Progressive (VPS on) (If WDR on, Interlaced scan)  |  |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz                   |
| Horizontal Resolution            | Color : 600TV lines  |  |
| Min. Illumination                | Color : 0.7Lux (F1.65, 50IRE), 0.001Lux (Sens-up 512x)<br>B/W : 0.07Lux (F1.65, 50IRE), 0.0001Lux (Sens-up 512x)                                   |  |
| S / N Ratio                      | 50dB   |  |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |  |
| LENS                             |  |  |
| Focal Length (Zoom Ratio)        | 3.69 ~ 44.32mm (12x)   |  |
| Max. Aperture Ratio              | F1.65(Wide) / F2.01(Tele)  |  |
| Angular Field of View            | H : 54.44°(Wide) ~ 4.64°(Tele), V : 41.42°(Wide) ~ 3.52°(Tele)   |  |
| Min. Object Distance             | 0.2m (Wide) / 0.8m (Tele)  |  |
| Focus Control                    | AF / One-shot AF / Manual  |  |
| Lens Type                        | DC auto iris   |  |
| PAN / TILT / ROTATE              |  |  |
| Pan Range                        | 0° ~ 355°  |  |
| Tilt Range                       | 0° ~ 90°   |  |
| Rotate Range                     | 0° ~ 355°  |  |
| Preset                           | 12ea   |  |
| Preset Accuracy                  | ±0.1°  |  |
| OPERATIONAL                      |  |  |
| Camera Title                     | Off / On (Displayed up to 54 characters)   |  |
| Day & Night                      | Auto (ICR) / Color / B/W   |  |
| Backlight Compensation           | Off / BLC / WDR  |  |
| Wide Dynamic Range               | 128x   | 160x                                       |
| Contrast Enhancement             | XDR (eXtended Dynamic Range) - Off / Low / Middle / High   |  |
| Digital Noise Reduction          | Motion adaptive 2D+3D noise filter (Off / Low / Middle / High / User)  |  |
| Digital Image Stabilization      | Off / On   |  |
| Motion Detection                 | Off / On (4 programmable zones)  |  |
| Privacy Masking                  | Off / On (12 polygonal programmable zones)   |  |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 512x)   |  |
| Gain Control                     | Off / Very Low / Low / Medium / High / Very High   |  |
| White Balance                    | ATW1 / ATW2 / AWC / Manual   |  |
| Electronic Shutter Speed         | Off / Manual (1/100 ~ 1/10Ksec)  |  |
| Digital Zoom                     | 16x  |  |
| Flip / Mirror                    | Digital flip   |  |
| VPS                              | Off / On   |  |
| Intelligent Video Analytics      | Moved / Fixed  |  |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |  |
| NETWORK                          |  |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |  |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |  |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240, 320 x 240   | 704 x 576, 640 x 480, 352 x 288, 320 x 240 |
| Max. Framerate                   | 30fps  | 25fps                                      |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |  |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |  |
| Audio I/O                        | Mic / Line in, Line out  |  |
| Audio Compression Format         | G.711 u-law  |  |
| Audio Communication              | Bi-directional audio   |  |
| IP                               | IPv4, IPv6   |  |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |  |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |  |
| Streaming Method                 | Unicast / Multicast  |  |
| Max. User Access                 | 10 users at unicast mode   |  |
| Memory Slot                      | SD/SDHC memory slot  |  |
| ONVIF Conformance                | Yes  |  |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari         |  |
| Central Management Software      | NET-i viewer   |  |
| ENVIRONMENTAL                    |  |  |
| Operating Temperature / Humidity | -40°C ~ +50°C (-40°F ~ +122°F) / Less than 90% RH  |  |
| Ingress Protection               | IP66 Grade (Waterproof)  |  |
| ELECTRICAL                       |  |  |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |  |
| Power Consumption                | Max. 8W (Heater off), Max. 11W (Heater on)   |  |
| MECHANICAL                       |  |  |
| Color / Material                 | Light gray / Aluminum  |  |
| Dimensions (WxH)                 | Ø160.0 x 134.5mm (Ø6.3" x 5.3")  |  |
| Weight                           | 1.5Kg (3.31 lb)  |  |



# SNV-3080



4CIF WDR Vandal-Resistant Network Dome Camera

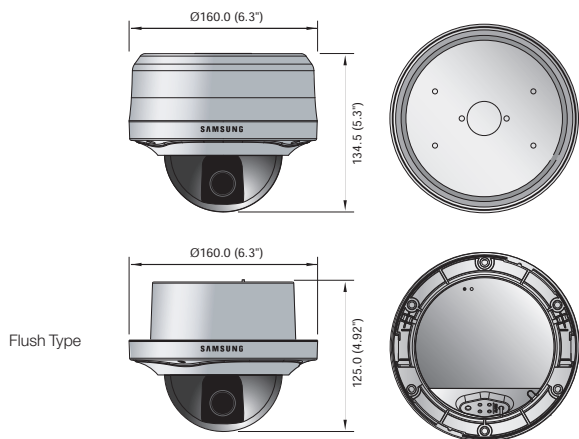


## Key Features

- Max. 30(25)fps at 4CIF resolution
- 2.8 ~ 11mm (3.9x) varifocal lens
- H.264, MPEG-4, MJPEG multiple codec
- PoE, SD memory, IP66, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SCX-300WM SCX-300CM SCX-300HM1 SCX-300LM SCX-300PM SCX-300KM

## Technical Specifications

|                                  | SNV-3080N  | SNV-3080P                       |
|----------------------------------|--|---------------------------------|
| VIDEO                            |  |                                 |
| Imaging Device                   | 1/3" Super HAD PS CCD  |                                 |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)                 |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)                 |
| Scanning System                  | Progressive (If WDR on, Interlaced scan)   |                                 |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz        |
| Horizontal Resolution            | Color : 600TV lines  |                                 |
| Min. Illumination                | Color : 0.4Lux (F1.2, 50IRE), 0.001Lux (Sens-up 512x)<br>B/W : 0.04Lux (F1.2, 50IRE), 0.0001Lux (Sens-up 512x)                                     |                                 |
| S / N Ratio                      | 52dB   |                                 |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation  |                                 |
| LENS                             |  |                                 |
| Focal Length (Zoom Ratio)        | 2.8 ~ 11mm (3.9x) Vari-focal   |                                 |
| Max. Aperture Ratio              | F1.2   |                                 |
| Angular Field of View            | H : 94.6°(Wide) ~ 28.8°(Tele), V : 68.4°(Wide) ~ 21.6°(Tele)   |                                 |
| Lens Type                        | DC auto iris   |                                 |
| Mount Type                       | Board-in type  |                                 |
| PAN / TILT / ROTATE              |  |                                 |
| Pan Range                        | 0° ~ 355°  |                                 |
| Tilt Range                       | 0° ~ 90°   |                                 |
| Rotate Range                     | 0° ~ 355°  |                                 |
| OPERATIONAL                      |  |                                 |
| Camera Title                     | Off / On (Displayed up to 54 characters)   |                                 |
| Day & Night                      | Auto / Day / Night (IR cut filter)   |                                 |
| Backlight Compensation           | Off / BLC / WDR  |                                 |
| Wide Dynamic Range               | 128x   | 160x                            |
| Contrast Enhancement             | XDR (eXtended Dynamic Range) - Off / Low / Middle / High   |                                 |
| Digital Noise Reduction          | Motion adaptive 2D+3D noise filter (Off / Low / Middle / High / User)  |                                 |
| Digital Image Stabilization      | Off / On   |                                 |
| Motion Detection                 | Off / On (4 programmable zones)  |                                 |
| Privacy Masking                  | Off / On (12 polygonal programmable zones, 4 point polygonal method)   |                                 |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 512x)   |                                 |
| Gain Control                     | AGC (Low / Middle / High)  |                                 |
| White Balance                    | ATW1 / ATW2 / AWC / 3200K / 5600K  |                                 |
| Electronic Shutter Speed         | Off / Auto (1/100 ~ 1/10Ksec)  | Off / Auto (1/120 ~ 1/10Ksec)   |
| Digital Zoom                     | 16x  |                                 |
| Flip / Mirror                    | Off / On   |                                 |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom   |                                 |
| Intelligent Video Analytics      | Scene change, Virtual line, Enter / Exit, Appear / Disappear   |                                 |
| PIP                              | Off / On   |                                 |
| Alarm I/O                        | Input 2ea / Output 2ea (Relay)   |                                 |
| NETWORK                          |  |                                 |
| Ethernet                         | RJ-45 (10/100BASE-T)   |                                 |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |                                 |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240  | 704 x 576, 640 x 480, 352 x 288 |
| Max. Framerate                   | 30fps  | 25fps                           |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |                                 |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |                                 |
| Streaming Capability             | Dual streaming (MPEG-4 + MJPEG or H.264 + MJPEG)   |                                 |
| Audio I/O                        | Mic / Line in, Line out  |                                 |
| Audio Compression Format         | G.711 u-law  |                                 |
| Audio Communication              | Bi-directional audio   |                                 |
| IP                               | IPv4, IPv6   |                                 |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF |                                 |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |                                 |
| Streaming Method                 | Unicast / Multicast  |                                 |
| Max. User Access                 | 10 users at unicast mode   |                                 |
| Memory Slot                      | SD/SDHC memory slot  |                                 |
| ONVIF Conformance                | Yes  |                                 |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean   |                                 |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7<br>Supported Browser : Internet Explorer 6.0 or Higher   |                                 |
| Central Management Software      | NET-i viewer   |                                 |
| ENVIRONMENTAL                    |  |                                 |
| Operating Temperature / Humidity | -40°C ~ +50°C (-40°F ~ +122°F) / Less than 90% RH  |                                 |
| Ingress Protection               | IP66 Grade (Waterproof)  |                                 |
| ELECTRICAL                       |  |                                 |
| Input Voltage / Current          | 12V DC, 24V AC, PoE (IEEE802.3af)  |                                 |
| Power Consumption                | Max. 8W (Heater off), Max. 11W (Heater on)   |                                 |
| MECHANICAL                       |  |                                 |
| Color / Material                 | Light gray / Aluminum  |                                 |
| Dimensions (WxH)                 | Ø160.0 x 134.5mm (Ø6.3" x 5.3")  |                                 |
| Weight                           | 1.28Kg (2.82 lb)   |                                 |



# SNP-5200/5200H



1.3Megapixel HD 20x Network PTZ Dome Camera



SNP-5200

SNP-5200H



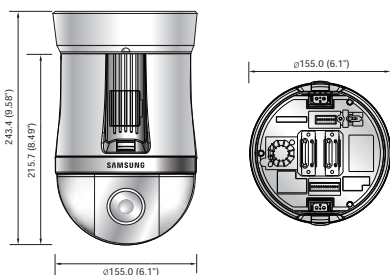
## Key Features

- Max. 1.3M (1280 x 1024) resolution
- 16 : 9 HD (720p) resolution support
- 4.45 ~ 89mm (20x) optical zoom, 16x digital zoom
- H.264, MPEG-4, MJPEG multiple codec
- PoE plus, SD memory, IP66, bi-directional audio support

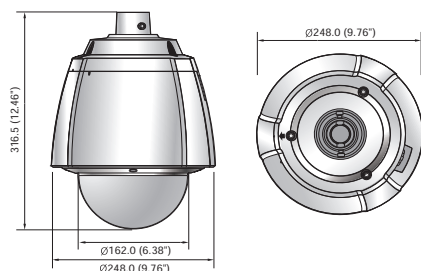
## Dimensions

Unit : mm (inch)

SNP-5200



SNP-5200H



## Accessories (Optional)



SBP-300WM1 SBP-300CM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

## Technical Specifications

|                                  | SNP-5200N/P  | SNP-5200HN/HP   |
|----------------------------------|--|---|
| <b>VIDEO</b>                     |  |   |
| Imaging Device                   | 1/3" 1.3M PS CMOS  |   |
| Total Pixels                     | 1,384(H) x 1,076(V)  |   |
| Effective Pixels                 | 1,329(H) x 1,049(V)  |   |
| Scanning System                  | Progressive  |   |
| Min. Illumination                | Color : 0.7Lux (F1.6, 50IRE), 0.01Lux (Sens-up 60x, 50IRE)<br>B/W : 0.08Lux (F1.6, 50IRE), 0.001Lux (Sens-up 60x, 50IRE)   |   |
| S / N Ratio                      | 52dB   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite, 704 x 480(N), 704 x 576(P), for installation  |   |
| <b>LENS</b>                      |  |   |
| Focal Length (Zoom Ratio)        | 4.45 ~ 89mm (20x)  |   |
| Max. Aperture Ratio              | F1.6(Wide) / F2.9(Tele)  |   |
| Angular Field of View            | H : 56.56°(Wide) ~ 3.10°(Tele) / V : 43.32°(Wide) ~ 2.34°(Tele)  |   |
| Min. Object Distance             | 1m (3.28ft)  |   |
| Focus Control                    | AF / One-shot AF / Manual  |   |
| Lens Type                        | DC auto iris   |   |
| Mount Type                       | Board-in type  |   |
| <b>PAN / TILT / ROTATE</b>       |  |   |
| Pan Range                        | 360° Endless   |   |
| Pan Speed                        | Preset : 500°/sec, Manual : 0.024°/sec ~ 120°/sec  |   |
| Tilt Range                       | 190°(-5° ~ 185°)   |   |
| Tilt Speed                       | Preset : 500°/sec, Manual : 0.024°/sec ~ 120°/sec  |   |
| Preset                           | 255ea  |   |
| Preset Accuracy                  | ±0.1°  |   |
| <b>OPERATIONAL</b>               |  |   |
| Camera Title                     | Off / On (Displayed up to 15 characters)   |   |
| Day & Night                      | Auto (ICR) / Color / B/W   |   |
| Backlight Compensation           | Off / BLC / HLC  |   |
| Contrast Enhancement             | SSDR (Samsung Super Dynamic Range) (Off / On)  |   |
| Digital Noise Reduction          | SSNR III (2D+3D noise filter) (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (4 programmable zones)  |   |
| Privacy Masking                  | Off / On (8 programmable zones)  |   |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 60x)  |   |
| Gain Control                     | Off / Low / Medium / High / Manual   |   |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |   |
| Electronic Shutter Speed         | Auto / A.FLK / Manual (1/30 ~ 30,000sec)   |   |
| Digital Zoom                     | 16x  |   |
| Flip / Mirror                    | Off / On   |   |
| Intelligent Video Analytics      | Scene Change, Virtual Line, Enter / Exit, Appear / Disappear   |   |
| Alarm I/O                        | Input 4ea / Output 2ea (Relay)   |   |
| Remote Control Interface         | RS-485/422   |   |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D, Panasonic, Honeywell, AD, Bosch, Vicon, GE   |   |
| <b>NETWORK</b>                   |  |   |
| Ethernet                         | RJ-45 (10/100BASE-T)   |   |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |   |
| Resolution                       | 1280 x 1024, 1280 x 720P (HD), 1024 x 768, 800 x 600, 640 x 480, 320 x 240   |   |
| Max. Framerate                   | 30fps at all resolutions   |   |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |   |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |   |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |   |
| Audio I/O                        | Mic / Line in, Line out  |   |
| Audio Compression Format         | G.711 u-law  |   |
| Audio Communication              | Bi-directional audio   |   |
| IP                               | IPv4, IPv6   |   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF                                       |   |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log, 802.1x authentication   |   |
| Streaming Method                 | Unicast / Multicast  |   |
| Max. User Access                 | 10 users at unicast mode   |   |
| Memory Slot                      | SD/SDHC memory slot  |   |
| ONVIF Conformance                | Yes  |   |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek |   |
| Supported OS                     | Windows XP / VISTA / 7, MAC OS   |   |
| Supported Browser                | Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari  |   |
| Central Management Software      | NET-i viewer   |   |
| <b>ENVIRONMENTAL</b>             |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH  | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH                               |
| Ingress Protection               | N/A  | IP66 Grade (Waterproof)   |
| <b>ELECTRICAL</b>                |  |   |
| Input Voltage / Current          | 24V AC, PoE+ (IEEE802.3at)   |   |
| Power Consumption                | Max. 21W   | Max. 25W (Heater off), Max. 52W (Heater on)<br>* Heater works at AC input only. |
| <b>MECHANICAL</b>                |  |   |
| Color / Material                 | Ivory / Plastic  | Ivory / Aluminum / Plastic sun-shield   |
| Dimensions (WxH)                 | Ø155.0 x 243.4mm (Ø6.1" x 9.58")   | Ø248.0 x 316.5mm (9.76" x 12.46")   |
| Weight                           | 2.1Kg (4.63 lb)  | 4.6Kg (10.14 lb)  |

# SNP-3430H

4CIF 43x Network PTZ Dome Camera

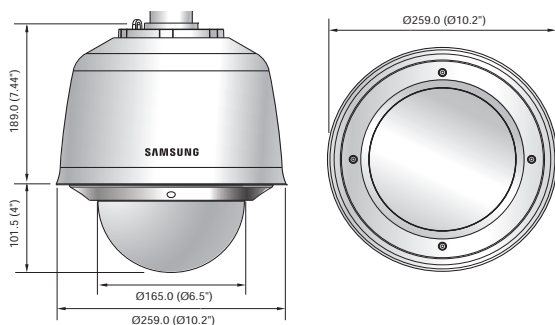


## Key Features

- Max. 30(25)fps at 4CIF resolution
- 3.2 ~ 138.5mm (43x) optical zoom, 16x digital zoom
- H.264, MPEG-4, MJPEG multiple codec
- PoE plus, SD memory, IP66, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBP-300WM1 SBP-300CM SBP-300LM SBP-300PM SBP-300KM

## Technical Specifications

|                                  | SNP-3430HN   | SNP-3430HP                              |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/4" Ex-view HAD PS CCD  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)                         |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)                         |
| Scanning System                  | Progressive (VPS on) (If WDR on, Interlaced scan)  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz                |
| Horizontal Resolution            | Color : 600TV lines  |   |
| Min. Illumination                | Color : 0.7Lux (F1.6, 50IRE), 0.001Lux (Sens-up, 512x)<br>B/W : 0.07Lux (F1.6, 50IRE), 0.0001Lux (Sens-up, 512x)   |   |
| S / N Ratio                      | 52dB   |   |
| Video Output                     | CVBS : 1.0Vp-p / 75Ω composite   |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 3.2 ~ 138.5mm (43x)  |   |
| Max. Aperture Ratio              | F1.6(Wide) / F3.7(Tele)  |   |
| Angular Field of View            | H : 61.2°(Wide) ~ 1.47°(Tele) / V : 47.2°(Wide) ~ 1.1°(Tele)   |   |
| Min. Object Distance             | 1m (3.28ft)  |   |
| Focus Control                    | AF / One-shot AF / Manual  |   |
| Zoom Movement Speed              | Max. 3.2sec (Wide→ Tele)   |   |
| Lens Type                        | DC auto iris   |   |
| Mount Type                       | Board-in type  |   |
| PAN / TILT / ROTATE              |  |   |
| Pan Range                        | 360° Endless   |   |
| Pan Speed                        | Preset : 360°/sec, Manual : 0.05°/sec ~ 200°/sec   |   |
| Tilt Range                       | 180°(0° ~ 180°)  |   |
| Tilt Speed                       | Preset : 360°/sec, Manual : 0.05°/sec ~ 200°/sec   |   |
| Preset                           | 255ea  |   |
| OPERATIONAL                      |  |   |
| Camera Title                     | Off / On (Displayed up to 32 characters)   |   |
| Day & Night                      | Auto (ICR) / Color / B/W   |   |
| Backlight Compensation           | Off / BLC / WDR  |   |
| Wide Dynamic Range               | 128x   | 160x                                    |
| Contrast Enhancement             | XDR (eXtended Dynamic Range) (Off / Low / Medium / High)   |   |
| Digital Noise Reduction          | Motion adaptive 2D+3D noise filter (Off / Low / Medium / High / User)  |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (4 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 polygonal programmable zones)   |   |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 512x)   |   |
| Gain Control                     | Off / Low / Medium / High / Manual   |   |
| White Balance                    | ATW (In) / ATW (Out) / AWC / Manual  |   |
| Electronic Shutter Speed         | Off / A.FLK / Manual (1/120 ~ 1/10Ksec)  | Off / A.FLK / Manual (1/100 ~ 1/10Ksec) |
| Digital Zoom                     | 16x  |   |
| Flip / Mirror                    | Off / On   |   |
| VPS                              | Off / On   |   |
| Intelligent Video Analytics      | Moved / Fixed  |   |
| PIP                              | Off / On   |   |
| Schedule                         | Day / Time schedule  |   |
| Alarm I/O                        | Input 8ea / Output 4ea (Relay)   |   |
| Remote Control Interface         | RS-485   |   |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D, Panasonic, GE (KALATEL), AD, Vicon, Honeywell (DK6), Bosch (Philips), Honeywell (VCLTP)  |   |
| NETWORK                          |  |   |
| Ethernet                         | RJ-45 (10/100BASE-T)   |   |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |   |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240  | 704 x 576, 640 x 480, 352 x 288         |
| Max. Framerate                   | 30fps  | 25fps                                   |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |   |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |   |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |   |
| Audio I/O                        | Mic / Line in, Line out  |   |
| Audio Compression Format         | G.711 u-law  |   |
| Audio Communication              | Bi-directional audio   |   |
| IP                               | IPv4, IPv6   |   |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF<br>HTTPS(SSL) login authentication, Digest login authentication |   |
| Security                         | IP address filtering, User access log, 802.1x Authentication   |   |
| Streaming Method                 | Unicast / Multicast  |   |
| Max. User Access                 | 10 users at unicast mode   |   |
| Memory Slot                      | SD/SDHC memory slot  |   |
| ONVIF Conformance                | Yes  |   |
| Webpage Language                 | English, French, German, Spanish, Italian, Chinese, Korean, Japanese, Russian, Swedish, Danish, Portuguese   |   |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari   |   |
| Central Management Software      | NET-i viewer   |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH  |   |
| Ingress Protection               | IP66 Grade (Waterproof)  |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | 24V AC, PoE+ (IEEE802.3at) / 2.5A  |   |
| Power Consumption                | Max. 20W (Heater Off), Max. 50W (Heater On), PoE+ 24W<br>* Heater works at AC input only   |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory / Aluminum / Plastic sun-shield  |   |
| Dimensions (WxH)                 | Ø259.0 x 290.5 mm (Ø10.2" x 11.44")  |   |
| Weight                           | 4.5Kg (9.92 lb)  |   |

# SNP-3370TH/3301H



4CIF 37x/30x Network PTZ Dome Camera

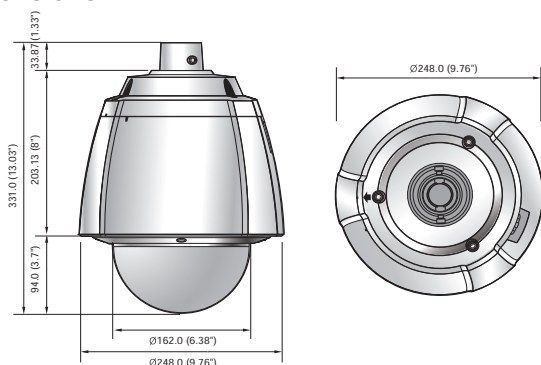


## Key Features

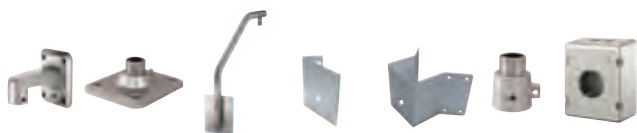
- Max. 30(25)fps at 4CIF resolution
- 3.5 ~ 129.5mm (37x) / 3.5 ~ 105mm (30x) optical zoom, 12x digital zoom
- H.264, MPEG-4, MJPEG multiple codec
- Auto tracking, SD memory, IP66, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



STB-300PW STB-300PP STB-355PPM STB-330PPM STB-340PPM STB-40PF STB-270B

## Technical Specifications

|                                  | SNP-3370THN/3301HN  | SNP-3370THP/3301HP              |
|----------------------------------|---|---------------------------------|
| VIDEO                            |   |                                 |
| Imaging Device                   | 1/4" Vertical double density interline transfer CCD   |                                 |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)                 |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)                 |
| Synchronization                  | Internal / Line lock  |                                 |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz        |
| Horizontal Resolution            | Color : 550TV lines   |                                 |
| Min. Illumination                | Color : 0.7Lux (F1.6, 50IRE), 0.0027Lux (Sens-up 256x)<br>B/W : 0.03Lux (F1.6, 50IRE), 0.0001Lux (Sens-up 256x)   |                                 |
| S / N Ratio                      | 50dB  |                                 |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |                                 |
| LENS                             |   |                                 |
| Focal Length (Zoom Ratio)        | SNP-3370TH : 3.5 ~ 129.5mm (37x), SNP-3301H : 3.5 ~ 105mm (30x)   |                                 |
| Max. Aperture Ratio              | SNP-3370TH : F1.6(Wide) / F3.9(Tele), SNP-3301H : F1.6(Wide) / F3.6(Tele)   |                                 |
| Angular Field of View            | SNP-3370TH : H : 55.5°(Wide) ~ 1.59°(Tele) / V : 42.5°(Wide) ~ 1.19°(Tele)<br>SNP-3301H : H : 55.5°(Wide) ~ 1.77°(Tele) / V : 42.5°(Wide) ~ 1.33°(Tele) |                                 |
| Min. Object Distance             | 1.8m (5.91ft)   |                                 |
| Focus Control                    | AF / One-shot AF / Manual   |                                 |
| Zoom Movement Speed              | SNP-3370TH : 2.5x/sec, SNP-3301H : 2.2x/sec   |                                 |
| Lens Type                        | DC auto iris  |                                 |
| Mount Type                       | Board-in type   |                                 |
| PAN / TILT / ROTATE              |   |                                 |
| Pan Range                        | 360° Endless  |                                 |
| Pan Speed                        | Preset : 500°/sec, Manual : 0.024°/sec ~ 120°/sec   |                                 |
| Tilt Range                       | 190° (-5° ~ 185°)   |                                 |
| Tilt Speed                       | Preset : 500°/sec, Manual : 0.024°/sec ~ 120°/sec   |                                 |
| Preset                           | 255ea   |                                 |
| Preset Accuracy                  | ±0.1°   |                                 |
| Auto Tracking                    | Yes (SNP-3370TH only)   |                                 |
| OPERATIONAL                      |   |                                 |
| On Screen Display                | English   |                                 |
| Day & Night                      | Auto (ICR) / Color / B/W  |                                 |
| Backlight Compensation           | Off / BLC / WDR / HLC   |                                 |
| Wide Dynamic Range               | 128x  | 160x                            |
| Digital Noise Reduction          | 3D noise filter (Off / Low / Medium / High)   |                                 |
| Digital Image Stabilization      | Off / On  |                                 |
| Motion Detection                 | Yes   |                                 |
| Privacy Masking                  | Off / On (8 programmable zones)   |                                 |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 256x)  |                                 |
| Gain Control                     | Off / Low / Medium / High   |                                 |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor   |                                 |
| Electronic Shutter Speed         | Auto (1/60 ~ 1/20,000sec) / Manual / A.FLK / Auto (1/50 ~ 1/20,000sec) / Manual / A.FLK   |                                 |
| Digital Zoom                     | 12x   |                                 |
| Flip / Mirror                    | Digital flip  |                                 |
| Intelligent Video Analytics      | Appear / Disappear  |                                 |
| Alarm I/O                        | Input 4ea / Output 2ea  |                                 |
| Remote Control Interface         | RS-485/422  |                                 |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D, Panasonic, Honeywell, AD, Vicon   |                                 |
| NETWORK                          |   |                                 |
| Ethernet                         | RJ-45 (10/100BASE-T)  |                                 |
| Video Compression Format         | H.264, MPEG-4, MJPEG  |                                 |
| Resolution                       | 704 x 480, 352 x 240, 176 x 120   | 704 x 576, 352 x 288, 176 x 144 |
| Max. Framerate                   | 30fps   | 25fps                           |
| Video Quality Adjustment         | H.264 / MPEG-4 : 5 Level (Verylow, Low, Medium, High, Very high)<br>MJPEG : 5 Level (Verylow, Low, Medium, High, Very high)                             |                                 |
| Bitrate Control Method           | CBR only  |                                 |
| Streaming Capability             | Dual streaming (MPEG-4 + MJPEG or H.264 + MJPEG)  |                                 |
| Audio I/O                        | Line in / Line out  |                                 |
| Audio Compression Format         | ADPCM   |                                 |
| Audio Communication              | Bi-directional audio  |                                 |
| IP                               | IPv4  |                                 |
| Protocol                         | TCP/IP, UDP/IP, RTP, RTSP, NTP, HTTP, DHCP, FTP, SMTP, ICMP, IGMP, ARP, DNS, DDNS   |                                 |
| Security                         | Password protection, IP address filtering, User access log  |                                 |
| Streaming Method                 | Unicast / Multicast   |                                 |
| Max. User Access                 | 10 users  |                                 |
| Memory Slot                      | SD/SDHC memory slot   |                                 |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7<br>Supported Browser : Internet Explorer 6.0 or Higher  |                                 |
| Central Management Software      | NET-i viewer  |                                 |
| ENVIRONMENTAL                    |   |                                 |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH   |                                 |
| Ingress Protection               | IP66 Grade (Waterproof)   |                                 |
| ELECTRICAL                       |   |                                 |
| Input Voltage / Current          | 24V AC  |                                 |
| Power Consumption                | Max. 22W (Heater off), Max. 64W (Heater on)   |                                 |
| MECHANICAL                       |   |                                 |
| Color / Material                 | Silver / Aluminum   |                                 |
| Dimensions (WxH)                 | Ø248.0 x 331.0mm (Ø9.76" x 13.03")  |                                 |
| Weight                           | 4.6Kg (10.14 lb)  |                                 |

# SNP-3370/3301



4CIF 37x/30x Network PTZ Dome Camera

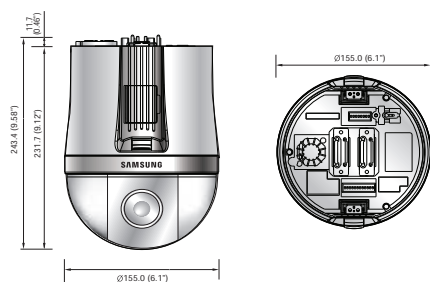


## Key Features

- Max. 30(25)fps at 4CIF resolution
- 3.5 ~ 129.5mm (37x) / 3.5 ~ 105mm (30x) optical zoom, 12x digital zoom
- H.264, MPEG-4, MJPEG multiple codec
- SD memory, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)

### Housing



STH-380NPO/370NPO  
/370NPI/360NPO

### Mount



STB-370NPC

STB-25PF

STB-30PF

### Mount



STB-270PWV

STB-350PPM

STB-496PPV

STB-330PPM

STB-340PPM

STB-270B

## Technical Specifications

|                                  | SNP-3370N/3301N  | SNP-3370P/3301P                 |
|----------------------------------|--|---------------------------------|
| VIDEO                            |  |                                 |
| Imaging Device                   | 1/4" Vertical double density interline transfer CCD  |                                 |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)                 |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)                 |
| Scanning System                  | Interlaced   |                                 |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz        |
| Horizontal Resolution            | Color : 550TV lines  |                                 |
| Min. Illumination                | Color : 0.7Lux (F1.6, 50IRE), 0.0027Lux (Sens-up 256x)<br>B/W : 0.03Lux (F1.6, 50IRE), 0.0001Lux (Sens-up 256x)                                      |                                 |
| S / N Ratio                      | 50dB   |                                 |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |                                 |
| LENS                             |  |                                 |
| Focal Length (Zoom Ratio)        | SNP-3370 : 3.5 ~ 129.5mm (37x), SNP-3301 : 3.5 ~ 105mm (30x)   |                                 |
| Max. Aperture Ratio              | SNP-3370 : F1.6(Wide) / F3.9(Tele), SNP-3301 : F1.6(Wide) / F3.6(Tele)   |                                 |
| Angular Field of View            | SNP-3370 : H : 55.5°(Wide) ~ 1.59°(Tele) / V : 42.5°(Wide) ~ 1.19°(Tele)<br>SNP-3301 : H : 55.5°(Wide) ~ 1.77°(Tele) / V : 42.5°(Wide) ~ 1.33°(Tele) |                                 |
| Min. Object Distance             | 1.8m (5.91ft)  |                                 |
| Focus Control                    | AF / One-shot AF / Manual  |                                 |
| Zoom Movement Speed              | SNP-3370 : 2.5x/sec, SNP-3301 : 2.2x/sec   |                                 |
| Lens Type                        | DC auto iris   |                                 |
| Mount Type                       | Board-in type  |                                 |
| PAN / TILT / ROTATE              |  |                                 |
| Pan Range                        | 360° Endless   |                                 |
| Pan Speed                        | Preset : 500°/sec, Manual : 0.024°/sec ~ 120°/sec  |                                 |
| Tilt Range                       | 190° (-5° ~ 185°)  |                                 |
| Tilt Speed                       | Preset : 500°/sec, Manual : 0.024°/sec ~ 120°/sec  |                                 |
| Preset                           | 255ea  |                                 |
| Preset Accuracy                  | ±0.1°  |                                 |
| OPERATIONAL                      |  |                                 |
| On Screen Display                | English  |                                 |
| Day & Night                      | Auto (ICR) / Color / B/W   |                                 |
| Backlight Compensation           | Off / BLC / WDR / HLC  |                                 |
| Wide Dynamic Range               | 128x   | 160x                            |
| Digital Noise Reduction          | 3D noise filter (Off / Low / Medium / High)  |                                 |
| Digital Image Stabilization      | Off / On   |                                 |
| Motion Detection                 | Yes  |                                 |
| Privacy Masking                  | Off / On (8 programmable zones)  |                                 |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 256x)   |                                 |
| Gain Control                     | Off / Low / Medium / High  |                                 |
| White Balance                    | ATW / AWC / Manual / Indoor / Outdoor  |                                 |
| Electronic Shutter Speed         | Auto (1/60 ~ 1/20,000sec) / Manual / A.FLK    Auto (1/50 ~ 1/20,000sec) / Manual / A.FLK   |                                 |
| Digital Zoom                     | 12x  |                                 |
| Flip / Mirror                    | Digital flip   |                                 |
| Intelligent Video Analytics      | Appear / Disappear   |                                 |
| Alarm I/O                        | Input 4ea / Output 2ea   |                                 |
| Remote Control Interface         | RS-485/422   |                                 |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D, Panasonic, Honeywell, AD, Vicon  |                                 |
| NETWORK                          |  |                                 |
| Ethernet                         | RJ-45 (10/100BASE-T)   |                                 |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |                                 |
| Resolution                       | 704 x 480, 352 x 240, 176 x 120  | 704 x 576, 352 x 288, 176 x 144 |
| Max. Frame rate                  | 30fps  | 25fps                           |
| Video Quality Adjustment         | H.264 / MPEG-4 : 5 Level (Verylow, Low, Medium, High, Very high)<br>MJPEG : 5 Level (Verylow, Low, Medium, High, Very high)                          |                                 |
| Bitrate Control Method           | CBR only   |                                 |
| Streaming Capability             | Dual streaming (MPEG-4 + MJPEG or H.264 + MJPEG)   |                                 |
| Audio I/O                        | Line in / Line out   |                                 |
| Audio Compression Format         | ADPCM  |                                 |
| Audio Communication              | Bi-directional audio   |                                 |
| IP                               | IPv4   |                                 |
| Protocol                         | TCP/IP, UDP/IP, RTP, RTSP, NTP, HTTP, DHCP, FTP, SMTP, ICMP, IGMP, ARP, DNS, DDNS  |                                 |
| Security                         | Password protection, IP address filtering, User access log   |                                 |
| Streaming Method                 | Unicast / Multicast  |                                 |
| Max. User Access                 | 10 users   |                                 |
| Memory Slot                      | SD/SDHC memory slot  |                                 |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7<br>Supported Browser : Internet Explorer 6.0 or Higher   |                                 |
| Central Management Software      | NET-i viewer   |                                 |
| ENVIRONMENTAL                    |  |                                 |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH  |                                 |
| ELECTRICAL                       |  |                                 |
| Input Voltage / Current          | 24V AC   |                                 |
| Power Consumption                | Max. 16W   |                                 |
| MECHANICAL                       |  |                                 |
| Color / Material                 | Silver / Plastic   |                                 |
| Dimensions (WxH)                 | Ø155.0 x 243.4mm (Ø6.1" x 9.58")   |                                 |
| Weight                           | 1.7Kg (3.75 lb)  |                                 |



# SNP-3120/3120V/3120VH



4CIF 12x Network PTZ Dome Camera



SNP-3120

SNP-3120V

SNP-3120VH

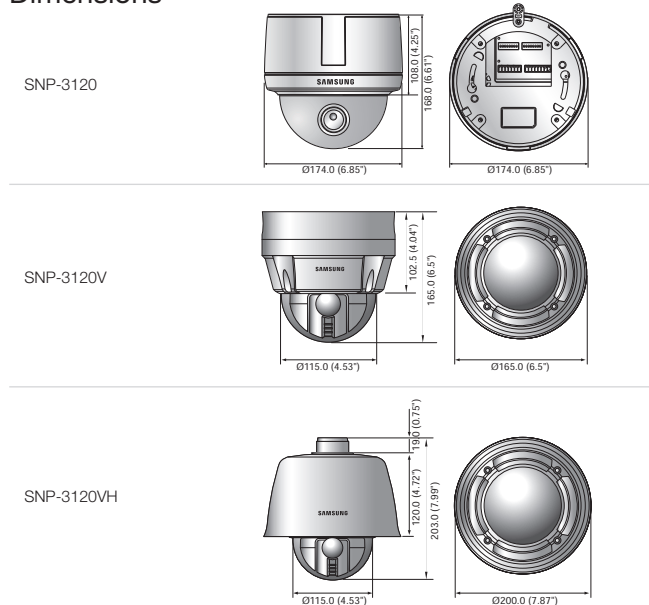


## Key Features

- Max. 30(25)fps at 4CIF resolution
- 3.69 ~ 44.32mm (12x) optical zoom, 16x digital zoom
- H.264, MPEG-4, MJPEG multiple codec
- PoE plus, SD memory, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBP-300WM1 SBP-300CM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

## Technical Specifications

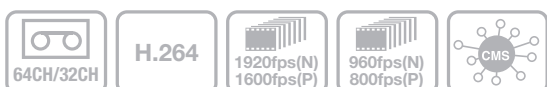
|                                  | SNP-3120N/VN/VHN  | SNP-3120P/VP/VHP                           |
|----------------------------------|---|--|
| <b>VIDEO</b>                     |   |  |
| Imaging Device                   | 1/4" Ex-view HAD PS CCD   |  |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)                            |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)                            |
| Scanning System                  | Progressive (VPS on) (If WDR on, Interlaced scan)   |  |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz                   |
| Horizontal Resolution            | Color : 600TV lines   |  |
| Min. Illumination                | Color : 0.7Lux (F1.65, 50IRE), 0.001Lux (Sens-up 512x),<br>B/W : 0.07Lux (F1.65, 50IRE), 0.0001Lux (Sens-up 512x)   |  |
| S / N Ratio                      | 50dB  |  |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |  |
| <b>LENS</b>                      |   |  |
| Focal Length (Zoom Ratio)        | 3.69 ~ 44.32mm (12x)  |  |
| Max. Aperture Ratio              | F1.65(Wide) / F2.01(Tele)   |  |
| Angular Field of View            | H : 54.44° (Wide) ~ 4.62° (Tele), V : 41.42° (Wide) ~ 3.52° (Tele)  |  |
| Min. Object Distance             | 0.2m(Wide) / 0.8m(Tele)   |  |
| Focus Control                    | AF / One-shot AF / Manual   |  |
| Lens Type                        | DC auto iris  |  |
| <b>PAN / TILT / ROTATE</b>       |   |  |
| Pan Range                        | 360° Endless  |  |
| Pan Speed                        | Preset : 650°/sec, Manual : 0.05°/sec ~ 120°/sec (Turbo : 200°/sec)   |  |
| Tilt Range                       | -5° ~ 185°  |  |
| Tilt Speed                       | Preset : 650°/sec, Manual : 0.05°/sec ~ 120°/sec  |  |
| Preset                           | 255ea   |  |
| Preset Accuracy                  | ±0.1°   |  |
| <b>OPERATIONAL</b>               |   |  |
| Camera Title                     | Off / On (Displayed up to 12 characters)  |  |
| Day & Night                      | Auto (ICR) / Color / B/W  |  |
| Backlight Compensation           | Off / BLC / WDR   |  |
| Wide Dynamic Range               | 128x  | 160x                                       |
| Contrast Enhancement             | XDR (eXtended Dynamic Range) (Off / Low / Medium / High)  |  |
| Digital Noise Reduction          | Motion adaptive 2D+3D noise filter (Off / Low / Medium / High)  |  |
| Digital Image Stabilization      | Off / On  |  |
| Motion Detection                 | Off / On (4 programmable zones)   |  |
| Privacy Masking                  | Off / On (12 polygonal programmable zones)  |  |
| Sens-up (Frame Integration)      | Off / Auto (2x ~ 512x)  |  |
| Gain Control                     | Off / Low / Medium / High / Manual  |  |
| White Balance                    | ATW (In) / ATW (Out) / AWC / Manual   |  |
| Electronic Shutter Speed         | Off / A.FLK / Manual (1/120 ~ 1/10Ksec)   |  |
| Digital Zoom                     | 16x   |  |
| Flip / Mirror                    | Digital flip  |  |
| VPS                              | Off / On  |  |
| Intelligent Video Analytics      | Moved / Fixed   |  |
| Alarm I/O                        | Input 2ea / Output 2ea (Relay)  |  |
| Remote Control Interface         | RS-485  |  |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D, Panasonic, Honeywell, AD, Vicon, GE, Bosch  |  |
| <b>NETWORK</b>                   |   |  |
| Ethernet                         | RJ-45 (10/100BASE-T)  |  |
| Video Compression Format         | H.264, MPEG-4, MJPEG  |  |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240, 320 x 240  | 704 x 576, 640 x 480, 352 x 288, 320 x 240 |
| Max. Framerate                   | 30fps   | 25fps                                      |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control   |  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR  |  |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)  |  |
| Audio I/O                        | Mic / Line in, Line out   |  |
| Audio Compression Format         | G.711 u-law   |  |
| Audio Communication              | Bi-directional audio  |  |
| IP                               | IPv4, IPv6  |  |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, ONVIF<br>HTTPS(SSL) Login authentication, Digest login authentication<br>IP address filtering, User access log |  |
| <b>Security</b>                  |   |  |
| Streaming Method                 | Unicast / Multicast   |  |
| Max. User Access                 | 10 users at unicast mode  |  |
| Memory Slot                      | SD/SDHC memory slot   |  |
| ONVIF Conformance                | Yes   |  |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari  |  |
| Central Management Software      | NET-i viewer  |  |
| <b>ENVIRONMENTAL</b>             |   |  |
| Operating Temperature / Humidity | SNP-3120 : -10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH<br>SNP-3120V/3120VH : -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH  |  |
| Ingress Protection               | IP66 (SNP-3120V/3120VH) * SNP-3120 not available  |  |
| <b>ELECTRICAL</b>                |   |  |
| Input Voltage / Current          | 24V AC, PoE+ (IEEE802.3at)  |  |
| Power Consumption                | SNP-3120 : Max. 15W, SNP-3120V/3120VH : Max. 15W (Heater off), Max. 45W (Heater on)<br>* Heater works at AC power input only  |  |
| <b>MECHANICAL</b>                |   |  |
| Color / Material                 | SNP-3120 : Ivory / Plastic, SNP-3120V : Ivory / Aluminum (Vandal-resistance)<br>SNP-3120VH : Ivory / Aluminum (Vandal-resistance), Sun-shield built-in  |  |
| Dimensions (WxH)                 | SNP-3120 : Ø174.0 x 168.0mm (Ø6.85" x 6.61"), SNP-3120V : Ø165.0 x 165.0mm (Ø6.5" x 6.5")<br>SNP-3120VH : Ø200.0 x 203.0mm (Ø7.87" x 7.99")   |  |
| Weight                           | SNP-3120 : 1.2Kg (2.65 lb), SNP-3120V : 1.9Kg (4.19 lb), SNP-3120VH : 2.4Kg (5.29 lb)   |  |



## SRN-6450/3250



64CH/32CH Network Video Recorder

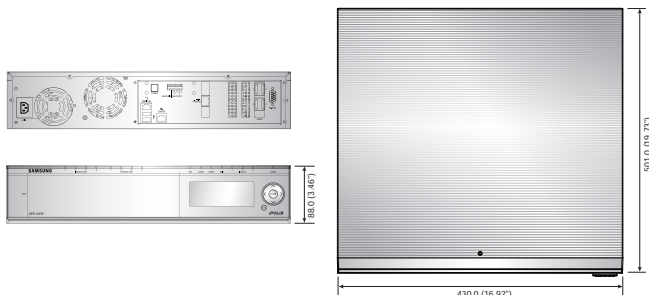


## Key Features

- H.264, MPEG-4, MJPEG multiple codec
- CIF high resolution images at 1920fps(N), 1600fps(P) in real-time (SRN-6450)  
CIF high resolution images at 960fps(N), 800fps(P) in real-time (SRN-3250)
- Up to 20TB using external storage option

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                     |                             | SRN-6450   | SRN-3250   |
|---------------------|-----------------------------|--|--|
| DISPLAY             |                             |  |  |
| N/W                 | Inputs                      | Up to 64CH (CIF 1920/1600fps)  | Up to 32CH (CIF 960/800fps)  |
| Camera              | Resolution                  | VGA, 4CIF, 1.3M  |  |
| Web                 | Live                        | 1 / 4 / 9 / 16 / 36 / 64, Sequence   | 1 / 4 / 9 / 16 / 32, Sequence  |
| Support             | Search                      | 1CH  |  |
| PERFORMANCE         |                             |  |  |
| Recording           | Compression                 | H.264, MPEG-4, MJPEG   |  |
|                     | Recording Bit Rate          | 48Mbps (*1)  | 36Mbps (*1)  |
|                     | Record Rate<br>(NTSC / PAL) | Up to 320fps@1.3M<br>Up to 1280/1152fps@4CIF<br>Up to 1920/1600fps@2CIF, CIF | Up to 120fps@1.3M<br>Up to 480/400fps@4CIF<br>Up to 960/800fps@2CIF, CIF |
|                     | Mode                        | Manual, Schedule (Normal / Event)  |  |
|                     | Overwrite Modes             | Continuous   |  |
|                     | Pre-alarm                   | Up to 5sec   |  |
|                     | Post-alarm                  | Up to 60sec  |  |
| Search & Playback   | Search Mode                 | Time, Event, Calendar  |  |
|                     | Playback Function           | REW, FWD (Depend on CMS)   |  |
| Network             | Bandwidth Control           | Automatic (Automatic transmission control)                                   |  |
|                     | Max. Remote Users           | 5 Users simultaneously   |  |
|                     | Protocol Support            | TCP/IP, DHCP, DNS, DDNS, HTTP, ARP, ICMP, NTP, RTP/RTCP, RTSP                |  |
|                     | Monitoring                  | CMS software NET-i, Built-in web server                                      |  |
| Storage             | Maximum Capacity            | Up to 20TB using external storage option                                     |  |
|                     | RAID                        | Normal, RAID1, 5   | Normal, RAID1  |
|                     | Internal HDD                | Up to 4 SATA HDDs  |  |
|                     | External HDD                | Up to 4 expansion bay (Up to 4 HDD each)                                     |  |
|                     | NAS                         | Up to 4 NAS connection (CIFS / Samba)  |  |
| Security            | Password Protection         | 2 User level   |  |
| INTERFACE           |                             |  |  |
| Monitors            | DOT Matrix LCD              | 20 x 2 Status display  |  |
| Alarm               | Inputs                      | Screw terminal 2 inputs, NO/NC   |  |
|                     | Outputs                     | Screw terminal 2 relay outputs, NO/NC  |  |
|                     | Remote Notification         | Notification via e-mail  |  |
| Connections         | Ethernet                    | 3 (RJ-45 100/1000 Base-T), 1 (RJ-45 100Base-T)                               |  |
|                     | Serial Interface            | RS-232C  |  |
|                     | USB                         | 2 USB 2.0 ports (Firmware upgrade)   |  |
|                     | eSATA                       | 4 External SATA ports  |  |
| IP Camera Protocols | Supported IP Cameras        | Samsung, AXIS (*2)   |  |
| GENERAL             |                             |  |  |
| Electrical          | Input Voltage / Current     | 100 ~ 240V AC $\pm$ 10%, 50/60Hz, Auto ranging                               |  |
|                     | Power Consumption           | Max. 110W (With 1x HDD)<br>Max. 130W (With 4x HDD)                           |  |
| Environmental       | Operating Temperature       | +5°C ~ +40°C (+41°F ~ +104°F)  |  |
|                     | Operating Humidity          | 0% ~ 60% RH  |  |
| Mechanical          | Dimensions (WxHxD)          | 430.0 x 88.0 x 501.0mm (16.92" x 3.46" x 19.73")                             |  |
|                     | Weight (4x Hard Disks)      | Approx. 11Kg (24.25 lb)  |  |
|                     | Rack Mount Kit              | For mounting one unit in an EIA 19 inch rack                                 |  |
| Language (LCD)      |                             | English  |  |
| Certifications      |                             | FCC (Class A), cUL/UL listed, CE (Class A)                                   |  |

(\*1) Up to 5Mbps for each camera

(\*2) VAPIX MPEG-4 Model, Some functions are limited

## SRN-1670D/470D



## 16CH/4CH Network Video Recorder



SRN-1670D



SRN-470D

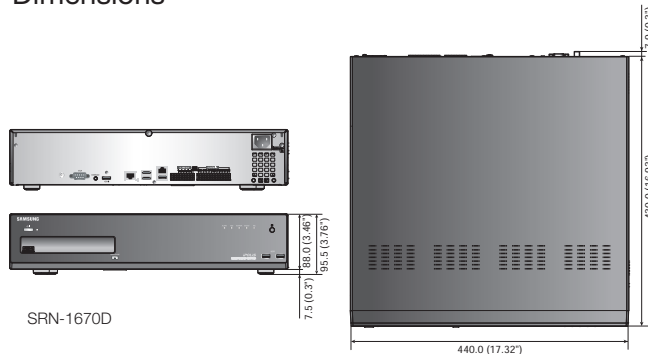


## Key Features

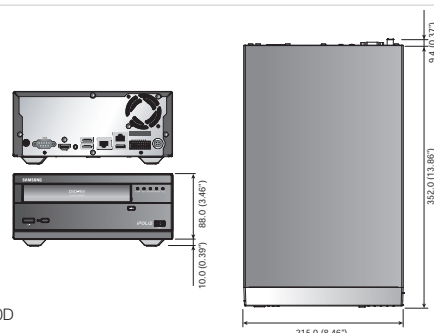
- H.264, MJPEG dual codec
- 4CIF high resolution images at 480fps(N), 400fps(P) in real-time (SRN-1670D)  
4CIF high resolution images at 120fps(N), 100fps(P) in real-time (SRN-470D)
- DVD writer support

## Dimensions

Unit : mm (inch)



SRN-1670D



SRN-470D

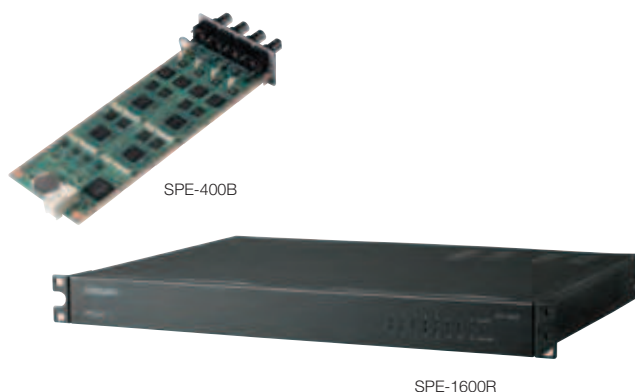
## Technical Specifications

|                     |  | SRN-1670D  | SRN-470D   |
|---------------------|--|--|--|
| DISPLAY             |  |  |  |
| N/W Camera          | Inputs   | Up to 16CH (4CIF 480/400fps)   | Up to 4CH (4CIF 120/100fps)  |
|                     | Resolution   | VGA, 4CIF, 1.3M, 2M  |  |
|                     | Protocols  | Samsung  |  |
| Live                | Multi Screen Display   | 1 / 4 / 6 / 8 / 9 / 13 / 16, Sequence  | 1 / 4, Sequence  |
| PERFORMANCE         |  |  |  |
| Operating System    | Embedded   | Linux  |  |
|                     | Compression  | H.264, MJPEG   |  |
| Recording           | Recording Bit Rate   | 48Mbps   |  |
|                     | Record Rate / NTSC   | Up to 120fps@1.3M, 2M<br>Up to 120fps@1280 x 720 (1M)<br>Up to 480fps@704 x 480 (4CIF)             | Up to 120fps@1.3M, 2M<br>Up to 120fps@1280 x 720 (1M)<br>Up to 120fps@704 x 480 (4CIF) |
|                     |  | Up to 100fps@1.3M, 2M<br>Up to 100fps@1280 x 720 (1M)<br>Up to 400fps@704 x 576 (4CIF)             | Up to 100fps@1.3M, 2M<br>Up to 100fps@1280 x 720 (1M)<br>Up to 100fps@704 x 576 (4CIF) |
|                     | Record Rate / PAL  |  |  |
|                     | Mode   | Manual, Schedule (Continuous / Event), Event (Pre / Post)  |  |
|                     | Overwrite Modes  | Continuous   |  |
|                     | Pre-alarm  | Up to 30sec (5, 10, 20, 30sec)   |  |
| Post-alarm          | Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)   |  |  |
| Search & Playback   | Playback Speed / NTSC  | Up to 30fps@1.3M, 2M<br>Up to 60fps@1280 x 720 (1M)<br>Up to 120fps@704 x 480 (4CIF)               | Up to 30fps@1.3M, 2M<br>Up to 30fps@1280 x 720 (1M)<br>Up to 120fps@704 x 480 (4CIF)   |
|                     |  | Up to 25fps@1.3M, 2M<br>Up to 50fps@1280 x 720 (1M)<br>Up to 100fps@704 x 576 (4CIF)               | Up to 25fps@1.3M, 2M<br>Up to 25fps@1280 x 720 (1M)<br>Up to 100fps@704 x 576 (4CIF)   |
|                     |  |  |  |
|                     | Search Mode  | Date/time, Event, Back up (*All search included preview function)                                  |  |
| Playback Function   | Fast forward / backward, Slow forward / backward, Step forward / backward  |  |  |
| Network             | Ethernet   | Gigabit Ethernet x 2   |  |
|                     | Transmission Speed   | Up to 48Mbps, Unlimited (48M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps |  |
|                     | Bandwidth Control  | Automatic  |  |
|                     | Max. Remote Users  | Search 3 / Live unicast 10 / Live multicast 20   |  |
|                     | Protocol Support   | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP  |  |
| Monitoring          | NET-i viewer, Webviewer  |  |  |
| Storage             | Internal HDD   | Up to 5 SATA HDDs  | Up to 1 SATA HDD   |
|                     | External HDD   | eSATA interface  |  |
|                     | DVD Writer (Back up)   | Yes  |  |
|                     | USB (Back up)  | 3 USB ports  | 2 USB ports  |
| Security            | File Format (Back up)  | BU (NVR player), EXE (Include player)  |  |
|                     | Password Protection  | 1Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function                 |  |
| Data Authentication | Watermark  |  |  |
| INTERFACE           |  |  |  |
| Monitors            | VGA  | Analog RGB 1280 x 1024(60Hz) resolution  |  |
|                     | HDMI   | 720p/1080p(60Hz) resolution  |  |
| Audio               | Inputs   | N/A (Network audio support, up to 16CH)  | N/A (Network audio support, up to 4CH)   |
|                     | Output   | RCA x 1  |  |
| Alarm               | Compression  | G.711/723/726  |  |
|                     | Inputs   | Terminal 16 inputs, NO/NC  | Terminal 4 inputs, NO/NC   |
|                     | Outputs  | Terminal 4 relay outputs, NO/NC  | Terminal 2 relay outputs, NO/NC  |
| Connections         | Remote Notification  | Notification via e-mail  |  |
|                     | Ethernet   | 2 RJ-45 10/100/1000 Base-T   |  |
|                     | USB  | USB 2.0, 3 ports   | USB 2.0, 2 ports   |
|                     | eSATA  | 2 ports  |  |
| Dome Protocols      | Application Support  | Mouse, Remote controller   |  |
|                     | Supported PTZ Cameras  | Samsung network products (Network PTZ)   |  |
| GENERAL             |  |  |  |
| Electrical          | Input Voltage / Current  | 100 ~ 240VAC $\pm$ 10%, 50/60Hz, Auto ranging  | 12V DC adaptor, 4A, 100 ~ 250VAC, 50/60Hz, 55W   |
|                     | Power Consumption  | Max. 60W (With 1x HDD)   | Max. 36W (With 1x HDD)   |
| Environmental       | Operating Temperature  | +0°C ~ +40°C (+32°F ~ +104°F)  |  |
|                     | Operating Humidity   | 20% ~ 85% RH   |  |
| Mechanical          | Dimensions (WxHxD)   | 440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")   | 215.0 x 88.0 x 352.0mm (8.46" x 3.46" x 13.86")  |
|                     | Weight (2x Hard Disks)   | Approx. 7.5Kg (16.53 lb)   | Approx. 3Kg (6.61 lb)  |
|                     | Rack Mount Kit   | 2ea  |  |
| Language            | Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thailandais, Rumania, Serbia, Croatia, Hungarian, Greek (22 Language) |  |  |

## SPE-400B/1600R



4CH Network Video Encoder (Blade Type) / Extension Rack

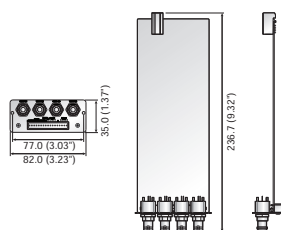


## Key Features

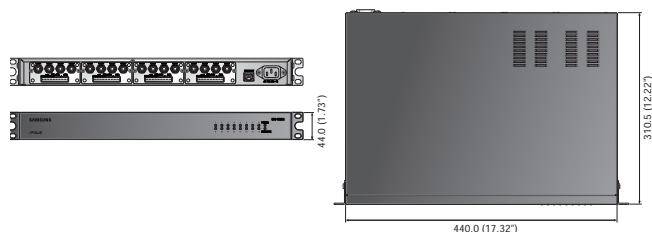
- Max. 30(25)fps at 4CIF resolution
- H.264, MPEG-4, MJPEG multiple codec
- Multiple streaming simultaneously
- 10/100/1000BASE-T
- SPE-1600R : extension rack, 4 slots for SPE-400B

## Dimensions

Unit : mm (inch)



SPE-400B



SPE-1600R

## Technical Specifications

|                                  | SPE-400BN  |  | SPE-400BP                                  |  |
|----------------------------------|--|--|--|--|
| OPERATIONAL                      |  |  |  |  |
| Video In                         | 4 CVBS : 1.0 Vp-p / 75Ω composite, NTSC/PAL auto detection   |  |  |  |
| De-interlacing Filter            | Built-in   |  |  |  |
| Event Trigger                    | Motion detection, Alarm input, Video loss  |  |  |  |
| Alarm I/O                        | Input 4ea / Output 4ea (Relay)   |  |  |  |
| Remote Control Interface         | 4ea RS-485 (Half duplex)   |  |  |  |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D   |  |  |  |
| NETWORK                          |  |  |  |  |
| Ethernet                         | RJ-45 (10/100/1000BASE-T)  |  |  |  |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |  |  |  |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240, 320 x 240   |  | 704 x 576, 640 x 480, 352 x 288, 320 x 240 |  |
| Max. Framerate                   | 30fps per channel  |  | 25fps per channel                          |  |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |  |  |  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |  |  |  |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |  |  |  |
| IP                               | IPv4, IPv6   |  |  |  |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPOE<br>FTP, SMTP, ICMP, IGMP, SNMPV1/V2C/V3(MIB-2), ARP, DNS, DDNS, ONVIF |  |  |  |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |  |  |  |
| Streaming Method                 | Unicast / Multicast  |  |  |  |
| Max. User Access                 | 10 users at unicast mode   |  |  |  |
| ONVIF Conformance                | Yes  |  |  |  |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari         |  |  |  |
| Central Management Software      | NET-i viewer   |  |  |  |
| ENVIRONMENTAL                    |  |  |  |  |
| Operating Temperature / Humidity | 0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 80% RH  |  |  |  |
| ELECTRICAL                       |  |  |  |  |
| Input Voltage / Current          | 5V DC  |  |  |  |
| Power Consumption                | Max. 11W   |  |  |  |
| MECHANICAL                       |  |  |  |  |
| Color / Material                 | Black / Metal  |  |  |  |
| Dimensions (WxHxD)               | 210.2 x 82.0 x 35.0mm (8.27" x 3.23" x 1.38")  |  |  |  |
| Weight                           | 165.9g (0.37 lb)   |  |  |  |

|                         | SPE-1600R  |
|-------------------------|--|
| <b>CONNECTION</b>       |  |
| Expansion Slots         | 4 Slots for SPE-400B                             |
| Connector               | RJ-45 (10/100/1000BASE-T)                        |
| <b>ENVIRONMENTAL</b>    |  |
| Operating Temperature   | 0°C ~ +40°C (+32°F ~ +104°F)                     |
| Operating Humidity      | 20% ~ 80% RH                                     |
| <b>ELECTRICAL</b>       |  |
| Input Voltage / Current | 100 ~ 240V AC ±10%, 50/60Hz / 0.5A               |
| Power Consumption       | Max. 50W (with SPE-400B x 4)                     |
| <b>MECHANICAL</b>       |  |
| Color / Material        | Black / Metal                                    |
| Dimensions (WxHxD)      | 478.0 x 310.5 x 44.0mm (18.82" x 12.22" x 1.73") |
| Weight                  | 3Kg (6.61 lb)                                    |

## SPE-400

4CH Network Video Encoder



NETWORK



4CH

H.264

4CIF

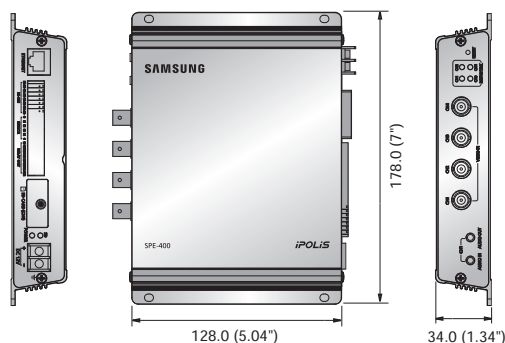
Bi-directional  
Audio

## Key Features

- Max. 30(25)fps at 4CIF resolution
- H.264, MPEG-4, MJPEG multiple codec
- Multiple streaming simultaneously
- 10/100/1000BASE-T
- SD memory, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SPE-400N   | SPE-400P                                   |
|----------------------------------|--|--|
| OPERATIONAL                      |  |  |
| Video In                         | 4 CVBS : 1.0 Vp-p / 75Ω composite, NTSC/PAL auto detection   |  |
| De-interlacing Filter            | Built-in   |  |
| Event Trigger                    | Motion detection, Alarm input, Video loss  |  |
| Alarm I/O                        | Input 4ea / Output 4ea (Relay)   |  |
| Remote Control Interface         | 4ea RS-485 (Half duplex)   |  |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D   |  |
| NETWORK                          |  |  |
| Ethernet                         | RJ-45 (10/100/1000BASE-T)  |  |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |  |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240, 320 x 240   | 704 x 576, 640 x 480, 352 x 288, 320 x 240 |
| Max. Framerate                   | 30fps per channel  | 25fps per channel                          |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |  |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |  |
| Audio I/O                        | 1ea line in / 1ea line out (CH1 only) (SPE-400)  |  |
| Audio Compression Format         | G.711 u-law  |  |
| Audio Communication              | Bi-directional audio   |  |
| IP                               | IPv4, IPv6   |  |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE<br>FTP, SMTP, ICMP, IGMP, SNMPV1/V2C/V3(MIB-2), ARP, DNS, DDNS, ONVIF |  |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |  |
| Streaming Method                 | Unicast / Multicast  |  |
| Max. User Access                 | 10 users at unicast mode   |  |
| Memory Slot                      | SD/SDHC memory slot (CH1 only)   |  |
| ONVIF Conformance                | Yes  |  |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari         |  |
| Central Management Software      | NET-i viewer   |  |
| ENVIRONMENTAL                    |  |  |
| Operating Temperature / Humidity | 0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 80% RH  |  |
| ELECTRICAL                       |  |  |
| Input Voltage / Current          | 12V DC   |  |
| Power Consumption                | Max. 15W   |  |
| MECHANICAL                       |  |  |
| Color / Material                 | Silver / Metal   |  |
| Dimensions (WxHxD)               | 128.0 x 34.0 x 178.0mm (5.04" x 1.34" x 7")  |  |
| Weight                           | 562g (1.29 lb)   |  |



## SPE-100

1CH Network Video Encoder



1CH

H.264

4CIF

Bi-directional  
Audio

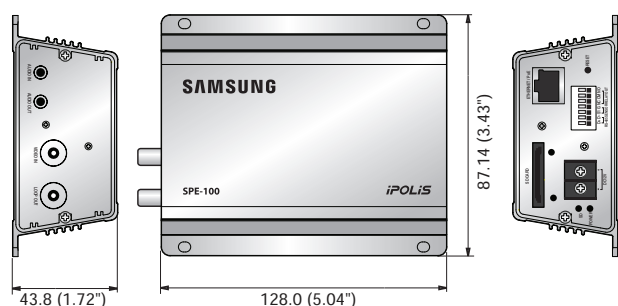
PoE

## Key Features

- Max. 30(25)fps at 4CIF resolution
- H.264, MPEG-4, MJPEG multiple codec
- Multiple streaming simultaneously
- 10/100BASE-T
- PoE, SD memory, bi-directional audio support

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SPE-100N   | SPE-100P                                   |
|----------------------------------|--|--|
| OPERATIONAL                      |  |  |
| Video In                         | CVBS : 1.0 Vp-p / 75Ω composite, NTSC/PAL auto detection   |  |
| Video Out                        | CVBS : 1.0 Vp-p / 75Ω composite, Loop-out  |  |
| De-interlacing Filter            | Built-in   |  |
| Event Trigger                    | Motion detection, Alarm input, Video loss  |  |
| Alarm I/O                        | Input 1ea / Output 1ea (Relay)   |  |
| Remote Control Interface         | 1ea RS-485 (Half duplex)   |  |
| RS-485 Protocol                  | Samsung-T/E, Pelco-P/D   |  |
| NETWORK                          |  |  |
| Ethernet                         | RJ-45 (10/100BASE-T)   |  |
| Video Compression Format         | H.264, MPEG-4, MJPEG   |  |
| Resolution                       | 704 x 480, 640 x 480, 352 x 240, 320 x 240   | 704 x 576, 640 x 480, 352 x 288, 320 x 240 |
| Max. Framerate                   | 30fps  | 25fps                                      |
| Video Quality Adjustment         | H.264 / MPEG-4 : Compression level, Target bitrate level control<br>MJPEG : Quality level control  |  |
| Bitrate Control Method           | H.264 / MPEG-4 : CBR or VBR, MJPEG : VBR   |  |
| Streaming Capability             | Multiple streaming (Up to 10 profiles)   |  |
| Audio I/O                        | 1ea line in / 1ea line out   |  |
| Audio Compression Format         | G.711 u-law  |  |
| Audio Communication              | Bi-directional audio   |  |
| IP                               | IPv4, IPv6   |  |
| Protocol                         | TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPOE<br>FTP, SMTP, ICMP, IGMP, SNMPV1/V2C/V3(MIB-2), ARP, DNS, DDNS, ONVIF |  |
| Security                         | HTTPS(SSL) login authentication, Digest login authentication<br>IP address filtering, User access log  |  |
| Streaming Method                 | Unicast / Multicast  |  |
| Max. User Access                 | 10 users at unicast mode   |  |
| Memory Slot                      | SD/SDHC memory slot  |  |
| ONVIF Conformance                | Yes  |  |
| Web Viewer                       | Supported OS : Windows XP / VISTA / 7, MAC OS<br>Supported Browser : Internet Explorer 6.0 or Higher, Firefox, Google Chrome, Apple Safari         |  |
| Central Management Software      | NET-i viewer   |  |
| ENVIRONMENTAL                    |  |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / 20% ~ 80% RH  |  |
| ELECTRICAL                       |  |  |
| Input Voltage / Current          | 12V DC, PoE (IEEE802.3af)  |  |
| Power Consumption                | Max. 4W  |  |
| MECHANICAL                       |  |  |
| Color / Material                 | Silver / Metal   |  |
| Dimensions (WxHxD)               | 128.0 x 43.8 x 87.14mm (5.04" x 1.72" x 3.43")   |  |
| Weight                           | 391g (0.86 lb)   |  |

# NET-i viewer

## Central Management Software



### Key Features

- Monitoring software for surveillance products of Samsung
- Up to 64 channels simultaneous real time live monitoring in single PC (when using dual monitors)
- Supports various video format : H.264, MPEG-4, MJPEG
- Supports various audio format : G.726, G.711, G.723, PCM
- Supports various video resolution : megapixel (1M, 2M, 3M), 4CIF, Half D1, VGA, CIF
- Powerful E-map based monitoring support
- Bi-directional audio communication
- Remote PTZ control and power area zoom (click and go control)
- Supports various search and playback options :
  - date and time based search
  - event (alarm, motion, intelligent video) based search
  - normal playback, backward playback, fast/slow playback, step playback
- Notification in case of event occurring :
  - highlighting in the border of video window
  - display event log message in real time
- Back up capability :
  - manual back up
  - AVI, REC1, SEC format
  - CD, DVD back up
  - external storage (USB, NAS) back up
- Manual recording (up to 1CH) during 24 hours
- Multi-level user access and authority management
- Multiple language user interface support : English, French, German, Spanish, Italian, Turkish, Russian, Chinese, Japanese, Korean
- Automatic search of network cameras for quick and easy configuration
- Easy device management (configuration, firmware upgrade)
- Automatic self upgrade (connection to Samsung upgrade server)

### Technical Specifications

|                                  |                         | NET-i (Version : 1.26)  |
|----------------------------------|-------------------------|---|
| DEVICE                           |                         |   |
| Supported Device                 |                         | Network Camera, Encoder, DVR, NVR   |
| Max. Register Device             |                         | 250   |
| PERFORMANCE                      |                         |   |
| Video                            | Supported Format        | H.264, MPEG-4, MJPEG  |
|                                  | Supported Resolution    | QXGA, UXGA, SXGA, HD, SVGA, 4CIF, Half D1, VGA, CIF, QVGA   |
| Audio                            | Supported Format        | G.711, G.726, G.723, PCM  |
|                                  | Functions               | Bi-directional audio, listen, transmit client microphone input to remote speakers   |
| Live Monitoring                  | Multi-monitor           | Live monitoring up to 16 channels simultaneously per computer monitor (Up to 32 when using dual monitors)   |
|                                  | Screen-split Mode       | 1, 4, 6, 7, 8, 9, 10, 11, 12, 16, 64 (Full-screen)  |
|                                  | PTZ Control             | PTZ control (Pan, Tilt, Zoom, Focus, Preset) using mouse<br>Digital zoom in/out on the image, click and go control  |
|                                  | Functions               | Automatic device search of network cameras for quick and easy configuration, Device management (Configuration & firmware update), Snapshot / Prints image   |
| Search & Playback                | Local (Remote) Playback | Supported   |
|                                  | Search                  | Search for recordings based on DVR, NVR, Date/time based search, Event (Alarm, Motion, Intelligent video) based search  |
|                                  | Playback mode           | Normal, Forward/Backward, Fast/Slow, Step   |
|                                  | PTZ Control             | PTZ control (Pan, Tilt, Zoom, Focus, Preset) using mouse or joystick, Digital zoom in/out on the image  |
|                                  | Functions               | Snapshot / Prints image   |
| Back up                          | Local (Remote) Back up  | Supported   |
|                                  | Back up                 | Local storage, CD/DVD, back up format (AVI, REC1, SEC)  |
| Event Monitoring                 | Display                 | Highlighting in the border of video window, Display event log message in real time, Launches instant player   |
|                                  | Logs                    | Event (Alarm, Motion, Intelligent video, video loss), Stores user actions by time and cameras and full system operation   |
| MAP Viewer                       | Display                 | Camera / Alarm / Sensor on the map  |
|                                  | Number of Map           | 50maps  |
|                                  | Supports Image          | JPEG / BMP / GIF / PNG  |
|                                  | Monitoring              | Launches instant player/viewer up to 16CH   |
| User                             |                         | Admin, Operator, User   |
| Update                           |                         | Automatic self upgrade (Connection to Samsung upgrade server)   |
| GENERAL                          |                         |   |
| Language                         |                         | Total 19 languages support.<br>English, French, German, Spanish, Italian, Russian, Chinese, Japanese, Korean, Turkish, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek  |
| System Requirement (Recommended) |                         | CPU Intel i7 above, RAM 3GB above, Video memory 1GB above, HDD 200GB above, DirectX 8.1 above. Display resolution : 1,280 x 1,024 above<br>OpenGL compatible,<br>OS : Window XP Professional, Windows 2000 Professional, Windows Vista Home Basic/Premium/Ultimate, Windows 7 |
| System Requirement (Minimum)     |                         | CPU Intel Core2Quad 2.5GHz above, RAM 3GB above, Video memory 512MB, HDD 200GB above  |

\* The entire items are not supported in every device. Some items are not supported in certain devices.

### Supported Models

#### NET-i viewer (The latest release version : 1.26)

|                |  |  |
|----------------|--|--|
| Network Camera | Box  | SNB-1000, SNB-2000, SNB-3000, SNB-5000, SNC-5200<br>SNC-B2335, SNC-B2331, SNC-1300, SNC-M300, SNC-550, SNC-570                   |
|                | Dome   | SND-1010, SND-3080/3080F, SNV-3080, SNV-3120, SND-5080/5080F, SNV-5080<br>SND-560, SND-460V, SNC-B5368, SNC-B5399                |
|                | PTZ  | SNP-3430H, SNP-3370TH/3370/3301, SNP-5200/5200H, SNP-3120/3120V/3120VH,<br>SNC-C6225/C7225/C7478, SNP-3300A/1000A, SNP-3750/3350 |
| Encoder        |  | SNS-400, SNS-100, SPE-400/100  |
| DVR            | SRD-1670(D)/1650(D)/870(D)/850(D)/470(D)<br>SRD-1630(D)/1610(D)/830(D) |  |
|                | SVR-3200/1680(C)/1660(C)/1645/960(C)/945/480                           |  |
|                | SHR-2000/5000/6000/7000/8000 series                                    |  |
|                | NVR (S/W)  |  |
|                |  | NET-i ware : SNS-SF064/032/016/008/004   |

# NET-i ware

## Recording Software



## Key Features

- Recording software for Samsung network cameras
  - : 4 / 8 / 16 / 32 / 64 cameras recording package are available now
  - : recording channel extension is available by channel addition
  - : live video monitoring and search/playback of recorded video by CMS software
- Delivers high performance recording
  - : up to 480fps(NTSC) / 400fps(PAL) recording at 4CIF resolution
- Triplex operation performance
  - : recording, live video transfer, recorded video transfer
- Supports various recording options
  - : continuous recording
  - : event based recording (including pre/post alarm recording) (motion detection, I/V detection, video loss, alarm signal input)
  - : scheduled recording (including holiday setup)
- Notification in case of event occurring
  - : user defined alert sound output
  - : e-mail to pre-assigned receiver
  - : notification to monitoring software (CMS software)
- Event log : system, user access, back up, recording, motion, alarm, video loss, I/V
- Multiple disk allocation and distribution for stable recording
- Multi-level user access and authority management
- Multiple language user interface support
  - : English, French, German, Spanish, Italian, Turkish, Russian, Chinese, Japanese, Korean, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek, Taiwanese
- Automatic search of network cameras for quick and easy configuration
- Automatic self upgrade (connection to Samsung upgrade server)

## Technical Specifications

|                                  |                              | SNS-SF064  | SNS-SF032 | SNS-SF016 | SNS-SF008 | SNS-SF004 |
|----------------------------------|------------------------------|--|-----------|-----------|-----------|-----------|
| DEVICE                           |                              |  |           |           |           |           |
| Supported Device                 |                              | Samsung's Network Camera, Encoder  |           |           |           |           |
| Max. Register Device             |                              | 64   | 32        | 16        | 8         | 4         |
| PERFORMANCE                      |                              |  |           |           |           |           |
| Video                            | Supported Format             | H.264, MPEG-4, MJPEG   |           |           |           |           |
|                                  | Supported Resolution         | QXGA, UXGA, SXGA, HD, SVGA, 4CIF, Half D1, VGA, CIF, QVGA  |           |           |           |           |
| Audio                            | Supported Format             | G.711, G.726, G.723, PCM   |           |           |           |           |
|                                  | Functions                    | Bi-directional audio, listen, transmit client microphone input to remote speakers  |           |           |           |           |
| Record                           | Performance                  | 100Mbps  |           |           |           |           |
|                                  | Record Mode                  | Continuous, Event (Pre/Post alarm recording), Scheduled recording  |           |           |           |           |
|                                  | Quality                      | 10 levels  |           |           |           |           |
|                                  | Pre/Post Record Time         | Pre : 1 ~ 16CH 60sec, 17~ 32CH 30sec, 33 ~ 64CH 15sec, Post : 1200sec  |           |           |           |           |
|                                  | LOG                          | System, User access, Back up, Recording, Motion, Alarm, Video loss, Intelligent video  |           |           |           |           |
| Search & Playback                |                              | 4 user x 4CH   |           |           |           |           |
| Playback Mode                    |                              | Time, Event, Timeline  |           |           |           |           |
| Back up                          | Manual                       | DVD/CD, USB HDD, USB flash memory, Back up format : REC1, SEC  |           |           |           |           |
|                                  | Schedule                     | NAS (Network Attached Storage), USB HDD, Back up format : REC1   |           |           |           |           |
| Event                            | E-mail                       | E-mail transfer at event occurrence  |           |           |           |           |
| Monitoring                       | Preset                       | Preset move at alarm occurrence  |           |           |           |           |
| Storage                          | Maximum Controller of HDD    | 24HDDs   |           |           |           |           |
|                                  | Supported Device Format      | e-SATA   |           |           |           |           |
| System                           | Functions                    | Storage space assigning by each disk, Warning against lower disk space   |           |           |           |           |
|                                  | NIC Support                  | NIC is selectable by device connection and client connection type  |           |           |           |           |
|                                  | SW Status                    | Device connection, Manual / Schedule recording status  |           |           |           |           |
|                                  | Data Security                | Login packet encryption  |           |           |           |           |
|                                  | Configuration Value          | Initialization / Export / Import   |           |           |           |           |
| User                             | Functions                    | Auto power-on record   |           |           |           |           |
|                                  | User Level                   | User-defined function  |           |           |           |           |
|                                  | Local(Remote) User           | Group : 32, User : 32  |           |           |           |           |
|                                  | IP Filtering for Remote User | Supported  |           |           |           |           |
| Update                           |                              | Automatic self upgrade (Connection to Samsung upgrade server)  |           |           |           |           |
| GENERAL                          |                              |  |           |           |           |           |
| Language                         |                              | English, French, German, Spanish, Italian, Turkish, Russian, Chinese, Japanese, Korean, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek, Taiwanese                             |           |           |           |           |
| System Requirement (Recommended) |                              | CPU : Intel Core i7, RAM : 4GB<br>Video memory : 256MB, 2HDDs(SATA II) above<br>Microsoft .NET Framework 3.5<br>OS : Windows 2003 Server SP2, Windows 2008 Server  |           |           |           |           |
| System Requirement (Minimum)     |                              | CPU : Intel Core i3, RAM : 2GB above<br>Video memory : 256MB, 2HDDs(SATA II) above<br>Microsoft .NET Framework 3.5<br>OS : Windows XP2, Windows 2003 Server SP2, Windows Vista, Windows 2008 Server, Windows 7 |           |           |           |           |

\* Recording channel extension is available by channel addition function.

## Supported Models

### NET-i ware (The latest release version : 1.26)

|                |      |  |
|----------------|------|--|
| Network Camera | Box  | SNB-1000, SNB-2000, SNB-3000, SNB-5000, SNZ-5200<br>SNC-B2335, SNC-B2331, SNC-1300, SNC-M300, SNC-550, SNC-570                   |
|                |      |  |
|                | Dome | SND-1010, SND-3080/3080F, SNV-3080, SNV-3120, SND-5080/5080F, SNV-5080<br>SND-560, SND-460V, SNC-B5368, SNC-B5399                |
|                |      |  |
| Encoder        | PTZ  | SNP-3430H, SNP-3370TH/3370/3301, SNP-5200/5200H, SNP-3120/3120V/3120VH,<br>SNC-C6225/C7225/C7478, SNP-3300A/1000A, SNP-3750/3350 |
|                |      |  |
| Encoder        |      | SNS-400, SNS-100, SPE-400/100  |

# SmartViewer

## DVR Management Software



### Key Features

- Monitor a maximum of 36 videos from the connected cameras
- Support full screen mode
- Add video to a desired position with the drag & drop method
- Add video to the video screen by double-clicking
- Support sequence (automatic screen transition)
- Favorite view & sequence of favorites
- Play up to 16 videos simultaneously
- Support range backup (integrated viewer)
- Search for and play recording data in the DVR, which are sorted by the event type
- User login & access privilege setup
- Create one group of multiple devices
- Save device configuration, smart viewer configuration as a file
- Log search (search by the system, user, record or backup log, etc)
- Remote update using the update server

### Technical Specifications

|                                  |                         | SmartViewer  |
|----------------------------------|-------------------------|--|
| DEVICE                           |                         |  |
| Supported Device                 |                         | DVR  |
| Max. Register Device             |                         | 1000 (Connect up to 16 devices simultaneously)   |
| PERFORMANCE                      |                         |  |
| Video                            | Supported Format        | H.264, MPEG-4, MJPEG   |
|                                  | Supported Resolution    | 4CIF, Half D1, VGA, CIF, QVGA  |
| Audio                            | Supported Format        | G.711, G.726, G.723, PCM   |
|                                  | Functions               | Listen   |
| Live Monitoring                  | Screen-split Mode       | (4 : 3) 1, 4, 9, 16, 25, 36 (Full-screen)<br>(16 : 9) 1, 6, 12, 20, 30 (Full-screen)   |
|                                  | PTZ Control             | PTZ control (Pan, Tilt, Zoom), Focus, Iris, Preset, Autopan, Scan/Pattern, Digital Zoom in/out on the image, Area zoom   |
|                                  | Functions               | Automatic device search of network cameras for quick and easy configuration, Device management (Configuration & firmware update), Snapshot / Prints image  |
|                                  | Record                  | 1 CH recording during 2hours (SEC format)  |
| Search & Playback                | Local (Remote) Playback | Supported  |
|                                  | Search                  | Search for recordings based on DVR, Date/time based search, Event (Alarm, Motion) based search   |
|                                  | Playback mode           | Normal, Forward / Backward, Fast / Slow, Step playback   |
|                                  | Functions               | Snapshot / Prints image  |
| Back up                          | Local (Remote) Back up  | Supported  |
|                                  | Back up                 | Local storage (SEC format)   |
| Event Monitoring                 | Display                 | Highlighting in the border of video window, Display event log message in real time, Launches instant player  |
|                                  | Logs                    | Event (Alarm, Motion, Video loss), Stores user actions by time, and cameras and full system operation  |
| User                             |                         | Admin, 20 users  |
| Update                           |                         | Automatic self upgrade (Connection to Samsung upgrade server)  |
| GENERAL                          |                         |  |
| Language                         |                         | Total 19 languages support.<br>English, French, German, Spanish, Italian, Russian, Chinese, Japanese, Korean, Turkish, Polish, Czech, Serbian, Romanian, Portuguese, Dutch, Croatian, Hungarian, Greek   |
| System Requirement (Recommended) |                         | CPU Intel i3 above, RAM 3GB above, VGA RAM 512GB above, HDD 200GB above, DirectX 9.0 above. Display resolution : 1,024 x 768 above, OpenGL compatible  |
| System Requirement (Minimum)     |                         | CPU Intel Core2Duo 2.4GHz above, RAM 2GB above, VGA RAM 128MB, HDD 200GB above, DirectX 9.0 above. Display resolution : 1,024 x 768 above, OpenGL compatible<br>OS : Window XP Professional SP2, Windows Vista Business/Ultimate, Windows 7 Professional/Ultimate/Enterprise |

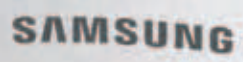
\* The entire items are not supported in every device. Some items are not supported in certain devices.

### Supported Models

#### SmartViewer (The latest release version : 3.05)

|     |  |
|-----|--|
| DVR | SRD-1670(D)/1650(D)/870(D)/850(D)/470(D)     |
|     | SRD-1630(D)/1610(D)/830(D)                   |
|     | SVR-3200/1680(C)/1660(C)/1645/960(C)/945/480 |
|     | SHR-2000/5000/6000/7000/8000 series          |





SAMSUNG



# CAMERA

Samsung Total Security Solution



# Camera Selection

| Type | Model                  | Image   | Image Sensor | Min. Illumination                           | Lens               | Angular Field of View                  | Resolution                     | D&N        | WDR / BLC               | S/N Ratio | OSD | MD  | Privacy Masking | Power                                     |
|------|------------------------|---|--------------|---|--------------------|--|--------------------------------|------------|-------------------------|-----------|-----|-----|-----------------|---|
| Box  | SCB-4000               |    | 1/2"         | 0.1Lux@F1.2 (Color)<br>0.01Lux@F1.2 (B/W)   | N/A                | N/A                                    | 600TVL (Color)<br>700TVL (B/W) | ICR        | XDR / BLC               | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>230V AC         |
|      | SCB-3001               |    | 1/3"         | 0.1Lux@F1.2 (Color)<br>0.01Lux@F1.2 (B/W)   | N/A                | N/A                                    | 650TVL (Color)<br>700TVL (B/W) | ICR        | WDR / SSDR<br>HLC / BLC | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>230V AC         |
|      | SCB-3000               |    | 1/3"         | 0.3Lux@F1.2 (Color)<br>0.01Lux@F1.2 (B/W)   | N/A                | N/A                                    | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / SSDR<br>HLC / BLC | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>230V AC         |
|      | SCB-2001               |    | 1/3"         | 0.05Lux@F1.2 (Color)<br>0.01Lux@F1.2 (B/W)  | N/A                | N/A                                    | 600TVL (Color)<br>700TVL (B/W) | ICR        | XDR / BLC               | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>230V AC         |
|      | SCB-2000               |    | 1/3"         | 0.05Lux@F1.2 (Color)                        | N/A                | N/A                                    | 600TVL (Color)                 | Electrical | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>12V DC, 230V AC |
|      | SCB-1000               |    | 1/3"         | 0.05Lux@F1.2 (Color)                        | N/A                | N/A                                    | 530TVL (Color)                 | Electrical | BLC                     | 50dB      | Yes | Yes | Yes             | 24V AC, 12V DC<br>230V AC                 |
|      | SUB-2000               |    | 1/3"         | 0.05Lux@F1.2 (Color)                        | N/A                | N/A                                    | 600TVL (Color)                 | Electrical | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>28V AC          |
|      | SCZ-3430               |    | 1/4"         | 0.7Lux@F1.65 (Color)<br>0.07Lux@F1.65 (B/W) | 43x<br>(Zoom)      | 61.22° ~ 1.47°(H)<br>47.16° ~ 1.1°(V)  | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / XDR<br>BLC        | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>12V DC          |
|      | SCZ-2430               |    | 1/4"         | 0.2Lux@F1.65 (Color)<br>0.02Lux@F1.65 (B/W) | 43x<br>(Zoom)      | 61.22° ~ 1.47°(H)<br>47.16° ~ 1.1°(V)  | 600TVL (Color)<br>700TVL (B/W) | ICR        | XDR / BLC               | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>12V DC          |
|      | SCZ-3370               |    | 1/4"         | 0.7Lux@F1.6 (Color)<br>0.07Lux@F1.6 (B/W)   | 37x<br>(Zoom)      | 55.5° ~ 1.59°(H)<br>42.5° ~ 1.19°(V)   | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / SSDR<br>HLC / BLC | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>12V DC          |
|      | SCZ-2370               |    | 1/4"         | 0.2Lux@F1.6 (Color)<br>0.02Lux@F1.6 (B/W)   | 37x<br>(Zoom)      | 55.5° ~ 1.59°(H)<br>42.5° ~ 1.19°(V)   | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>12V DC          |
|      | SCZ-3250               |    | 1/4"         | 0.7Lux@F1.65 (Color)<br>0.07Lux@F1.65 (B/W) | 25x<br>(Zoom)      | 54.95° ~ 2.24°(H)<br>41.83° ~ 1.68°(V) | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / XDR<br>BLC        | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>12V DC          |
|      | SCZ-2250               |   | 1/4"         | 0.2Lux@F1.65 (Color)<br>0.02Lux@F1.65 (B/W) | 25x<br>(Zoom)      | 54.95° ~ 2.24°(H)<br>41.83° ~ 1.68°(V) | 600TVL (Color)<br>700TVL (B/W) | ICR        | XDR / BLC               | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>12V DC          |
|      | SCO-2370               |  | 1/4"         | 0.2Lux@F1.6 (Color)<br>0.02Lux@F1.6 (B/W)   | 37x<br>(Zoom)      | 55.5° ~ 1.59°(H)<br>42.5° ~ 1.19°(V)   | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCO-2080               |  | 1/3"         | 0.15Lux@F1.2 (Color)<br>0.001Lux@F1.2 (B/W) | 3.6x<br>(V/F)      | 94.4° ~ 28°(H)<br>69.2° ~ 21°(V)       | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCO-2120R              |  | 1/4"         | 0.2Lux@F1.67 (Color)<br>0Lux@F1.67 (LED on) | 12x<br>(Zoom)      | 51.54° ~ 4.5°(H)<br>39.24° ~ 3.38°(V)  | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCO-2080R              |  | 1/3"         | 0.15Lux@F1.2 (Color)<br>0Lux@F1.2 (LED on)  | 3.6x<br>(V/F)      | 94.4° ~ 28°(H)<br>69.2° ~ 21°(V)       | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCB-3021               |  | 1/3"         | 0.45Lux@F2.0 (Sens-up)                      | 4.3mm<br>(Fixed)   | 64.6°(H) / 46.6°(V)                    | 600TVL (Color)                 | Electrical | WDR / BLC               | 52dB      | Yes | Yes | Yes             | 12V DC                                    |
|      | SCB-3020               |  | 1/3"         | 0.45Lux@F2.0 (Sens-up)                      | 3.7mm<br>(Fixed)   | 64.65°(H) / 48.49°(V)                  | 600TVL (Color)                 | Electrical | WDR / BLC               | 52dB      | Yes | Yes | Yes             | 12V DC                                    |
|      | SCB-2020               |  | 1/3"         | 0.15Lux@F2.0 (Sens-up)                      | 3.7mm<br>(Fixed)   | 64.65°(H) / 48.49°(V)                  | 600TVL (Color)                 | Electrical | BLC                     | 52dB      | Yes | Yes | Yes             | 12V DC                                    |
|      | SCB-2010               |  | 1/3"         | 0.04Lux@F2.0 (Sens-up)                      | 3mm<br>(Fixed)     | 95°(H) / 71°(V)                        | 600TVL (Color)                 | Electrical | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 12V DC                                    |
| Dome | SCD-3081               |  | 1/3"         | 0.1Lux@F1.2 (Color)<br>0.01Lux@F1.2 (B/W)   | 3.9x<br>(V/F)      | 94° ~ 26°(H)<br>67° ~ 20°(V)           | 650TVL (Color)<br>700TVL (B/W) | ICR        | WDR / SSDR<br>HLC / BLC | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCD-3080               |  | 1/3"         | 0.3Lux@F1.2 (Color)<br>0.01Lux@F1.2 (B/W)   | 3.9x<br>(V/F)      | 94° ~ 26°(H)<br>67° ~ 20°(V)           | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / SSDR<br>HLC / BLC | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCD-2080               |  | 1/3"         | 0.15Lux@F1.2 (Color)<br>0.001Lux@F1.2 (B/W) | 3.6x<br>(V/F)      | 94.4° ~ 28°(H)<br>69.2° ~ 21°(V)       | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCD-2080E              |  | 1/3"         | 0.15Lux@F1.2 (Color)<br>0.001Lux@F1.2 (B/W) | 3.6x<br>(V/F)      | 94.4° ~ 28°(H)<br>69.2° ~ 21°(V)       | 600TVL (Color)<br>700TVL (B/W) | Electrical | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCD-2060E              |  | 1/3"         | 0.15Lux@F1.2 (Color)<br>0.001Lux@F1.2 (B/W) | 2.4x<br>(V/F)      | 103.4° ~ 46.6°(H)<br>77.6° ~ 35.1°(V)  | 600TVL (Color)<br>700TVL (B/W) | Electrical | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCD-2020/<br>2040/2021 |  | 1/3"         | 0.15Lux@F1.2 (Color)                        | 3.7/8mm<br>(Fixed) | 71°(H) / 52°(V)<br>33°(H) / 25°(V)     | 600TVL (Color)                 | Electrical | SSDR                    | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)                    |
|      | SCD-2010/<br>2030      |  | 1/3"         | 0.04Lux@F1.2 (Color)                        | 3/6mm<br>(Fixed)   | 95°(H) / 71°(V)<br>46°(H) / 34°(V)     | 600TVL (Color)<br>700TVL (B/W) | Electrical | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 12V DC                                    |
|      | SCD-2080R              |  | 1/3"         | 0.15Lux@F1.2 (Color)<br>0Lux@F1.2 (LED on)  | 3.6x<br>(V/F)      | 94.4° ~ 28°(H)<br>69.2° ~ 21°(V)       | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 12V DC                                    |
|      | SCD-2020R              |  | 1/3"         | 0.15Lux@F1.2 (Color)<br>0Lux@F1.2 (LED on)  | 3.6mm<br>(Fixed)   | 66°(H) / 49°(V)                        | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 12V DC                                    |
|      | SCD-2010F              |  | 1/3"         | 0.04Lux@F1.2 (Sens-up)                      | 3mm<br>(Fixed)     | 89.5°(H) / 67.2°(V)                    | 600TVL (Color)                 | Electrical | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 12V DC                                    |

# Camera Selection

| Type    | Model                 | Image   | Image Sensor | Min. Illumination                            | Lens         | Angular Field of View                  | Resolution                     | D&N        | WDR / BLC               | S/N Ratio | OSD | MD  | Privacy Masking | Power                            |
|---------|-----------------------|---|--------------|--|--------------|--|--------------------------------|------------|-------------------------|-----------|-----|-----|-----------------|----------------------------------|
| Dome    | SUD-3080/3080F        |    | 1/3"         | 0.3Lux@F1.2 (Color)<br>0.01Lux@F1.2 (B/W)    | 3.9x (V/F)   | 102° ~ 28°(H)<br>73° ~ 21°(V)          | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / SSDR<br>HLC / BLC | 52dB      | Yes | Yes | Yes             | 28V AC<br>24V AC, 12V DC         |
|         | SUD-2080/2080F        |    | 1/3"         | 0.15Lux@F1.2 (Color)<br>0.001Lux@F1.2 (B/W)  | 3.6x (V/F)   | 94.4° ~ 28°(H)<br>69.2° ~ 21°(V)       | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 28V AC<br>24V AC, 12V DC         |
|         | SCV-3120              |    | 1/4"         | 0.7Lux@F1.65 (Color)<br>0.07Lux@F1.65 (B/W)  | 12x (Zoom)   | 54.44° ~ 4.64°(H)<br>41.42° ~ 3.52°(V) | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / XDR<br>BLC        | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)           |
|         | SCV-2120              |    | 1/4"         | 0.2Lux@F1.67 (Color)<br>0.02Lux@F1.67 (B/W)  | 12x (Zoom)   | 51.54° ~ 4.5°(H)<br>39.24° ~ 3.38°(V)  | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)           |
|         | SCV-3080              |    | 1/3"         | 0.3Lux@F1.2 (Color)<br>0.01Lux@F1.2 (B/W)    | 3.9x (V/F)   | 102° ~ 28°(H)<br>73° ~ 21°(V)          | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / SSDR<br>HLC / BLC | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>24V AC |
|         | SCV-2080              |    | 1/3"         | 0.15Lux@F1.2 (Color)<br>0.001Lux@F1.2 (B/W)  | 3.6x (V/F)   | 94.4° ~ 28°(H)<br>69.2° ~ 21°(V)       | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)<br>24V AC |
|         | SCV-2060              |    | 1/3"         | 0.15Lux@F1.2 (Color)<br>0.001Lux@F1.2 (B/W)  | 2.4x (V/F)   | 103.4° ~ 46.6°(H)<br>77.6° ~ 35.1°(V)  | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)           |
|         | SCV-2081R             |    | 1/3"         | 0.15Lux@F1.2 (Color)<br>0Lux@F1.2 (LED on)   | 3.6x (V/F)   | 94.4° ~ 28°(H)<br>69.2° ~ 21°(V)       | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)           |
|         | SCV-2080R             |    | 1/3"         | 0.15Lux@F1.2 (Color)<br>0Lux@F1.2 (LED on)   | 3.6x (V/F)   | 94.4° ~ 28°(H)<br>69.2° ~ 21°(V)       | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | Dual (24V AC / 12V DC)           |
|         | SCV-2010F             |    | 1/3"         | 0.04Lux@F1.2 (Sens-up)                       | 3mm (Fixed)  | 89.5°(H) / 67.2°(V)                    | 600TVL (Color)                 | Electrical | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 12V DC                           |
| PTZ     | SCP-3430H             |   | 1/4"         | 0.7Lux@F1.65 (Color)<br>0.07Lux@F1.65 (B/W)  | 43x (Zoom)   | 61.22° ~ 1.47°(H)<br>47.16° ~ 1.1°(V)  | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / XDR<br>BLC        | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-2430H             |  | 1/4"         | 0.2Lux@F1.65 (Color)<br>0.02Lux@F1.65 (B/W)  | 43x (Zoom)   | 61.22° ~ 1.47°(H)<br>47.16° ~ 1.1°(V)  | 600TVL (Color)<br>700TVL (B/W) | ICR        | XDR / BLC               | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-3430              |  | 1/4"         | 0.7Lux@F1.65 (Color)<br>0.07Lux@F1.65 (B/W)  | 43x (Zoom)   | 61.22° ~ 1.47°(H)<br>47.16° ~ 1.1°(V)  | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / XDR<br>BLC        | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-2430              |  | 1/4"         | 0.2Lux@F1.65 (Color)<br>0.02Lux@F1.65 (B/W)  | 43x (Zoom)   | 61.22° ~ 1.47°(H)<br>47.16° ~ 1.1°(V)  | 600TVL (Color)<br>700TVL (B/W) | ICR        | XDR / BLC               | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-3370TH/3370H/3370 |  | 1/4"         | 0.7Lux@F1.6 (Color)<br>0.07Lux@F1.6 (B/W)    | 37x (Zoom)   | 55.5° ~ 1.59°(H)<br>42.5° ~ 1.19°(V)   | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / SSDR<br>HLC / BLC | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-2370TH/2370H/2370 |  | 1/4"         | 0.2Lux@F1.6 (Color)<br>0.02Lux@F1.6 (B/W)    | 37x (Zoom)   | 55.5° ~ 1.59°(H)<br>42.5° ~ 1.19°(V)   | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-2330H/2330        |  | 1/4"         | 0.2Lux@F1.6 (Color)<br>0.02Lux@F1.6 (B/W)    | 33x (Zoom)   | 55.5° ~ 1.77°(H)<br>42.5° ~ 1.33°(V)   | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-2270H/2270        |  | 1/4"         | 0.2Lux@F1.6 (Color)<br>0.02Lux@F1.6 (B/W)    | 33x (Zoom)   | 55.5° ~ 2.24°(H)<br>42.5° ~ 1.62°(V)   | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-3250H             |  | 1/4"         | 0.7Lux@F1.65 (Color)<br>0.07Lux@F1.65 (B/W)  | 25x (Zoom)   | 54.95° ~ 2.24°(H)<br>41.83° ~ 1.68°(V) | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / XDR<br>BLC        | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-2250H             |  | 1/4"         | 0.2Lux@F1.65 (Color)<br>0.02Lux@F1.65 (B/W)  | 25x (Zoom)   | 54.95° ~ 2.24°(H)<br>41.83° ~ 1.68°(V) | 600TVL (Color)<br>700TVL (B/W) | ICR        | XDR / BLC               | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-3250              |  | 1/4"         | 0.7Lux@F1.65 (Color)<br>0.07Lux@F1.65 (B/W)  | 25x (Zoom)   | 54.95° ~ 2.24°(H)<br>41.83° ~ 1.68°(V) | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / XDR<br>BLC        | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-2250              |  | 1/4"         | 0.2Lux@F1.65 (Color)<br>0.02Lux@F1.65 (B/W)  | 25x (Zoom)   | 54.95° ~ 2.24°(H)<br>41.83° ~ 1.68°(V) | 600TVL (Color)<br>700TVL (B/W) | ICR        | XDR / BLC               | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-3120/3120V/3120VH |  | 1/4"         | 0.7Lux@F1.65 (Color)<br>0.07Lux@F1.65 (B/W)  | 12x (Zoom)   | 54.44° ~ 4.64°(H)<br>41.42° ~ 3.52°(V) | 600TVL (Color)<br>700TVL (B/W) | ICR        | WDR / XDR<br>BLC        | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCP-2120              |  | 1/4"         | 0.2Lux@F1.67 (Color)<br>0.004Lux@F1.67 (B/W) | 12x (Zoom)   | 51.54° ~ 4.49°(H)<br>39.28° ~ 3.39°(V) | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 24V AC                           |
|         | SCU-2370              |  | 1/4"         | 0.2Lux@F1.65 (Color)<br>0.02Lux@F1.65 (B/W)  | 37x (Zoom)   | 55.5° ~ 1.59°(H)<br>42.5° ~ 1.19°(V)   | 600TVL (Color)<br>700TVL (B/W) | ICR        | SSDR<br>HLC / BLC       | 52dB      | Yes | Yes | Yes             | 24V AC                           |
| Thermal | SCU-9051              |  | QVGA         | 0Lux   | 50mm (Fixed) | 9.2° ~ 6.9°                            | 320 x 240                      | N/A        | N/A                     | N/A       | Yes | N/A | N/A             | 24V AC                           |
|         | SCB-9051              |  | QVGA         | 0Lux   | 50mm (Fixed) | 9.2° ~ 6.9°                            | 320 x 240                      | N/A        | N/A                     | N/A       | Yes | N/A | N/A             | 24V AC                           |
|         | SCB-9050              |  | QVGA         | 0Lux   | 14mm (Fixed) | 30° ~ 22.8°                            | 320 x 240                      | N/A        | N/A                     | N/A       | Yes | N/A | N/A             | 24V AC                           |

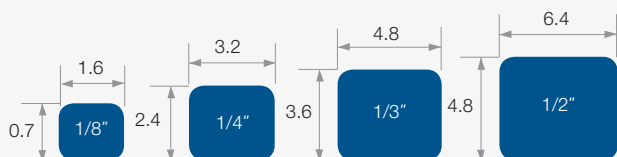
# Camera Terms & Features



## CCD (Charged Coupled Device)

CCD, this is a solid state semiconductor imaging device often referred to as an integrated circuit, chip or "imager" solid state cameras are sometimes referred to as CCD cameras.

Format sizes in mm



## Sensitivity

A camera's ability to reproduce a given scene with a given amount of light. Usually expressed in footcandles or lux. The sensitivity of a CCD camera, broadly speaking, is a measure of its performance in low light conditions.

| LIGHTING               | LUX LEVEL |
|------------------------|-----------|
| Unobstructed sun       | 100,000   |
| Sun with light cloud   | 70,000    |
| Sun with heavy cloud   | 20,000    |
| Home / office lighting | 100-1000  |
| Sunrise / sunset       | 500       |
| Street lighting        | 1-10      |
| Twilight               | 4         |
| Full moon              | 0.2       |
| Quarter moon           | 0.02      |
| Overcast moon          | 0.007     |
| Clear night sky        | 0.001     |
| Average starlight      | 0.0007    |
| Overcast night sky     | 0.00005   |

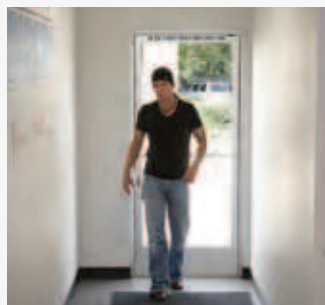


## WDR (Wide Dynamic Range)

WDR technology helps to get detailed information from the dark part of the image without saturation from the bright part. There is no limitation of zone area with the WDR function and the color image is crisper than when using traditional BLC functions. It combines two fields which are high shutter speed exposure in bright areas and low shutter speed exposure in dark areas into one composite image.



WDR Off



WDR On



## Pixel

Short for Picture Element. A pixel is the smallest area of a television picture capable of being delineated by an electrical signal passed through the system. The number of picture elements (pixels) in a complete picture, and their geometric characteristics of vertical height and horizontal width, provide information on the total amount of detail which the raster can display and on the sharpness of the detail, respectively.



## Day & Night

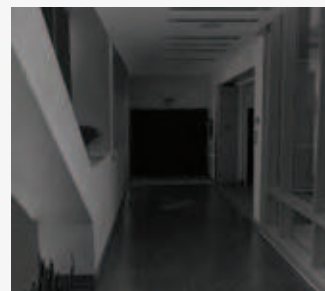
Day & Night refers to a function which helps the camera adapt to low lighting conditions. In low light, it switches the camera from color to monochrome automatically, allowing for much greater light sensitivity.

## ICR (Infrared Cutoff Removal)

The IR cut filter is on when the camera is operating as a color camera for precise color reproduction. With ICR, the filter is removed which allows for much greater light sensitivity in monochrome mode.



Day



Night

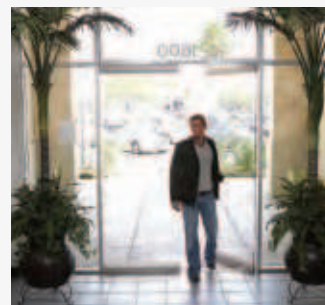


## BLC (Back Light Compensation)

In CCTV applications it is common to have a bright light source behind the subject of interest. A person at an ATM or entering through an outside door are common examples. Without compensation, these subjects would normally appear as dark silhouettes. The aim of backlight compensation technology is to allow the camera to find the best picture conditions and automatically give the necessary light level compensation, so that users can obtain good identification of a subject in the foreground when there is a bright light source in the background. BLC works by enhancing specific zones in the picture which usually contains the subject of interest. WDR is a more effective alternative to BLC that does not depend on the subject being in a specific zone.



BLC Off



BLC On



# Camera Terms & Features



## HLC (Highlight Compensation)

HLC is Samsung's unique BLC technology that detects if any strong spots of light exist and compensates for the area as needed to produce clearer images. Spotlight BLC is especially effective for reading the number-plates of cars in streets or parking lots at night.



HLC Off



HLC On



## Automatic White Balance

Accurate color reproduction requires that the camera compensate for the color temperature of the light source. Automatic white balance is a feature that the camera uses to do color compensation. For indoor applications incandescent, fluorescent, and quartz lighting all have different color temperatures. Outdoors there is sunlight, mercury vapor, and low pressure sodium lighting, all of which have drastically different color temperatures. In many applications the color temperature can change as lighting conditions change. Samsung cameras offer white balance functions that can be tailored to provide superior color reproduction over a wide range of color temperature conditions.



Normal

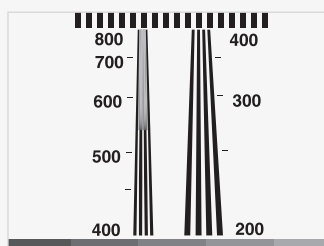


Automatic White Balance

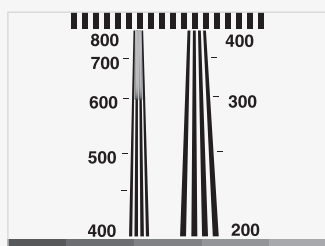


## Resolution

The ability of the camera to resolve fine detail can make the difference in obtaining evidence or not. Resolution is measured by a chart with converging lines of higher and higher density. The resolution is the line density where the camera is no longer able to reproduce individual lines. For this reason, resolution is expressed in terms of TV lines (TVL). The higher this number is, the better the picture.



550TVL



600TVL

STANDARD TEST CHART



## MD (Motion Detection)

This is a function where the camera analyzes successive frames of video and can detect movement in the scene. Units that use MD utilize various types of thresholds that can be programmed by the user to prevent or reduce false alarms. If the type or level of motion crosses these thresholds, the unit can automatically react in a way that benefits the system. In cameras with MD, a visible alert message can appear on the screen. In some models, a contact output from the camera can be used to switch a picture to a particular monitor, calling the attention of the operator.



Motion Detection



## Privacy Masking

This function allows for areas in the picture to be masked so that they cannot be viewed or recorded. The size and position of these masks are programmable. This feature is useful in applications where a camera can see into areas that are not relevant to the security purposes for the camera and the owner does not want to be subject to privacy invasion claims.



## Auto Tracking

The advanced auto tracking feature provides high-accuracy detection of moving objects in targeted area by identifying the characteristics of the subject including color, shape and contrast using advanced algorithm. This feature will automatically pan, tilt and optically zoom to identify a subject clearly. This allows the operator easily identify and lock a subject on the screen at a push of a button.



## Auto Digital Flip

The auto digital flip feature allows for more convenient way to view an objects that pass directly below the camera. As the camera pans in the vertical direction to follow the object, the digital flip feature will automatically flip the image 180° as the object passes beneath the camera, and continue to follow the subject without delay.



## Smart Zoom

The advanced smart zoom feature provides a quick way to automatically zoom into a defined area where motion is detected. This allows the operator to identify a subject that is in a restricted area quickly.



## Dual Power

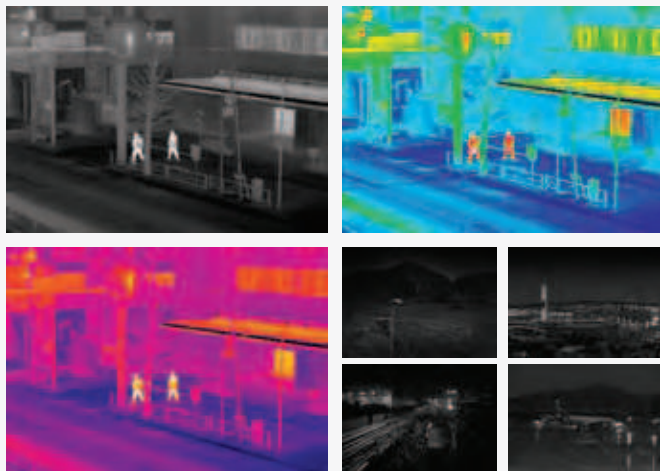
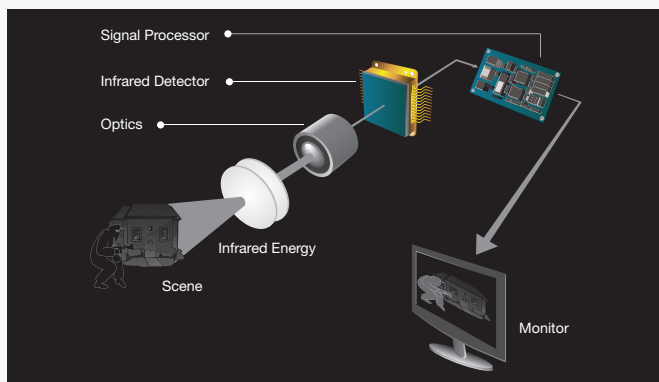
Units with dual power accept either 24V AC or 12V DC power sources and will automatically switch to the appropriate mode upon receiving power.

# Camera Terms & Features

## Thermal Night Vision Camera (Thermal Camera)

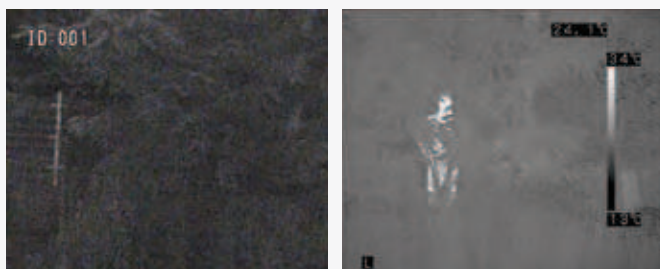
### Thermal Camera

The thermal camera is an advanced camera that detects differences in the infrared energy of objects and the background, converts them into electric signals, and produces digital images.



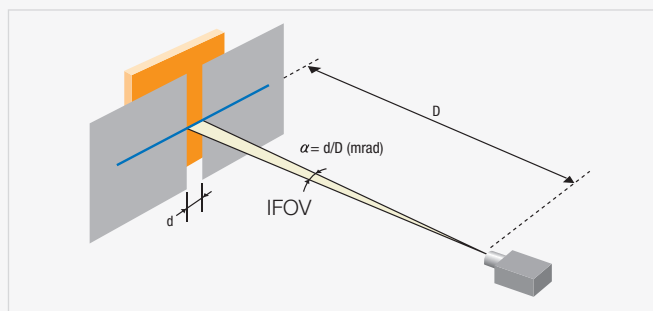
### Thermal Cameras Vs. Visible Cameras

Comparing with visible camera, it is possible to detect the objects to be seen up to 1Km (0.6miles) away in total darkness and through rain, fog or heavy smoke.



### IFOV - Instantaneous Field of View (Spatial Resolution)

A measurement of a sensor's intrinsic field of view corresponding to the amount of light that a sensor can detect at an instant : the smaller it is, the fuller an image looks with longer detection distance.



$$\text{IFOV} = d/D \text{ mrad}$$

(ex)  $\text{IFOV} = 23.5\mu\text{m}/14\text{mm} = 1.68\text{mrad}$

### NETD (Noise Equivalent Temperature Difference)

NETD is a measurement of the smallest temperature difference that a thermal imaging camera can detect object clearly.



### Color Pattern

With color pattern function, it is easy to detect the temperature of the objects. Especially, it is possible to differentiate the object with the temperature range.



# Core Technologies

SV-V | A1

## SV-V / A1, Advanced DSP



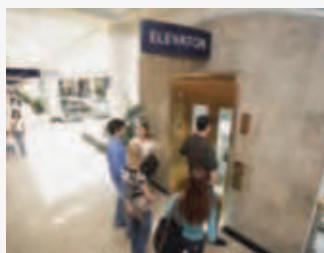
SV-V DSP Chip



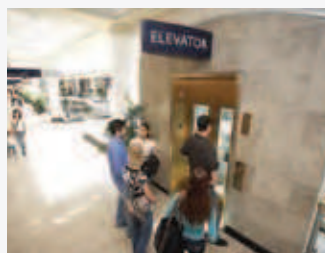
A1 DSP Chip

## Super High Resolution

SV-V/A1 camera technology eliminates false colour artifacts (Moire) by utilizing a special optical low pass filter and is able to resolve a horizontal resolution of 600TV lines, by means of 12 Bit A/D serial signal processing coupled with image element enhancement technology. Additionally, the implementation of a 3 line processing algorithm to prevent noise under low illumination applications, directional adaptive filtering and adjustment of aperture gain by luminance level combine to provide a more vivid and clearer image.



Conventional Camera



SV-V/A1 Camera



Source Image



CCD Raw Data



False colour Artifacts



Advanced Digital Filter

SV-V/A1 Camera Image

## VPS (Virtual Progressive Scan)

SV-V/A1 camera models featuring WDR functions generate images using Double Scan CCD technology and these cameras provide VPS operation which can utilize either Interlace or Progressive scanning methods. This VPS is unique to Samsung and ensures the edges of moving objects are clearly defined. Applications for Samsung cameras utilizing this technology include highway and automatic number plate recognition projects. When used with LCD monitors offering progressive scan operation, Samsung VPS produces visibly superior images to non-VPS cameras. The problems of the blurred edges resulting from delays in even/odd field image scanning, are eliminated when VPS technology is used with a network product (encoder).



Interlace Transmission (Delayed edge)



VPS Transmission (Clear edge)

## SSNRIII (Samsung Super Noise ReductionIII) / DNR (motion adaptive Digital Noise Reduction)

The SSNRIII/DNR function eliminates noise thus generating a distinct and clear image. SV-V/A1 technology utilizes both an adaptive 2D filter reducing noise of moving parts and an adaptive 3D filter reducing noise of fixed parts. These filters are combined with DNle technology which is applied to Samsung CCTV monitors. The result is that SV-V/A1 camera series support SSNRIII/motion adaptive DNR function that removes noise (Fixed Pattern, Random, etc.) and greatly reduces motion blur.



SSNRIII/DNR Off



SSNRIII/DNR On

## SSDR (Samsung Super Dynamic Range) / XDR (eXtended Dynamic Range)

Under strongly backlit or high contrast scenes, cameras generally produce images which reproduce detail in the brighter area of the scene (fig 1). Consequently, detail is often lost in the darker areas of the scene. Samsung SV-V/A1 cameras provide SSDR/XDR technology to increase the level of visible detail in the dark areas, whilst maintaining image clarity and detail in the brighter portions of the image (fig 2).



fig1 - SSDR/XDR Off



fig2 - SSDR/XDR On





# Core Technologies

SV-V/A1

## SV-V / A1, Advanced DSP

### Intelligent Video Analytics

The Samsung SV-V/A1 series of cameras, also provide built-in capability for video analytics. Operational modes include :

- Fixed : Senses objects that appear and remain in a scene for longer than a pre-determined period of time.
- Moved : Detects objects removed from a scene
- Fence : Provides virtual electronic area [Area mode] and directional line [Line mode] and generates an alarm in the event of a breach of the area or a cross of the directional line.
- Tracking : Tracks an object through a scene and generates an alarm in the event of abnormal directional changes.
- Counting : Provides the counting numbers of the objects pre-determined direction. (SV-V)

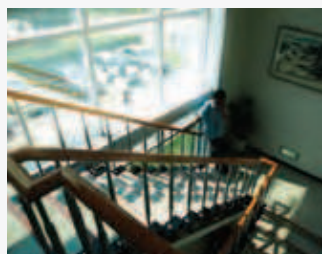
### Camera Control Via Coaxial Cable

The Samsung SV-V/A1 series cameras offer camera control via the video coaxial cable. This function provides access to the camera settings menu without connecting the any other control lines to the camera. This technology allows for camera set up (with the exception of lens focus) to be performed remotely, thus simplifying the installation process and offering remote adjustment in real time.



### WDR (Wide Dynamic Range)

The SV-V/A1 DSP technology compensates for backlight problems 128 times more effectively than standard BLC, by applying an optimum fusion ratio when combining the high speed shutter used in bright areas and the low speed shutter used in dark areas. It carries out a precise analysis on the picture to get detailed information from the dark areas without any saturation from the bright areas.



WDR Off



WDR On

### DIS (Digital Image Stabilization)

SV-V/A1 cameras have the capability of digitally compensating for camera shake commonly caused by wind or air handling equipment. Removing even minor vibration in the picture results in significant savings in DVR storage space.



DIS Off



DIS On

### Privacy Zone

A "privacy zone" can be set if you desire to block viewing of specific areas in the picture.



Privacy zone Off



Privacy zone On

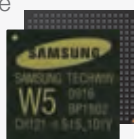


# Core Technologies

WV

## W-V, the DSP that redefines performance for video security

Samsung's 5<sup>th</sup> generation DSP is the engine that brings out the performance of this camera. This unique DSP provides features such as advanced 2D/3D noise filtering and digital image stabilization which work together to reduce storage requirements by as much as 70% over conventional cameras. In addition, the W-V DSP also provides advanced features such as Day & Night and frame integration to enhance low light performance along with features such as motion detection, privacy masking, Highlight Compensation, and image flip. These features are all programmable via onscreen menus that can be remotely set up from the remote control center.



W-V DSP Chip



### High quality color images of 600TV lines

The W-V camera delivers high quality 600TV lines images utilizing a unique image processing technology found only in Samsung's 5<sup>th</sup> generation DSP.



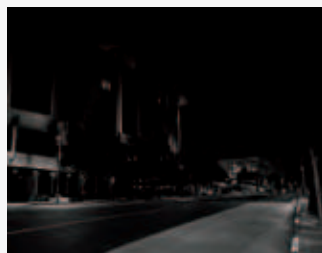
Conventional Camera



W-V Camera

### Day & Night function

The W-V utilizes Day & Night control to enhance performance in low lighting conditions. The W-V cameras can deliver outstanding images around the clock in challenging lighting conditions.



Conventional Camera



W-V Camera

### SSDR (Samsung Super Dynamic Range)

Samsung SSDR function automatically increases dark photoelectric signals while retaining bright signals; dark spots in images become more visible for accurate monitoring.



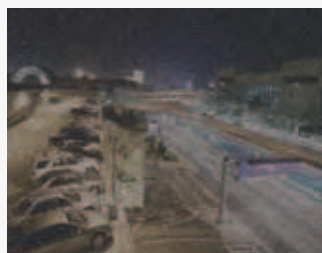
Conventional Camera



W-V Camera

### 2D/3D noise filter SSNR III for clear low light images

Managing noise is the key to achieving great results in low light. The advanced 2D/3D noise filtering system in the W-V allows it to provide good color in much lower lighting levels. Reducing noise in the picture also reduces the amount of storage space required to record the video on a DVR.



Conventional Camera



W-V Camera

### DIS (Digital Image Stabilization)

DIS (Digital Image Stabilization) removes image jitter that is caused by vibrations in the building. This stabilization greatly reduces the amount of hard disk space required to store images on a DVR.

### Convenient Multi-language OSD

Advanced features can be easily optimized with the use of the on-screen display menus that are available in six different languages. These menus can be accessed locally at the camera via pushbuttons or remotely from an optional low cost hand-held controller, or from the monitoring location center via RS-485.

## SCB-4000



High Resolution Low Light Camera

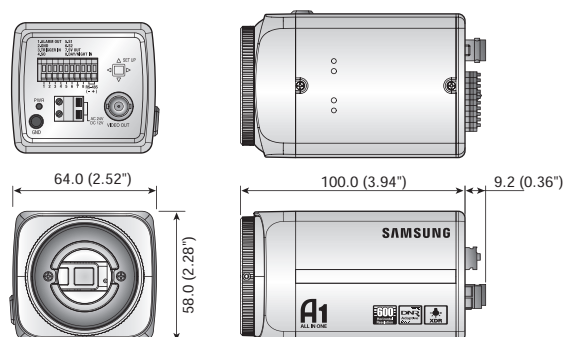


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.1Lux@F1.2 (Color), 0.01Lux (B/W)
- True Day & Night (ICR), Intelligent video, MD, DNR (3D+2D)
- Coax : CCVC, RS-485, Dual power, 230V AC (high voltage type)

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCB-4000N  | SCB-4000P   | SCB-4000PH     |
|----------------------------------|--|---|----------------|
| VIDEO                            |  |   |                |
| Imaging Device                   | 1/2" Ex-view HAD CCD   |   |                |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |                |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |                |
| Scanning System                  | 2 : 1 Interlace  |   |                |
| Synchronization                  | Internal / Line lock   |   |                |
| Frequency                        | H : 15.734KHz / V : 59.94Hz    H : 15.625KHz / V : 50Hz  |   |                |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |                |
| Min. Illumination                | Color : 0.1Lux@F1.2 (50IRE), 0.0002Lux (Sens-up, 512x)<br>B/W : 0.01Lux@F1.2 (50IRE), 0.00002Lux (Sens-up, 512x) |   |                |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |                |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |                |
| LENS                             |  |   |                |
| Lens Type                        | Manual / Auto iris (Video / DC)  |   |                |
| Mount Type                       | C / CS   |   |                |
| OPERATIONAL                      |  |   |                |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |                |
| Camera Title                     | Off / On (Displayed 54 characters)   |   |                |
| Day & Night                      | Day / Night / Auto / Ext   |   |                |
| Backlight Compensation           | Off / On (Area setting)  |   |                |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)   |   |                |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)   |   |                |
| Digital Image Stabilization      | Off / On   |   |                |
| Motion Detection                 | Off / Tracking / Detection   |   |                |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)  |   |                |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |                |
| Gain Control                     | Off / On   |   |                |
| White Balance                    | ATW1 / ATW2 / AWC / 3200K / 5600K  |   |                |
| Electronic Shutter Speed         | 1/60 ~ 1/200,000sec  |   |                |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |                |
| Reverse                          | Off / H / V / H/V  |   |                |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom   |   |                |
| Intelligent Video                | Fixed / Moved, Fence (Line, Area)  |   |                |
| PIP                              | Off / On   |   |                |
| Alarm                            | 1 Out  |   |                |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |                |
| Protocol                         | Coax : CCVC<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, GE                           |   |                |
| ENVIRONMENTAL                    |  |   |                |
| Operating Temperature / Humidity | -10℃ ~ +50℃ (+14℉ ~ +122℉) / Less than 90% RH  |   |                |
| ELECTRICAL                       |  |   |                |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  |   | 230V AC ±10%   |
| Power Consumption                | Max. 3.0W  |   | Max. 4.1W      |
| MECHANICAL                       |  |   |                |
| Color / Material                 | Silver / Aluminum, Steel   |   |                |
| Dimensions (WxHxD)               | 64.0 x 58.0 x 100.0mm (2.52" x 2.28" x 3.94")  |   |                |
| Weight                           | 305g (0.67 lb)   |   | 395g (0.87 lb) |

# SCB-3001

Premium Resolution WDR Camera



Product Design : 90%  
Features and Functions : 90%  
Ease of Installation : 90%  
Image Quality : 90%  
Performance : 90%  
Overall Rating : 90%

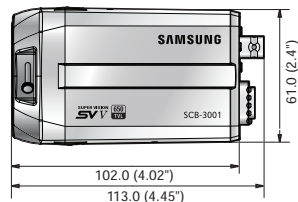


## Key Features

- High resolution of 650TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.1Lux@F1.2 (Color), 0.01Lux (B/W)
- WDR, VPS, True Day & Night (ICR), Intelligent video, MD
- SSNRIII (3D+2D), Coax : Pelco-C (Coaxitron), RS-485, Dual power, 230V AC (high voltage type)

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCB-3001N  | SCB-3001P   | SCB-3001PH                                  |
|----------------------------------|--|---|---|
| VIDEO                            |  |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II (Double scan)  |   |   |
| Total Pixels                     | 1,028(H) x 508(V)  | 1,028(H) x 596(V)   |   |
| Effective Pixels                 | 976(H) x 494(V)  | 976(H) x 582(V)   |   |
| Scanning System                  | 2 : 1 Interlace  |   |   |
| Synchronization                  | Internal / Line lock / Extern  |   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz    H : 15.625KHz / V : 50Hz  |   |   |
| Horizontal Resolution            | Color : 650TV lines, B/W : 700TV lines   |   |   |
| Min. Illumination                | Color : 0.1Lux@F1.2 (50IRE), 0.0002Lux (Sens-up, 512x)<br>B/W : 0.01Lux@F1.2 (50IRE), 0.00002Lux (Sens-up, 512x) |   |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |   |
| LENS                             |  |   |   |
| Lens Type                        | Manual / Auto iris (Video / DC)  |   |   |
| Mount Type                       | C / CS   |   |   |
| OPERATIONAL                      |  |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |   |
| Camera Title                     | Off / On (Displayed 15 characters)   |   |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W  |   |   |
| Backlight Compensation           | Off / User BLC / HLC / SSDR / WDR  |   |   |
| Wide Dynamic Range               | 128x   | 160x  |   |
| Contrast Enhancement             | SSDR   |   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |   |
| Digital Image Stabilization      | Off / On   |   |   |
| Motion Detection                 | Built-in   |   |   |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)  |   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |   |
| Gain Control                     | Off / Low / High   |   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |   |
| Reverse                          | Off / H-Rev / V-Rev / HV-Rev   |   |   |
| Profile                          | Basic / Day & Night / Backlight / ITS / Indoor / User  |   |   |
| Intelligent Video                | Fixed / Moved / Fence / Tracking / Detection / Counting  |   |   |
| VPS                              | Off / On   |   |   |
| PIP                              | Off / On   |   |   |
| Alarm                            | 1 Out  |   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon                |   |   |
| ENVIRONMENTAL                    |  |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |   |   |
| ELECTRICAL                       |  |   |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  |   | 230V AC ±10%                                |
| Power Consumption                | Max. 4.0W  |   | Max. 4.2W                                   |
| MECHANICAL                       |  |   |   |
| Color / Material                 | Black, Silver / Aluminum, Steel  |   |   |
| Dimensions (WxHxD)               | 66.0 x 61.0 x 102.0mm (2.6" x 2.4" x 4.02")  |   | 66.0 x 61.0 x 115.0mm (2.6" x 2.4" x 4.53") |
| Weight                           | 310g (0.68 lb)   |   | 540g (1.19 lb)                              |

## SCB-3000

High Resolution WDR Camera

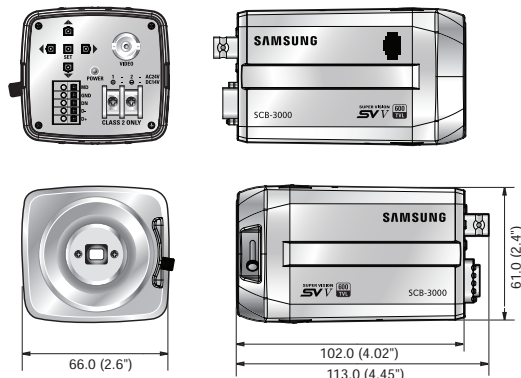


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.3Lux@F1.2 (Color), 0.01Lux (B/W)
- WDR, VPS, True Day & Night (ICR), MD
- SSNRIII (3D+2D), Coax : Pelco-C (Coaxitron), RS-485, Dual power, 230V AC (high voltage type)

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCB-3000N  | SCB-3000P   | SCB-3000PH                                  |
|----------------------------------|--|---|---|
| VIDEO                            |  |   |   |
| Imaging Device                   | 1/3" Super HAD CCD (Double scan)   |   |   |
| Total Pixels                     | 1,028(H) x 508(V)  | 1,028(H) x 596(V)   |   |
| Effective Pixels                 | 976(H) x 494(V)  | 976(H) x 582(V)   |   |
| Scanning System                  | 2 : 1 Interlace  |   |   |
| Synchronization                  | Internal / Line lock / Extern  |   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz    H : 15.625KHz / V : 50Hz  |   |   |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |   |
| Min. Illumination                | Color : 0.3Lux@F1.2 (50IRE), 0.0006Lux (Sens-up, 512x)<br>B/W : 0.01Lux@F1.2 (50IRE), 0.00002Lux (Sens-up, 512x) |   |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |   |
| LENS                             |  |   |   |
| Lens Type                        | Manual / Auto iris (Video / DC)  |   |   |
| Mount Type                       | C / CS   |   |   |
| OPERATIONAL                      |  |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |   |
| Camera Title                     | Off / On (Displayed 15 characters)   |   |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W  |   |   |
| Backlight Compensation           | Off / User BLC / HLC / SSDR / WDR  |   |   |
| Wide Dynamic Range               | 128x   | 160x  |   |
| Contrast Enhancement             | SSDR   |   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |   |
| Digital Image Stabilization      | Off / On   |   |   |
| Motion Detection                 | Built-in   |   |   |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)  |   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |   |
| Gain Control                     | Off / Low / High   |   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |   |
| Reverse                          | Off / H-Rev / V-Rev / HV-Rev   |   |   |
| Profile                          | Basic / Day & Night / Backlight / ITS / Indoor / User  |   |   |
| VPS                              | Off / On   |   |   |
| PIP                              | Off / On   |   |   |
| Alarm                            | 1 Out  |   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon                |   |   |
| ENVIRONMENTAL                    |  |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |   |   |
| ELECTRICAL                       |  |   |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  |   | 230V AC ±10%                                |
| Power Consumption                | Max. 4.0W  |   | Max. 4.2W                                   |
| MECHANICAL                       |  |   |   |
| Color / Material                 | Black, Silver / Aluminum, Steel  |   |   |
| Dimensions (WxHxD)               | 66.0 x 61.0 x 102.0mm (2.6" x 2.4" x 4.02")  |   | 66.0 x 61.0 x 115.0mm (2.6" x 2.4" x 4.53") |
| Weight                           | 310g (0.68 lb)   |   | 540g (1.19 lb)                              |



## SCB-2001



High Resolution Day &amp; Night Camera

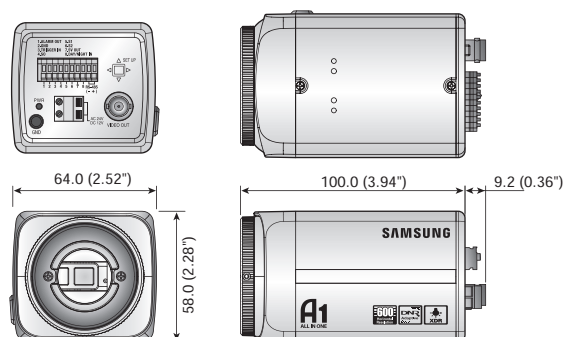


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.05Lux@F1.2 (Color), 0.01Lux (B/W)
- True Day & Night (ICR), Intelligent video, MD, DNR (3D+2D)
- Coax : CCVC, RS-485, Dual power, 230V AC (high voltage type)

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCB-2001N   | SCB-2001P   | SCB-2001PH     |
|----------------------------------|---|---|----------------|
| VIDEO                            |   |   |                |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |                |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |                |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |                |
| Scanning System                  | 2 : 1 Interlace   |   |                |
| Synchronization                  | Internal / Line lock  |   |                |
| Frequency                        | H : 15.734KHz / V : 59.94Hz    H : 15.625KHz / V : 50Hz   |   |                |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |                |
| Min. Illumination                | Color : 0.05Lux@F1.2 (50IRE), 0.0001Lux (Sens-up, 512x)<br>B/W : 0.01Lux@F1.2 (50IRE), 0.00002Lux (Sens-up, 512x) |   |                |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |                |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |                |
| LENS                             |   |   |                |
| Lens Type                        | Manual / Auto iris (Video / DC)   |   |                |
| Mount Type                       | C / CS  |   |                |
| OPERATIONAL                      |   |   |                |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean   | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |                |
| Camera Title                     | Off / On (Displayed 54 characters)  |   |                |
| Day & Night                      | Day / Night / Auto / Ext  |   |                |
| Backlight Compensation           | Off / On (Area setting)   |   |                |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)  |   |                |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)  |   |                |
| Digital Image Stabilization      | Off / On  |   |                |
| Motion Detection                 | Off / Tracking / Detection  |   |                |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)   |   |                |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |                |
| Gain Control                     | Off / On  |   |                |
| White Balance                    | ATW1 / ATW2 / AWC (Manual) / 3200K / 5600K  |   |                |
| Electronic Shutter Speed         | 1/60 ~ 1/200,000sec   | 1/50 ~ 1/200,000sec   |                |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |                |
| Reverse                          | Off / H / V / H/V   |   |                |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom  |   |                |
| Intelligent Video                | Fixed / Moved, Fence (Line, Area)   |   |                |
| PIP                              | Off / On  |   |                |
| Alarm                            | 1 Out   |   |                |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |                |
| Protocol                         | Coax : CCVC<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, GE                            |   |                |
| ENVIRONMENTAL                    |   |   |                |
| Operating Temperature / Humidity | -10℃ ~ +50℃ (+14ℱ ~ +122ℱ) / Less than 90% RH   |   |                |
| ELECTRICAL                       |   |   |                |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)   |   | 230V AC ±10%   |
| Power Consumption                | Max. 3.0W   |   | Max. 4.1W      |
| MECHANICAL                       |   |   |                |
| Color / Material                 | Silver / Aluminum, Steel  |   |                |
| Dimensions (WxHxD)               | 64.0 x 58.0 x 100.0mm (2.52" x 2.28" x 3.94")   |   |                |
| Weight                           | 305g (0.67 lb)  |   | 395g (0.87 lb) |

# SCB-2000

High Resolution Camera

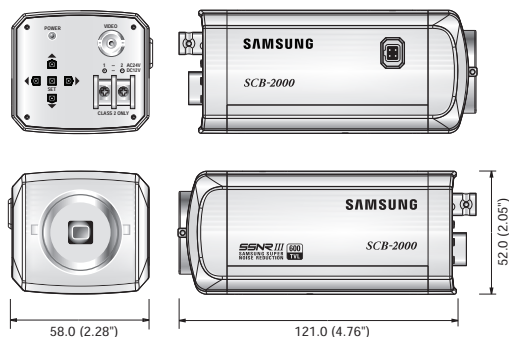


## Key Features

- High resolution of 600TV lines
- Min. illumination 0.05Lux@F1.2 (Color)
- MD, SSNRIII (3D+2D), Coax : Pelco-C (Coaxitron)
- Dual power, 12V DC, 230V AC (high voltage type)

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCB-2000N   | SCB-2000ND     | SCB-2000P   | SCB-2000PD     | SCB-2000PH           |
|----------------------------------|---|----------------|---|----------------|----------------------|
| VIDEO                            |   |                |   |                |                      |
| Imaging Device                   | 1/3" Super HAD CCD II   |                |   |                |                      |
| Total Pixels                     | 811(H) x 508(V)   |                | 795(H) x 596(V)   |                |                      |
| Effective Pixels                 | 768(H) x 494(V)   |                | 752(H) x 582(V)   |                |                      |
| Scanning System                  | 2 : 1 Interlace   |                |   |                |                      |
| Synchronization                  | Internal / Line lock  | Internal       | Internal / Line lock  | Internal       | Internal / Line lock |
| Frequency                        | H : 15.734KHz / V : 59.94Hz                                       |                | H : 15.625KHz / V : 50Hz  |                |                      |
| Horizontal Resolution            | Color : 600TV lines   |                |   |                |                      |
| Min. Illumination                | 0.05Lux / 0.0001Lux (F1.2, Sens-up 512x)                          |                |   |                |                      |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |                |   |                |                      |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite                                   |                |   |                |                      |
| LENS                             |   |                |   |                |                      |
| Lens Type                        | Manual / Auto iris (Video / DC)                                   |                |   |                |                      |
| Mount Type                       | C / CS  |                |   |                |                      |
| OPERATIONAL                      |   |                |   |                |                      |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean |                | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |                |                      |
| Camera Title                     | On / Off (Displayed 15 characters)                                |                |   |                |                      |
| Day & Night                      | Auto (Electrical) / Color / B/W                                   |                |   |                |                      |
| Backlight Compensation           | BLC / HLC / Off   |                |   |                |                      |
| Contrast Enhancement             | SSDR (Off / On)   |                |   |                |                      |
| Digital Noise Reduction          | SSNRIII (Off / On)  |                |   |                |                      |
| Digital Image Stabilization      | Off / On  |                |   |                |                      |
| Motion Detection                 | Off / On (8 programmable zones)                                   |                |   |                |                      |
| Privacy Masking                  | Off / On (12 programmable zones)                                  |                |   |                |                      |
| Sens-up (Frame Integration)      | 2x ~ 512x   |                |   |                |                      |
| Gain Control                     | Off / Low / High  |                |   |                |                      |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)        |                |   |                |                      |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   |                | 1/50 ~ 1/120,000sec   |                |                      |
| Digital Zoom                     | Off / On (1x ~ 16x)   |                |   |                |                      |
| Reverse                          | H-Rev (Off / On), V-Rev (Off / On)                                |                |   |                |                      |
| Communication                    | Coaxial control (SPC-300 compatible)                              |                |   |                |                      |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |                |   |                |                      |
| ENVIRONMENTAL                    |   |                |   |                |                      |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                 |                |   |                |                      |
| ELECTRICAL                       |   |                |   |                |                      |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)                                       | 12V DC ±10%    | Dual (24V AC & 12V DC ±10%)   | 12V DC ±10%    | 230V AC ±10%         |
| Power Consumption                | Max. 3.5W   | Max. 2.5W      | Max. 3.5W   | Max. 2.5W      | Max. 4.0W            |
| MECHANICAL                       |   |                |   |                |                      |
| Color / Material                 | Black & Dark gray / Aluminum, Steel                               |                |   |                |                      |
| Dimensions (WxHxD)               | 58.0 x 52.0 x 121.0mm (2.28" x 2.05" x 4.76")                     |                |   |                |                      |
| Weight                           | 340g (0.75 lb)  | 310g (0.68 lb) | 340g (0.75 lb)  | 310g (0.68 lb) | 510g (1.12 lb)       |

# SCB-1000

## High Resolution Camera

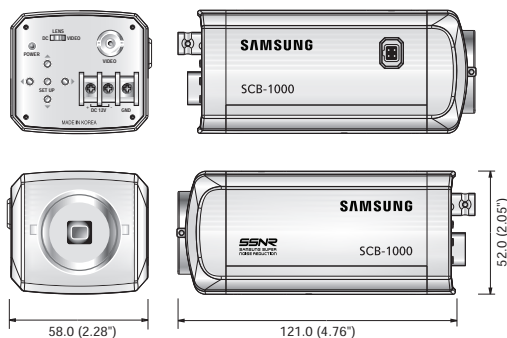


### Key Features

- High resolution of 530TV lines
- Min. illumination 0.05Lux@F1.2 (Color)
- MD, SSNR, 24V AC, 12V DC, 230V AC (high voltage type)

### Dimensions

Unit : mm (inch)



### Technical Specifications

|                                  | SCB-1000NA  | SCB-1000ND     | SCB-1000PA               | SCB-1000PD     | SCB-1000PH           |
|----------------------------------|---|----------------|--------------------------|----------------|----------------------|
| VIDEO                            |   |                |                          |                |                      |
| Imaging Device                   | 1/3" Super HAD CCD II                             |                |                          |                |                      |
| Total Pixels                     | 811(H) x 508(V)                                   |                | 795(H) x 596(V)          |                |                      |
| Effective Pixels                 | 768(H) x 494(V)                                   |                | 752(H) x 582(V)          |                |                      |
| Scanning System                  | 2 : 1 Interlace                                   |                |                          |                |                      |
| Synchronization                  | Internal / Line lock                              | Internal       | Internal / Line lock     | Internal       | Internal / Line lock |
| Frequency                        | H : 15.734KHz / V : 59.94Hz                       |                | H : 15.625KHz / V : 50Hz |                |                      |
| Horizontal Resolution            | Color : 530TV lines                               |                |                          |                |                      |
| Min. Illumination                | 0.05Lux / 0.0004Lux (F1.2, Sens-up, 128x)         |                |                          |                |                      |
| S / N Ratio                      | 50dB (AGC off, Weight on)                         |                |                          |                |                      |
| Video Output                     | CVBS : 1.0Vp-p / 75Ω composite                    |                |                          |                |                      |
| LENS                             |   |                |                          |                |                      |
| Lens Type                        | Manual / Auto iris (Video / DC)                   |                |                          |                |                      |
| Mount Type                       | C / CS  |                |                          |                |                      |
| OPERATIONAL                      |   |                |                          |                |                      |
| On Screen Display                | Built-in  |                |                          |                |                      |
| Camera Title                     | Off / On (Displayed 15 characters)                |                |                          |                |                      |
| Day & Night                      | Auto (Electrical) / On                            |                |                          |                |                      |
| Backlight Compensation           | Low / Middle / High / Off                         |                |                          |                |                      |
| SSNR (Digital Noise Reduction)   | Low / Middle / High / Off                         |                |                          |                |                      |
| Motion Detection                 | Off / On (4 programmable zones)                   |                |                          |                |                      |
| Privacy Masking                  | Off / On (4 programmable zones)                   |                |                          |                |                      |
| Sens-up (Frame Integration)      | 2x ~ 128x   |                |                          |                |                      |
| Gain Control                     | Low / Middle / High / Off                         |                |                          |                |                      |
| White Balance                    | ATW / Manual / AWC (1,800K° ~ 10,500K°)           |                |                          |                |                      |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec                               |                | 1/50 ~ 1/120,000sec      |                |                      |
| Mirror                           | Off / On  |                |                          |                |                      |
| ENVIRONMENTAL                    |   |                |                          |                |                      |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH |                |                          |                |                      |
| ELECTRICAL                       |   |                |                          |                |                      |
| Input Voltage / Current          | 24V AC ±10%                                       | 12V DC ±10%    | 24V AC ±10%              | 12V DC ±10%    | 230V AC ±10%         |
| Power Consumption                | Max. 3.5W   | Max. 2.5W      | Max. 3.5W                | Max. 2.5W      | Max. 4.0W            |
| MECHANICAL                       |   |                |                          |                |                      |
| Color / Material                 | Light silver / Aluminum, Steel                    |                |                          |                |                      |
| Dimensions (WxHxD)               | 58.0 x 52.0 x 121.0mm (2.28" x 2.05" x 4.76")     |                |                          |                |                      |
| Weight                           | 340g (0.75 lb)                                    | 310g (0.68 lb) | 340g (0.75 lb)           | 310g (0.68 lb) | 510g (1.12 lb)       |

# SUB-2000



High Resolution UTP Camera

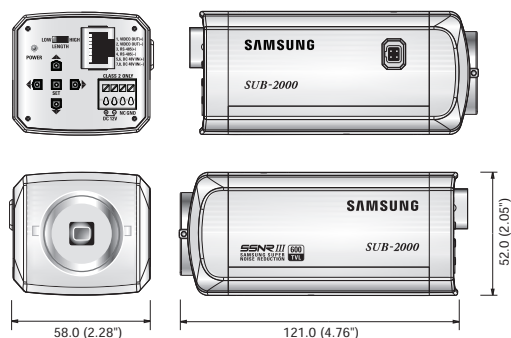


## Key Features

- High resolution of 600TV lines
- Min. illumination 0.05Lux@F1.2 (Color)
- MD, SSNRIII (3D+2D), Built-in UTP T/X
- Coax : Pelco-C (Coaxitron), RS-485, Dual power, 28V AC

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SUB-2000N   | SUB-2000P  |
|----------------------------------|---|--|
| VIDEO                            |   |  |
| Imaging Device                   | 1/3" Super HAD CCD II   |  |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)  |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)  |
| Scanning System                  | 2 : 1 Interlace   |  |
| Synchronization                  | Internal / Line lock  |  |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz   |
| Horizontal Resolution            | Color : 600TV lines   |  |
| Min. Illumination                | Color : 0.05Lux@F1.2 (50IRE)  |  |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |  |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |  |
| UTP Output                       | Built-in UTP TX   |  |
| LENS                             |   |  |
| Lens Type                        | Manual / Auto iris (Video / DC)   |  |
| Mount Type                       | C / CS  |  |
| OPERATIONAL                      |   |  |
| On Screen Display                | English, Japanese, Spanish,<br>French, Portuguese, Taiwanese, Korean                              | English, French, German, Spanish, Italian,<br>Chinese, Russian, Polish, Czech, Romanian,<br>Serbian, Swedish, Danish, Turkish,Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)  |  |
| Day & Night                      | Auto (Electrical) / Color / B/W   |  |
| Backlight Compensation           | BLC / HLC / Off   |  |
| Dynamic Range                    | SSDR (Off / On)   |  |
| Digital Noise Reduction          | SSNRIII (Off / On)  |  |
| Digital Image Stabilization      | Off / On  |  |
| Motion Detection                 | Off / On (8 programmable zones)   |  |
| Privacy Masking                  | Off / On (12 programmable zones)  |  |
| Sens-up (Frame Integration)      | 2x ~ 512x   |  |
| Gain Control                     | Low / High / Off  |  |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |  |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec  |
| Digital Zoom                     | Off / On (1x ~ 16x)   |  |
| Reverse                          | H-Rev (Off / On), V-Rev (Off / On)  |  |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |  |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon |  |
| ENVIRONMENTAL                    |   |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH   |  |
| ELECTRICAL                       |   |  |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%), 28V AC ±10%  |  |
| Power Consumption                | Max. 3.5W   |  |
| MECHANICAL                       |   |  |
| Color / Material                 | Black & Dark gray / Aluminum, Steel   |  |
| Dimensions (WxHxD)               | 58.0 x 52.0 x 121.0mm (2.28" x 2.05" x 4.76")   |  |
| Weight                           | 290g (0.64 lb)  |  |

## UTP Kit



4CH UTP Power Supply Hub  
SPU-400



1CH UTP Transceiver  
SPU-100TR



4CH UTP Receiver  
SPU-400R



## SCZ-3430/2430



High Resolution 43x Zoom Camera

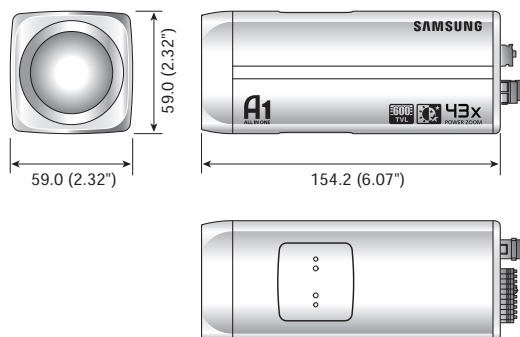


## Key Features

- High resolution of 600TV lines (Color), 700TV lines(B/W)
- Min. illumination 0.7Lux@F1.65 (Color), 0.07Lux (B/W) : SCZ-3430  
Min. illumination 0.2Lux@F1.65 (Color), 0.02Lux (B/W) : SCZ-2430
- Powerful 43x zoom (3.2 ~ 138.5mm), Digital 16x
- WDR, VPS : SCZ-3430, True Day & Night (ICR),  
Intelligent video, MD, DNR (3D+2D)
- Coax : CCVC, RS-485, Dual power, 12V DC

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCZ-3430N/2430N  | SCZ-3430ND/2430ND                                | SCZ-3430P/2430P   | SCZ-3430PD/2430PD                                |
|----------------------------------|--|--|---|--|
| VIDEO                            |  |  |   |  |
| Imaging Device                   | 1/4" Ex-view HAD CCD (Double scan) : SCZ-3430, 1/4" Super HAD CCD II : SCZ-2430    |  |   |  |
| Total Pixels                     | 811(H) x 508(V)  |  | 795(H) x 596(V)   |  |
| Effective Pixels                 | 768(H) x 494(V)  |  | 752(H) x 582(V)   |  |
| Scanning System                  | 2 : 1 Interlace  |  |   |  |
| Synchronization                  | Internal / Line lock   | Internal   | Internal / Line lock  | Internal   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  |  | H : 15.625KHz / V : 50Hz  |  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |  |   |  |
| Min. Illumination                | Color : 0.7Lux@F1.65 (50IRE), 0.001Lux (Sens-up, 512x) : SCZ-3430                  |  |   |  |
|                                  | 0.2Lux@F1.65 (50IRE), 0.0004Lux (Sens-up, 512x) : SCZ-2430                         |  |   |  |
|                                  | B/W : 0.07Lux@F1.65 (50IRE), 0.0002Lux (Sens-up, 512x) : SCZ-3430                  |  |   |  |
|                                  | 0.02Lux@F1.65 (50IRE), 0.00004Lux (Sens-up, 512x) : SCZ-2430                       |  |   |  |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |  |   |  |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |  |   |  |
| LENS                             |  |  |   |  |
| Focal Length (Zoom Ratio)        | 3.2 ~ 138.5mm (Optical 43x)  |  |   |  |
| Max. Aperture Ratio              | 1: 1.65(Wide) ~ 3.7(Tele)  |  |   |  |
| Angular Field of View            | H : 61.22°(Wide) ~ 1.47°(Tele) / V : 47.16°(Wide) ~ 1.1°(Tele)                     |  |   |  |
| Min. Object Distance             | 1m (3.28ft)  |  |   |  |
| Focus Control                    | Auto / Manual / One AF   |  |   |  |
| Zoom Movement Speed              | 3.2sec (Wide to tele)  |  |   |  |
| OPERATIONAL                      |  |  |   |  |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean                  |  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |  |
| Camera Title                     | Off / On (Displayed 54 characters)   |  |   |  |
| Day & Night                      | Day / Night / Auto / Ext   |  |   |  |
| Backlight Compensation           | Off / On (Area setting)  |  |   |  |
| Wide Dynamic Range               | 128x : SCZ-3430  |  | 160x : SCZ-3430   |  |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)   |  |   |  |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)                                     |  |   |  |
| Digital Image Stabilization      | Off / On   |  |   |  |
| Motion Detection                 | Off / Tracking / Detection   |  |   |  |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)                            |  |   |  |
| Sens-up (Frame Integration)      | 2x ~ 512x  |  |   |  |
| Gain Control                     | Off / On   |  |   |  |
| White Balance                    | ATW1 / ATW2 / AWC (Manual) / 3200K / 5600K   |  |   |  |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  |  | 1/50 ~ 1/120,000sec   |  |
| Digital Zoom                     | Off / On (1x ~ 16x)  |  |   |  |
| Reverse                          | Off / H / V / H/V  |  |   |  |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom                         |  |   |  |
| VPS                              | Off / On : SCZ-3430  |  |   |  |
| Intelligent Video                | Fixed / Moved  |  |   |  |
| PIP                              | Off / On   |  |   |  |
| Schedule                         | Day / Time   |  |   |  |
| Alarm                            | 1 Out  |  |   |  |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485                                       |  |   |  |
| Protocol                         | Coax : CCVC<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon |  |   |  |
| ENVIRONMENTAL                    |  |  |   |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                                  |  |   |  |
| ELECTRICAL                       |  |  |   |  |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  | 12V DC ±10%                                      | Dual (24V AC & 12V DC ±10%)   | 12V DC ±10%                                      |
| Power Consumption                | Max. 3.0W  |  |   |  |
| MECHANICAL                       |  |  |   |  |
| Color / Material                 | Silver / Aluminum, Steel   |  |   |  |
| Dimensions (WxHxD)               | 59.0 x 59.0 x 154.2mm<br>(2.32" x 2.32" x 6.07")                                   | 59.0 x 59.0 x 124.2mm<br>(2.32" x 2.32" x 4.89") | 59.0 x 59.0 x 154.2mm<br>(2.32" x 2.32" x 6.07")  | 59.0 x 59.0 x 124.2mm<br>(2.32" x 2.32" x 4.89") |
| Weight                           | 564g (1.24 lb)   | 421g (0.93 lb)                                   | 564g (1.24 lb)  | 421g (0.93 lb)                                   |

## SCZ-3370/2370



## High Resolution 37x Zoom Camera



SCZ-3370

SCZ-2370

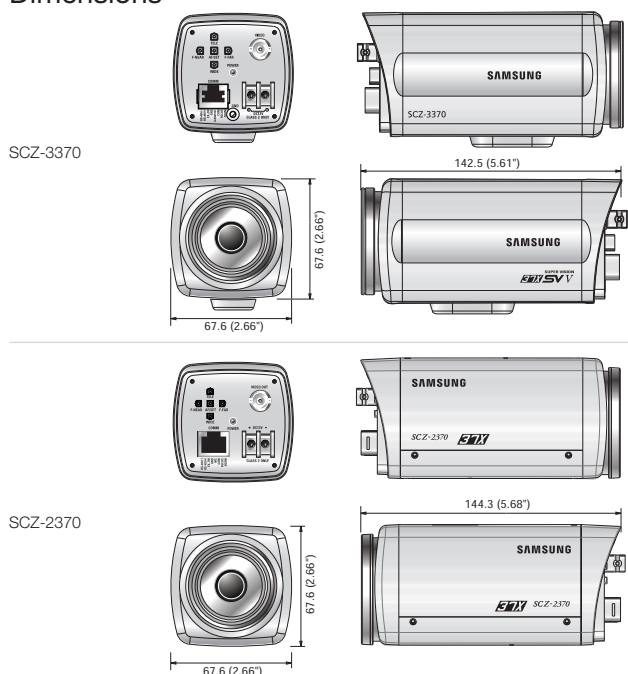


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.7Lux@F1.6 (Color), 0.07Lux (B/W) : SCZ-3370  
Min. Illumination 0.2Lux@F1.6 (Color), 0.02Lux (B/W) : SCZ-2370
- Powerful 37x zoom (3.5 ~ 129.5mm), Digital 16x
- WDR, VPS : SCZ-3370, True Day & Night (ICR),  
Intelligent video, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), RS-485, Dual power, 12V DC

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCZ-3370N/2370N   | SCZ-3370ND/2370ND  | SCZ-3370P/2370P   | SCZ-3370PD/2370PD  |
|----------------------------------|---|--|---|--|
| VIDEO                            |   |  |   |  |
| Imaging Device                   | 1/4" Ex-view double scan CCD : SCZ-3370, 1/4" Ex-view HAD CCD : SCZ-2370                |  |   |  |
| Total Pixels                     | 811(H) x 508(V)   |  | 795(H) x 596(V)   |  |
| Effective Pixels                 | 768(H) x 494(V)   |  | 752(H) x 582(V)   |  |
| Scanning System                  | 2 : 1 Interlace, Progressive  |  |   |  |
| Synchronization                  | Internal / Line lock  | Internal   | Internal / Line lock  | Internal   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   |  | H : 15.625KHz / V : 50Hz  |  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |  |   |  |
| Min. Illumination                | Color : 0.7Lux@F1.6 (50IRE), 0.001Lux (Sens-up, 512x) : SCZ-3370                        |  |   |  |
|                                  | 0.2Lux@F1.6 (50IRE), 0.0004Lux (Sens-up, 512x) : SCZ-2370                               |  |   |  |
|                                  | B/W : 0.07Lux@F1.6 (50IRE), 0.0001Lux (Sens-up, 512x) : SCZ-3370                        |  |   |  |
|                                  | 0.02Lux@F1.6 (50IRE), 0.00004Lux (Sens-up, 512x) : SCZ-2370                             |  |   |  |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |  |   |  |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |  |   |  |
| LENS                             |   |  |   |  |
| Focal Length (Zoom Ratio)        | 3.5 ~ 129.5mm (Optical 37x)   |  |   |  |
| Max. Aperture Ratio              | 1 : 1.72(Wide) ~ 3.94(Tele)   |  |   |  |
| Angular Field of View            | H : 55.5°(Wide) ~ 1.59°(Tele) / V : 42.5°(Wide) ~ 1.19°(Tele)                           |  |   |  |
| Min. Object Distance             | 1.5m (4.92ft)   |  |   |  |
| Focus Control                    | Auto / Manual / One push  |  |   |  |
| Zoom Movement Speed              | 2.8sec (Wide to tele)   |  |   |  |
| OPERATIONAL                      |   |  |   |  |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean                       |  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |  |
| Camera Title                     | Off / On (Displayed 15 characters)  |  |   |  |
| Day & Night                      | Auto (ICR) / External / Color / B/W   |  |   |  |
| Backlight Compensation           | Off / HLC / BLC / WDR (SCZ-3370)  |  |   |  |
| Wide Dynamic Range               | 128x : SCZ-3370   |  | 160x : SCZ-3370   |  |
| Contrast Enhancement             | SSDR (Off / On)   |  |   |  |
| Digital Noise Reduction          | SSNRIII (Off/ Low / Medium / High)  |  |   |  |
| Digital Image Stabilization      | Off / On  |  |   |  |
| Privacy Masking                  | Off / On (12 programmable zones)  |  |   |  |
| Sens-up (Frame Integration)      | 2x ~ 512x   |  |   |  |
| Gain Control                     | Off / Low / Medium / High / Manual  |  |   |  |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)                              |  |   |  |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   |  | 1/50 ~ 1/120,000sec   |  |
| Digital Zoom                     | Off / On (1x ~ 16x)   |  |   |  |
| Flip / Mirror (Reverse)          | Off / H-Rev / V-Rev / HV-Rev : SCZ-3370, H-Rev (Off / On) / V-Rev (Off / On) : SCZ-2370 |  |   |  |
| Profile                          | Basic / Day & Night / Backlight / ITS / Indoor / User : SCZ-3370                        |  |   |  |
| VPS                              | Off / On : SCZ-3370   |  |   |  |
| Intelligent Video                | Fixed / Moved / Motion Detection / Tracking / Fence / Counting : SCZ-3370               |  |   |  |
| Alarm                            | 1 Out : SCZ-3370  |  |   |  |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |  |   |  |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |  |   |  |
|                                  | RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD                 |  |   |  |
| ENVIRONMENTAL                    |   |  |   |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                                       |  |   |  |
| ELECTRICAL                       |   |  |   |  |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)   | 12V DC ±10%  | Dual (24V AC & 12V DC ±10%)   | 12V DC ±10%  |
| Power Consumption                | Max. 6.1W : SCZ-3370  | Max. 4.7W : SCZ-3370   | Max. 6.1W : SCZ-3370  | Max. 4.7W : SCZ-3370   |
|                                  | Max. 4.8W : SCZ-2370  | Max. 4.8W : SCZ-3370   | Max. 4.8W : SCZ-3370  | Max. 4.8W : SCZ-3370   |
| MECHANICAL                       |   |  |   |  |
| Color / Material                 | Black, Silver / Aluminum : SCZ-3370, Black, Silver / Plastic, Steel : SCZ-2370          |  |   |  |
| Dimensions (WxHxD)               | 67.6 x 67.6 x 142.5mm<br>(2.66" x 2.66" x 5.61")<br>: SCZ-3370N                         | 67.6 x 67.6 x 118.5mm<br>(2.66" x 2.66" x 4.67")<br>: SCZ-3370ND | 67.6 x 67.6 x 142.5mm<br>(2.66" x 2.66" x 5.61")<br>: SCZ-3370P   | 67.6 x 67.6 x 118.5mm<br>(2.66" x 2.66" x 4.67")<br>: SCZ-3370PD |
|                                  | 67.6 x 67.6 x 144.3mm<br>(2.66" x 2.66" x 5.68")<br>: SCZ-2370N                         | 67.6 x 67.6 x 122.3mm<br>(2.66" x 2.66" x 4.81")<br>: SCZ-2370ND | 67.6 x 67.6 x 144.3mm<br>(2.66" x 2.66" x 5.68")<br>: SCZ-2370P   | 67.6 x 67.6 x 122.3mm<br>(2.66" x 2.66" x 4.81")<br>: SCZ-2370PD |
|                                  | 500g (1.1 lb)<br>: SCZ-3370N  | 410g (0.9 lb)<br>: SCZ-3370ND                                    | 500g (1.1 lb)<br>: SCZ-3370P  | 410g (0.9 lb)<br>: SCZ-3370PD                                    |
| Weight                           | 520g (1.15 lb)<br>: SCZ-2370N   | 415g (0.91 lb)<br>: SCZ-2370ND                                   | 520g (1.15 lb)<br>: SCZ-2370P   | 415g (0.91 lb)<br>: SCZ-2370PD                                   |

# SCZ-3250/2250



High Resolution 25x Zoom Camera

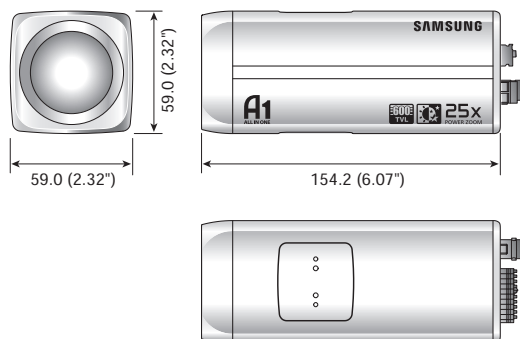


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.7Lux@F1.65 (Color), 0.07Lux (B/W) : SCZ-3250  
Min. illumination 0.2Lux@F1.65 (Color), 0.02Lux (B/W) : SCZ-2250
- Powerful 25x zoom (3.66 ~ 91.36mm), Digital 16x
- WDR, VPS : SCZ-3250, True Day & Night (ICR),  
Intelligent video, MD, DNR (3D+2D)
- Coax : CCVC, RS-485, Dual power, 12V DC

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCZ-3250N/2250N  | SCZ-3250ND/2250ND                                | SCZ-3250P/2250P   | SCZ-3250PD/2250PD                                |
|----------------------------------|--|--|---|--|
| VIDEO                            |  |  |   |  |
| Imaging Device                   | 1/4" Ex-view HAD CCD (Double scan) : SCZ-3250, 1/4" Super HAD CCD II : SCZ-2250    |  |   |  |
| Total Pixels                     | 811(H) x 508(V)  |  | 795(H) x 596(V)   |  |
| Effective Pixels                 | 768(H) x 494(V)  |  | 752(H) x 582(V)   |  |
| Scanning System                  | 2 : 1 Interlace  |  |   |  |
| Synchronization                  | Internal / Line lock   | Internal   | Internal / Line lock  | Internal   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  |  | H : 15.625KHz / V : 50Hz  |  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |  |   |  |
| Min. Illumination                | Color : 0.7Lux@F1.65 (50IRE), 0.001Lux (Sens-up, 512x) : SCZ-3250                  |  |   |  |
|                                  | 0.2Lux@F1.65 (50IRE), 0.0004Lux (Sens-up, 512x) : SCZ-2250                         |  |   |  |
|                                  | B/W : 0.07Lux@F1.65 (50IRE), 0.0002Lux (Sens-up, 512x) : SCZ-3250                  |  |   |  |
|                                  | 0.02Lux@F1.65 (50IRE), 0.00004Lux (Sens-up, 512x) : SCZ-2250                       |  |   |  |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |  |   |  |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |  |   |  |
| LENS                             |  |  |   |  |
| Focal Length (Zoom Ratio)        | 3.66 ~ 91.36mm (Optical 25x)   |  |   |  |
| Max. Aperture Ratio              | 1 : 1.65(Wide) ~ 3.0(Tele)   |  |   |  |
| Angular Field of View            | H : 54.95°(Wide) ~ 2.24°(Tele) / V : 41.83°(Wide) ~ 1.68°(Tele)                    |  |   |  |
| Min. Object Distance             | 1m (3.28ft)  |  |   |  |
| Focus Control                    | Auto / Manual / One AF   |  |   |  |
| Zoom Movement Speed              | 2.9sec (Wide to tele)  |  |   |  |
| OPERATIONAL                      |  |  |   |  |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean                  |  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |  |
| Camera Title                     | Off / On (Displayed 54 characters)   |  |   |  |
| Day & Night                      | Day / Night / Auto / Ext   |  |   |  |
| Backlight Compensation           | Off / On (Area setting)  |  |   |  |
| Wide Dynamic Range               | 128x : SCZ-3250  |  | 160x : SCZ-3250   |  |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)   |  |   |  |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)                                     |  |   |  |
| Digital Image Stabilization      | Off / On   |  |   |  |
| Motion Detection                 | Off / Tracking / Detection   |  |   |  |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)                            |  |   |  |
| Sens-up (Frame Integration)      | 2x ~ 512x  |  |   |  |
| Gain Control                     | Off / On   |  |   |  |
| White Balance                    | ATW1 / ATW2 / AWC (Manual) / 3200K / 5600K   |  |   |  |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  |  | 1/50 ~ 1/120,000sec   |  |
| Digital Zoom                     | Off / On (1x ~ 16x)  |  |   |  |
| Reverse                          | Off / H / V / H/V  |  |   |  |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom                         |  |   |  |
| VPS                              | Off / On : SCZ-3250  |  |   |  |
| Intelligent Video                | Fixed / Moved  |  |   |  |
| PIP                              | Off / On   |  |   |  |
| Schedule                         | Day / Time   |  |   |  |
| Alarm                            | 1 Out  |  |   |  |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485                                       |  |   |  |
| Protocol                         | Coax : CCVC<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon |  |   |  |
| ENVIRONMENTAL                    |  |  |   |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                                  |  |   |  |
| ELECTRICAL                       |  |  |   |  |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  | 12V DC ±10%                                      | Dual (24V AC & 12V DC ±10%)   | 12V DC ±10%                                      |
| Power Consumption                | Max. 3.0W  |  |   |  |
| MECHANICAL                       |  |  |   |  |
| Color / Material                 | Silver / Aluminum, Steel   |  |   |  |
| Dimensions (WxHxD)               | 59.0 x 59.0 x 154.2mm<br>(2.32" x 2.32" x 6.07")                                   | 59.0 x 59.0 x 124.2mm<br>(2.32" x 2.32" x 4.89") | 59.0 x 59.0 x 154.2mm<br>(2.32" x 2.32" x 6.07")  | 59.0 x 59.0 x 124.2mm<br>(2.32" x 2.32" x 4.89") |
| Weight                           | 564g (1.24 lb)   | 421g (0.93 lb)                                   | 564g (1.24 lb)  | 421g (0.93 lb)                                   |

# SCO-2370



High Resolution 37x Weatherproof Camera

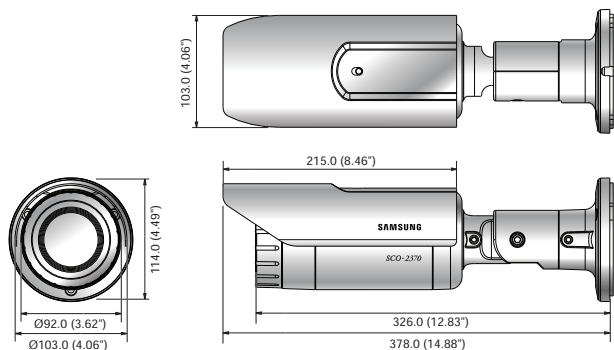


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.2Lux@F1.6 (Color), 0.02Lux (B/W)
- Powerful 37x zoom (3.5 ~ 129.5mm), Digital 16x
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- IP68, Coax : Pelco-C (Coaxitron), RS-485, Dual power

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCO-2370N   | SCO-2370P   |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/4" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |
| Min. Illumination                | Color : 0.2Lux@F1.6 (50IRE), 0.0004Lux (Sens-up, 512x)<br>B/W : 0.02Lux@F1.6 (50IRE), 0.0004Lux (Sens-up 512x)          |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3.5 ~ 129.5mm (Optical 37x)   |   |
| Max. Aperture Ratio              | 1 : 1.6(Wide) ~ 3.9(Tele)   |   |
| Angular Field of View            | H : 55.5°(Wide) ~ 1.59°(Tele) / V : 42.5°(Wide) ~ 1.19°(Tele)   |   |
| Min. Object Distance             | 1.5m (4.92ft)   |   |
| Focus Control                    | Auto / Manual / One push  |   |
| Zoom Movement Speed              | 2.8sec (Wide to tele)   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean   | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | On / Off (Displayed 15 characters)  |   |
| Day & Night                      | Auto (ICR) / Color / B/W  |   |
| Backlight Compensation           | Off / BLC / HLC   |   |
| Dynamic Range                    | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off/ Low / Medium / High)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)   |   |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / Medium / High / Manual  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Flip / Mirror                    | Off / On  |   |
| Alarm                            | 1 Out   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD                   |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH : 24V AC<br>-20°C ~ +50°C (-4°F ~ +122°F) / Less than 90% RH : 12V DC |   |
| Ingress Protection               | IP68  |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)   |   |
| Power Consumption                | Max. 3.8W, 4.8W (12V DC / 24V AC, Fan & heater Off)<br>Max. 28W (Fan & heater on, 24V AC)                               |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Dark gray / Aluminum, Plastic   |   |
| Dimensions (WxHxD)               | Ø103.0 x 114.0 x 378.0mm (Ø4.06" x 4.49" x14.88")   |   |
| Weight                           | 1.95Kg (4.3 lb)   |   |



# SCO-2080

High Resolution Weatherproof Camera

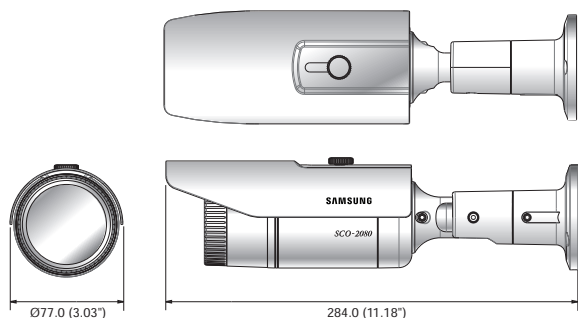


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.15Lux@ F1.2 (Color), 0.001Lux (B/W)
- Built-in V/F lens (2.8 ~ 10mm)
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- IP66, Coax : Pelco-C (Coaxitron), RS-485, Dual power

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCO-2080N  | SCO-2080P   |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/3" Super HAD CCD II  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), 0.0003Lux (Sens-up, 512x)<br>B/W : 0.001Lux@F1.2 (50IRE), 0.000002Lux (Sens-up 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (V/F, 3.6x)   |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)  |   |
| Angular Field of View            | H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)  |   |
| Min. Object Distance             | 0.2m (0.66ft)  |   |
| Focus Control                    | Manual   |   |
| Lens Type                        | DC auto iris   |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | On / Off (Displayed 15 characters)   |   |
| Day & Night                      | Auto (ICR) / Color / B/W   |   |
| Backlight Compensation           | Off / BLC / HLC  |   |
| Dynamic Range                    | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (8 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Reverse                          | H-Rev (Off / On), V-Rev (Off / On)   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon                  |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |   |
| Ingress Protection               | IP66   |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  |   |
| Power Consumption                | Max. 3.8W  |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Dark gray / ALDC   |   |
| Dimensions (WxHxD)               | Ø77.0 x 216.0mm (Ø3.03" x 8.5") (Bracket angle 90°), 284.0mm (11.18") (Bracket angle 180°)                         |   |
| Weight                           | 955g (2.11 lb)   |   |

# SCO-2120R



High Resolution 12x Weatherproof IR Camera

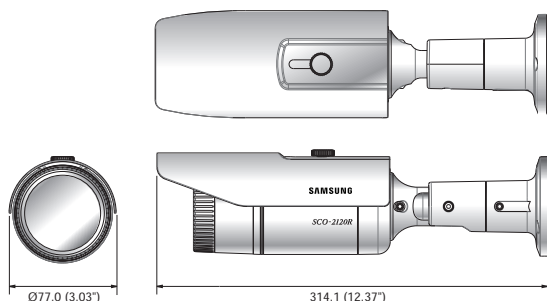


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0Lux (IR LED On), IR distance 70m
- Powerful 12x zoom (3.94 ~ 46.05mm), Digital 16x
- True Day & Night (ICR), MD, SSNR III (3D+2D)
- IP66, Coax : Pelco-C (Coaxitron), RS-485, Dual power

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCO-2120RN  | SCO-2120RP  |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/4" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |
| Min. Illumination                | Color : 0.2Lux@F1.67 (50IRE), 0.0004Lux (Sens-up, 512x)<br>B/W : 0Lux (IR LED on)                     |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3.94 ~ 46.05mm (Optical 12x)  |   |
| Max. Aperture Ratio              | 1 : 1.67(Wide) ~ 1.88(Tele)   |   |
| Angular Field of View            | H : 51.54°(Wide) ~ 4.5°(Tele) / V : 39.24°(Wide) ~ 3.38°(Tele)  |   |
| Min. Object Distance             | 1.8m (Tele) (5.91ft)  |   |
| Focus Control                    | Auto / Manual / One push  |   |
| Zoom Movement Speed              | 1.9sec (Wide to tele)   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean                                     | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | On / Off (Displayed 15 characters)  |   |
| Day & Night                      | Auto (ICR) / Color / B/W  |   |
| Backlight Compensation           | Off / BLC / HLC   |   |
| Dynamic Range                    | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)   |   |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | Off / On  |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD |   |
| IR Distance                      | 70m (850nm IR LED : 31ea)   |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH   |   |
| Ingress Protection               | IP66  |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)   |   |
| Power Consumption                | Max. 6.8W / 6.5W (IR LED on)  |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Dark gray / ALDC  |   |
| Dimensions (WxHxD)               | Ø77.0 x 274.7mm (Ø3.03" x 10.81") (Bracket angle 90°), 314.1mm (12.37") (Bracket angle 180°)          |   |
| Weight                           | 1.2Kg (2.65 lb)   |   |

# SCO-2080R



High Resolution Weatherproof IR Camera



Product Design : 80%  
Features and Functions : 85%  
Image Quality : 87%  
Day/Night Performance : 80%  
Overall Rating : 83%

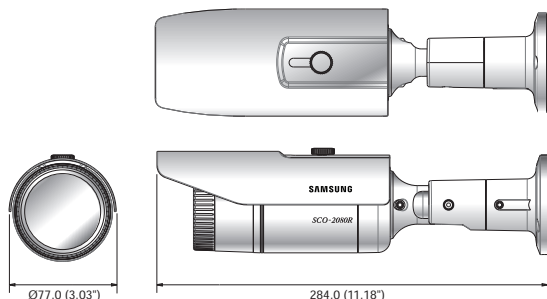


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0Lux (IR LED On), IR distance 50m
- Built-in V/F lens (2.8 ~ 10mm)
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- IP66, Coax : Pelco-C (Coaxitron), RS-485, Dual power

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCO-2080RN  |   | SCO-2080RP |
|----------------------------------|---|---|------------|
| VIDEO                            |   |   |            |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |            |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |            |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |            |
| Scanning System                  | 2 : 1 Interlace   |   |            |
| Synchronization                  | Internal / Line lock  |   |            |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |            |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |            |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), 0.0003Lux (Sens-up, 512x)<br>B/W : 0Lux (IR LED On)                 |   |            |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |            |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |            |
| LENS                             |   |   |            |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (V/F, 3.6x)  |   |            |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)   |   |            |
| Angular Field of View            | H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)   |   |            |
| Min. Object Distance             | 0.2m (0.66ft)   |   |            |
| Focus Control                    | Manual  |   |            |
| Lens Type                        | DC auto iris  |   |            |
| OPERATIONAL                      |   |   |            |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean                                 | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |            |
| Camera Title                     | On / Off (Displayed 15 characters)  |   |            |
| Day & Night                      | Auto (ICR) / Color / B/W  |   |            |
| Backlight Compensation           | Off / BLC / HLC   |   |            |
| Dynamic Range                    | SSDR (Off / On)   |   |            |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |            |
| Digital Image Stabilization      | Off / On  |   |            |
| Motion Detection                 | Off / On (8 programmable zones)   |   |            |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |            |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |            |
| Gain Control                     | Off / Low / High  |   |            |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |   |            |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |            |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |            |
| Reverse                          | H-Rev (Off / On), V-Rev (Off / On)  |   |            |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |            |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon |   |            |
| IR Distance                      | 50m (850nm IR LED : 32ea)   |   |            |
| ENVIRONMENTAL                    |   |   |            |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH   |   |            |
| Ingress Protection               | IP66  |   |            |
| ELECTRICAL                       |   |   |            |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)   |   |            |
| Power Consumption                | Max 6.8W / 6.5W (IR LED on)   |   |            |
| MECHANICAL                       |   |   |            |
| Color / Material                 | Dark gray / ALDC  |   |            |
| Dimensions (WxHxD)               | Ø77.0 x 216.0mm (Ø3.03" x 8.5") (Bracket angle 90°), 284.0mm (11.18") (Bracket angle 180°)        |   |            |
| Weight                           | 1Kg (2.2 lb)  |   |            |

# SCB-3021/3020/2020



High Resolution ATM Camera

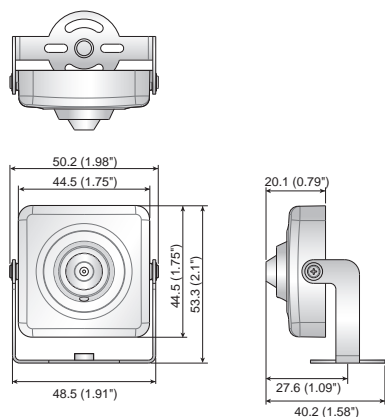


## Key Features

- High resolution of 600TV lines
- Min. illumination 0.45Lux/0.15Lux@F2.0 (Color)
- Built-in 4.3mm fixed lens : SCB-3021  
3.7mm fixed lens : SCB-3020/2020
- WDR, VPS : 3021/3020, intelligent video, MD, DNR (3D+2D)
- Coax : CCVC, 12V DC

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCB-3021N/3020N/2020N   | SCB-3021P/3020P/2020P   |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD (Double scan) : SCB-3020, 1/3" Super HAD CCD II : SCB-2020                           |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock (L-Pulse input)  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines   |   |
| Min. Illumination                | Color : 0.45Lux@F2.0 (50IRE, Sens-up 2x) : SCB-3021/3020<br>0.15Lux@F2.0 (50IRE, Sens-up 2x) : SCB-2020 |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 4.3mm : SCB-3021, 3.7mm : SCB-3020/2020   |   |
| Max. Aperture Ratio              | F2.0  |   |
| Angular Field of View            | D : 88.4° / H : 64.6° / V : 46.6° : SCB-3021<br>D : 80.81° / H : 64.65° / V : 48.49° : SCB-3020/2020    |   |
| Min. Object Distance             | 0.4m (1.31ft)   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | Multi-language support<br>English, Japanese, Spanish, French,<br>Portuguese, Taiwanese, Korean          | Multi-language support<br>English, French, German, Spanish, Italian,<br>Chinese, Russian, Polish, Czech, Romanian,<br>Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 54 characters)  |   |
| Day & Night                      | Day / Night / Auto  |   |
| Backlight Compensation           | Off / On  |   |
| Wide Dynamic Range               | 128x : SCB-3021/3020  | 160x : SCB-3021/3020  |
| Contrast Enhancement             | Off / Low / Mid / High  |   |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / Tracking / Detection  |   |
| Privacy Masking                  | Off / On (12 programmable zones, polygonal type)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / On  |   |
| White Balance                    | ATW1 / ATW2 / AWC (Manual) / 3200K / 5600K  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/200,000sec   | 1/50 ~ 1/200,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | Off / H / V / H/V   |   |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom  |   |
| VPS                              | Off / On : SCB-3021/3020  |   |
| Intelligent Video                | Fixed / Moved, Fence (Line, Area)   |   |
| PIP                              | Off / On  |   |
| Alarm                            | 1 Output  |   |
| Communication                    | Coaxial control (SPC-300 compatible)  |   |
| Protocol                         | Coax : CCVC   |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH   |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 12V DC ±10%   |   |
| Power Consumption                | Max. 2.0W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Black / Aluminum  |   |
| Dimensions (WxHxD)               | 50.2 x 40.2 x 53.3mm (1.98" x 1.58" x 2.1")   |   |
| Weight                           | 105g (0.23 lb)  |   |



# SCB-2010

## High Resolution Small Box Camera

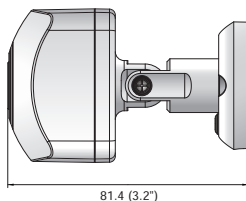
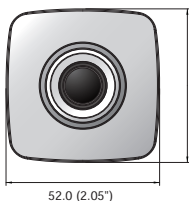
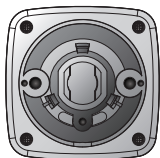


### Key Features

- High resolution of 600TV lines
- Min. illumination 0.15Lux@F2.0 (Color)
- MD, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), 12V DC

### Dimensions

Unit : mm (inch)



### Technical Specifications

|                                  | SCB-2010N   | SCB-2010P   |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines   |   |
| Min. Illumination                | Color : 0.04Lux (50IRE@F1.2, Sens-up 2x)  |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3mm   |   |
| Max. Aperture Ratio              | F2.0  |   |
| Angular Field of View            | H : 95° / V : 71°   |   |
| Min. Object Distance             | 0.4m (1.31ft)   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean   | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | On / Off (Displayed 15 characters)  |   |
| Day & Night                      | Auto (Electric) / Color / B/W   |   |
| Backlight Compensation           | Off / User BLC / HLC / SSDR   |   |
| Dynamic Range                    | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)   |   |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | H-Rev (Off / On), V-Rev (Off / On)  |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH   |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 12V DC ±10%   |   |
| Power Consumption                | Max. 1.8W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory / Plastic   |   |
| Dimensions (WxHxD)               | 52.0 x 52.0 x 40.4 mm (2.05" x 2.05" x 1.59") (Without Bracket)<br>52.0x 52.0 x 81.4 mm (2.05" x 2.05" x 3.2") (With Bracket) |   |
| Weight                           | 95g (0.21 lb) (With Bracket)  |   |

## SCD-3081



High Resolution WDR Varifocal Dome Camera



SCD-3081



SCD-3081B

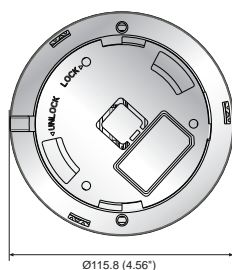


## Key Features

- High resolution of 650TV lines, 700TV lines (B/W)
- Min. illumination 0.1Lux@F1.2 (Color), 0.01Lux (B/W)
- 3.9x V/F lens (2.8 ~ 11mm), WDR, VPS, Intelligent Video
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), Dual power

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCD-3081N  | SCD-3081P   |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/3" Super HAD CCD II (Double scan)  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 650TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.1Lux@F1.2 (50IRE), 0.0002Lux (Sens-up, 512x)<br>B/W : 0.01Lux@F1.2 (50IRE), 0.00002Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 11mm (3.9x)  |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)  |   |
| Angular Field of View            | H : 94°(Wide) ~ 26°(Tele) / V : 67°(Wide) ~ 20°(Tele)  |   |
| Min. Object Distance             | 0.2m (0.66ft)  |   |
| Lens Type                        | DC auto iris   |   |
| Mount Type                       | Board type   |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 0° ~ 340°  |   |
| Tilt Range                       | 0° ~ 73°   |   |
| Rotate Range                     | 0° ~ 340°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)   |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W  |   |
| Backlight Compensation           | Off / User BLC / HLC / SSSDR / WDR   |   |
| Wide Dynamic Range               | 128x   | 160x  |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (8 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Reverse                          | Off / H-Rev / V-Rev / HV-Rev   |   |
| Profile                          | Basic / Day & Night / Backlight / ITS / Indoor / User  |   |
| VPS                              | Off / On   |   |
| Intelligent Video                | Fixed / Moved / Area / Fence / Tracking / Detection / Counting   |   |
| PIP                              | Off / On   |   |
| Alarm                            | 1 Out  |   |
| Communication                    | Coaxial control (SPC-300 compatible)   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)   |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  |   |
| Power Consumption                | Max. 3.5W  |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory / Plastic (Dome cover : Clear)   |   |
| Dimensions (WxH)                 | Ø115.8 x 92.7mm (Ø4.56" x 3.65")   |   |
| Weight                           | 365g (0.8 lb)  |   |

\* Derivative products : SCD-3081B

# SCD-3080/2080



## High Resolution Varifocal Dome Camera



SCD-3080/2080



SCD-3080B/2080B

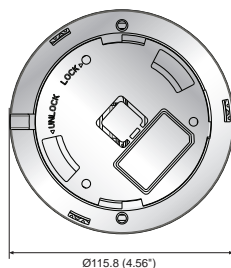


### Key Features

- High resolution of 600TV lines, 700TV lines (B/W)
- Min. illumination 0.3Lux@F1.2 (Color), 0.01Lux (B/W) : SCD-3080  
Min. illumination 0.15Lux@F1.2 (Color), 0.001Lux (B/W) : SCD-2080
- 3.9x V/F lens (2.8 ~ 11mm) : SCD-3080  
3.6x V/F lens (2.8 ~ 10mm) : SCD-2080
- WDR, VPS, Intelligent Video : SCD-3080
- True Day & Night (ICR) : SCD-3080/2080, MD, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), Dual power

### Dimensions

Unit : mm (inch)



### Technical Specifications

|                                  | SCD-3080N/2080N   | SCD-3080P/2080P   |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD (Double scan) : SCB-3080, 1/3" Super HAD CCD II : SCB-2080           |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |
| Min. Illumination                | Color : 0.3Lux@F1.2 (50IRE), 0.0006Lux (Sens-up, 512x) : SCD-3080                       |   |
|                                  | 0.15Lux@F1.2 (50IRE) : 0.0003Lux (Sens-up, 512x) : SCD-2080                             |   |
|                                  | B/W : 0.01Lux@F1.2 (50IRE), 0.00002Lux (Sens-up, 512x) : SCD-3080                       |   |
|                                  | 0.001Lux@F1.2 (50IRE), 0.000002Lux (Sens-up, 512x) : SCD-2080                           |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 11mm (3.9x) : SCD-3080, 2.8 ~ 10mm (3.6x) : SCD-2080                              |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)   |   |
| Angular Field of View            | H : 94°(Wide) ~ 26°(Tele) / V : 67°(Wide) ~ 20°(Tele) : SCD-3080                        |   |
|                                  | H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele) : SCD-2080                    |   |
| Min. Object Distance             | 0.2m (0.66ft)   |   |
| Lens Type                        | DC auto iris  |   |
| Mount Type                       | Board type  |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 0° ~ 340° : SCD-3080, 0° ~ 352° : SCD-2080  |   |
| Tilt Range                       | 0° ~ 73°  |   |
| Rotate Range                     | 0° ~ 340° : SCD-3080, 0° ~ 348° : SCD-2080  |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean                       | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)  |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W : SCD-3080<br>Auto (ICR) / Color / B/W : SCD-2080   |   |
| Backlight Compensation           | Off / User BLC / HLC / SDDR / WDR : SCD-3080, BLC / HLC / Off : SCD-2080                |   |
| Wide Dynamic Range               | 128x : SCD-3080   | 160x : SCD-3080   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)   |   |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)                              |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | Off / H-Rev / V-Rev / HV-Rev : SCD-3080, H-Rev (Off / On) / V-Rev (Off / On) : SCD-2080 |   |
| Profile                          | Basic / Day & Night / Backlight / ITS / Indoor / User : SCD-3080                        |   |
| VPS                              | Off / On : SCD-3080   |   |
| Intelligent Video                | Fixed / Moved / Area / Fence / Tracking / Detection / Counting : SCD-3080               |   |
| PIP                              | Off / On : SCD-3080   |   |
| Alarm                            | 1 Out : SCD-3080  |   |
| Communication                    | Coaxial control (SPC-300 compatible)  |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                                       |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)   |   |
| Power Consumption                | Max. 3.5W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory / Plastic (Dome cover : Clear)  |   |
| Dimensions (WxH)                 | Ø115.8 x 92.7mm (Ø4.56" x 3.65")  |   |
| Weight                           | 365g (0.8 lb) : SCD-3080, 345g (0.76 lb) : SCD-2080                                     |   |

\* Derivative products : SCD-3080B/2080B

# SCD-2080E/2060E

## High Resolution Varifocal Dome Camera



SCD-2080E/2060E

SCD-2080EB/2060EB

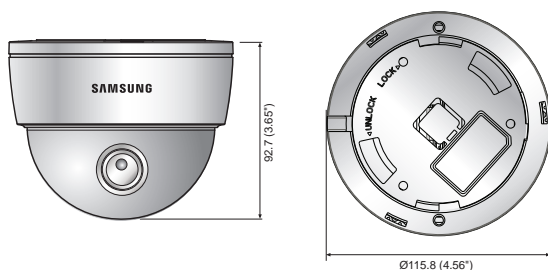


### Key Features

- High resolution of 600TV lines, 700TV lines (B/W)
- Min. illumination 0.15Lux@F1.2 (Color), 0.001Lux (B/W)
- 3.6x V/F lens (2.8 ~ 10mm) : SCD-2080E  
2.4x V/F lens (2.5 ~ 6mm) : SCD-2060E
- MD, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), Dual power

### Dimensions

Unit : mm (inch)



### Technical Specifications

|                                  | SCD-2080EN/2060EN   | SCD-2080EP/2060EP   |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), 0.0003Lux (Sens-up, 512x)   |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (3.6x) : SCD-2080E, 2.5 ~ 6mm (2.4x) : SCD-2060E   |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)   |   |
| Angular Field of View            | H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele) : SCD-2080E<br>H : 103.4°(Wide) ~ 46.6°(Tele) / V : 77.6°(Wide) ~ 35.1°(Tele) : SCD-2060E |   |
| Lens Type                        | DC auto iris  |   |
| Mount Type                       | Board type  |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 0° ~ 352°   |   |
| Tilt Range                       | 0° ~ 73°  |   |
| Rotate Range                     | 0° ~ 348°   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean   | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)  |   |
| Day & Night                      | Auto (Electrical) / Color / B/W   |   |
| Backlight Compensation           | BLC / HLC / Off   |   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)   |   |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)   |   |
| Communication                    | Coaxial control (SPC-300 compatible)  |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH   |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)   |   |
| Power Consumption                | Max. 3.5W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory / Plastic (Dome cover : Clear)  |   |
| Dimensions (WxH)                 | Ø115.8 x 92.7mm (Ø4.56" x 3.65")  |   |
| Weight                           | 345g (0.76 lb)  |   |

\* Derivative products : SCD-2080EB/2060EB



# SCD-2020/2040/2021

## High Resolution Small Dome Camera



SCD-2020/2040/2021



SCD-2020B/2021B

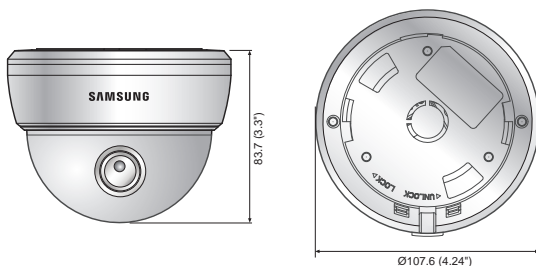


### Key Features

- High resolution of 600TV lines
- Min. illumination 0.15Lux@F1.2
- Built-in fixed lens  
(3.7mm : SCD-2020, 8mm : SCD-2040, 3.7, 8mm : SCD-2021)
- SSNR III (3D+2D)
- Coax : Pelco-C (Coaxitron), Dual power

### Dimensions

Unit : mm (inch)



### Technical Specifications

|                                  | SCD-2020N/2040N/2021N  | SCD-2020P/2040P/2021P   |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/3" Super HAD CCD II  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines  |   |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), 0.0006Lux (Sens-up, 256x)                                    |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 3.7mm (Fixed) : SCD-2020, 8mm (Fixed) : SCD-2040, 3.7mm (Fixed), Additional 8mm : SCD-2021 |   |
| Max. Aperture Ratio              | F2.0   |   |
| Angular Field of View            | H : 71° / V : 52° (3mm), H : 33° / V : 25° (8mm)   |   |
| Min. Object Distance             | 0.4m (1.31ft)  |   |
| Lens Type                        | Fixed  |   |
| Mount Type                       | Board type   |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 0° ~ 352°  |   |
| Tilt Range                       | 0° ~ 75°   |   |
| Rotate Range                     | 0° ~ 348°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean                          | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)   |   |
| Day & Night                      | Auto (Electrical ) / Color / B/W   |   |
| Backlight Compensation           | BLC / HLC / Off  |   |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (8 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)                                 |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)  |   |
| Communication                    | Coaxial control (SPC-300 compatible)   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)   |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  |   |
| Power Consumption                | Max. 3.5W  |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory / Plastic (Dome cover : Smoked)  |   |
| Dimensions (WxH)                 | Ø107.6 x 83.7mm (Ø4.24" x 3.3")  |   |
| Weight                           | 285g (0.63 lb)   |   |

\* Derivative products : SCD-2020B/2021B

# SCD-2010/2030

## High Resolution Mini Dome Camera



SCD-2010/2030



SCD-2010B

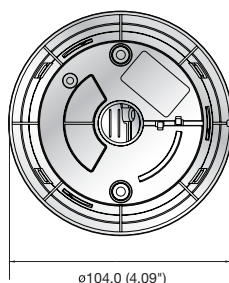
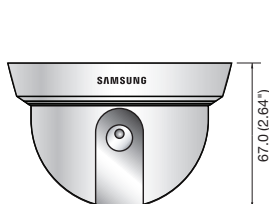


### Key Features

- High resolution of 600TV lines
- Min. illumination 0.04Lux@F1.2
- Built-in fixed lens (3mm : SCD-2010, 6mm : SCD-2030)
- Coax : Pelco-C (Coaxitron), 12V DC

### Dimensions

Unit : mm (inch)



### Technical Specifications

|                                  | SCD-2010N/2030N   | SCD-2010P/2030P   |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz                                       | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines   |   |
| Min. Illumination                | Color : 0.04Lux@F1.2  |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite                                   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3mm : SCD-2010, 6mm : SCD-2030                                    |   |
| Max. Aperture Ratio              | F2.0  |   |
| Angular Field of View            | H : 95° / V : 71° : SCD-2010, H : 46° / V : 34° : SCD-2030        |   |
| Min. Object Distance             | 0.4m (1.31ft)   |   |
| Lens Type                        | Fixed   |   |
| Mount Type                       | Board type  |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 0° ~ 352°   |   |
| Tilt Range                       | 0° ~ 75°  |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)                                |   |
| Day & Night                      | Auto (Electrical) / Color / B/W                                   |   |
| Backlight Compensation           | BLC / HLC / Off   |   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)                                   |   |
| Privacy Masking                  | Off / On (12 programmable zones)                                  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)        |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)                               |   |
| Communication                    | Coaxial control (SPC-300 compatible)                              |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                 |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 12V DC ±10%   |   |
| Power Consumption                | Max. 1.8W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory / Plastic (Dome cover : clear)                              |   |
| Dimensions (WxH)                 | Ø104.0 x 67.0mm (Ø4.09" x 2.64")                                  |   |
| Weight                           | 180g (0.4 lb)   |   |

\* Derivative products : SCD-2010B

# SCD-2080R

## High Resolution IR Dome Camera

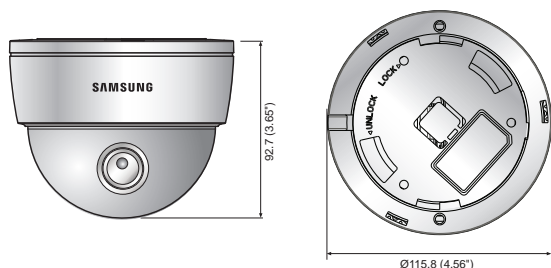


### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0Lux (IR LED on), IR distance 20m
- 3.6x V/F lens (2.8 ~ 10mm)
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), 12V DC

### Dimensions

Unit : mm (inch)



### Technical Specifications

|                                  | SCD-2080RN   | SCD-2080RP  |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/3" Super HAD CCD II  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), 0.0003Lux (Sens-up, 512x)<br>B/W : 0Lux (LED on) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (3.6x)  |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)  |   |
| Angular Field of View            | H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)                      |   |
| Min. Object Distance             | 0.2m (0.66ft)  |   |
| Lens Type                        | DC auto iris   |   |
| Mount Type                       | Board type   |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 0° ~ 352°  |   |
| Tilt Range                       | 0° ~ 73°   |   |
| Rotate Range                     | 0° ~ 348°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean              | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)   |   |
| Day & Night                      | Auto (ICR) / Color / B/W   |   |
| Backlight Compensation           | BLC / HLC / Off  |   |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (8 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)                     |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)  |   |
| Communication                    | Coaxial control (SPC-300 compatible)   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)   |   |
| IR Distance                      | 20m (IR LED 12ea)  |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                              |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | 12V DC ±10%  |   |
| Power Consumption                | Max. 3.5W  |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory / Plastic (Dome cover : Smoked)  |   |
| Dimensions (WxH)                 | Ø115.8 x 92.7mm (Ø4.56" x 3.65")   |   |
| Weight                           | 310g (0.68 lb)   |   |

# SCD-2020R

High Resolution Small IR Dome Camera

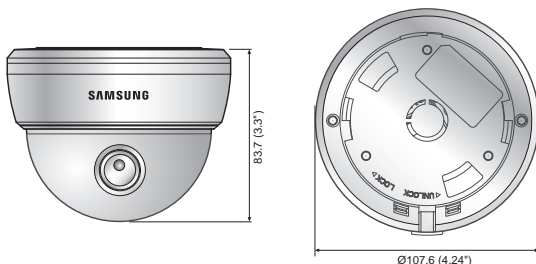


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0Lux (IR LED on), IR distance 7m
- Built-in fixed lens (3.6mm), SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), 12V DC

## Dimensions

Unit : mm (inch)



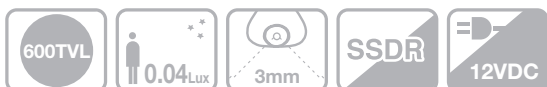
## Technical Specifications

|                                  | SCD-2020RN  | SCD-2020RP  |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz                                       | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines                            |   |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), B/W : 0Lux (IR LED on)              |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite                                   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3.6mm   |   |
| Max. Aperture Ratio              | F2.0  |   |
| Angular Field of View            | H : 66° / V : 49°   |   |
| Min. Object Distance             | 0.4m (1.31ft)   |   |
| Lens Type                        | Fixed   |   |
| Mount Type                       | Board type  |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 0° ~ 352°   |   |
| Tilt Range                       | 0° ~ 75°  |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)                                |   |
| Day & Night                      | Auto (ICR) / Color / B/W  |   |
| Backlight Compensation           | BLC / HLC / Off   |   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)                                   |   |
| Privacy Masking                  | Off / On (12 programmable zones)                                  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)        |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)                               |   |
| Communication                    | Coaxial control (SPC-300 compatible)                              |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |   |
| IR Distance                      | 7m (IR LED 8ea)   |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                 |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 12V DC ±10%   |   |
| Power Consumption                | Max. 2.5W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory / Plastic (Dome cover : clear)                              |   |
| Dimensions (WxH)                 | Ø107.6 x 83.7mm (Ø4.24" x 3.3")                                   |   |
| Weight                           | 280g (0.62 lb)  |   |



# SCD-2010F

High Resolution Compact Flat Dome Camera

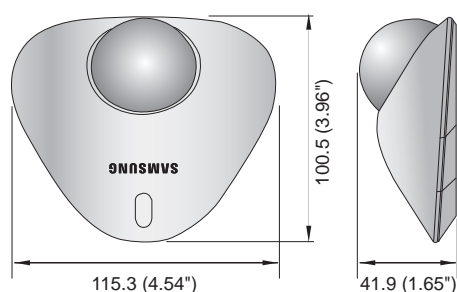


## Key Features

- High resolution of 600TV lines
- Min. Illumination 0.04Lux@F1.2
- Built-in fixed lens (3mm)
- Coax : Pelco-C (Coaxitron), 12V DC

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCD-2010FN  | SCD-2010FP  |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz                                       | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines   |   |
| Min. Illumination                | Color : 0.04Lux (Sens-up, 2x)                                     |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite                                   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3mm   |   |
| Max. Aperture Ratio              | F2.0  |   |
| Angular Field of View            | H : 89.5° / V : 67.2°   |   |
| Min. Object Distance             | 0.4m (1.31ft)   |   |
| Lens Type                        | Fixed   |   |
| Mount Type                       | Board type  |   |
| PAN / TILT                       |   |   |
| Pan Range                        | ±10°  |   |
| Tilt Range                       | 0° ~ 90°  |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)                                |   |
| Day & Night                      | Auto (Electrical) / Color / B/W                                   |   |
| Backlight Compensation           | BLC / HLC / Off   |   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)                                   |   |
| Privacy Masking                  | Off / On (12 programmable zones)                                  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)        |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)                               |   |
| Communication                    | Coaxial control (SPC-300 compatible)                              |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                 |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 12V DC ±10%   |   |
| Power Consumption                | Max. 1.8W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory / Plastic (Dome cover : Clear)                              |   |
| Dimensions (WxHxD)               | 115.3 x 100.5 x 41.9mm (4.54" x 3.96" x 1.65")                    |   |
| Weight                           | 140g (0.31 lb)  |   |

# SUD-3080/3080F



## High Resolution WDR UTP Dome Camera



SUD-3080

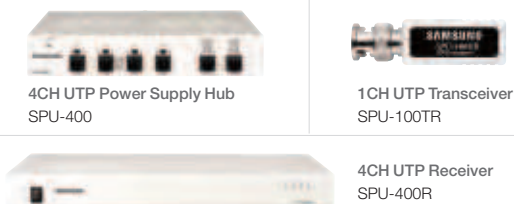
SUD-3080F



### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.3Lux@F1.2 (Color), 0.01Lux (B/W)
- 3.9x V/F lens (2.8 ~ 11mm), WDR, VPS
- True Day & Night (ICR), Intelligent video, MD, SSNRIII (3D+2D)
- Built-in UTP TX, Coax : Pelco-C (Coaxitron), RS-485, 28V AC, 24V AC, 12V DC

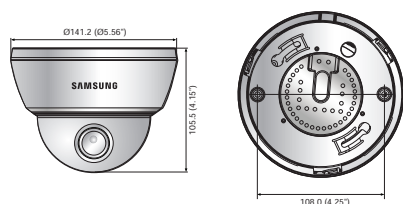
### UTP Kit



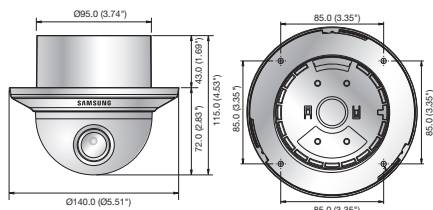
### Dimensions

Unit : mm (inch)

SUD-3080



SUD-3080F



### Technical Specifications

|                                  | SUD-3080N/3080FN   | SUD-3080P/3080FP  |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/3" Sony Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.3Lux@F1.2 (50IRE), 0.0006Lux (Sens-up, 512x)<br>B/W : 0.01Lux@F1.2 (50IRE), 0.00002Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| UTP Output                       | Built-in UTP TX [Maximum transmission length 900m (3000ft)] : Balanced differential signal 100Ω                  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 11mm (3.9x)  |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)  |   |
| Angular Field of View            | H : 102°(Wide) ~ 28°(Tele) / V : 73°(Wide) ~ 21°(Tele)   |   |
| Min. Object Distance             | 0.2m (0.66ft)  |   |
| Lens Type                        | DC auto iris   |   |
| Mount Type                       | Board type   |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 0° ~ 352°  |   |
| Tilt Range                       | 0° ~ 73°   |   |
| Rotate Range                     | 0° ~ 348°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)   |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W  |   |
| Backlight Compensation           | Off / User BLC / HLC / SSDR / WDR  |   |
| Wide Dynamic Range               | 128x   | 160x  |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Built-in   |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Reverse                          | Off / H-Rev / V-Rev / HV-Rev   |   |
| Profile                          | Basic / Day & Night / Backlight / ITS / Indoor / User  |   |
| VPS                              | Off / On   |   |
| Intelligent Video                | Fixed / Moved / Area / Fence / Tracking / Detection / Counting   |   |
| PIP                              | Off / On   |   |
| Alarm                            | 1 Out  |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon                |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | 28V AC ±10%, 24V AC & 12V DC±10%   |   |
| Power Consumption                | Max. 4.0W  |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory, Plastic (Dome cover : Clear)  |   |
| Dimensions (WxH)                 | Ø141.2 x 105.5mm (Ø5.56" x 4.15") : SUD-3080, Ø140.0 x 115.0mm (Ø5.51" x 4.53") : SUD-3080F                      |   |
| Weight                           | 520g (1.15 lb) : SUD-3080, 435g (0.96 lb) : SUD-3080F  |   |

# SUD-2080/2080F



## High Resolution Varifocal UTP Dome Camera



SUD-2080

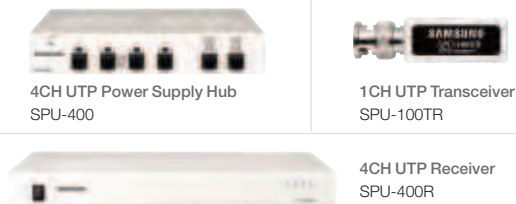
SUD-2080F



### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.15Lux@F1.2 (Color), 0.001Lux (B/W)
- 3.6x V/F lens (2.8 ~ 10mm)
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- Built-in UTP TX, Coax : Pelco-C (Coaxitron), RS-485, 28V AC, 24V AC, 12V DC

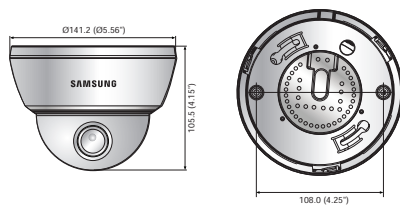
### UTP Kit



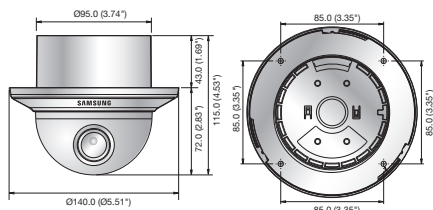
### Dimensions

Unit : mm (inch)

SUD-2080



SUD-2080F



### Technical Specifications

|                                  | SUD-2080N/2080FN  | SUD-2080P/2080FP  |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), 0.0003Lux (Sens-up, 512x)<br>B/W : 0.001Lux@F1.2 (50IRE), 0.000002Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| UTP Output                       | Built-in UTP TX [Maximum transmission length 900m (3000ft)] : Balanced differential signal 100Ω                     |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (3.6x)   |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)   |   |
| Angular Field of View            | H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)   |   |
| Min. Object Distance             | 0.2m (0.66ft)   |   |
| Lens Type                        | DC auto iris  |   |
| Mount Type                       | Board type  |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 0° ~ 352°   |   |
| Tilt Range                       | 0° ~ 73°  |   |
| Rotate Range                     | 0° ~ 348°   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean   | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)  |   |
| Day & Night                      | Auto (ICR) / Color / B/W  |   |
| Backlight Compensation           | BLC / HLC / Off   |   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)   |   |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon                   |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH   |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 28V AC ±10%, 24V AC & 12V DC±10%  |   |
| Power Consumption                | Max. 3.5W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory, Plastic (Dome cover : Clear)   |   |
| Dimensions (WxH)                 | Ø141.2 x 105.5mm (Ø5.56" x 4.15") : SUD-2080, Ø140.0 x 115.0mm (Ø5.51" x 4.53") : SUD-2080F                         |   |
| Weight                           | 520g (1.15 lb) : SUD-2080, 435g (0.96 lb) : SUD-2080F   |   |

# SCV-3120



## High Resolution 12x WDR Vandal-Resistant Dome Camera

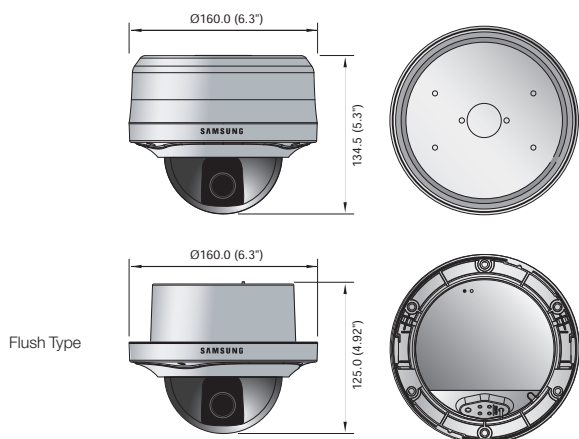


### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.7Lux@F1.65 (Color), 0.07Lux (B/W)
- Powerful 12x zoom (3.69 ~ 44.32mm), Digital 16x
- WDR, VPS, True Day & Night (ICR), Intelligent video, MD
- IP66, Coax : CCVC, RS-485, Dual power

### Dimensions

Unit : mm (inch)



### Accessories (Optional)



SCX-300WM SCX-300CM SCX-300HM1 SCX-300LM SCX-300PM SCX-300KM

### Technical Specifications

|                                  | SCV-3120N  | SCV-3120P   |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/4" Double scan CCD   |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.7Lux@F1.65 (50IRE), 0.001Lux (Sens-up, 512x)<br>B/W : 0.07Lux@F1.65 (50IRE), 0.0001Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 3.69 ~ 44.32mm (12x)   |   |
| Max. Aperture Ratio              | 1 : 1.65(Wide) ~ 3.7(Tele)   |   |
| Angular Field of View            | H : 54.44°(Wide) ~ 4.64°(Tele) / V : 41.42°(Wide) ~ 3.52°(Tele)  |   |
| Min. Object Distance             | 1m (3.28ft)  |   |
| Focus Control                    | Auto / Manual / One-AF   |   |
| Zoom Movement Speed              | 1.9sec (Wide to tele)  |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 0° ~ 355°  |   |
| Tilt Range                       | 0° ~ 90°   |   |
| Rotate Range                     | 0° ~ 355°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 54 characters)   |   |
| Day & Night                      | Day / Night / Auto / Ext   |   |
| Backlight Compensation           | Off / On (Area setting)  |   |
| Wide Dynamic Range               | 128x   | 160x  |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)   |   |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / Tracking / Detection   |   |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / On   |   |
| White Balance                    | ATW1 / ATW2 / AWC (Manual) / 3200K / 5600K   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Reverse                          | Off / H / V / H/V  |   |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom   |   |
| VPS                              | Off / On   |   |
| Intelligent Video                | Fixed / Moved  |   |
| PIP                              | Off / On   |   |
| Alarm                            | 1 Out  |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |
| Protocol                         | Coax : CCVC<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon                               |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH  |   |
| Ingress Protection               | IP66   |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  |   |
| Power Consumption                | Max. 6W  |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Light gray / Aluminum, Plastic (Dome cover : Clear)  |   |
| Dimensions (WxH)                 | Ø160.0 x 134.5mm (Ø6.3" x 5.3")  |   |
| Weight                           | 1.28Kg (2.82 lb)   |   |



# SCV-2120

## High Resolution 12x Vandal-Resistant Dome Camera



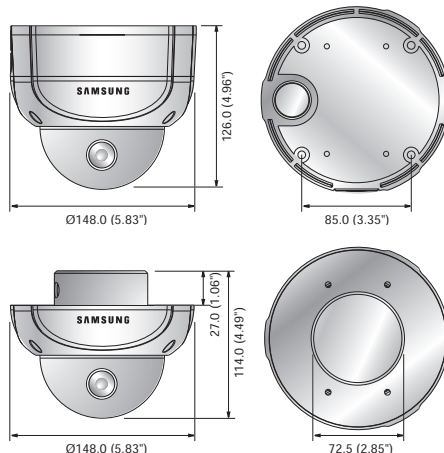
### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.2Lux@F1.67 (Color), 0.02Lux (B/W)
- Powerful 12x zoom (3.94 ~ 46.05mm), Digital 16x
- MD, SSNRIII (3D+2D)
- IP66, Coax : Pelco-C (Coaxitron), RS-485, Dual power

### Dimensions

Unit : mm (inch)

Flush Type



### Accessories (Optional)



SBP-300WM1 SBP-300WM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

### Technical Specifications

|                                  | SCV-2120N  | SCV-2120P   |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/4" Super HAD CCD   |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.2Lux@F1.67 (50IRE), 0.0004Lux (Sens-up, 512x)<br>B/W : 0.02Lux@F1.67 (50IRE), 0.00004Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 3.94 ~ 46.05mm (Optical 12x)   |   |
| Max. Aperture Ratio              | 1 : 1.67(Wide) ~ 3.7(Tele)   |   |
| Angular Field of View            | H : 51.54°(Wide) ~ 4.5°(Tele) / V : 39.24°(Wide) ~ 3.38°(Tele)   |   |
| Min. Object Distance             | 1.8m (5.91ft)  |   |
| Focus Control                    | Auto / Manual / One push   |   |
| Zoom Movement Speed              | 1.9sec (Wide to tele)  |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 0° ~ 340°  |   |
| Tilt Range                       | 0° ~ 146°  |   |
| Rotate Range                     | 0° ~ 340°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)   |   |
| Day & Night                      | Auto / Color / B/W   |   |
| Backlight Compensation           | BLC / HLC / Off  |   |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (8 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / On   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)  |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Vicon, Honeywell, Panasonic, Bosch, AD              |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |   |
| Ingress Protection               | IP66   |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  |   |
| Power Consumption                | Max. 3.5W  |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory / Aluminum, Plastic (Dome cover : Clear)   |   |
| Dimensions (WxH)                 | Ø148.0 x 126.0mm (Ø5.83" x 4.96")  |   |
| Weight                           | 1.38Kg (3.04 lb)   |   |

# SCV-3080/2080



High Resolution Vandal-Resistant Dome Camera

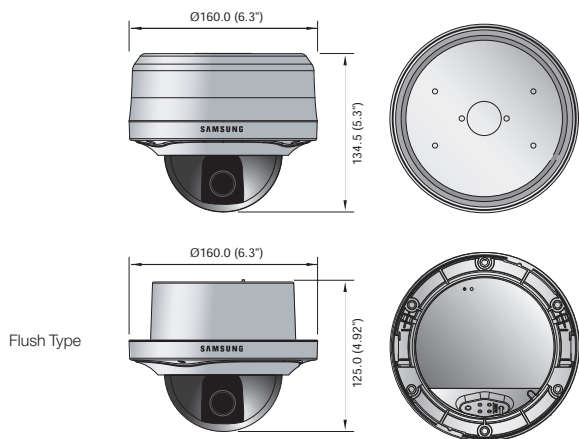


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.3Lux@F1.2 (Color), 0.01Lux (B/W) : SCV-3080  
Min. illumination 0.15Lux@F1.2 (Color), 0.001Lux (B/W) : SCV-2080
- 3.9x V/F lens (2.8 ~ 11mm), WDR, VPS, Day & Night (ICR), Intelligent video : SCV-3080  
3.6x V/F lens (2.8 ~ 10mm), True Day & Night (ICR), MD, SSNRIII (3D+2D) : SCV-2080
- IP66, Coax : Pelco-C (Coaxitron), Dual power

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SCX-300WM SCX-300CM SCX-300HM SCX-300LM SCX-300PM SCX-300KM

## Technical Specifications

|                                  | SCV-3080N/2080N  | SCV-3080P/2080P   |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/3" Super HAD CCD (Double scan) : SCV-3080, 1/3" Super HAD CCD II : SCV-2080                        |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.3Lux@ F1.2 (50IRE), 0.0006Lux (Sens-up, 512x) : SCV-3080                                   |   |
|                                  | 0.15Lux@ F1.2 (50IRE), 0.0003Lux (Sens-up, 512x) : SCV-2080  |   |
|                                  | B/W : 0.01Lux@ F1.2 (50IRE), 0.00002Lux (Sens-up, 512x) : SCV-3080                                   |   |
|                                  | 0.001Lux@ F1.2 (50IRE), 0.000002Lux (Sens-up, 512x) : SCV-2080                                       |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 11mm (3.9x) : SCV-3080, 2.8 ~ 10mm (3.6x) : SCV-2080   |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)  |   |
| Angular Field of View            | H : 102°(Wide) ~ 28°(Tele) / V : 73°(Wide) ~ 21°(Tele) : SCV-3080                                    |   |
|                                  | H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele) : SCV-2080                                 |   |
| Min. Object Distance             | 0.2m (0.66ft)  |   |
| Lens Type                        | DC auto iris   |   |
| Mount Type                       | Board type   |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 0° ~ 355°  |   |
| Tilt Range                       | 0° ~ 90°   |   |
| Rotate Range                     | 0° ~ 355°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean                                    | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)   |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W : SCV-3080, Auto (ICR) / Color / B/W : SCV-2080                  |   |
| Backlight Compensation           | Off / User BLC / HLC / SSDR / WDR : SCV-3080, BLC / HLC / Off : SCV-2080                             |   |
| Wide Dynamic Range               | 128x (52dB) : SCV-3080   | 160x (54dB) : SCV-3080  |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Built-in : SCV-3080, Off / On (8 programmable zones) : SCV-2080                                      |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Reverse                          | Off / H / V / H/V  |   |
| Profile                          | Off / H-Rev / V-Rev / HV-Rev : SCV-3080, H-Rev (Off / On) / V-Rev (Off / On) : SCV-2080              |   |
| VPS                              | Basic / Day & Night / Backlight / ITS / Indoor / User : SCV-3080                                     |   |
| Intelligent Video                | Fixed / Moved / Area / Fence / Tracking / Detection / Counting : SCV-3080                            |   |
| PIP                              | Off / On : SCV-3080  |   |
| Alarm                            | 1 Out : SCV-3080   |   |
| Communication                    | Coaxial control (SPC-300 compatible)   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)   |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH  |   |
| Ingress Protection               | IP66   |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%), Built-in fan & heater (24V AC±10%)                                      |   |
| Power Consumption                | Max. 3.8W / Max. 8W (Fan & heater on) : SCV-3080, Max. 4.0W / Max. 8.3W (Fan & heater on) : SCV-2080 |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Light gray / Aluminum, Plastic (Dome cover : Clear)  |   |
| Dimensions (WxH)                 | Ø160.0 x 134.5mm (Ø6.3" x 5.3")  |   |
| Weight                           | 1.26Kg (2.78 lb)   |   |

# SCV-2060

## High Resolution Vandal-Resistant Dome Camera

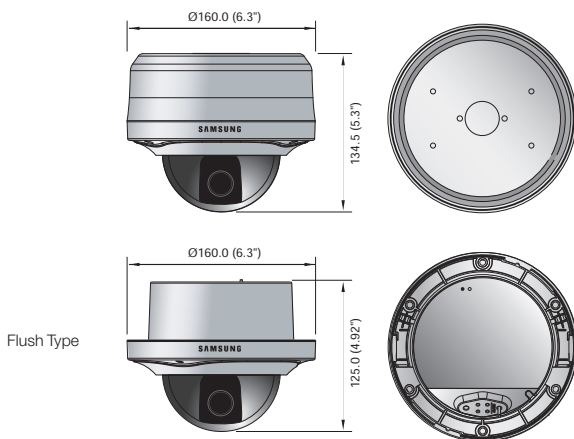


### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.15Lux@F1.2 (Color), 0.001Lux (B/W)
- 2.4x V/F lens (2.5 ~ 6mm), True Day & Night (ICR)  
MD, SSNRIII (3D+2D)
- IP66, Coax : Pelco-C (Coaxitron), Dual power

### Dimensions

Unit : mm (inch)



### Accessories (Optional)



SCX-300WM SCX-300CM SCX-300HM SCX-300LM SCX-300PM SCX-300KM

### Technical Specifications

|                                  | SCV-2060N   | SCV-2060P   |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), 0.0003Lux (Sens-up, 512x)<br>B/W : 0.001Lux@F1.2 (50IRE), 0.000002Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 2.5 ~ 6mm (2.4x)  |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 1.7(Tele)   |   |
| Angular Field of View            | H : 103.4°(Wide) ~ 46.6°(Tele) / V : 77.6°(Wide) ~ 35.1°(Tele)  |   |
| Lens Type                        | DC auto iris  |   |
| Mount Type                       | Board type  |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 0° ~ 355°   |   |
| Tilt Range                       | 0° ~ 90°  |   |
| Rotate Range                     | 0° ~ 355°   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean   | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)  |   |
| Day & Night                      | Auto (ICR) / Color / B/W  |   |
| Backlight Compensation           | BLC / HLC / Off   |   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)   |   |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)   |   |
| Communication                    | Coaxial control (SPC-300 compatible)  |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH   |   |
| Ingress Protection               | IP66  |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%), Built-in fan & heater (24V AC ±10%)  |   |
| Power Consumption                | Max. 3.8W / Max. 7.8W (Fan & heater on)   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Light gray / Aluminum, Plastic (Dome cover : Clear)   |   |
| Dimensions (WxH)                 | Ø160.0 x 134.5mm (Ø6.3" x 5.3")   |   |
| Weight                           | 1.28Kg (2.82 lb)  |   |

# SCV-2081R

High Resolution Vandal-Resistant IR Dome Camera

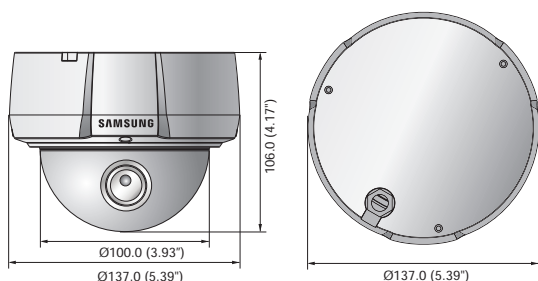


## Key Features

- High resolution of 600TV lines, 700TV lines (B/W)
- Min. illumination 0Lux (IR LED on), IR distance 20m
- 3.6x V/F lens (2.8 ~ 10mm), True Day & Night (ICR) MD, SSNRIII (3D+2D)
- IP66, Coax : Pelco-C (Coaxitron), Dual power

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCV-2081RN   | SCV-2081RP  |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/3" Super HAD CCD II  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), 0.0003Lux (Sens-up, 512x)<br>B/W : 0Lux (LED on) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (3.6x)  |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)  |   |
| Angular Field of View            | H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)                      |   |
| Lens Type                        | DC auto iris   |   |
| Mount Type                       | Board type   |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 0° ~ 352°  |   |
| Tilt Range                       | 0° ~ 73°   |   |
| Rotate Range                     | 0° ~ 348°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean              | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)   |   |
| Day & Night                      | Auto (ICR) / Color / B/W   |   |
| Backlight Compensation           | BLC / HLC / Off  |   |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (8 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)                     |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec  | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)  |   |
| Communication                    | Coaxial control (SPC-300 compatible)   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)   |   |
| IR Distance                      | 20m (IR LED 20ea)  |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                              |   |
| Ingress Protection               | IP66   |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)  |   |
| Power Consumption                | Max. 3W / Max. 4W (IR LED on)  |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory / ALDC12 (Dome cover : Smoked / PC)                                      |   |
| Dimensions (WxH)                 | Ø137.0 x 106.0mm (Ø5.39" x 4.17")  |   |
| Weight                           | 700g (1.54 lb)   |   |



# SCV-2080R

## High Resolution Vandal-Resistant IR Dome Camera



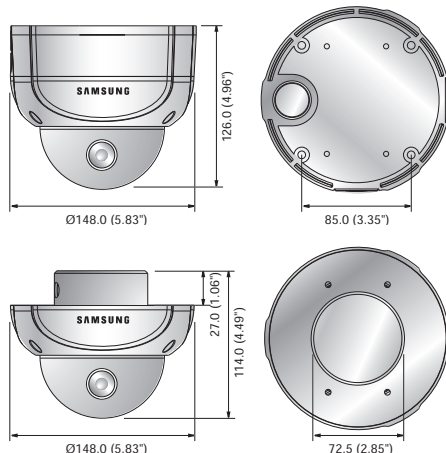
### Key Features

- High resolution of 600TV lines, 700TV lines (B/W)
- Min. illumination 0Lux (IR LED on), IR distance 30m
- 3.6x V/F lens (2.8 ~ 10mm), True Day & Night (ICR)  
MD, SSNRIII (3D+2D)
- IP66, Coax : Pelco-C (Coaxitron), RS-485, Dual power

### Dimensions

Unit : mm (inch)

Flush Type



### Accessories (Optional)



SBP-300WM1 SBP-300WM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

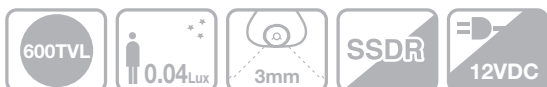
### Technical Specifications

|                                  | SCV-2080RN  | SCV-2080RP  |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |
| Min. Illumination                | Color : 0.15Lux@F1.2 (50IRE), 0.0003Lux (Sens-up, 512x)<br>B/W : 0Lux (LED on)                    |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 2.8 ~ 10mm (3.6x)   |   |
| Max. Aperture Ratio              | 1 : 1.2(Wide) ~ 2.8(Tele)   |   |
| Angular Field of View            | H : 94.4°(Wide) ~ 28°(Tele) / V : 69.2°(Wide) ~ 21°(Tele)   |   |
| Min. Object Distance             | 0.2m (0.66ft)   |   |
| Lens Type                        | DC auto iris  |   |
| Mount Type                       | Board type  |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 0° ~ 340°   |   |
| Tilt Range                       | 0° ~ 146°   |   |
| Rotate Range                     | 0° ~ 340°   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean                                 | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)  |   |
| Day & Night                      | Auto (ICR) / Color / B/W  |   |
| Backlight Compensation           | BLC / HLC / Off   |   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)   |   |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon |   |
| IR Distance                      | 30m (IR LED 10ea)   |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH   |   |
| Ingress Protection               | IP66  |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | Dual (24V AC & 12V DC ±10%)   |   |
| Power Consumption                | Max. 5W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory / Aluminum, Plastic (Dome cover : Smoked)   |   |
| Dimensions (WxH)                 | Ø148.0 x 126.0mm (Ø5.83" x 4.96")   |   |
| Weight                           | 1.3Kg (2.87 lb)   |   |

## SCV-2010F



High Resolution Compact Vandal-Resistant Flat Camera

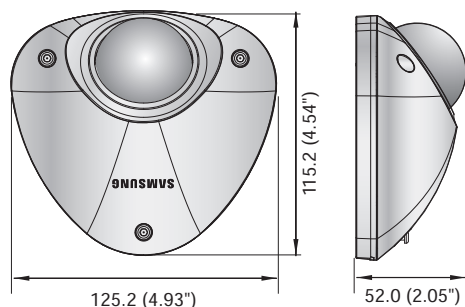


## Key Features

- High resolution of 600TV lines
- Min. illumination 0.04Lux@F1.2
- Built-in fixed lens (3mm)
- IP66, Coax : Pelco-C (Coaxitron), 12V DC

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                                  | SCV-2010FN  | SCV-2010FP  |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/3" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz                                       | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines   |   |
| Min. Illumination                | Color : 0.04Lux (Sens-up, 2x)                                     |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite                                   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3mm   |   |
| Max. Aperture Ratio              | F2.0  |   |
| Angular Field of View            | H : 89.5° / V : 67.2°   |   |
| PAN / TILT                       |   |   |
| Pan Range                        | ±10°  |   |
| Tilt Range                       | 0° ~ 90°  |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 15 characters)                                |   |
| Day & Night                      | Auto (Electrical) / Color / B/W                                   |   |
| Backlight Compensation           | BLC / HLC / Off   |   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)                                   |   |
| Privacy Masking                  | Off / On (12 programmable zones)                                  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Low / High / Off  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)        |   |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Reverse                          | H-Rev (Off / On) / V-Rev (Off / On)                               |   |
| Communication                    | Coaxial control (SPC-300 compatible)                              |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)  |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH                 |   |
| Ingress Protection               | IP66  |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 12V DC ±10%   |   |
| Power Consumption                | Max. 1.8W   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory / Aluminum, Plastic (Dome cover : Clear)                    |   |
| Dimensions (WxHxD)               | 125.2 x 52.0 x 115.2mm (4.93" x 2.05" x 4.54")                    |   |
| Weight                           | 410g (0.9 lb)   |   |

# SCP-3430H/2430H



High Resolution 43x Weatherproof PTZ Dome Camera

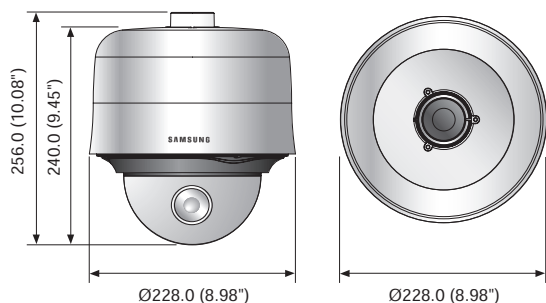


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.7Lux@F1.65 (Color), 0.07Lux (B/W) : SCP-3430H  
Min. illumination 0.2Lux@F1.65 (Color), 0.02Lux (B/W) : SCP-2430H
- Powerful 43x zoom (3.2 ~ 138.5mm), Digital 16x
- WDR, VPS : SCP-3430H, True Day & Night (ICR)  
Intelligent video, MD, DNR (3D+2D)
- IP66, Coax : CCVC, 24V AC

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



## Technical Specifications

|                                  | SCP-3430HN/2430HN   | SCP-3430HP/2430HP   |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/4" Ex-view HAD CCD (Double scan) : SCP-3430H, 1/4" Super HAD CCD II : SCP-2430H   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |
| Min. Illumination                | Color : 0.7Lux@F1.65 (50IRE), 0.001Lux (Sens-up, 512x) : SCP-3430H<br>0.2Lux@F1.65 (50IRE), 0.0004Lux (Sens-up, 512x) : SCP-2430H   |   |
|                                  | B/W : 0.07Lux@F1.65 (50IRE), 0.0002Lux (Sens-up, 512x) : SCP-3430H<br>0.02Lux@F1.65 (50IRE), 0.00004Lux (Sens-up, 512x) : SCP-2430H |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3.2 ~ 138.5mm (Optical 43x)   |   |
| Max. Aperture Ratio              | 1 : 1.65(Wide) ~ 3.7(Tele)  |   |
| Angular Field of View            | H : 61.22°(Wide) ~ 1.47°(Tele) / V : 47.16°(Wide) ~ 1.1°(Tele)  |   |
| Min. Object Distance             | 1m (3.28ft)   |   |
| Focus Control                    | Auto / Manual / One AF  |   |
| Zoom Movement Speed              | 3.2sec (Wide to tele)   |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 360° Endless  |   |
| Pan Speed                        | Preset : 600°/sec, Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)  |   |
| Tilt Range                       | -6° ~ 186°  |   |
| Tilt Speed                       | Preset : 600°/sec, Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)  |   |
| Preset                           | 512   |   |
| Preset Accuracy                  | ±0.1°   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean   | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 54 characters)  |   |
| Day & Night                      | Day / Night / Auto / Ext  |   |
| Backlight Compensation           | Off / On (Area setting)   |   |
| Wide Dynamic Range               | 128x : SCP-3430H  | 160x : SCP-3430H  |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)  |   |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / Tracking / Detection  |   |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / On  |   |
| White Balance                    | ATW1 / ATW2 / AWC (Manual) / 3200K / 5600K  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/10,000sec  | 1/50 ~ 1/10,000sec  |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Digital Flip                     | Off / On  |   |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom  |   |
| VPS                              | Off / On  |   |
| Intelligent Video                | Fixed / Moved   |   |
| PIP                              | Off / On  |   |
| Schedule                         | Day / Time  |   |
| Alarm                            | 8 In 3 Out  |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |
| Protocol                         | Coax : CCVC<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, GE  |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH   |   |
| Ingress Protection               | IP66  |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 24V AC ±10%   |   |
| Power Consumption                | Max. 11W / 47W (Fan & heater on)  |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Light gray / Aluminum, Plastic (Dome cover : Clear)   |   |
| Dimensions (WxH)                 | Ø228.0 x 256.0mm (Ø8.98" x 10.08")  |   |
| Weight                           | 3Kg (6.61 lb)   |   |

# SCP-3430/2430



High Resolution 43x PTZ Dome Camera

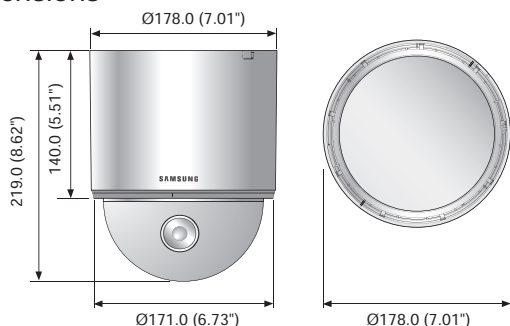


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.7Lux@F1.65 (Color), 0.07Lux (B/W) : SCP-3430  
Min. illumination 0.2Lux@F1.65 (Color), 0.02Lux (B/W) : SCP-2430
- Powerful 43x zoom (3.2 ~ 138.5mm), Digital 16x
- WDR, VPS : SCP-3430, True Day & Night (ICR)  
Intelligent video, MD, DNR (3D+2D)
- Coax : CCVC, 24VAC

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SCX-300WM SCX-300CM SCX-300HM1 SCX-300LM SCX-300PM SCX-300KM

## Technical Specifications

|                                  | SCP-3430N/2430N  | SCP-3430P/2430P   |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/4" Ex-view HAD CCD (Double scan) : SCP-3430, 1/4" Super HAD CCD II : SCP-2430  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.7Lux@F1.65 (50IRE), 0.001Lux (Sens-up, 512x) : SCP-3430<br>0.2Lux@F1.65 (50IRE), 0.0004Lux (Sens-up, 512x) : SCP-2430<br>B/W : 0.07Lux@F1.65 (50IRE), 0.0002Lux (Sens-up, 512x) : SCP-3430<br>0.02Lux@F1.65 (50IRE), 0.00004Lux (Sens-up, 512x) : SCP-2430 |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 3.2 ~ 138.5mm (Optical 43x)  |   |
| Max. Aperture Ratio              | 1 : 1.65(Wide) ~ 3.7(Tele)   |   |
| Angular Field of View            | H : 61.22°(Wide) ~ 1.47°(Tele) / V : 47.16°(Wide) ~ 1.1°(Tele)   |   |
| Min. Object Distance             | 1m (3.28ft)  |   |
| Focus Control                    | Auto / Manual / One AF   |   |
| Zoom Movement Speed              | 3.2sec (Wide to tele)  |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 360° Endless   |   |
| Pan Speed                        | Preset : 600°/sec, Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)   |   |
| Tilt Range                       | -6° ~ 186°   |   |
| Tilt Speed                       | Preset : 600°/sec, Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)   |   |
| Preset                           | 512  |   |
| Preset Accuracy                  | ±0.1°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 54 characters)   |   |
| Day & Night                      | Day / Night / Auto / Ext   |   |
| Backlight Compensation           | Off / WDR / BLC : SCP-3430, Off / On (Area setting) : SCP-2430   |   |
| Wide Dynamic Range               | 128x : SCP-3430  | 160x : SCP-3430   |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)   |   |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / Tracking / Detection   |   |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / On   |   |
| White Balance                    | ATW1 / ATW2 / AWC (Manual) / 3200K / 5600K   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/10,000sec   | 1/50 ~ 1/10,000sec  |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Digital Flip                     | Off / On   |   |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom   |   |
| VPS                              | Off / On   |   |
| Intelligent Video                | Fixed / Moved  |   |
| PIP                              | Off / On   |   |
| Schedule                         | Day / Time   |   |
| Alarm                            | 8 In 3 Out   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |
| Protocol                         | Coax : CCVC<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, GE   |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | 24V AC ±10%  |   |
| Power Consumption                | Max. 11W   |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Light gray / Plastic (Dome cover : Clear)  |   |
| Dimensions (WxH)                 | Ø178.0 x 219.0mm (Ø7.01" x 8.62")  |   |
| Weight                           | 2Kg (4.41 lb)  |   |



# SCP-3370TH/3370H/3370

## High Resolution 37x WDR PTZ Dome Camera



SCP-3370TH/3370H



SCP-3370

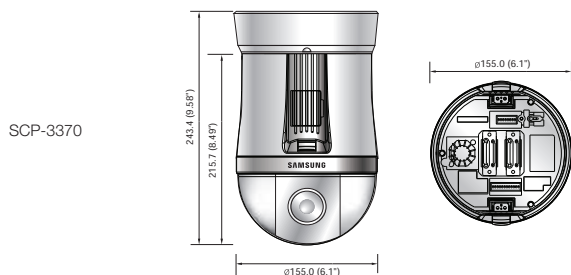
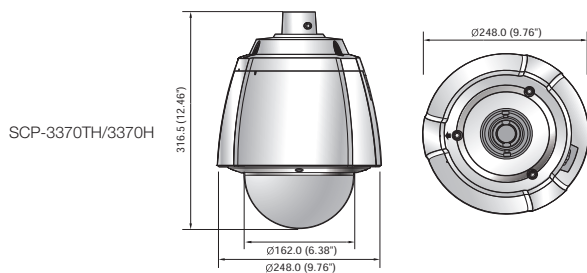


### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.7Lux@F1.6 (Color), 0.07Lux (B/W)
- Powerful 37x zoom (3.5 ~ 129.5mm), Digital 16x
- WDR, VPS, True Day & Night (ICR), Intelligent video, MD, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), RS-485, 24V AC

### Dimensions

Unit : mm (inch)



### Accessories (Optional)



SBP-300WM1 SBP-300WM SBP-300CM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

### Technical Specifications

|                                  | SCP-3370THN/3370HN/3370N   | SCP-3370THP/3370HP/3370P  |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/4" Ex-view HAD CCD   |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines  |   |
| Min. Illumination                | Color : 0.7Lux@F1.6 (50IRE), 0.001Lux (Sens-up, 512x)<br>B/W : 0.07Lux@F1.6 (50IRE), 0.0001Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 3.5 ~ 129.5mm (Optical 37x)  |   |
| Max. Aperture Ratio              | 1 : 1.6(Wide) ~ 3.9(Tele)  |   |
| Angular Field of View            | H : 55.5°(Wide) ~ 1.59°(Tele) / V : 42.5°(Wide) ~ 1.19°(Tele)  |   |
| Min. Object Distance             | 1.8m (5.91ft)  |   |
| Focus Control                    | Auto / Manual / One AF   |   |
| Zoom Movement Speed              | 2.8sec   |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 360° Endless   |   |
| Pan Speed                        | Preset : 600°/sec, Manual : 0.024°/sec ~ 120°/sec (Proportional zoom ratio)                                    |   |
| Tilt Range                       | -5° ~ 185°   |   |
| Tilt Speed                       | Preset : 600°/sec, Manual : 0.024°/sec ~ 120°/sec (Proportional zoom ratio)                                    |   |
| Preset                           | 255  |   |
| Preset Accuracy                  | ±0.1°  |   |
| Auto Tracking                    | Yes (SCP-3370TH only)  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 12 characters)   |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W  |   |
| Backlight Compensation           | BLC / HLC / Off  |   |
| Wide Dynamic Range               | 128x   |   |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (8 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/10,000sec   | 1/50 ~ 1/10,000sec  |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Digital Flip                     | Off / On   |   |
| VPS                              | Off / On   |   |
| Intelligent Video                | Off / Detection / Tracking / Fixed_Moved / Auto track  |   |
| PIP                              | Off / On   |   |
| Schedule                         | Day / Time   |   |
| Alarm                            | 8 In 3 Out   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD, GE      |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH  |   |
| Ingress Protection               | IP66 : SCP-3370TH/3370H  |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | 24V AC ±10%  |   |
| Power Consumption                | Max. 15W / 60W (Fan & heater on) : SCP-3370TH/3370H, Max. 13W : SCP-3370                                       |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory / Aluminum, Plastic (Dome cover : Clear)   |   |
| Dimensions (WxH)                 | Ø248.0 x 316.5mm (Ø9.76" x 12.46") : SCP-3370TH/3370H<br>Ø155.0 x 243.4mm (Ø6.1" x 9.58") : SCP-3370           |   |
| Weight                           | 4.5Kg (9.92 lb) : SCP-3370TH/3370H, 2Kg (4.41 lb) : SCP-3370   |   |

# SCP-2370TH/2370H/2370

## High Resolution 37x PTZ Dome Camera



SCP-2370TH/2370H



SCP-2370

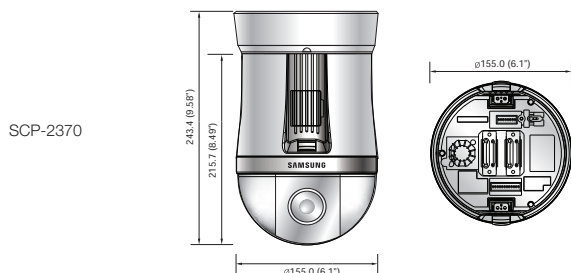
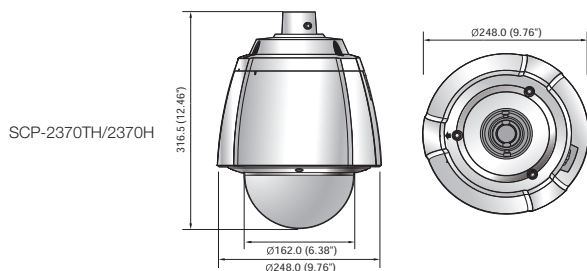


### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.2Lux@F1.6 (Color), 0.02Lux (B/W)
- Powerful 37x zoom (3.5 ~ 129.5mm), Digital 16x
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), RS-485, 24V AC

### Dimensions

Unit : mm (inch)



### Accessories (Optional)



SBP-300WM1 SBP-300WM SBP-300CM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

### Technical Specifications

|                                  | SCP-2370THN/2370HN/2370N   | SCP-2370THP/2370HP/2370P  |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/4" Super HAD CCD II  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines  |   |
| Min. Illumination                | Color : 0.2Lux@F1.6 (50IRE), 0.0004Lux (Sens-up, 512x)<br>B/W : 0.02Lux@F1.6 (50IRE), 0.00004Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 3.5 ~ 129.5mm (Optical 37x)  |   |
| Max. Aperture Ratio              | 1 : 1.6(Wide) ~ 3.9(Tele)  |   |
| Angular Field of View            | H : 55.5°(Wide) ~ 1.59°(Tele) / V : 42.5°(Wide) ~ 1.19°(Tele)  |   |
| Min. Object Distance             | 1.8m (5.91ft)  |   |
| Focus Control                    | Auto / Manual / One AF   |   |
| Zoom Movement Speed              | 2.8sec   |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 360° Endless   |   |
| Pan Speed                        | Preset : 600°/sec, Manual : 0.024°/sec ~ 120°/sec (Proportional zoom ratio)                                      |   |
| Tilt Range                       | -5° ~ 185°   |   |
| Tilt Speed                       | Preset : 600°/sec, Manual : 0.024°/sec ~ 120°/sec (Proportional zoom ratio)                                      |   |
| Preset                           | 255  |   |
| Preset Accuracy                  | ±0.1°  |   |
| Auto Tracking                    | Yes (SCP-2370TH only)  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 12 characters)   |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W  |   |
| Backlight Compensation           | BLC / HLC / Off  |   |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (8 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/10,000sec   | 1/50 ~ 1/10,000sec  |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Digital Flip                     | Off / On   |   |
| Schedule                         | Day / Time   |   |
| Alarm                            | 8 In 3 Out   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD, GE        |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH  |   |
| Ingress Protection               | IP66 : SCP-2370TH/2370H  |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | 24V AC ±10%  |   |
| Power Consumption                | Max. 15W / 60W (Fan & heater on) : SCP-2370TH/2370H, Max. 13W : SCP-2370   |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory / Aluminum, Plastic (Dome cover : Clear)   |   |
| Dimensions (WxH)                 | Ø248.0 x 316.5mm (Ø9.76" x 12.46") : SCP-2370TH/2370H<br>Ø155.0 x 243.4mm (Ø6.1" x 9.58") : SCP-2370             |   |
| Weight                           | 4.5Kg (9.92 lb) : SCP-2370TH/2370H, 2Kg (4.41 lb) : SCP-2370   |   |

# SCP-2330H/2330

## High Resolution 33x PTZ Dome Camera



SCP-2330H



SCP-2330



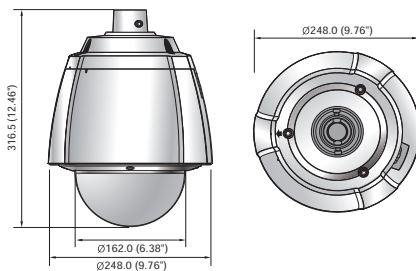
### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.2Lux@F1.6 (Color), 0.02Lux (B/W)
- Powerful 33x zoom (3.5 ~ 115.5mm), Digital 16x
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), RS-485, 24V AC

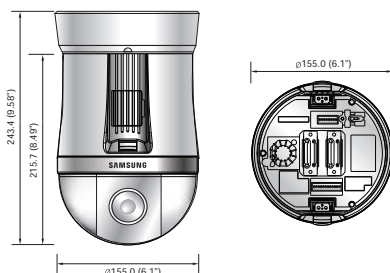
### Dimensions

Unit : mm (inch)

SCP-2330H



SCP-2330



### Accessories (Optional)



SBP-300WM1 SBP-300WM SBP-300CM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

### Technical Specifications

|                                  | SCP-2330HN/2330N  | SCP-2330HP/2330P  |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/4" Super HAD CCD II   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines   |   |
| Min. Illumination                | Color : 0.2Lux@F1.6 (50IRE), 0.0004Lux (Sens-up, 512x)<br>B/W : 0.02Lux@F1.6 (50IRE), 0.0004Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3.5 ~ 115.5mm (Optical 33x)   |   |
| Max. Aperture Ratio              | 1 : 1.6(Wide) ~ 3.6(Tele)   |   |
| Angular Field of View            | H : 55.5°(Wide) ~ 1.77°(Tele) / V : 42.5°(Wide) ~ 1.33°(Tele)   |   |
| Min. Object Distance             | 1.8m (5.91ft)   |   |
| Focus Control                    | Auto / Manual / One AF  |   |
| Zoom Movement Speed              | 2.8sec  |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 360° Endless  |   |
| Pan Speed                        | Preset : 600°/sec, Manual : 0.024°/sec ~ 120°/sec (Proportional zoom ratio)                                     |   |
| Tilt Range                       | -5° ~ 185°  |   |
| Tilt Speed                       | Preset : 600°/sec, Manual : 0.024°/sec ~ 120°/sec (Proportional zoom ratio)                                     |   |
| Preset                           | 255   |   |
| Preset Accuracy                  | ±0.1°   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean   | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 12 characters)  |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W   |   |
| Backlight Compensation           | BLC / HLC / Off   |   |
| Contrast Enhancement             | SSDR (Off / On)   |   |
| Digital Noise Reduction          | SSNRIII (Off / On)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / On (8 programmable zones)   |   |
| Privacy Masking                  | Off / On (12 programmable zones)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / Low / High  |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/10,000sec  | 1/50 ~ 1/10,000sec  |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Digital Flip                     | Off / On  |   |
| Schedule                         | Day / Time  |   |
| Alarm                            | 8 In 3 Out  |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD, GE       |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH   |   |
| Ingress Protection               | IP66 : SCP-2330H  |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 24V AC ±10%   |   |
| Power Consumption                | Max. 15W / 58W (Fan & heater on) : SCP-2330H, Max. 13W : SCP-2330   |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Ivory / Aluminum, Plastic (Dome cover : Clear)  |   |
| Dimensions (WxH)                 | Ø248.0 x 316.5mm (Ø9.76" x 12.46") : SCP-2330H<br>Ø155.0 x 243.4mm (Ø6.1" x 9.58") : SCP-2330                   |   |
| Weight                           | 4.5Kg (9.92 lb) : SCP-2330H, 2Kg (4.41 lb) : SCP-2330   |   |

# SCP-2270H/2270



## High Resolution 27x PTZ Dome Camera



SCP-2270H



SCP-2270



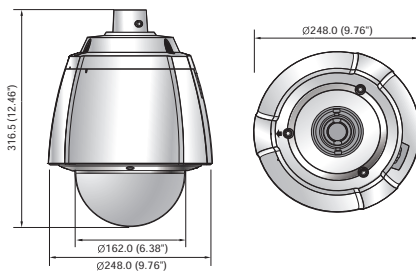
### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.2Lux@F1.6 (Color), 0.02Lux (B/W)
- Powerful 27x zoom (3.5 ~ 94.5mm), Digital 16x
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- Coax : Pelco-C (Coaxitron), RS-485, 24V AC

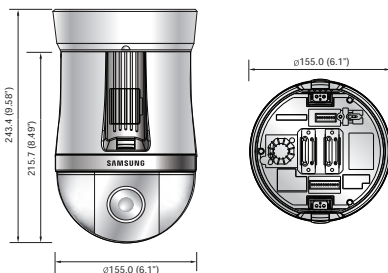
### Dimensions

Unit : mm (inch)

SCP-2270H



SCP-2270



### Accessories (Optional)



SBP-300WM1 SBP-300WM SBP-300CM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

### Technical Specifications

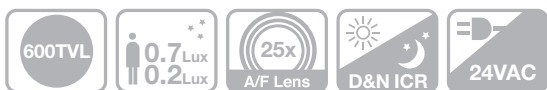
|                                  | SCP-2270HN/2270N   | SCP-2270HP/2270P  |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/4" Super HAD CCD II  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines  |   |
| Min. Illumination                | Color : 0.2Lux@F1.6 (50IRE), 0.0004Lux (Sens-up, 512x)<br>B/W : 0.02Lux@F1.6 (50IRE), 0.00004Lux (Sens-up, 512x) |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 3.5 ~ 95mm (Optical 27x)   |   |
| Max. Aperture Ratio              | 1 : 1.6(Wide) ~ 3.6(Tele)  |   |
| Angular Field of View            | H : 55.5°(Wide) ~ 2.24°(Tele) / V : 42.5°(Wide) ~ 1.62°(Tele)  |   |
| Min. Object Distance             | 1.8m (5.91ft)  |   |
| Focus Control                    | Auto / Manual / One AF   |   |
| Zoom Movement Speed              | 2.8sec   |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 360° Endless   |   |
| Pan Speed                        | Preset : 600°/sec, Manual : 0.024°/sec ~ 120°/sec (Proportional zoom ratio)                                      |   |
| Tilt Range                       | -5° ~ 185°   |   |
| Tilt Speed                       | Preset : 600°/sec, Manual : 0.024°/sec ~ 120°/sec (Proportional zoom ratio)                                      |   |
| Preset                           | 255  |   |
| Preset Accuracy                  | ±0.1°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 12 characters)   |   |
| Day & Night                      | Auto (ICR) / External / Color / B/W  |   |
| Backlight Compensation           | BLC / HLC / Off  |   |
| Contrast Enhancement             | SSDR (Off / On)  |   |
| Digital Noise Reduction          | SSNRIII (Off / On)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / On (8 programmable zones)  |   |
| Privacy Masking                  | Off / On (12 programmable zones)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / Low / High   |   |
| White Balance                    | ATW / Outdoor / Indoor / Manual / AWC (1,700K° ~ 11,000K°)   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/10,000sec   | 1/50 ~ 1/10,000sec  |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Digital Flip                     | Off / On   |   |
| Schedule                         | Day / Time   |   |
| Alarm                            | 8 In 3 Out   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD, GE        |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH  |   |
| Ingress Protection               | IP66 : SCP-2270H   |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | 24V AC ±10%  |   |
| Power Consumption                | Max. 15W / 58W (Fan & heater on) : SCP-2270H, Max. 13W : SCP-2270  |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Ivory / Aluminum, Plastic (Dome cover : Clear)   |   |
| Dimensions (WxH)                 | Ø248.0 x 316.5mm (Ø9.76" x 12.46") : SCP-2270H<br>Ø155.0 x 243.4mm (Ø6.1" x 9.58") : SCP-2270                    |   |
| Weight                           | 4.5Kg (9.92 lb) : SCP-2270H, 2Kg (4.41 lb) : SCP-2270  |   |



# SCP-3250H/2250H



High Resolution 25x Weatherproof PTZ Dome Camera

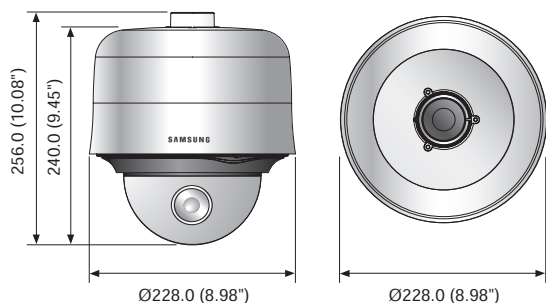


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.7Lux@F1.65 (Color), 0.07Lux (B/W) : SCP-3250H  
Min. illumination 0.2Lux@F1.65 (Color), 0.02Lux (B/W) : SCP-2250H
- Powerful 25x zoom (3.66 ~ 91.36mm), Digital 16x
- WDR, VPS : SCP-3250H, True Day & Night (ICR)  
Intelligent video, MD, DNR (3D+2D)
- IP66, Coax : CCVC, RS-485, 24V AC

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



## Technical Specifications

|                                  | SCP-3250HN/2250HN   | SCP-3250HP/2250HP   |
|----------------------------------|---|---|
| VIDEO                            |   |   |
| Imaging Device                   | 1/4" Ex-view HAD CCD (Double scan) : SCP-3250H, 1/4" Super HAD CCD II : SCP-2250H   |   |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace   |   |
| Synchronization                  | Internal / Line lock  |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |   |
| Min. Illumination                | Color : 0.7Lux@F1.65 (50IRE), 0.001Lux (Sens-up, 512x) : SCP-3250H<br>0.2Lux@F1.65 (50IRE), 0.0004Lux (Sens-up, 512x) : SCP-2250H   |   |
|                                  | B/W : 0.07Lux@F1.65 (50IRE), 0.0002Lux (Sens-up, 512x) : SCP-3250H<br>0.02Lux@F1.65 (50IRE), 0.00004Lux (Sens-up, 512x) : SCP-2250H |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |   |
| LENS                             |   |   |
| Focal Length (Zoom Ratio)        | 3.66 ~ 91.36mm (Optical 25x)  |   |
| Max. Aperture Ratio              | 1 : 1.65(Wide) ~ 3.0(Tele)  |   |
| Angular Field of View            | H : 54.95°(Wide) ~ 2.24°(Tele) / V : 41.83°(Wide) ~ 1.68°(Tele)   |   |
| Min. Object Distance             | 1m (3.28ft)   |   |
| Focus Control                    | Auto / Manual / One AF  |   |
| Zoom Movement Speed              | 2.9sec (Wide to tele)   |   |
| PAN / TILT                       |   |   |
| Pan Range                        | 360° Endless  |   |
| Pan Speed                        | Preset : 600°/sec, Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)  |   |
| Tilt Range                       | -6° ~ 186°  |   |
| Tilt Speed                       | Preset : 600°/sec, Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)  |   |
| Preset                           | 512   |   |
| Preset Accuracy                  | ±0.1°   |   |
| OPERATIONAL                      |   |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean   | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 54 characters)  |   |
| Day & Night                      | Day / Night / Auto / Ext  |   |
| Backlight Compensation           | Off / On (Area setting)   |   |
| Wide Dynamic Range               | 128x : SCP-3250H  | 160x : SCP-3250H  |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)  |   |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)  |   |
| Digital Image Stabilization      | Off / On  |   |
| Motion Detection                 | Off / Tracking / Detection  |   |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)   |   |
| Sens-up (Frame Integration)      | 2x ~ 512x   |   |
| Gain Control                     | Off / On  |   |
| White Balance                    | ATW1 / ATW2 / AWC (Manual) / 3200K / 5600K  |   |
| Electronic Shutter Speed         | 1/60 ~ 1/10,000sec  | 1/50 ~ 1/10,000sec  |
| Digital Zoom                     | Off / On (1x ~ 16x)   |   |
| Digital Flip                     | Off / On  |   |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom  |   |
| VPS                              | Off / On  |   |
| Intelligent Video                | Fixed / Moved   |   |
| PIP                              | Off / On  |   |
| Schedule                         | Day / Time  |   |
| Alarm                            | 8 In 3 Out  |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |   |
| Protocol                         | Coax : CCVC<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, GE  |   |
| ENVIRONMENTAL                    |   |   |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH   |   |
| Ingress Protection               | IP66  |   |
| ELECTRICAL                       |   |   |
| Input Voltage / Current          | 24V AC ±10%   |   |
| Power Consumption                | Max. 16.3W / 47W (Fan & heater on)  |   |
| MECHANICAL                       |   |   |
| Color / Material                 | Light gray / Aluminum, Plastic (Dome cover : Clear)   |   |
| Dimensions (WxH)                 | Ø228.0 x 256.0mm (Ø8.98" x 10.08")  |   |
| Weight                           | 5.66Kg (12.48 lb)   |   |

# SCP-3250/2250



High Resolution 25x PTZ Dome Camera

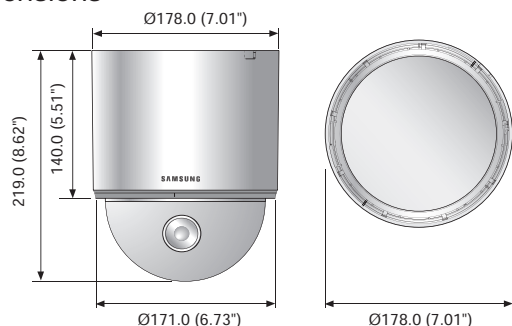


## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.7Lux@F1.65 (Color), 0.07Lux (B/W) : SCP-3250  
Min. illumination 0.2Lux@F1.65 (Color), 0.02Lux (B/W) : SCP-2250
- Powerful 25x zoom (3.66 ~ 91.36mm), Digital 16x
- WDR, VPS : SCP-3250, True Day & Night (ICR)  
Intelligent video, MD, DNR (3D+2D)
- Coax : CCVC, RS-485, 24V AC

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SCX-300WM SCX-300CM SCX-300HM1 SCX-300LM SCX-300PM SCX-300KM

## Technical Specifications

|                                  | SCP-3250N/2250N  | SCP-3250P/2250P   |
|----------------------------------|--|---|
| VIDEO                            |  |   |
| Imaging Device                   | 1/4" Ex-view HAD CCD (Double scan) : SCP-3250, 1/4" Super HAD CCD II : SCP-2250  |   |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)   |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)   |
| Scanning System                  | 2 : 1 Interlace  |   |
| Synchronization                  | Internal / Line lock   |   |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz  |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |   |
| Min. Illumination                | Color : 0.7Lux@F1.65 (50IRE), 0.001Lux (Sens-up, 512x) : SCP-3250<br>0.2Lux@F1.65 (50IRE), 0.0004Lux (Sens-up, 512x) : SCP-2250<br>B/W : 0.07Lux@F1.65 (50IRE), 0.0002Lux (Sens-up, 512x) : SCP-3250<br>0.02Lux@F1.65 (50IRE), 0.00004Lux (Sens-up, 512x) : SCP-2250 |   |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |   |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |   |
| LENS                             |  |   |
| Focal Length (Zoom Ratio)        | 3.66 ~ 91.36mm (Optical 25x)   |   |
| Max. Aperture Ratio              | 1 : 1.65(Wide) ~ 3.0(Tele)   |   |
| Angular Field of View            | H : 54.95°(Wide) ~ 2.24°(Tele) / V : 41.83°(Wide) ~ 1.68°(Tele)  |   |
| Min. Object Distance             | 1m (3.28ft)  |   |
| Focus Control                    | Auto / Manual / One AF   |   |
| Zoom Movement Speed              | 2.9sec (Wide to tele)  |   |
| PAN / TILT                       |  |   |
| Pan Range                        | 360° Endless   |   |
| Pan Speed                        | Preset : 600°/sec, Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)   |   |
| Tilt Range                       | -6° ~ 186°   |   |
| Tilt Speed                       | Preset : 600°/sec, Manual : 0.01°/sec ~ 180°/sec (Proportional zoom ratio)   |   |
| Preset                           | 512  |   |
| Preset Accuracy                  | ±0.1°  |   |
| OPERATIONAL                      |  |   |
| On Screen Display                | English, Japanese, Spanish, French, Portuguese, Taiwanese, Korean  | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| Camera Title                     | Off / On (Displayed 54 characters)   |   |
| Day & Night                      | Day / Night / Auto / Ext   |   |
| Backlight Compensation           | Off / On (Area setting)  |   |
| Wide Dynamic Range               | 128x : SCP-3250  | 160x : SCP-3250   |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)   |   |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)   |   |
| Digital Image Stabilization      | Off / On   |   |
| Motion Detection                 | Off / Tracking / Detection   |   |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)  |   |
| Sens-up (Frame Integration)      | 2x ~ 512x  |   |
| Gain Control                     | Off / On   |   |
| White Balance                    | ATW1 / ATW2 / AWC (Manual) / 3200K / 5600K   |   |
| Electronic Shutter Speed         | 1/60 ~ 1/10,000sec   | 1/50 ~ 1/10,000sec  |
| Digital Zoom                     | Off / On (1x ~ 16x)  |   |
| Digital Flip                     | Off / On   |   |
| Profile                          | Standard / ITS / Backlight / Day & Night / Gaming / Custom   |   |
| VPS                              | Off / On   |   |
| Intelligent Video                | Fixed / Moved / Fence / Area / Tracking : SCP-3250, Fixed / Moved : SCP-2250   |   |
| PIP                              | Off / On   |   |
| Schedule                         | Day / Time   |   |
| Alarm                            | 8 In 3 Out   |   |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |   |
| Protocol                         | Coax : CCVC<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, GE   |   |
| ENVIRONMENTAL                    |  |   |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH  |   |
| ELECTRICAL                       |  |   |
| Input Voltage / Current          | 24V AC ±10%  |   |
| Power Consumption                | Max. 11W   |   |
| MECHANICAL                       |  |   |
| Color / Material                 | Light gray / Plastic (Dome cover : Clear)  |   |
| Dimensions (WxH)                 | Ø178.0 x 219.0mm (Ø7.01" x 8.62")  |   |
| Weight                           | 3.34Kg (7.36 lb)   |   |

# SCP-3120/3120V/3120VH



High Resolution 12x WDR PTZ Dome Camera



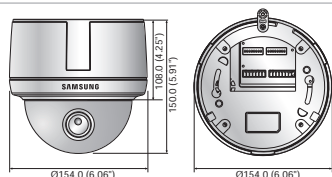
## Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.7Lux@F1.65 (Color), 0.07Lux (B/W)
- Powerful 12x zoom (3.6 ~ 44.3mm), Digital 16x
- WDR, VPS, True Day & Night (ICR), Intelligent video, MD, DNR (3D+2D)
- IP66 : SCP-3120V/3120VH, Coax : Pelco-C (Coaxitron), RS-485, 24V AC

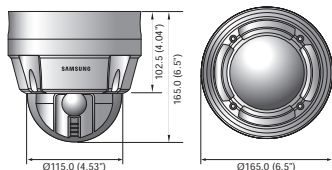
## Dimensions

Unit : mm (inch)

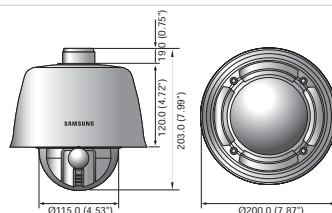
SCP-3120



SCP-3120V



SCP-3120VH



## Accessories (Optional)



SBP-300WM1 SBP-300WM SBP-300CM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

## Technical Specifications

|                                  | SCP-3120N/3120VN/3120VHN  | SCP-3120P/3120VP/3120VHP                                       |
|----------------------------------|---|--|
| VIDEO                            |   |  |
| Imaging Device                   | 1/4" Ex-view HAD CCD (Double scan)  |  |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)  |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)  |
| Scanning System                  | 2 : 1 Interlace   |  |
| Synchronization                  | Internal / Line lock  |  |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz                                       |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |  |
| Min. Illumination                | Color : 0.7Lux@F1.65 (50IRE), 0.001Lux (Sens-up, 512x)<br>B/W : 0.07Lux@F1.65 (50IRE), 0.0001Lux (Sens-up, 512x)                            |  |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |  |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |  |
| LENS                             |   |  |
| Focal Length (Zoom Ratio)        | 3.6 ~ 44.3mm (Optical 12x)  |  |
| Max. Aperture Ratio              | 1 : 1.65(Wide) ~ 2.01(Tele)   |  |
| Angular Field of View            | H : 54.44°(Wide) ~ 4.64°(Tele) / V : 41.42°(Wide) ~ 3.52°(Tele)   |  |
| Min. Object Distance             | 1m (3.28ft)   |  |
| Focus Control                    | Auto / Manual / One shot  |  |
| Zoom Movement Speed              | 1.9sec  |  |
| PAN / TILT                       |   |  |
| Pan Range                        | 360° Endless  |  |
| Pan Speed                        | Preset : 650°/sec, Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio)  |  |
| Tilt Range                       | -5° ~ 185°  |  |
| Tilt Speed                       | Preset : 650°/sec, Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio)  |  |
| Preset                           | 255   |  |
| Preset Accuracy                  | ±0.1°   |  |
| OPERATIONAL                      |   |  |
| On Screen Display                | English, French, Spanish, Italian, German, Portuguese, Korean   | English, French, Spanish, German, Italian, Chinese, Portuguese |
| Camera Title                     | Off / On (Displayed 12 characters)  |  |
| Day & Night                      | Off / Auto / B/W  |  |
| Backlight Compensation           | BLC / WDR / Off   |  |
| Wide Dynamic Range               | 128x  | 160x   |
| Contrast Enhancement             | XDR (Off / Low / Mid / High)  |  |
| Digital Noise Reduction          | Adaptive 3D+2D (Off / Low / Mid / High / User)  |  |
| Digital Image Stabilization      | Off / On  |  |
| Motion Detection                 | Off / Tracking / Detection  |  |
| Privacy Masking                  | Off / On (12 programmable zones with polygonal masking)   |  |
| Sens-up (Frame Integration)      | 2x ~ 512x   |  |
| Gain Control                     | Off / On  |  |
| White Balance                    | ATW (In) / ATW (Out) / AWC / Manual   |  |
| Electronic Shutter Speed         | 1/60 ~ 1/10,000sec  | 1/50 ~ 1/10,000sec   |
| Digital Zoom                     | Off / On (1x ~ 16x)   |  |
| Digital Flip                     | Off / On  |  |
| VPS                              | Off / On  |  |
| Intelligent Video                | Fixed / Moved   |  |
| Schedule                         | Day / Time  |  |
| Alarm                            | 2 In 2 Out  |  |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |  |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD, GE                                   |  |
| ENVIRONMENTAL                    |   |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH : SCP-3120<br>-50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH : SCP-3120V/3120VH        |  |
| Ingress Protection               | IP66 : SCP-3120V/3120VH   |  |
| ELECTRICAL                       |   |  |
| Input Voltage / Current          | 24V AC ±10%   |  |
| Power Consumption                | Max. 12W : SCP-3120, Max. 12W / 45W (Fan & heater on) : SCP-3120V/3120VH  |  |
| MECHANICAL                       |   |  |
| Color / Material                 | Ivory / Plastic (Dome cover : Clear) : SCP-3120<br>Ivory / Aluminum, Plastic (Dome cover : Clear) : SCP-3120V/3120VH                        |  |
| Dimensions (WxH)                 | Ø154.0 x 150.0mm (Ø6.06" x 5.91") : SCP-3120, Ø165.0 x 165.0mm (Ø6.5" x 6.5") : SCP-3120V<br>Ø200.0 x 203.0mm (Ø7.87" x 7.99") : SCP-3120VH |  |
| Weight                           | 1Kg (2.2 lb) : SCP-3120, 1.8Kg (3.97 lb) : SCP-3120V, 2.4Kg (5.29 lb) : SCP-3120VH  |  |

# SCP-2120



## High Resolution 12x PTZ Dome Camera

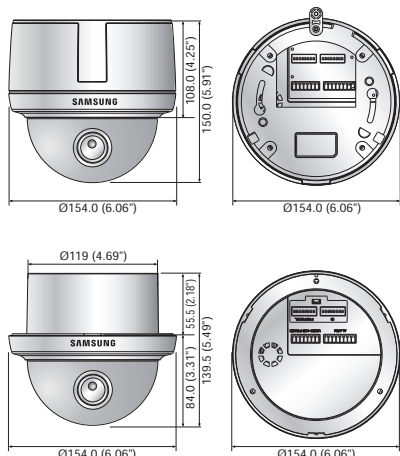


### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.2Lux@F1.67 (Color), 0.004Lux (B/W)
- Powerful 12x zoom (3.94 ~ 46.05mm), Digital 16x
- True Day & Night (ICR), MD, SSNR III (3D+2D)
- Coax : Pelco-C (Coaxitron), RS-485, 24V AC

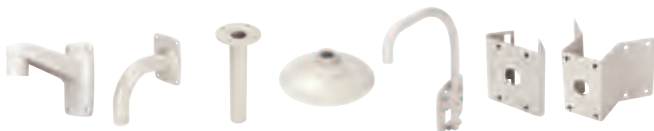
### Dimensions

Unit : mm (inch)



Flush Type

### Accessories (Optional)



SBP-300WM1 SBP-300WM SBP-300CM SBP-300HM1 SBP-300LM SBP-300PM SBP-300KM

### Technical Specifications

|                                  | SCP-2120N   | SCP-2120P  |
|----------------------------------|---|--|
| VIDEO                            |   |  |
| Imaging Device                   | 1/4" Super HAD CCD II   |  |
| Total Pixels                     | 811(H) x 508(V)   | 795(H) x 596(V)  |
| Effective Pixels                 | 768(H) x 494(V)   | 752(H) x 582(V)  |
| Scanning System                  | 2 : 1 Interlace   |  |
| Synchronization                  | Internal / Line lock  |  |
| Frequency                        | H : 15.734KHz / V : 59.94Hz   | H : 15.625KHz / V : 50Hz                                       |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines  |  |
| Min. Illumination                | Color : 0.2Lux@F1.67 (50IRE), 0.0004Lux (Sens-up, 512x)<br>B/W : 0.004Lux@F1.67 (50IRE), 0.00008Lux (Sens-up, 512x) |  |
| S / N Ratio                      | 52dB (AGC off, Weight on)   |  |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite   |  |
| LENS                             |   |  |
| Focal Length (Zoom Ratio)        | 3.94 ~ 46.05mm (Optical 12x)  |  |
| Max. Aperture Ratio              | 1 : 1.67(Wide) ~ 1.88 (Tele)  |  |
| Angular Field of View            | H : 51.54°(Wide) ~ 4.49°(Tele) / V : 39.28°(Wide) ~ 3.39°(Tele)   |  |
| Min. Object Distance             | 1m (3.28ft)   |  |
| Focus Control                    | Auto / Manual / One shot  |  |
| Zoom Movement Speed              | 1.9sec (Wide to tele)   |  |
| PAN / TILT                       |   |  |
| Pan Range                        | 360° Endless  |  |
| Pan Speed                        | Preset : 650°/sec, Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio)  |  |
| Tilt Range                       | -5° ~ 185°  |  |
| Tilt Speed                       | Preset : 650°/sec, Manual : 0.05°/sec ~ 120°/sec (Proportional zoom ratio)  |  |
| Preset                           | 255   |  |
| Preset Accuracy                  | ±0.1°   |  |
| OPERATIONAL                      |   |  |
| On Screen Display                | English, French, German, Spanish, Italian, Portuguese, Korean   | English, French, German, Spanish, Italian, Chinese, Portuguese |
| Camera Title                     | Off / On (Displayed 12 characters)  |  |
| Day & Night                      | Off / Auto / B/W  |  |
| Backlight Compensation           | BLC / HLC / Off   |  |
| Contrast Enhancement             | SSDR (Off / On)   |  |
| Digital Noise Reduction          | SSNRIII (Off / Low / Medium / High)   |  |
| Motion Detection                 | Off / On  |  |
| Privacy Masking                  | Off / On (8 programmable zones)   |  |
| Sens-up (Frame Integration)      | 2x ~ 512x   |  |
| Gain Control                     | Off / On  |  |
| White Balance                    | ATW / ATW(IN) / ATW(OUT) / Manual / AWC   |  |
| Electronic Shutter Speed         | 1/60 ~ 1/120,000sec   | 1/50 ~ 1/120,000sec  |
| Digital Zoom                     | Off / On (2x ~ 16x)   |  |
| Digital Flip                     | Off / On  |  |
| Schedule                         | Day / Time  |  |
| Alarm                            | 2 In 2 Out  |  |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485  |  |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Vicon, Panasonic, Bosch, Honeywell, AD, GE           |  |
| ENVIRONMENTAL                    |   |  |
| Operating Temperature / Humidity | -10°C ~ +50°C (+14°F ~ +122°F) / Less than 90% RH   |  |
| ELECTRICAL                       |   |  |
| Input Voltage / Current          | 24V AC ±10%   |  |
| Power Consumption                | Max. 12W  |  |
| MECHANICAL                       |   |  |
| Color / Material                 | Ivory / Plastic (Dome cover : Clear)  |  |
| Dimensions (WxH)                 | Ø154.0 x 150.0mm (Ø6.06" x 5.91")   |  |
| Weight                           | 1Kg (2.2 lb)  |  |

CAMERA



# SCU-2370



## High Resolution 37x Weatherproof Positioning System

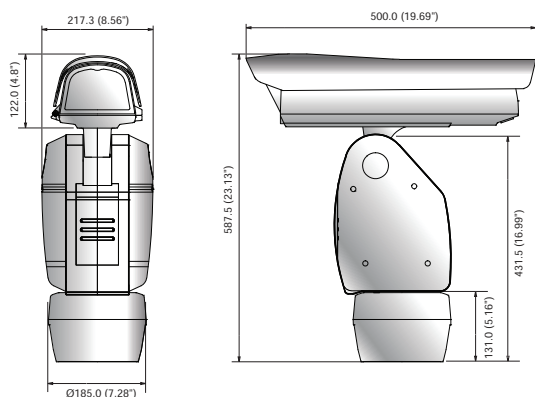


### Key Features

- High resolution of 600TV lines (Color), 700TV lines (B/W)
- Min. illumination 0.2Lux@F1.6 (Color), 0.02Lux (B/W)
- Powerful 37x zoom (3.5 ~ 129.5mm), Digital 16x
- True Day & Night (ICR), MD, SSNRIII (3D+2D)
- IP66, Coax : Pelco-C (Coaxitron), RS-485, 24V AC

### Dimensions

Unit : mm (inch)



### Accessories (Optional)



SBU-500WM



SBU-220PM

### Technical Specifications

|                                  | SCU-2370N  | SCU-2370P                |
|----------------------------------|--|--------------------------|
| VIDEO                            |  |                          |
| Imaging Device                   | 1/4" Ex-view HAD CCD   |                          |
| Total Pixels                     | 811(H) x 508(V)  | 795(H) x 596(V)          |
| Effective Pixels                 | 768(H) x 494(V)  | 752(H) x 582(V)          |
| Scanning System                  | 2 : 1 Interlace  |                          |
| Synchronization                  | Internal / Line lock   |                          |
| Frequency                        | H : 15.734KHz / V : 59.94Hz  | H : 15.625KHz / V : 50Hz |
| Horizontal Resolution            | Color : 600TV lines, B/W : 700TV lines   |                          |
| Min. Illumination                | Color : 0.2Lux@F1.6 (50IRE), 0.0004Lux (Sens-up, 512x)<br>B/W : 0.02Lux@F1.6 (50IRE), 0.00004Lux (Sens-up, 512x) |                          |
| S / N Ratio                      | 52dB (AGC off, Weight on)  |                          |
| Video Output                     | CVBS : 1.0 Vp-p / 75Ω composite  |                          |
| LENS                             |  |                          |
| Focal Length (Zoom Ratio)        | 3.5 ~ 129.5mm (Optical 37x)  |                          |
| Max. Aperture Ratio              | 1 : 1.6(Wide) ~ 3.9(Tele)  |                          |
| Angular Field of View            | H : 55.5°(Wide) ~ 1.59°(Tele) / V : 42.5°(Wide) ~ 1.19°(Tele)  |                          |
| Min. Object Distance             | 1.5m   |                          |
| Focus Control                    | Auto / Manual / One shot   |                          |
| Zoom Movement Speed              | 2.8sec   |                          |
| Lens Type                        | DC auto iris   |                          |
| PAN / TILT                       |  |                          |
| Pan Range                        | 360° Endless   |                          |
| Pan Speed                        | Preset : 0.1° ~ 120°/sec, Manual : 0.1°/sec ~ 36°/sec (Turbo : 120°/sec)   |                          |
| Tilt Range                       | -85° ~ 40°   |                          |
| Tilt Speed                       | Preset : 0.1° ~ 36°/sec, Manual : 0.1°/sec ~ 36°/sec   |                          |
| Preset                           | 255  |                          |
| Preset Accuracy                  | ±0.1°  |                          |
| OPERATIONAL                      |  |                          |
| On Screen Display                | English, Chinese, French, German, Spanish, Italian, Portuguese   |                          |
| Camera Title                     | Off / On (Displayed 12 characters)   |                          |
| Day & Night                      | Color / B/W / Auto   |                          |
| Backlight Compensation           | Off / HLC / BLC  |                          |
| Contrast Enhancement             | SSDR (Off / On)  |                          |
| Digital Noise Reduction          | SSNRIII (Off / On)   |                          |
| Digital Image Stabilization      | Off / On   |                          |
| Motion Detection                 | Off / On   |                          |
| Privacy Masking                  | Off / On (8 area)  |                          |
| Sens-up (Frame Integration)      | 2x ~ 512x  |                          |
| Gain Control                     | Off / Low / Medium / High / Manual   |                          |
| White Balance                    | ATW / Indoor / Outdoor / Manual / AWC  |                          |
| Electronic Shutter Speed         | Auto (1/60 ~ 1/120,000sec) / Manual / A.FLK Auto (1/50 ~ 1/120,000sec) / Manual / A.FLK                          |                          |
| Digital Zoom                     | Off / On (2x ~ 16x)  |                          |
| Schedule                         | Day / Time   |                          |
| Alarm                            | 3 In 2 Out 1 Aux (Option : Wiper pump)   |                          |
| IR Illuminator (Optional)        | On / On (1 ~ 60sec, 1 ~ 60min) / Off   |                          |
| Communication                    | Coaxial control (SPC-300 compatible), RS-485   |                          |
| Protocol                         | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, GE, AD        |                          |
| ENVIRONMENTAL                    |  |                          |
| Operating Temperature / Humidity | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH  |                          |
| Ingress Protection               | IP66   |                          |
| ELECTRICAL                       |  |                          |
| Input Voltage / Current          | 24V AC ±10%  |                          |
| Power Consumption                | Max. 40W / 144W (Fan & heater on)  |                          |
| MECHANICAL                       |  |                          |
| Color / Material                 | Ivory / Aluminum   |                          |
| Dimensions (WxHxD)               | 217.3 x 587.5 x 500.0mm (8.56" x 23.13" x 19.69")  |                          |
| Weight                           | 17.5Kg (38.58 lb)  |                          |

# SCU-9051



## Weatherproof Thermal Positioning System

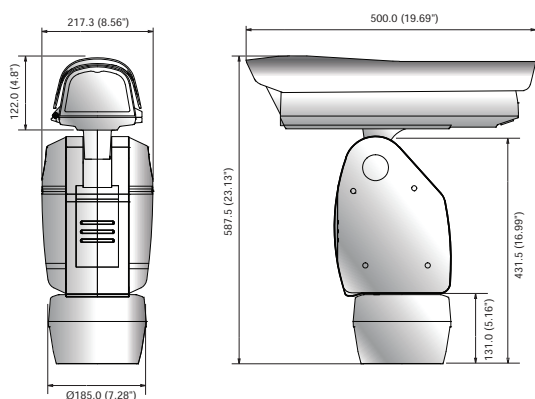


### Key Features

- Outstanding 1km detection without lighting
- Min. discernable temperature of 0.08°C
- Built-in 50mm, 0.47mrad. Color pattern
- IP66, Coax : Pelco-C (Coaxitron), RS-485, 24V AC

### Dimensions

Unit : mm (inch)



### Accessories (Optional)



SBU-500WM



SBU-220PM

### Technical Specifications

|                                    |   |           |
|------------------------------------|---|-----------|
|                                    | SCU-9051N   | SCU-9051P |
| VIDEO                              |   |           |
| Imaging Device                     | 320(H) x 240(H) uncooled VOX microbolometer   |           |
| Sensor Pitch                       | 23.5μm  |           |
| Measured Wavelength Range          | 8 ~ 14um, LWIR  |           |
| Video Ratio (Sensor)               | 30fps   | 25fps     |
| Thermal Sensitivity (NETD)         | 85mK@F1.4   |           |
| Video Output                       | CVBS : 1.0 Vp-p / 75Ω composite   |           |
| LENS                               |   |           |
| Focal Length (Zoom Ratio)          | 50mm (Fixed)  |           |
| Max. Aperture Ratio                | 1 : 1.4   |           |
| Angular Field of View (HxV)        | 8.6° x 6.5°   |           |
| Min. Object Distance               | 27m ~ ∞, Pan focus  |           |
| IFOV (Instantaneous Field of View) | 0.47mrad  |           |
| PAN / TILT                         |   |           |
| Pan Range                          | 360° Endless  |           |
| Pan Speed                          | Preset : 0.1° ~ 120°/sec, Manual : 0.1°/sec ~ 36°/sec (Turbo : 120°/sec)                                  |           |
| Tilt Range                         | -85° ~ 40°  |           |
| Tilt Speed                         | Preset : 0.1° ~ 36°/sec, Manual : 0.1°/sec ~ 36°/sec  |           |
| Preset                             | 255   |           |
| Preset Accuracy                    | ±0.1°   |           |
| OPERATIONAL                        |   |           |
| On Screen Display                  | English, Chinese, French, German, Spanish, Italian, Portuguese  |           |
| Image Mode                         | Color 1 / Color 2 / ISO / B/W   |           |
| Sharpness                          | Off / On (Manual)   |           |
| Contrast Enhancement               | Auto / Manual   |           |
| Digital Noise Reduction            | ADNR (Adaptive Digital Noise Reducer)   |           |
| Digital Zoom                       | Off / On (1x ~ 4x)  |           |
| Temp Display                       | 8 Zone / Point  |           |
| IV (Intelligence Video)            | Fence / Tracking / MD   |           |
| ISO / Fire Man                     | Isolated temp display / Fire man  |           |
| Alarm                              | 3 In 2 Out 1 Aux  |           |
| Communication                      | Coaxial control (SPC-300 compatible), RS-485  |           |
| Protocol                           | Coax : Pelco-C (Coaxitron)<br>RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Vicon, Honeywell, AD, GE, Bosch |           |
| ENVIRONMENTAL                      |   |           |
| Operating Temperature / Humidity   | -50°C ~ +50°C (-58°F ~ +122°F) / Less than 90% RH   |           |
| Ingress Protection                 | IP66  |           |
| ELECTRICAL                         |   |           |
| Input Voltage / Current            | 24V AC ±10%   |           |
| Power Consumption                  | Max. 40W / 144W (Fan & heater on)   |           |
| MECHANICAL                         |   |           |
| Color / Material                   | Ivory / Aluminum  |           |
| Dimensions (WxHxD)                 | 217.3 x 587.5 x 500.0mm (8.56" x 23.13" x 19.69")   |           |
| Weight                             | 17.5Kg (38.58 lb)   |           |

# SCB-9051/9050

## Weatherproof Thermal Camera



### Key Features

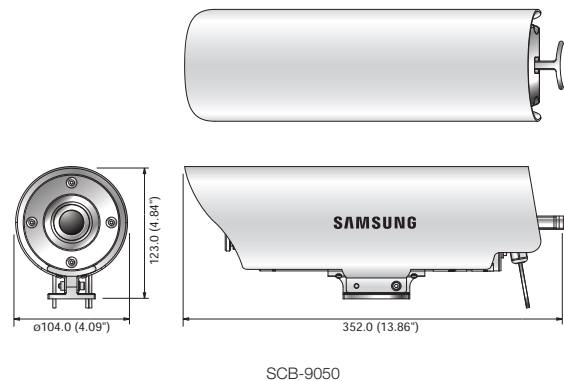
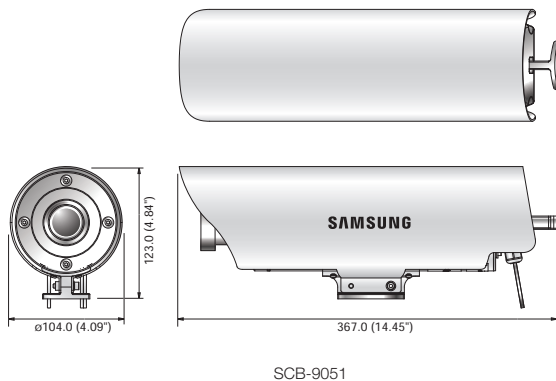
- Outstanding 1km detection without lighting : SCB-9051  
Outstanding 360m detection without lighting : SCB-9050
- Min. discernable temperature of 0.08°C
- Built-in 50mm, 0.47mrad. Color pattern : SCB-9051  
Built-in 14mm, 1.68mrad. Color pattern : SCB-9050
- IP66, RS-485, 24V AC

### Technical Specifications

|                                    | SCB-9051N/9050N  | SCB-9051P/9050P |
|------------------------------------|--|-----------------|
| VIDEO                              |  |                 |
| Imaging Device                     | 320(H) x 240(V) uncooled VOX microbolometer  |                 |
| Sensor Pitch                       | 23.5μm   |                 |
| Measured Wavelength Range          | 8 ~ 14um, LWIR   |                 |
| Video Ratio (Sensor)               | 30fps  | 25fps           |
| Thermal Sensitivity (NETD)         | 85mK@F1.4  |                 |
| Video Output                       | CVBS : 1.0 Vp-p / 75Ω composite  |                 |
| LENS                               |  |                 |
| Focal Length (Zoom Ratio)          | 50mm (Fixed) : SCB-9051, 14mm (Fixed) : SCB-9050   |                 |
| Max. Aperture Ratio                | 1 : 1.4  |                 |
| Angular Field of View (HxV)        | 8.6° x 6.5° : SCB-9051, 30.1° x 22.8° : SCB-9050   |                 |
| Min. Object Distance               | 27m ~ ∞, Pan focus : SCB-9051, 0.5m ~ ∞, Pan focus : SCB-9050  |                 |
| IFOV (Instantaneous Field of View) | 0.47mrad : SCB-9051, 1.68mrad : SCB-9050   |                 |
| Focus Control                      | Manual   |                 |
| OPERATIONAL                        |  |                 |
| On Screen Display                  | English, Japanese, Korean  |                 |
| Image Mode                         | Color 1 / Color 2 / ISO / B/W  |                 |
| Sharpness                          | 6 levels : Off ~ 5   |                 |
| Contrast Enhancement               | 11 levels (Auto), 10 levels (Manual)   |                 |
| Digital Noise Reduction            | 3D (4 Step : Low / Medium / High / Off)  |                 |
| Digital Zoom                       | Off / On (2x ~ 4x)   |                 |
| Communication                      | RS-485   |                 |
| Protocol                           | Samsung-T/E, Pelco-D   |                 |
| ENVIRONMENTAL                      |  |                 |
| Operating Temperature / Humidity   | -30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH  |                 |
| Ingress Protection                 | IP66   |                 |
| ELECTRICAL                         |  |                 |
| Input Voltage / Current            | 24V AC ±10%  |                 |
| Power Consumption                  | Max. 10.5W / 22W (With heater)   |                 |
| MECHANICAL                         |  |                 |
| Color / Material                   | Ivory / Aluminum   |                 |
| Dimensions (WxHxD)                 | Ø104.0 x 123.0 x 367.0mm (Ø4.09" x 4.84" x 14.45") : SCB-9051<br>Ø104.0 x 123.0 x 352.0mm (Ø4.09" x 4.84" x 13.86") : SCB-9050 |                 |
| Weight                             | Approx. 2.2Kg (4.85 lb)  |                 |

### Dimensions

Unit : mm (inch)











# LENS

Samsung Total Security Solution





# Lens Selection

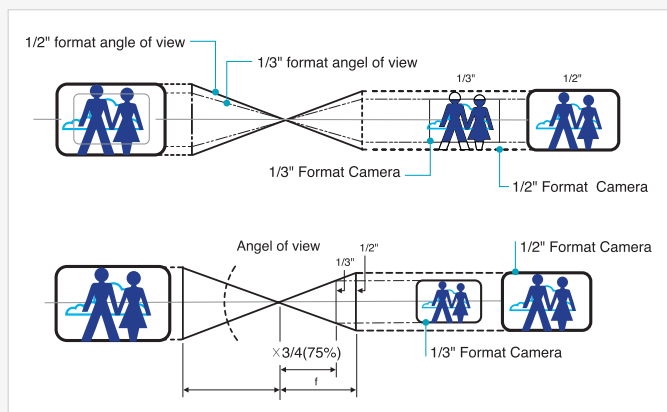
| Lens Description | Model       | Image  | Mount | Image Format | Resolution   | Focal Length                 | Back Focal Length               | Zoom Ratio | F. No | Minimum Angle of View | Operation |           |           | Dimensions (WxHxD)mm / inch                     | Weight (g / lb)  |
|------------------|-------------|--|-------|--------------|--------------|------------------------------|---------------------------------|------------|-------|-----------------------|-----------|-----------|-----------|---|------------------|
|                  |             |  |       |              |              |                              |                                 |            |       |                       | Iris      | Focus     | Zoom      |   |                  |
| Zoom Lens        | SLA-12240   |   | C     | 1/2"         | 1.3Megapixel | 12 ~ 240mm<br>0.47" ~ 9.45"  | 19.82mm<br>0.78"                | 20         | 1.6   | 38.9° ~ 1.9°          | Auto      | Motorized | Motorized | 116.0 x 135.0 x 223.5mm<br>4.57" x 5.31" x 8.8" | 2.6Kg<br>5.73 lb |
|                  | SLA-880     |   |       |              |              | 8 ~ 80mm<br>0.31" ~ 3.14"    | 15.3mm<br>0.6"                  | 10         | 1.2   | 54.3° ~ 5.8°          |           |           |           | 70.0 x 81.0 x 123.5mm<br>2.76" x 3.19" x 4.86"  | 670g<br>1.48 lb  |
| Varifocal Lens   | SLA-3580DN  |   | CS    | 1/3"         | VGA          | 3.5 ~ 8mm<br>0.14" ~ 0.31"   | 8.7 ~ 14.7mm<br>0.34" ~ 0.58"   | 2.3        | 1.0   | 111.2° ~ 44.7°        | DC        | Manual    | Manual    | 38.6 x 45.3 x 46.0mm<br>1.52" x 1.78" x 4.86"   | 54.5g<br>0.12 lb |
|                  | SLA-2810D   |   |       |              |              | 2.8 ~ 10mm<br>0.11" ~ 0.39"  | 7.8 ~ 17mm<br>0.3" ~ 0.67"      | 3          | 1.4   | 115.8° ~ 35.8°        |           |           |           | 40.0 x 46.0 x 57.2mm<br>1.57" x 1.81" x 2.25"   | 65g<br>0.14 lb   |
|                  | SLA-550DA   |   |       |              |              | 5 ~ 50mm<br>0.2" ~ 1.97"     | 7.6 ~ 11.5mm<br>0.3" ~ 0.45"    | 10         | 1.4   | 65.7° ~ 7.2°          |           |           |           | 44.5 x 50.8 x 66.2mm<br>1.75" x 2" x 2.61"      | 126g<br>0.28 lb  |
|                  | SLA-612DN   |   |       | 1/2"         |              | 6 ~ 12mm<br>0.24" ~ 0.47"    | 7.55 ~ 12.13mm<br>0.3" ~ 0.48"  | 2          | 1.6   | 81.4° ~ 38.8°         |           |           |           | 40.4 x 45.7 x 43.5mm<br>1.6" x 1.8" x 1.71"     | 53g<br>0.12 lb   |
|                  | SLA-M2882   |   |       | 1/3"         |              | 2.8 ~ 8.2mm<br>0.11" ~ 0.32" | 7.97 ~ 14.12mm<br>0.31" ~ 0.56" | 2.9        | 1.4   | 116.5° ~ 42.4°        |           |           |           | 43.8 x 48.1 x 52.0mm<br>1.72" x 1.89" x 2.05"   | 100g<br>0.22 lb  |
|                  | SLA-M3180DN |  |       | 1/2.8"       | 3Megapixel   | 3.1 ~ 8mm<br>0.12" ~ 0.31"   | 7.8mm<br>0.31"                  | 2.6        | 1.2   | 123.1° ~ 48.3°        |           |           |           | 43.8 x 48.2 x 55.0mm<br>1.72" x 1.90" x 2.17"   | 59g<br>0.13 lb   |

## Field of View (1/3" TYPE CCD)

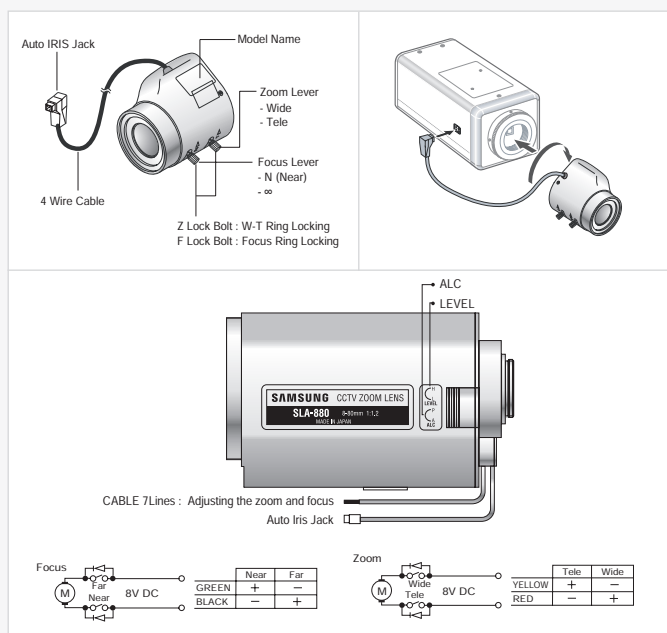
| F(mm)<br>D(m) | 3.6             | 6              | 12            | 16            | 25            | 50            | 75          | 180         |
|---------------|-----------------|----------------|---------------|---------------|---------------|---------------|-------------|-------------|
| 1             | 1.33 x 1.00     | 0.80 x 0.60    | 0.40 x 0.30   | 0.30 x 0.23   | 0.19 x 0.14   | 0.10 x 0.07   | 0.06 x 0.05 | 0.03 x 0.02 |
| 1.5           | 2.00 x 1.50     | 1.20 x 0.90    | 0.60 x 0.45   | 0.45 x 0.34   | 0.29 x 0.22   | 0.14 x 0.11   | 0.10 x 0.07 | 0.04 x 0.03 |
| 2             | 2.67 x 2.00     | 1.60 x 1.20    | 0.80 x 0.60   | 0.60 x 0.45   | 0.38 x 0.29   | 0.19 x 0.14   | 0.13 x 0.10 | 0.05 x 0.04 |
| 2.5           | 3.33 x 2.50     | 2.00 x 1.50    | 1.00 x 0.75   | 0.75 x 0.56   | 0.48 x 0.36   | 0.24 x 0.18   | 0.16 x 0.12 | 0.07 x 0.05 |
| 3             | 4.00 x 3.00     | 2.40 x 1.80    | 1.20 x 1.90   | 0.90 x 0.68   | 0.58 x 0.43   | 0.29 x 0.22   | 0.19 x 0.14 | 0.08 x 0.06 |
| 3.5           | 4.67 x 3.50     | 2.80 x 2.10    | 1.40 x 1.05   | 1.05 x 0.79   | 0.67 x 0.50   | 0.34 x 0.25   | 0.22 x 0.17 | 0.09 x 0.07 |
| 4             | 5.33 x 4.00     | 3.20 x 2.40    | 1.60 x 1.20   | 1.20 x 0.90   | 0.77 x 0.58   | 0.38 x 0.29   | 0.26 x 0.19 | 0.11 x 0.08 |
| 4.5           | 6.00 x 4.50     | 3.60 x 2.70    | 1.80 x 1.35   | 1.35 x 1.01   | 0.86 x 0.65   | 0.43 x 0.32   | 0.29 x 0.22 | 0.12 x 0.09 |
| 5             | 6.67 x 5.00     | 4.00 x 3.00    | 2.00 x 1.50   | 1.50 x 1.13   | 0.96 x 0.72   | 0.48 x 0.36   | 0.32 x 0.24 | 0.13 x 0.10 |
| 6             | 8.00 x 6.00     | 4.80 x 3.60    | 2.40 x 1.80   | 1.80 x 1.35   | 1.15 x 0.86   | 0.58 x 0.43   | 0.38 x 0.29 | 0.16 x 0.12 |
| 7             | 9.33 x 7.00     | 5.60 x 4.20    | 2.80 x 2.10   | 2.10 x 1.58   | 1.34 x 1.01   | 0.67 x 0.50   | 0.45 x 0.34 | 0.19 x 0.14 |
| 8             | 10.67 x 8.00    | 6.40 x 4.80    | 3.20 x 2.40   | 2.40 x 1.80   | 1.54 x 1.15   | 0.77 x 0.58   | 0.51 x 0.38 | 0.21 x 0.16 |
| 9             | 12.00 x 9.00    | 7.20 x 5.40    | 3.60 x 2.70   | 2.70 x 2.03   | 1.73 x 1.30   | 0.86 x 0.65   | 0.58 x 0.43 | 0.24 x 0.18 |
| 10            | 13.33 x 10.00   | 8.00 x 6.00    | 4.00 x 3.00   | 3.00 x 2.25   | 1.92 x 1.44   | 0.96 x 0.72   | 0.64 x 0.48 | 0.27 x 0.20 |
| 11            | 14.67 x 11.00   | 8.80 x 6.60    | 4.40 x 3.30   | 3.30 x 2.48   | 2.11 x 1.58   | 1.06 x 0.79   | 0.70 x 0.53 | 0.29 x 0.22 |
| 12            | 16.00 x 12.00   | 9.60 x 7.20    | 4.80 x 3.60   | 3.60 x 2.70   | 2.30 x 1.73   | 1.15 x 0.86   | 0.77 x 0.58 | 0.32 x 0.24 |
| 13            | 17.33 x 13.00   | 10.40 x 7.80   | 5.20 x 3.90   | 3.90 x 2.93   | 2.50 x 1.87   | 1.25 x 0.94   | 0.83 x 0.62 | 0.35 x 0.26 |
| 14            | 18.67 x 14.00   | 11.20 x 8.40   | 5.60 x 4.20   | 4.20 x 3.15   | 2.69 x 2.02   | 1.34 x 1.01   | 0.90 x 0.67 | 0.37 x 0.28 |
| 15            | 20.00 x 15.00   | 12.00 x 9.00   | 6.00 x 4.50   | 4.50 x 3.38   | 2.88 x 2.16   | 1.44 x 1.08   | 0.96 x 0.72 | 0.40 x 0.30 |
| 20            | 26.67 x 20.00   | 16.00 x 12.00  | 8.00 x 6.00   | 6.00 x 4.50   | 3.84 x 2.88   | 1.92 x 1.44   | 1.28 x 0.96 | 0.53 x 0.40 |
| 25            | 33.33 x 25.00   | 20.00 x 15.00  | 10.00 x 7.50  | 7.50 x 5.63   | 4.80 x 3.60   | 2.40 x 1.80   | 1.60 x 1.20 | 0.67 x 0.50 |
| 30            | 40.00 x 30.00   | 24.00 x 18.00  | 12.00 x 9.00  | 9.00 x 6.75   | 5.76 x 4.32   | 2.88 x 2.16   | 1.92 x 1.44 | 0.80 x 0.60 |
| 60            | 80.00 x 60.00   | 48.00 x 36.00  | 24.00 x 18.00 | 18.00 x 13.50 | 11.52 x 8.64  | 5.76 x 4.32   | 3.84 x 2.88 | 1.60 x 1.20 |
| 90            | 120.00 x 90.00  | 72.00 x 54.00  | 36.00 x 27.00 | 27.00 x 20.25 | 17.28 x 12.96 | 8.64 x 6.48   | 5.76 x 4.32 | 2.40 x 1.80 |
| 120           | 160.00 x 120.00 | 96.00 x 72.00  | 48.00 x 36.00 | 36.00 x 27.00 | 23.04 x 17.28 | 11.52 x 8.64  | 7.68 x 5.76 | 3.20 x 2.40 |
| 150           | 200.00 x 150.00 | 120.00 x 90.00 | 60.00 x 45.00 | 45.00 x 33.75 | 28.80 x 21.60 | 14.40 x 10.80 | 9.60 x 7.20 | 4.00 x 3.00 |

# Lens Terms & Features

## Lens Angle of View



## Lens Parts & Names



## Focal Length

The distance (in millimeters) from the lens to the surface of the image sensor. The shorter the distance, the wider the view : the longer the distance, the narrower (telephoto) the view.



## Varifocal Lens

A lens type that the focal length can be varied to give the exact image desired. It is similar to a manual zoom lens, except that a varifocal lens cannot be zoom tracked.



## Zoom Lens

A lens type that is capable of enlarge or reduce, on a continuously variable basis, the size of a televised image primarily by varying lens focal length.



## C/CS-Mount

The two industry standards for mounting a lens on a camera. The C-mount lens has a 17.5mm flange back distance. The CS-mount lens has a 12.5mm flange back distance.



## Manual / Auto Iris

Iris is the adjustable opening (Mechanical diaphragm) through which light can pass and be regulated.

### Manual iris

A lens with a manual adjustment to set the iris opening (F stop) in a fixed position. Generally used for fixed lighting applications.

### Auto iris

A lens in which the aperture automatically opens or closes to maintain proper light levels on the camera's pickup device.

## Field of View at a Glance

### Field of view formula

| CCD    | 1/4"                 | 1/3"                 | 1/2"                 |
|--------|----------------------|----------------------|----------------------|
| Width  | $(3.6 \times L) / f$ | $(4.8 \times L) / f$ | $(6.4 \times L) / f$ |
| Height | $(2.7 \times L) / f$ | $(3.6 \times L) / f$ | $(4.8 \times L) / f$ |

W (m) : Width of scene

H (m) : Height of scene

f (mm) : Lens focal length

L (m) : Distance between lens and subject

# SLA-12240/880

1/2" C-mount Motorized 20x/10x Zoom Lens



SLA-12240

SLA-880

## Key Features

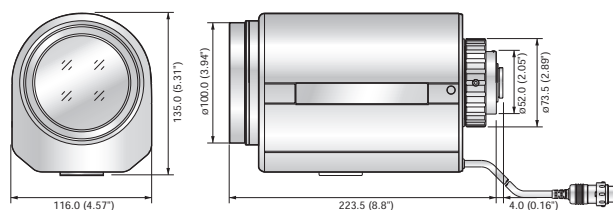
- Built-in 50mm lens with micro bolometer sensor
- Auto iris : SLA-12240 (DC), SLA-880 (Video)
- 20x optical zoom, 12 ~ 240mm / 0.47" ~ 9.45" (SLA-12240)  
10x optical zoom, 8 ~ 80mm / 0.31" ~ 3.15" (SLA-880)

## Technical Specifications

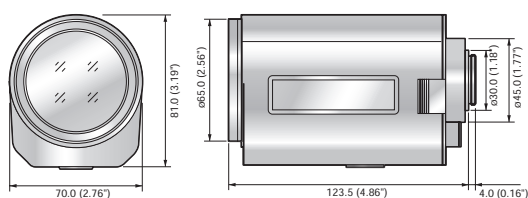
|                            |            | SLA-12240                                      | SLA-880                                       |              |
|----------------------------|------------|--|---|--------------|
| CCD                        |            | 1/2"   | 1/2"  | 1/3"         |
| Resolution                 |            | 1.3Megapixel                                   | VGA   |              |
| Iris Type                  |            | Auto Iris (DC)                                 | Auto iris (Video)                             |              |
| Object Distance            |            | 2.8m ~ ∞                                       | 0.2m ~ ∞                                      |              |
| Zoom                       |            | 20x  | 10x   |              |
| Mount                      |            | C-mount  |   |              |
| Focal Length               |            | 12 ~ 240mm / 0.47" ~ 9.45"                     | 8 ~ 80mm / 0.31" ~ 3.15"                      |              |
| Max. Aperture Ratio        |            | F 1.6  | F 1.2   |              |
| Angle of View              | Diagonal   | 38.9° ~ 1.9°                                   | 54.3° ~ 5.8°                                  | 41.3° ~ 4.4° |
|                            | Horizontal | 30.8° ~ 1.6°                                   | 44.0° ~ 4.7°                                  | 33.3° ~ 3.5° |
|                            | Vertical   | 23° ~ 1.2°                                     | 33.3° ~ 3.5°                                  | 25° ~ 2.6°   |
| Operation                  | Iris       | F 1.6 ~ F 720C                                 | F 1.2 ~ F 560C                                |              |
|                            | Focus      | 2.8m ~ ∞                                       | 1.5m ~ ∞                                      |              |
|                            | Zoom       | 12 ~ 240mm / 0.47" ~ 9.45"                     | 8 ~ 80mm / 0.31" ~ 3.15"                      |              |
| Control                    | Iris       | 3.3V DC  | 8.5V DC ~ 16V DC                              |              |
|                            | Focus      | 6 ~ 12V DC                                     | 8V DC   |              |
|                            | Zoom       | 6 ~ 12V DC                                     | 8V DC   |              |
| Object Dimension at M.O.D. |            | 240mm : 66mm x 50mm                            | 80mm : 123mm x 92mm                           |              |
|                            |            | 9.45" : 2.6" x 1.97"                           | 3.15" : 4.84" x 3.62"                         |              |
| Back Focal Length          |            | 19.82mm / 0.78"                                | 15.3mm / 0.6"                                 |              |
| Flange Back Length         |            | 17.526mm / 0.69"                               | 17.526mm / 0.69"                              |              |
| Preset                     |            | Built-in                                       | N/A   |              |
| Input Signal               |            | Video signal (V or VS)                         |   |              |
| Sensitivity Adjustment     |            | 0.5V(p-p) ~ 1.0V(p-p) (Video signal)           |   |              |
| Operating Temperature      |            | -10°C~ +50°C (+14°F ~ +122°F)                  |   |              |
| Dimensions (WxHxD)         |            | 116.0 x 135.0 x 223.5mm (4.57" x 5.31" x 8.8") | 70.0 x 81.0 x 123.5mm (2.76" x 3.19" x 4.86") |              |
| Weight                     |            | 2.6Kg (5.73 lb)                                | 670g (1.48 lb)                                |              |

## Dimensions

Unit : mm (inch)



SLA-12240



SLA-880

# SLA-3580DN/2810D/550DA/612DN

1/3", 1/2" CS-mount Auto Iris Lens



SLA-3580DN

SLA-2810D

SLA-550DA

SLA-612DN

LENS

## Key Features

- F1.0 (SLA-3580DN), F1.4 (SLA-2810D/550DA)  
F1.6 (SLA-612DN) DC type auto iris
- Varifocal 3.5 ~ 8mm / 0.14" ~ 0.31" (SLA-3580DN)  
2.8 ~ 10mm / 0.11" ~ 0.39" (SLA-2810D)  
5 ~ 50mm / 0.2" ~ 1.97" (SLA-550DA)  
6 ~ 12mm / 0.24" ~ 0.47" (SLA-612DN)

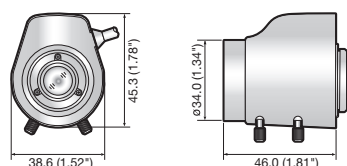
## Technical Specifications

|                         |            | SLA-3580DN                                      | SLA-2810D                                       | SLA-550DA                                    | SLA-612DN                                     |
|-------------------------|------------|---|---|--|---|
| CCD                     |            | 1/3"  | 1/3"  | 1/3"   | 1/2"  |
| Resolution              |            | VGA   | VGA   | VGA  | VGA   |
| Focal Length            |            | 3.5 ~ 8mm                                       | 2.8 ~ 10mm                                      | 5 ~ 50mm                                     | 6 ~ 12mm                                      |
|                         |            | 0.14" ~ 0.31"                                   | 0.11" ~ 0.39"                                   | 0.2" ~ 1.97"                                 | 0.24" ~ 0.47"                                 |
| Max. Aperture Ratio     |            | 1 : 1 ~ 360                                     | 1 : 1.4 ~ 360                                   | 1 : 1.4 ~ 360                                | 1 : 1.6 ~ 300                                 |
| Max. Image Format       |            | 4.8(H) x 3.6(V)                                 | 4.8(H) x 3.6(V)                                 | 4.8(H) x 3.6(V)                              | 6.4(H) x 4.8(V)                               |
| Angle of View           | Diagonal   | 111.2° ~ 44.7°                                  | 115.8° ~ 35.3°                                  | 65.7° ~ 7.2°                                 | 86.4° ~ 38.8°                                 |
|                         | Horizontal | 83.5° ~ 35.6°                                   | 93.7° ~ 28.3°                                   | 52.7° ~ 5.7°                                 | 65.3° ~ 30.8°                                 |
|                         | Vertical   | 60.4° ~ 26.6°                                   | 70.6° ~ 21.2°                                   | 39.6° ~ 4.3°                                 | 47.4° ~ 23°                                   |
| Operation               | Iris       | Auto (F1.0 ~ 360)                               | Auto (F1.4 ~ 360)                               | Auto (F1.4 ~ 360)                            | Auto (F1.6 ~ 300)                             |
|                         | Focus      | Manual  | Manual  | Manual                                       | Manual  |
|                         | Zoom       | Manual  | Manual  | Manual                                       | Manual  |
| Iris Type               |            | DC  | DC  | DC   | DC  |
| Effective Lens Aperture | Front      | Ø17.5mm<br>Ø0.69"                               | Ø20.5mm<br>Ø0.81"                               | Ø37.7mm<br>Ø1.48"                            | Ø17.9mm<br>Ø0.7"                              |
|                         | Rear       | Ø8.8mm<br>Ø0.37"                                | Ø8.8mm<br>Ø0.35"                                | Ø10mm<br>Ø0.4"                               | Ø9mm<br>Ø0.35"                                |
| Back Focal Length       |            | 8.7 ~ 14.7mm<br>0.34" ~ 0.58"                   | 7.8 ~ 17mm<br>0.3" ~ 0.67"                      | 7.6 ~ 11.5mm<br>0.3" ~ 0.45"                 | 7.55 ~ 12.13mm<br>0.3" ~ 0.48"                |
| Flange Back Length      |            | 12.5mm / 0.49"                                  | 12.5mm / 0.49"                                  | 12.5mm / 0.49"                               | 12.5mm / 0.49"                                |
| Mount                   |            | CS-mount  | CS-mount  | CS-mount                                     | CS-mount                                      |
| Dimensions (WxHxD)      |            | 38.6 x 45.3 x 46.0mm<br>(1.52" x 1.78" x 1.81") | 40.0 x 46.0 x 57.2mm<br>(1.57" x 1.81" x 2.25") | 44.5 x 50.8 x 66.2mm<br>(1.75" x 2" x 2.61") | 40.4 x 45.7 x 43.5mm<br>(1.6" x 1.8" x 1.71") |
| Weight                  |            | 54.5g (0.12 lb)                                 | 65g (0.14 lb)                                   | 126g (0.28 lb)                               | 53g (0.12 lb)                                 |

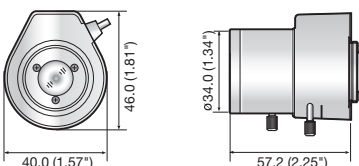
## Dimensions

Unit : mm (inch)

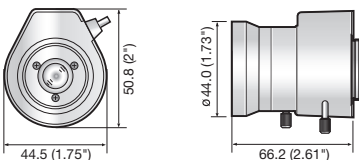
SLA-3580DN



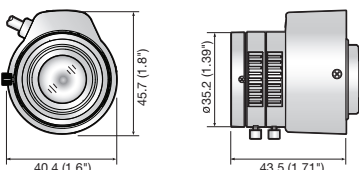
SLA-2810D



SLA-550DA



SLA-612DN





# SLA-M2882/M3180DN

1/3", 1/2.8" CS-mount Auto Iris Megapixel Lens



SLA-M2882



SLA-M3180DN



## Key Features

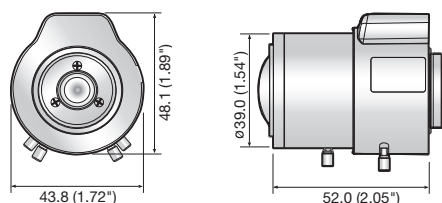
- F1.4 (SLA-M2882), F1.2 (SLA-M3180DN) DC type auto iris
- Varifocal 2.8 ~ 8.2mm / 0.11" ~ 0.32" (SLA-M2882)  
3.1 ~ 8mm / 0.12" ~ 0.31" (SLA-M3180DN)

## Technical Specifications

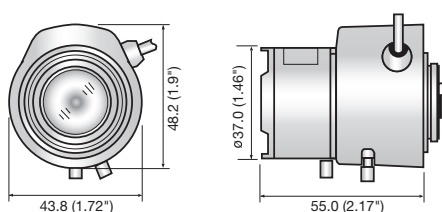
|                         |            | SLA-M2882                                       | SLA-M3180DN                                    |
|-------------------------|------------|---|--|
| CCD                     |            | 1/3"  | 1/2.8"   |
| Resolution              |            | 1.3Megapixel                                    | 3Megapixel                                     |
| Focal Length            |            | 2.8 ~ 8.2mm / 0.11" ~ 0.32"                     | 3.1 ~ 8mm / 0.12" ~ 0.31"                      |
| Max. Aperture Ratio     |            | 1 : 1.4 ~ 360                                   | 1 : 1.2 ~ 360                                  |
| Max. Image Format       |            | 4.8(H) x 3.6(V)                                 | 3.2(H) x 5.8(V)                                |
| Angle of View           | Diagonal   | 116.5° ~ 42.4°                                  | 123.1° ~ 48.3°                                 |
|                         | Horizontal | 94.2° ~ 34.1°                                   | 105.4° ~ 42.2°                                 |
|                         | Vertical   | 71° ~ 25.6°                                     | 57.9° ~ 23.8°                                  |
| Operation               | Iris       | Auto (F1.4 ~ 360)                               | Auto (F1.2 ~ 360)                              |
|                         | Focus      | Manual  | Manual   |
|                         | Zoom       | Manual  | Manual   |
| Iris Type               |            | DC  | DC   |
| Effective Lens Aperture | Front      | Ø26mm / Ø1.02"                                  | Ø20.9mm / Ø0.82"                               |
|                         | Rear       | Ø8.6mm / Ø0.34"                                 | Ø10.5mm / Ø0.41"                               |
| Back Focal Length       |            | 7.97 ~ 14.12mm / 0.31" ~ 0.56"                  | 7.8mm / 0.31"                                  |
| Flange Back Length      |            | 12.5mm / 0.49"                                  | 12.5mm / 0.49"                                 |
| Mount                   |            | CS-mount  | CS-mount                                       |
| Dimensions (WxHxD)      |            | 43.8 x 48.1 x 52.0mm<br>(1.72" x 1.89" x 2.05") | 43.8 x 48.2 x 55.0mm<br>(1.72" x 1.9" x 2.17") |
| Weight                  |            | 100g (0.22 lb)                                  | 59g (0.13 lb)                                  |

## Dimensions

Unit : mm (inch)



SLA-M2882



SLA-M3180DN



# DVR


Samsung Total Security Solution

# DVR Selection

|             |                      | SRD-1670/1670D/1670DC  | SRD-1650/1650D/1650DC  | SRD-1630/1630D/1630DC   |
|-------------|----------------------|--|--|---|
|             |                      |               |              |            |
| OS          | Embedded             | Linux  | Linux  | Linux   |
| Live        | Frame Rate           | 480fps NTSC, 400fps PAL  | 480fps NTSC, 400fps PAL  | 480fps NTSC, 400fps PAL   |
| Recording   | Record Rate / NTSC   | Up to 480fps@704 x 480 (4CIF)<br>Up to 480fps@704 x 240 (2CIF)<br>Up to 480fps@352 x 240 (CIF) | Up to 120fps@704 x 480 (4CIF)<br>Up to 240fps@704 x 240 (2CIF)<br>Up to 480fps@352 x 240 (CIF) | Up to 60fps@704 x 480 (4CIF)<br>Up to 120fps@704 x 240 (2CIF)<br>Up to 240fps@352 x 240 (CIF) |
|             | Record Rate / PAL    | Up to 400fps@704 x 576 (4CIF)<br>Up to 400fps@704 x 288 (2CIF)<br>Up to 400fps@352 x 288 (CIF) | Up to 100fps@704 x 576 (4CIF)<br>Up to 200fps@704 x 288 (2CIF)<br>Up to 400fps@352 x 288 (CIF) | Up to 50fps@704 x 576 (4CIF)<br>Up to 100fps@704 x 288 (2CIF)<br>Up to 200fps@352 x 288 (CIF) |
| Recording   | Compression          | H.264  | H.264  | H.264   |
| Video       | Inputs               | 16CH   | 16CH   | 16CH  |
|             | Resolution           | 704 x 480 NTSC, 704 x 576 PAL  | 704 x 480 NTSC, 704 x 576 PAL  | 704 x 480 NTSC, 704 x 576 PAL   |
| Audio       | Inputs               | 16CH line in (Built-in 4CH)  | 16CH line in (Built-in 4CH)  | 4CH line in (Built-in 4CH)  |
| Storage     | Internal HDD         | Up to 6 SATA HDDs (SRD-1670),<br>Up to 5 SATA HDDs (SRD-1670D/1670DC)                          | Up to 6 SATA HDDs (SRD-1650),<br>Up to 5 SATA HDDs (SRD-1650D/1650DC)                          | Up to 6 SATA HDDs (SRD-1630),<br>Up to 5 SATA HDDs (SRD-1630D/1630DC)                         |
|             | External HDD         | Up to 2 expansion bay  | Up to 2 expansion bay  | N/A   |
| Monitors    | VGA                  | Yes  | Yes  | Yes   |
|             | HDMI                 | Yes  | Yes  | N/A   |
|             | Main Composite       | 1CH  | 1CH  | 1CH   |
|             | Spot Composite       | 4CH  | 1CH  | 1CH   |
| Connections | USB                  | USB 2.0, 3 ports   | USB 2.0, 3 ports   | USB 2.0, 3 ports  |
|             | e-SATA               | 2 External SATA ports  | 2 External SATA ports  | N/A   |
|             | DVD Writer (Back up) | Yes (SRD-1670D/1670DC)   | Yes (SRD-1650D/1650DC)   | Yes (SRD-1630D/1630DC)  |
|             | Mouse                | Yes  | Yes  | Yes   |
| Network     | Remote Users         | Search 3 / Live unicast 10 / Live multicast 20   | Search 3 / Live unicast 10 / Live multicast 20   | Search 3 / Live unicast 10 / Live multicast 20  |
|             | Transmission Speed   | CIF 480/400fps   | CIF 480/400fps   | CIF 480/400fps  |
|             | Monitoring           | NET-i viewer, SmartViewer, Webviewer   | NET-i viewer, SmartViewer, Webviewer   | NET-i viewer, SmartViewer, Webviewer  |

\* Option : Audio extension cable

\* SRD-1670DC/1650DC/1630DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (Coaxitron)]

|             |                      | SRD-1610/1610D/1610DC  | SRD-1652D  | SRD-852D  |
|-------------|----------------------|--|--|---|
|             |                      |           |            |          |
| OS          | Embedded             | Linux  | Linux  | Linux   |
| Live        | Frame Rate           | 480fps NTSC, 400fps PAL  | 480fps NTSC, 400fps PAL  | 240fps NTSC, 200fps PAL   |
| Recording   | Record Rate / NTSC   | Up to 30fps@704 x 480 (4CIF)<br>Up to 60fps@704 x 240 (2CIF)<br>Up to 120fps@352 x 240 (CIF) | Up to 120fps@704 x 480 (4CIF)<br>Up to 240fps@704 x 240 (2CIF)<br>Up to 480fps@352 x 240 (CIF) | Up to 60fps@704 x 480 (4CIF)<br>Up to 120fps@704 x 240 (2CIF)<br>Up to 240fps@352 x 240 (CIF) |
|             | Record Rate / PAL    | Up to 25fps@704 x 576 (4CIF)<br>Up to 50fps@704 x 288 (2CIF)<br>Up to 100fps@352 x 288 (CIF) | Up to 100fps@704 x 576 (4CIF)<br>Up to 200fps@704 x 288 (2CIF)<br>Up to 400fps@352 x 288 (CIF) | Up to 50fps@704 x 576 (4CIF)<br>Up to 100fps@704 x 288 (2CIF)<br>Up to 200fps@352 x 288 (CIF) |
| Recording   | Compression          | H.264  | H.264  | H.264   |
| Video       | Inputs               | 16CH   | 16CH   | 8CH   |
|             | Resolution           | 704 x 480 NTSC, 704 x 576 PAL  | 704 x 480 NTSC, 704 x 576 PAL  | 704 x 480 NTSC, 704 x 576 PAL   |
| Audio       | Inputs               | 4CH line in (Built-in 4CH)   | 4CH line in (Built-in 4CH)   | 4CH line in (Built-in 4CH)  |
| Storage     | Internal HDD         | Up to 6 SATA HDDs (SRD-1610),<br>Up to 5 SATA HDDs (SRD-1610D/1610DC)                        | Up to 4 SATA HDDs  | Up to 4 SATA HDDs   |
|             | External HDD         | N/A  | N/A  | N/A   |
| Monitors    | VGA                  | Yes  | Yes  | Yes   |
|             | HDMI                 | N/A  | N/A  | N/A   |
|             | Main Composite       | 1CH  | 1CH  | 1CH   |
|             | Spot Composite       | 1CH  | 1CH  | 1CH   |
| Connections | USB                  | USB 2.0, 3 ports   | USB 2.0, 2 ports   | USB 2.0, 2 ports  |
|             | e-SATA               | N/A  | N/A  | N/A   |
|             | DVD Writer (Back up) | Yes (SRD-1610D/1610DC)   | Yes  | Yes   |
|             | Mouse                | Yes  | Yes  | Yes   |
| Network     | Remote Users         | Search 3 / Live unicast 10 / Live multicast 20   | Search 3 / Live unicast 10 / Live multicast 20   | Search 3 / Live unicast 10 / Live multicast 20  |
|             | Transmission Speed   | CIF 480/400fps   | CIF 120/100fps   | CIF 120/100fps  |
|             | Monitoring           | NET-i viewer, SmartViewer, Webviewer   | NET-i viewer, SmartViewer, Webviewer   | NET-i viewer, SmartViewer, Webviewer  |

\* Option : Audio extension cable

\* SRD-1610DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (Coaxitron)]

# DVR Selection

|             |                      | SRD-870/870D/870DC   | SRD-850/850D/850DC  | SRD-830/830D/830DC   |
|-------------|----------------------|--|---|--|
|             |                      |               |             |           |
| OS          | Embedded             | Linux  | Linux   | Linux  |
| Live        | Frame Rate           | 240fps NTSC, 200fps PAL  | 240fps NTSC, 200fps PAL   | 240fps NTSC, 200fps PAL  |
| Recording   | Record Rate / NTSC   | Up to 240fps@704 x 480 (4CIF)<br>Up to 240fps@704 x 240 (2CIF)<br>Up to 240fps@352 x 240 (CIF) | Up to 60fps@704 x 480 (4CIF)<br>Up to 120fps@704 x 240 (2CIF)<br>Up to 240fps@352 x 240 (CIF) | Up to 30fps@704 x 480 (4CIF)<br>Up to 60fps@704 x 240 (2CIF)<br>Up to 120fps@352 x 240 (CIF) |
|             | Record Rate / PAL    | Up to 200fps@704 x 576 (4CIF)<br>Up to 200fps@704 x 288 (2CIF)<br>Up to 200fps@352 x 288 (CIF) | Up to 50fps@704 x 576 (4CIF)<br>Up to 100fps@704 x 288 (2CIF)<br>Up to 200fps@352 x 288 (CIF) | Up to 25fps@704 x 576 (4CIF)<br>Up to 50fps@704 x 288 (2CIF)<br>Up to 100fps@352 x 288 (CIF) |
| Recording   | Compression          | H.264  | H.264   | H.264  |
| Video       | Inputs               | 8CH  | 8CH   | 8CH  |
|             | Resolution           | 704 x 480 NTSC, 704 x 576 PAL  | 704 x 480 NTSC, 704 x 576 PAL   | 704 x 480 NTSC, 704 x 576 PAL  |
| Audio       | Inputs               | 8CH line in (Built-in 4CH)   | 8CH line in (Built-in 4CH)  | 4CH line in (Built-in 4CH)   |
| Storage     | Internal HDD         | Up to 6 SATA HDDs (SRD-870),<br>Up to 5 SATA HDDs (SRD-870D/870DC)                             | Up to 6 SATA HDDs (SRD-850),<br>Up to 5 SATA HDDs (SRD-850D/850DC)                            | Up to 6 SATA HDDs (SRD-830),<br>Up to 5 SATA HDDs (SRD-830D/830DC)                           |
|             | External HDD         | Up to 2 expansion bay  | Up to 2 expansion bay   | N/A  |
| Monitors    | VGA                  | Yes  | Yes   | Yes  |
|             | HDMI                 | Yes  | Yes   | N/A  |
|             | Main Composite       | 1CH  | 1CH   | 1CH  |
|             | Spot Composite       | 2CH  | 1CH   | 1CH  |
| Connections | USB                  | USB 2.0, 3 ports   | USB 2.0, 3 ports  | USB 2.0, 3 ports   |
|             | e-SATA               | 2 External SATA ports  | 2 External SATA ports   | N/A  |
|             | DVD Writer (Back up) | Yes (SRD-870D/870DC)   | Yes (SRD-850D/850DC)  | Yes (SRD-830D/830DC)   |
|             | Mouse                | Yes  | Yes   | Yes  |
| Network     | Remote Users         | Search 3 / Live unicast 10 / Live multicast 20   | Search 3 / Live unicast 10 / Live multicast 20  | Search 3 / Live unicast 10 / Live multicast 20   |
|             | Transmission Speed   | CIF 240/200fps   | CIF 240/200fps  | CIF 240/200fps   |
|             | Monitoring           | NET-i viewer, SmartViewer, Webviewer   | NET-i viewer, SmartViewer, Webviewer  | NET-i viewer, SmartViewer, Webviewer   |

\* Option : Audio extension cable

\* SRD-870DC/850DC/830DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (coaxitron)]

|             |                      | SRD-470/470D   | SRD-450  |
|-------------|----------------------|--|--|
|             |                      |             |         |
| OS          | Embedded             | Linux  | Linux  |
| Live        | Frame Rate           | 120fps NTSC, 100fps PAL  | 120fps NTSC, 100fps PAL  |
| Recording   | Record Rate / NTSC   | Up to 120fps@704 x 480 (4CIF)<br>Up to 120fps@704 x 240 (2CIF)<br>Up to 120fps@352 x 240 (CIF) | Up to 30fps@704 x 480 (4CIF)<br>Up to 60fps@704 x 240 (2CIF)<br>Up to 120fps@352 x 240 (CIF) |
|             | Record Rate / PAL    | Up to 100fps@704 x 576 (4CIF)<br>Up to 100fps@704 x 288 (2CIF)<br>Up to 100fps@352 x 288 (CIF) | Up to 25fps@704 x 576 (4CIF)<br>Up to 50fps@704 x 288 (2CIF)<br>Up to 100fps@352 x 288 (CIF) |
| Recording   | Compression          | H.264  | H.264  |
| Video       | Inputs               | 4CH (Built-in 4CH)   | 4CH (Built-in 4CH)   |
|             | Resolution           | 704 x 480 NTSC, 704 x 576 PAL  | 704 x 480 NTSC, 704 x 576 PAL  |
| Audio       | Inputs               | 4CH line in  | 4CH line in  |
| Storage     | Internal HDD         | Up to 2 SATA HDDs (SRD-470),<br>Up to 1 SATA HDD (SRD-470D)                                    | Up to 1 SATA HDD   |
|             | External HDD         | N/A  | N/A  |
| Monitors    | VGA                  | Yes  | Yes  |
|             | HDMI                 | N/A  | N/A  |
|             | Main Composite       | 1CH  | 1CH  |
|             | Spot Composite       | 1CH  | N/A  |
| Connections | USB                  | USB 2.0, 2 ports   | USB 2.0, 2 ports   |
|             | e-SATA               | N/A  | N/A  |
|             | DVD Writer (Back up) | Yes (SRD-470D)   | N/A  |
|             | Mouse                | Yes  | Yes (Not included)   |
| Network     | Remote Users         | Search 3 / Live unicast 10 / Live multicast 20   | Live 4 / Search 4  |
|             | Transmission Speed   | CIF 120/100fps   | CIF 120/100fps   |
|             | Monitoring           | NET-i viewer, SmartViewer, Webviewer   | Webviewer  |

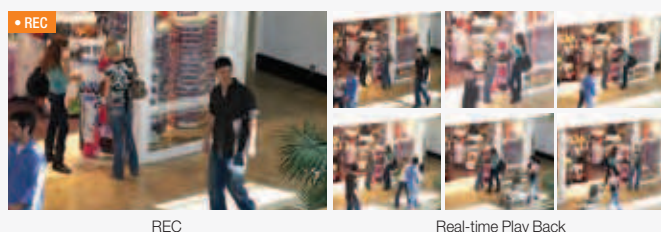


# New DVR Features

## High Quality Image

### High Definition Real-time Recording & Play back

The SRD series features leading live and playback image quality. Each unit is capable of recording up to real-time 4CIF images across selected channels, if not all channels.



### CIF / 4CIF Real-time Recording

With 20 models to choose from there is a recording solution available from CIF to real-time 4CIF recording across all channels to perfectly match both your application and budget.



### High Definition Up-scaling (1080p)

Selected models come complete with an HDMI output able to upscale image to 1080p (1920 x 1080) alongside VGA and BNC outputs to take advantage of the latest monitor formats.



## GUI (Graphic User Interface)

A shared GUI across all models makes it extremely easy to set-up and use the SRD series. Even a first time user will be able to easily navigate the menu and operational functions thanks to its intuitive, user friendly design.

## Motion Search

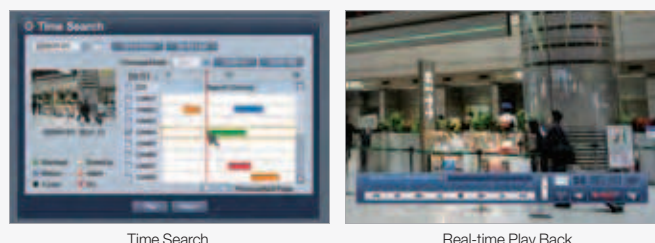
One hour motion search can be easily set up by using the GUI on recorded video to display any changes within the scene within an area of interest. "From" and "to" times can be easily set allowing users to search over a specific time period.



## Searching Preview

When in search mode (all search modes supported), SRD series DVRs display a still image allowing users to easily identify which channel is to be selected.

**Search Mode** • Event • Back up • POS • Motion • Time



## Easy Back up during Play Back

Convenient back-up is possible with all SRD series DVRs allowing users to assign the starting point and the ending point of the video that needs to be backed-up during playback.



## Easy Back up GUI

The easy-to-use GUI supports various back-up modes for each channel. Users can select a back-up device and start/end time and then the DVR automatically checks the capacity of the device.



## VPS (Virtual Progressive Scan)

All DVRs in the range feature VPS, which eliminates the problem of blurred edges on moving objects to provide picture-perfect still frame images.

## Easy Upgrade and Installation

A fully removable back BNC panel allows hard drives to be easily swapped and upgraded without having to unplug all of the cables.

# SRD-1670/1670D/1670DC



16CH 4CIF Real-time H.264 Digital Video Recorder



\*SRD-1670D  
Product Design : 90%  
Features and Functions : 90%  
Video Quality : 90%  
Performance : 90%  
Overall Rating : 90%

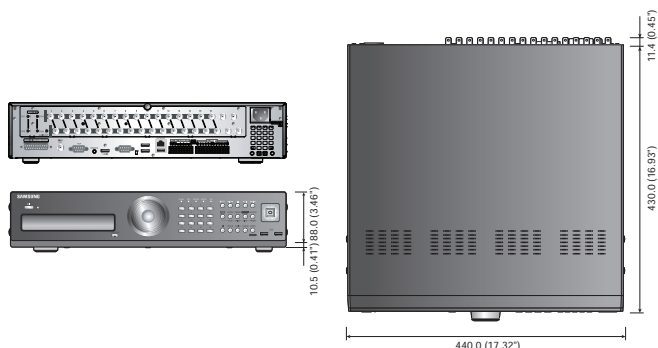


## Key Features

- 16CH 4CIF real-time DVR
- Up to 480(NTSC) / 400(PAL)fps recording rate
- SRD-1670 : Max. 6 internal HDD (HDD x 6)  
SRD-1670D(C) : Max. 5 internal HDD (HDD x 5)
- SRD-1670DC : PTZ control via coaxial cable  
[Samsung CCVC, Pelco-C (Coaxitron)]
- SRD-1670D(C) : DVD-RW
- Support for smart phone

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                    |                                  | SRD-1670  | SRD-1670D         |
|--------------------|----------------------------------|---|-------------------|
| <b>DISPLAY</b>     |                                  |   |                   |
| Video              | Inputs                           | 16 Composite video 0.5-1 Vp-p, 75 ohm automatic termination   |                   |
|                    | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Frame Rate                       | NTSC : 480fps / PAL : 400fps  |                   |
| Live               | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Multi Screen Display             | 1 / 4 / 6 / 8 / 9 / 13 / 16 / PIP   |                   |
| <b>PERFORMANCE</b> |                                  |   |                   |
| Operating System   | Embedded                         | Linux   |                   |
|                    | Compression                      | H.264   |                   |
| Recording          | Record Rate                      | NTSC : Up to 480fps@704 x 480 / PAL : Up to 400fps@704 x 576<br>NTSC : Up to 480fps@704 x 240 / PAL : Up to 400fps@704 x 288<br>NTSC : Up to 480fps@352 x 240 / PAL : Up to 400fps@352 x 288  |                   |
|                    | Mode                             | NTSC : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.9 / 1.9 / 3.8 / 7.5 / 15 / 30fps)<br>PAL : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.8 / 1.6 / 3.1 / 6.2 / 12.5 / 25fps) |                   |
|                    | Overwrite Modes                  | Continuous  |                   |
|                    | Pre-alarm                        | Up to 30sec (5, 10, 20, 30sec)  |                   |
| Search & Playback  | Post-alarm                       | Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)  |                   |
|                    | Search Mode                      | Date/Time, Event, Back up, Pos, Motion (*All search include preview function)   |                   |
|                    | Playback Function                | Fast forward / backward, Slow forward / backward, Step forward / backward   |                   |
|                    | Transmission Speed               | CIF 480/400fps  |                   |
| Network            | Bandwidth                        | Up to 8Mbps, Unlimited (8M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps  |                   |
|                    | Bandwidth Control                | Selectable  |                   |
|                    | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)  |                   |
|                    | Max. Remote Users                | Search 3 / Live unicast 10 / Live multicast 20  |                   |
| Smart Phone        | Protocol Support                 | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP   |                   |
|                    | Monitoring                       | NET-i viewer, SmartViewer, Webviewer  |                   |
|                    | Smart Phone                      | Android, i-Phone  |                   |
|                    | Protocol Support                 | RTSP/RTP (UDP), CGI, HTTP   |                   |
| Storage            | Transmission Speed               | Wi-Fi : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)<br>3G : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)   |                   |
|                    | Max. Remote Users                | Live 1  |                   |
|                    | Internal HDD                     | Up to 6 SATA HDDs   | Up to 5 SATA HDDs |
|                    | External HDD                     | Up to 2 expansion bay (Up to 4 HDD each)  |                   |
| Security           | DVD Writer (Back up)             | N/A   | Yes               |
|                    | USB (Back up)                    | 3 USB ports   |                   |
|                    | File Format (Back up)            | AVI, BU (DVR player), EXE (Include player)  |                   |
|                    | Password Protection              | 1 Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function   |                   |
| <b>INTERFACE</b>   |                                  |   |                   |
| Monitors           | VGA                              | 1 VGA (800 x 600, 1024 x 768, 1280 x 1024)  |                   |
|                    | HDMI                             | 480p / 720p / 1080p resolution  |                   |
|                    | Main Composite                   | 1 BNC, 1 Vp-p, 75 ohm   |                   |
|                    | Spot Composite                   | Digital spot (4 BNC, 1 Vp-p, 75 ohm), support multi screen and camera title   |                   |
| Audio              | Loop Outputs                     | 16  |                   |
|                    | Inputs / Output                  | 16CH line in (Built-in 4CH, option : audio extension cable) / 1CH line out  |                   |
|                    | Compression                      | ADPCM   |                   |
|                    | Sampling Rate                    | 16KHz   |                   |
| Alarm              | Inputs / Output                  | Terminal 16 inputs (NO/NC) / Terminal 4 relay outputs (NO/NC), Rating : 30V DC / 2A, 125V AC / 0.5A   |                   |
|                    | Remote Notification              | Notification via e-mail   |                   |
|                    | Ethernet                         | 1 RJ-45 10/100/1000 Base-T  |                   |
|                    | Serial Interface                 | RS-232/RS-485 for PTZ, Samsung system keyboard  |                   |
| Connections        | USB                              | USB 2.0, 3 ports  |                   |
|                    | eSATA                            | 2 External SATA ports   |                   |
|                    | Application Support              | Mouse, Remote controller  |                   |
|                    | Protocol Support                 | Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, Vicon<br>* SRD-1670DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (Coaxitron)]  |                   |
| <b>GENERAL</b>     |                                  |   |                   |
| Electrical         | Input Voltage / Current          | 100 ~ 240V AC $\pm$ 10%, 50/60Hz, Autoranging   |                   |
|                    | Power Consumption                | Max. 60W (With 1x HDD)  |                   |
| Environmental      | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH  |                   |
|                    | Dimensions (WxHxD)               | 440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")  |                   |
| Mechanical         | Weight (With hard disks)         | Approx. 7.5Kg (16.53 lb)  |                   |
|                    | Rack Mount Kit                   | 2ea   |                   |
| Language           |                                  | Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thailandais, Rumanian, Serbian, Croatian, Hungarian, Greek (22 Language)               |                   |

# SRD-1650/1650D/1650DC



16CH CIF Real-time H.264 Digital Video Recorder

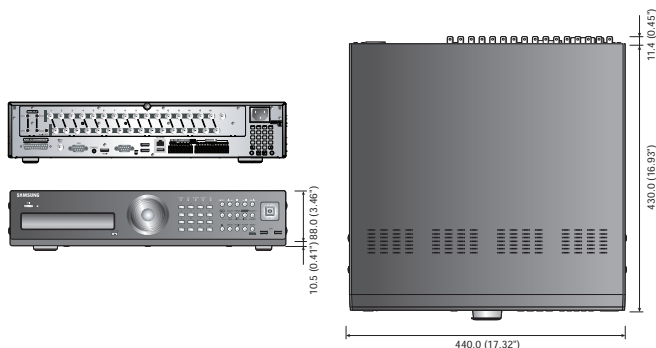


## Key Features

- 16CH CIF real-time DVR
- Up to 480(NTSC) / 400(PAL)fps recording rate
- SRD-1650 : Max. 6 internal HDD (HDD x 6)  
SRD-1650D(C) : Max. 5 internal HDD (HDD x 5)
- SRD-1650DC : PTZ control via coaxial cable  
[Samsung CCVC, Pelco-C (Coaxitron)]
- SRD-1650D(C) : DVD-RW
- Support for smart phone

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                    |                                  | SRD-1650  | SRD-1650D         |
|--------------------|----------------------------------|---|-------------------|
| <b>DISPLAY</b>     |                                  |   |                   |
| Video              | Inputs                           | 16 Composite video 0.5-1 Vp-p, 75 ohm automatic termination   |                   |
|                    | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Frame Rate                       | NTSC : 480fps / PAL : 400fps  |                   |
| Live               | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Multi Screen Display             | 1 / 4 / 6 / 8 / 9 / 13 / 16 / PIP   |                   |
| <b>PERFORMANCE</b> |                                  |   |                   |
| Operating System   | Embedded                         | Linux   |                   |
|                    | Compression                      | H.264   |                   |
| Recording          | Record Rate                      | NTSC : Up to 120fps@704 x 480 / PAL : Up to 100fps@704 x 576<br>NTSC : Up to 240fps@704 x 240 / PAL : Up to 200fps@704 x 288<br>NTSC : Up to 480fps@352 x 240 / PAL : Up to 400fps@352 x 288  |                   |
|                    | Mode                             | NTSC : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.9 / 1.9 / 3.8 / 7.5 / 15 / 30fps)<br>PAL : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.8 / 1.6 / 3.1 / 6.2 / 12.5 / 25fps) |                   |
|                    | Overwrite Modes                  | Continuous  |                   |
|                    | Pre-alarm                        | Up to 30sec (5, 10, 20, 30sec)  |                   |
| Search & Playback  | Post-alarm                       | Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)  |                   |
|                    | Search Mode                      | Date/Time, Event, Back up, Pos, Motion (*All search include preview function)   |                   |
|                    | Playback Function                | Fast forward / backward, Slow forward / backward, Step forward / backward   |                   |
|                    | Transmission Speed               | CIF 480/400fps  |                   |
| Network            | Bandwidth                        | Up to 8Mbps, Unlimited (8M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps  |                   |
|                    | Bandwidth Control                | Selectable  |                   |
|                    | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)  |                   |
|                    | Max. Remote Users                | Search 3 / Live unicast 10 / Live multicast 20  |                   |
| Smart Phone        | Protocol Support                 | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP   |                   |
|                    | Monitoring                       | NET-i viewer, SmartViewer, Webviewer  |                   |
|                    | Smart Phone                      | Android, i-Phone  |                   |
|                    | Protocol Support                 | RTSP/RTP (UDP), CGI, HTTP   |                   |
| Storage            | Transmission Speed               | Wi-Fi : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)<br>3G : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)   |                   |
|                    | Max. Remote Users                | Live 1  |                   |
|                    | Internal HDD                     | Up to 6 SATA HDDs   | Up to 5 SATA HDDs |
|                    | External HDD                     | Up to 2 expansion bay (Up to 4 HDD each)  |                   |
| Security           | DVD Writer (Back up)             | N/A   | Yes               |
|                    | USB (Back up)                    | 3 USB ports   |                   |
|                    | File Format (Back up)            | AVI, BU (DVR player), EXE (Include player)  |                   |
|                    | Password Protection              | 1 Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function   |                   |
| <b>INTERFACE</b>   |                                  |   |                   |
| Monitors           | VGA                              | 1 VGA (800 x 600, 1024 x 768, 1280 x 1024)  |                   |
|                    | HDMI                             | 480p / 720p / 1080p resolution  |                   |
|                    | Main Composite                   | 1 BNC, 1 Vp-p, 75 ohm   |                   |
|                    | Spot Composite                   | Digital spot (1 BNC, 1 Vp-p, 75 ohm), support multi screen and camera title   |                   |
| Audio              | Loop Outputs                     | 16  |                   |
|                    | Inputs / Output                  | 16CH line in (Built-in 4CH, option : audio extension cable) / 1CH line out  |                   |
|                    | Compression                      | ADPCM   |                   |
|                    | Sampling Rate                    | 16KHz   |                   |
| Alarm              | Inputs / Output                  | Terminal 16 inputs (NO/NC) / Terminal 4 relay outputs (NO/NC), Rating : 30V DC / 2A, 125V AC / 0.5A   |                   |
|                    | Remote Notification              | Notification via e-mail   |                   |
|                    | Ethernet                         | 1 RJ-45 10/100/1000 Base-T  |                   |
|                    | Serial Interface                 | RS-232/RS-485 for PTZ, Samsung system keyboard  |                   |
| Connections        | USB                              | USB 2.0, 3 ports  |                   |
|                    | eSATA                            | 2 External SATA ports   |                   |
|                    | Application Support              | Mouse, Remote controller  |                   |
|                    | Protocol Support                 | Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, Vicon<br>* SRD-1650DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (Coaxitron)]  |                   |
| <b>GENERAL</b>     |                                  |   |                   |
| Electrical         | Input Voltage / Current          | 100 ~ 240V AC $\pm$ 10%, 50/60Hz, Autoranging   |                   |
|                    | Power Consumption                | Max. 60W (With 1x HDD)  |                   |
| Environmental      | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH  |                   |
|                    | Dimensions (WxHxD)               | 440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")  |                   |
| Mechanical         | Weight (With hard disks)         | Approx. 7.5Kg (16.53 lb)  |                   |
|                    | Rack Mount Kit                   | 2ea   |                   |
| Language           |                                  | Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thai, Rumanian, Serbian, Croatian, Hungarian, Greek (22 Language)                      |                   |

# SRD-1630/1630D/1630DC



16CH H.264 Digital Video Recorder

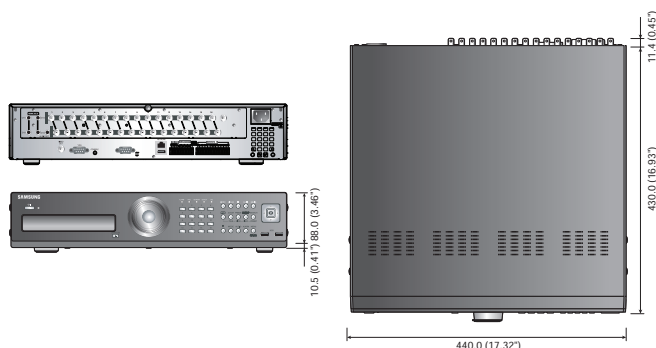


## Key Features

- 16CH DVR
- Up to 240(NTSC) / 200(PAL)fps recording rate
- SRD-1630 : Max. 6 internal HDD (HDD x 6)  
SRD-1630D : Max. 5 internal HDD (HDD x 5)
- SRD-1630DC : PTZ control via coaxial cable  
[Samsung CCVC, Pelco-C (Coaxitron)]
- SRD-1630D(C) : DVD-RW
- Support for smart phone

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                   |                                  | SRD-1630  | SRD-1630D         |
|-------------------|----------------------------------|---|-------------------|
| DISPLAY           |                                  |   |                   |
| Video             | Inputs                           | 16 Composite video 0.5-1 Vp-p, 75 ohm automatic termination   |                   |
|                   | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
| Live              | Frame Rate                       | NTSC : 480fps / PAL : 400fps  |                   |
|                   | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                   | Multi Screen Display             | 1 / 4 / 6 / 8 / 9 / 13 / 16 / PIP   |                   |
| PERFORMANCE       |                                  |   |                   |
| Operating System  | Embedded                         | Linux   |                   |
|                   | Compression                      | H.264   |                   |
| Recording         | Record Rate                      | NTSC : Up to 60fps@704 x 480 / PAL : Up to 50fps@704 x 576<br>NTSC : Up to 120fps@704 x 240 / PAL : Up to 100fps@704 x 288<br>NTSC : Up to 240fps@352 x 240 / PAL : Up to 200fps@352 x 288  |                   |
|                   | Mode                             | NTSC : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.9 / 1.9 / 3.8 / 7.5 / 15 / 30fps)<br>PAL : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.8 / 1.6 / 3.1 / 6.2 / 12.5 / 25fps) |                   |
|                   | Overwrite Modes                  | Continuous  |                   |
|                   | Pre-alarm                        | Up to 30sec (5, 10, 20, 30sec)  |                   |
|                   | Post-alarm                       | Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)  |                   |
| Search & Playback | Search Mode                      | Date/Time, Event, Back up, Pos, Motion (*All search include preview function)   |                   |
|                   | Playback Function                | Fast forward / backward, Slow forward / backward, Step forward / backward   |                   |
| Network           | Transmission Speed               | CIF 480/400fps  |                   |
|                   | Bandwidth                        | Up to 4Mbps, Unlimited (4M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps  |                   |
|                   | Bandwidth Control                | Selectable  |                   |
|                   | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)  |                   |
|                   | Max. Remote Users                | Search 3 / Live unicast 10 / Live multicast 20  |                   |
| Smart Phone       | Protocol Support                 | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP   |                   |
|                   | Monitoring                       | NET-i viewer, SmartViewer, Webviewer  |                   |
|                   | Smart Phone                      | Android, i-Phone  |                   |
|                   | Protocol Support                 | RTSP/RTP (UDP), CGI, HTTP   |                   |
| Storage           | Transmission Speed               | Wi-Fi : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)<br>3G : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)   |                   |
|                   | Max. Remote Users                | Live 1  |                   |
|                   | Internal HDD                     | Up to 6 SATA HDDs   | Up to 5 SATA HDDs |
| Security          | DVD Writer (Back up)             | N/A   | Yes               |
|                   | USB (Back up)                    | 3 USB ports   |                   |
|                   | File Format (Back up)            | AVI, BU (DVR player), EXE (Include player)  |                   |
|                   | Password Protection              | 1 Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function   |                   |
|                   | Data Authentication              | Watermark   |                   |
| INTERFACE         |                                  |   |                   |
| Monitors          | VGA                              | 1 VGA (800 x 600, 1024 x 768, 1280 x 1024)  |                   |
|                   | Main Composite                   | 1 BNC, 1 Vp-p, 75 ohm   |                   |
|                   | Spot Composite                   | Digital spot (1 BNC, 1 Vp-p, 75 ohm), support multi screen and camera title   |                   |
|                   | Loop Outputs                     | 16  |                   |
| Audio             | Inputs / Output                  | 4CH line in / 1CH line out  |                   |
|                   | Compression                      | ADPCM   |                   |
|                   | Sampling Rate                    | 16KHz   |                   |
| Alarm             | Inputs / Output                  | Terminal 16 inputs (NO/NC) / Terminal 4 relay outputs (NO/NC),<br>Rating : 30V DC / 2A, 125V AC / 0.5A  |                   |
|                   | Remote Notification              | Notification via e-mail   |                   |
| Connections       | Ethernet                         | 1 RJ-45 10/100/1000 Base-T  |                   |
|                   | Serial Interface                 | RS-232/RS-485 for PTZ, Samsung system keyboard  |                   |
|                   | USB                              | USB 2.0, 3 ports  |                   |
|                   | Application Support              | Mouse, Remote controller  |                   |
|                   | Protocol Support                 | Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD,<br>DIAMOND, ERNA, KALATEL, VCL TP, Vicon<br>* SRD-1630DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (Coaxitron)]   |                   |
| GENERAL           |                                  |   |                   |
| Electrical        | Input Voltage / Current          | 100 ~ 240V AC $\pm$ 10%, 50/60Hz, Autoranging   |                   |
|                   | Power Consumption                | Max. 60W (With 1x HDD)  |                   |
| Environmental     | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH  |                   |
|                   | Dimensions (WxHxD)               | 440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")  |                   |
| Mechanical        | Weight (With hard disks)         | Approx. 7.5Kg (16.53 lb)  |                   |
|                   | Rack Mount Kit                   | 2ea   |                   |
| Language          |                                  | Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian,<br>Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thailandais,<br>Rumanian, Serbian, Croatian, Hungarian, Greek (22 Language)         |                   |



# SRD-1610/1610D/1610DC



16CH H.264 Digital Video Recorder

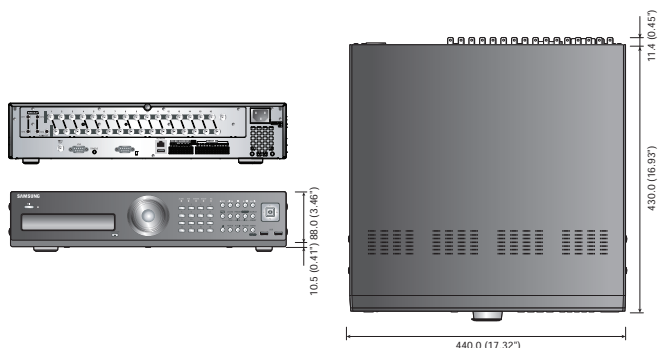


## Key Features

- 16CH DVR
- Up to 120(NTSC) / 100(PAL)fps recording rate
- SRD-1610 : Max. 6 internal HDD (HDD x 6)  
SRD-1610D : Max. 5 internal HDD (HDD x 5)
- SRD-1610DC : PTZ control via coaxial cable  
[Samsung CCVC, Pelco-C (Coaxitron)]
- SRD-1610D(C) : DVD-RW
- Support for smart phone

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                    | SRD-1610                         | SRD-1610D   |
|--------------------|----------------------------------|---|
| <b>DISPLAY</b>     |                                  |   |
| Video              | Inputs                           | 16 Composite video 0.5-1 Vp-p, 75 ohm automatic termination   |
|                    | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |
|                    | Frame Rate                       | NTSC : 480fps / PAL : 400fps  |
| Live               | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |
|                    | Multi Screen Display             | 1 / 4 / 6 / 8 / 9 / 13 / 16 / PIP   |
| <b>PERFORMANCE</b> |                                  |   |
| Operating System   | Embedded                         | Linux   |
|                    | Compression                      | H.264   |
| Recording          | Record Rate                      | NTSC : Up to 30fps@704 x 480 / PAL : Up to 25fps@704 x 576<br>NTSC : Up to 60fps@704 x 240 / PAL : Up to 50fps@704 x 288<br>NTSC : Up to 120fps@352 x 240 / PAL : Up to 100fps@352 x 288  |
|                    | Mode                             | NTSC : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.9 / 1.9 / 3.8 / 7.5 / 15 / 30fps)<br>PAL : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.8 / 1.6 / 3.1 / 6.2 / 12.5 / 25fps) |
|                    | Overwrite Modes                  | Continuous  |
|                    | Pre-alarm                        | Up to 30sec (5, 10, 20, 30sec)  |
| Search & Playback  | Post-alarm                       | Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)  |
|                    | Search Mode                      | Date/Time, Event, Back up, Pos, Motion (*All search include preview function)   |
|                    | Playback Function                | Fast forward / backward, Slow forward / backward, Step forward / backward   |
|                    | Transmission Speed               | CIF 480/400fps  |
| Network            | Bandwidth                        | Up to 4Mbps, Unlimited (4M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps  |
|                    | Bandwidth Control                | Selectable  |
|                    | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)  |
|                    | Max. Remote Users                | Search 3 / Live unicast 10 / Live multicast 20  |
| Smart Phone        | Protocol Support                 | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP   |
|                    | Monitoring                       | NET-i viewer, SmartViewer, Webviewer  |
|                    | Smart Phone                      | Android, i-Phone  |
|                    | Protocol Support                 | RTSP/RTP (UDP), CGI, HTTP   |
| Storage            | Transmission Speed               | Wi-Fi : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)<br>3G : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)   |
|                    | Max. Remote Users                | Live 1  |
|                    | Internal HDD                     | Up to 6 SATA HDDs   |
|                    | DVD Writer (Back up)             | N/A   |
| Security           | USB (Back up)                    | 3 USB ports   |
|                    | File Format (Back up)            | AVI, BU (DVR player), EXE (Include player)  |
|                    | Password Protection              | 1 Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function   |
|                    | Data Authentication              | Watermark   |
| <b>INTERFACE</b>   |                                  |   |
| Monitors           | VGA                              | 1 VGA (800 x 600, 1024 x 768, 1280 x 1024)  |
|                    | Main Composite                   | 1 BNC, 1 Vp-p, 75 ohm   |
|                    | Spot Composite                   | Digital spot (1 BNC, 1 Vp-p, 75 ohm), support multi screen and camera title   |
|                    | Loop Outputs                     | 16  |
| Audio              | Inputs / Output                  | 4CH line in / 1CH line out  |
|                    | Compression                      | ADPCM   |
|                    | Sampling Rate                    | 16KHz   |
| Alarm              | Inputs / Output                  | Terminal 16 inputs (NO/NC) / Terminal 4 relay outputs (NO/NC),<br>Rating : 30V DC / 2A, 125V AC / 0.5A  |
|                    | Remote Notification              | Notification via e-mail   |
|                    | Ethernet                         | 1 RJ-45 10/100/1000 Base-T  |
|                    | Serial Interface                 | RS-232/RS-485 for PTZ, Samsung system keyboard  |
| Connections        | USB                              | USB 2.0, 3 ports  |
|                    | Application Support              | Mouse, Remote controller  |
|                    | Protocol Support                 | Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, Vicon  |
|                    |                                  | * SRD-1610DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (Coaxitron)]  |
| <b>GENERAL</b>     |                                  |   |
| Electrical         | Input Voltage / Current          | 100 ~ 240V AC $\pm$ 10%, 50/60Hz, Autoranging   |
|                    | Power Consumption                | Max. 60W (With 1x HDD)  |
| Environmental      | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH  |
|                    | Dimensions (WxHxD)               | 440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")  |
| Mechanical         | Weight (With hard disks)         | Approx. 7.5Kg (16.53 lb)  |
|                    | Rack Mount Kit                   | 2ea   |
| Language           |                                  | Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thai, Rumanian, Serbian, Croatian, Hungarian, Greek (22 Language)                      |

# SRD-1652D/852D



## 16CH/8CH CIF Real-time H.264 Digital Video Recorder



SRD-1652D



SRD-852D

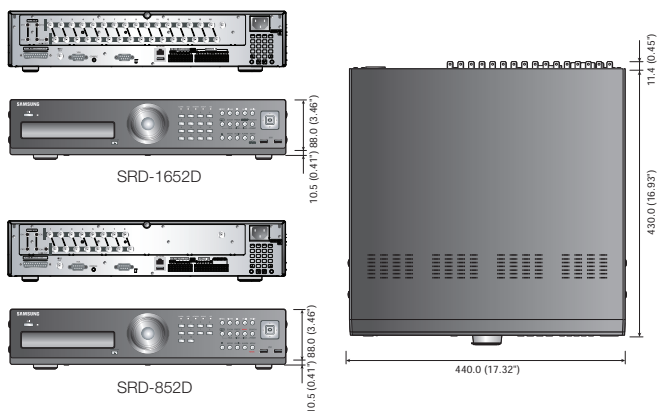


### Key Features

- 16CH/8CH CIF real-time DVR
- SRD-1652D : Up to 480(NTSC) / 400(PAL)fps recording rate  
SRD-852D : Up to 240(NTSC) / 200(PAL)fps recording rate
- Max. 4 internal HDD (HDD x 4)
- DVD-RW
- Support for smart phone

### Dimensions

Unit : mm (inch)



### Technical Specifications

|                    |                                  | SRD-1652D  | SRD-852D   |
|--------------------|----------------------------------|--|--|
| <b>DISPLAY</b>     |                                  |  |  |
| Video              | Inputs                           | 16 Composite video 0.5-1 Vp-p  | 8 Composite video 0.5-1 Vpp  |
|                    | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576   |  |
|                    | Frame Rate                       | NTSC : 480fps / PAL : 400fps   | NTSC : 240fps / PAL : 200fps   |
| Live               | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576   |  |
|                    | Multi Screen Display             | 1 / 4 / 6 / 8 / 9 / 13 / 16 / PIP  | 1 / 4 / 6 / 8 / 9 / 13 / PIP   |
| <b>PERFORMANCE</b> |                                  |  |  |
| Operating System   | Embedded                         | Linux  |  |
|                    | Compression                      | H.264  |  |
| Recording          | Record Rate                      | NTSC : Up to 120fps@704 x 480<br>NTSC : Up to 240fps@704 x 240<br>NTSC : Up to 480fps@352 x 240  | NTSC : Up to 60fps@704 x 480<br>NTSC : Up to 120fps@704 x 240<br>NTSC : Up to 240fps@352 x 240                                     |
|                    |                                  | PAL : Up to 100fps@704 x 576<br>PAL : Up to 200fps@704 x 288<br>PAL : Up to 400fps@352 x 288   | PAL : Up to 50fps@704 x 576<br>PAL : Up to 100fps@704 x 288<br>PAL : Up to 200fps@352 x 288  |
|                    |                                  | Mode   |  |
|                    | Overwrite Modes                  | Continuous   |  |
| Search & Playback  | Pre-alarm                        | Up to 5sec   |  |
|                    | Post-alarm                       | Up to 6hour (5,10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)  |  |
|                    | Search Mode                      | Date/Time, Event, Back up, Pos, Motion (*All search mode include preview function)   |  |
|                    | Playback Function                | Fast forward / backward, Slow forward / backward, Step forward / backward  |  |
| Network            | Transmission Speed               | CIF 120/100fps   |  |
|                    | Bandwidth                        | Up to 8Mbps, Unlimited (8M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps   |  |
|                    | Bandwidth Control                | Selectable   |  |
|                    | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)   |  |
| Smart Phone        | Max. Remote Users                | Search 3 / Live unicast 10 / Live multicast 20   |  |
|                    | Protocol Support                 | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP  |  |
|                    | Monitoring                       | NET-i viewer, SmartViewer, Webviewer   |  |
|                    | Smart Phone                      | Android, i-Phone   |  |
| Storage            | Protocol Support                 | RTSP/RTP (UDP), CGI, HTTP  |  |
|                    | Transmission Speed               | Wi-Fi : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)<br>3G : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)  |  |
|                    | Max. Remote Users                | Live 1   |  |
|                    | Internal HDD                     | Up to 4 SATA HDDs  |  |
| Security           | DVD Writer (Back up)             | Yes  |  |
|                    | USB (Back up)                    | 2 USB ports  |  |
|                    | File Format (Back up)            | AVI, BU (DVR player), EXE (Include player)   |  |
| INTERFACE          | Password Protection              | 1 Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function  |  |
|                    | Data Authentication              | Watermark  |  |
| Monitors           | VGA                              | 1 VGA (800 x 600, 1024 x 768, 1280 x 1024)   |  |
|                    | Main Composite                   | 1 BNC, 1.0 Vp-p, 75 ohm  |  |
|                    | Spot Composite                   | Analog spot (1 BNC, 1 Vp-p, 75 ohm)  |  |
| Audio              | Inputs / Output                  | 4 Line in (Built-in 4CH, RCA / 1CH line out (RCA))   |  |
|                    | Compression                      | ADPCM  |  |
|                    | Sampling Rate                    | 16KHz  |  |
| Alarm              | Inputs / Output                  | Terminal 16 inputs (NO/NC), Terminal 1 inputs (Alarm Reset), Terminal 4 relay outputs (NO/NC), Rating : 24V DC / 1A, 125V AC / 0.5A  | Terminal 8 inputs (NO/NC), Terminal 1 inputs (Alarm Reset), Terminal 4 relay outputs (NO/NC), Rating : 24V DC / 1A, 125V AC / 0.5A |
|                    | Remote Notification              | Notification via e-mail  |  |
|                    | Ethernet                         | 1 RJ-45 10/100/1000 Base-T   |  |
| Connections        | Serial Interface                 | RS-232/RS-485 for PTZ, Samsung system keyboard   |  |
|                    | USB                              | USB 2.0, 2 ports (Front)   |  |
|                    | Application Support              | Mouse, Remote controller   |  |
| GENERAL            | Protocol Support                 | Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, Vicon   |  |
|                    | Electrical                       | Input Voltage / Current 100 ~ 240V AC $\pm$ 10%, 50/60Hz, Autoranging  |  |
| Environmental      | Power Consumption                | Max. 60W (With 1x HDD)   |  |
|                    | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH   |  |
| Mechanical         | Dimensions (WxHxD)               | 440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")   |  |
|                    | Weight (With hard disks)         | Approx. 7.5Kg (16.53 lb)   |  |
| Language           | Rack Mount Kit                   | 2ea  |  |
|                    | Language                         | Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thai, Rumanian, Serbian, Croatian, Hungarian, Greek (22 Language) |  |

# SRD-870/870D/870DC



8CH 4CIF H.264 Real-time Digital Video Recorder

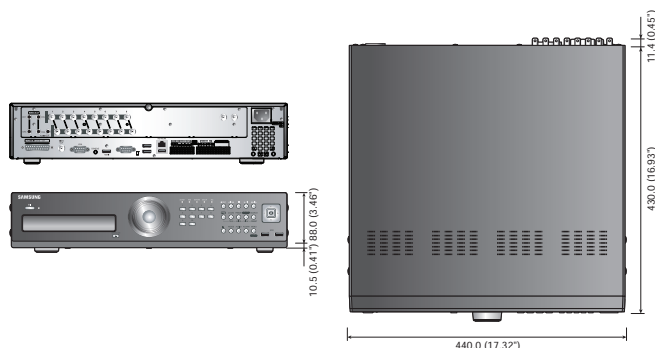


## Key Features

- 8CH 4CIF real-time DVR
- Up to 240(NTSC) / 200(PAL)fps recording rate
- SRD-870 : Max. 6 internal HDD (HDD x 6)  
SRD-870D(C) : Max. 5 internal HDD (HDD x 5)
- SRD-870DC : PTZ control via coaxial cable  
[Samsung CCVC, Pelco-C (Coaxitron)]
- SRD-870D(C) : DVD-RW
- Support for smart phone

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                    |                                  | SRD-870   | SRD-870D          |
|--------------------|----------------------------------|---|-------------------|
| <b>DISPLAY</b>     |                                  |   |                   |
| Video              | Inputs                           | 8 Composite video 0.5-1 Vp-p, 75 ohm automatic termination  |                   |
|                    | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Frame Rate                       | NTSC : 240fps / PAL : 200fps  |                   |
| Live               | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Multi Screen Display             | 1 / 4 / 6 / 8 / 9 / 13 / PIP  |                   |
| <b>PERFORMANCE</b> |                                  |   |                   |
| Operating System   | Embedded                         | Linux   |                   |
|                    | Compression                      | H.264   |                   |
| Recording          | Record Rate                      | NTSC : Up to 240fps@704 x 480 / PAL : Up to 200fps@704 x 576<br>NTSC : Up to 240fps@704 x 240 / PAL : Up to 200fps@704 x 288<br>NTSC : Up to 240fps@352 x 240 / PAL : Up to 200fps@352 x 288  |                   |
|                    | Mode                             | NTSC : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.9 / 1.9 / 3.8 / 7.5 / 15 / 30fps)<br>PAL : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.8 / 1.6 / 3.1 / 6.2 / 12.5 / 25fps) |                   |
|                    | Overwrite Modes                  | Continuous  |                   |
|                    | Pre-alarm                        | Up to 30sec (5, 10, 20, 30sec)  |                   |
| Search & Playback  | Post-alarm                       | Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)  |                   |
|                    | Search Mode                      | Date/Time, Event, Back up, Pos, Motion (*All search include preview function)   |                   |
|                    | Playback Function                | Fast forward / backward, Slow forward / backward, Step forward / backward   |                   |
|                    | Transmission Speed               | CIF 240/200fps  |                   |
| Network            | Bandwidth                        | Up to 8Mbps, Unlimited (8M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps  |                   |
|                    | Bandwidth Control                | Selectable  |                   |
|                    | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)  |                   |
|                    | Max. Remote Users                | Search 3 / Live unicast 10 / Live multicast 20  |                   |
| Smart Phone        | Protocol Support                 | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP   |                   |
|                    | Monitoring                       | NET-i viewer, SmartViewer, Webviewer  |                   |
|                    | Smart Phone                      | Android, i-Phone  |                   |
|                    | Protocol Support                 | RTSP/RTP (UDP), CGI, HTTP   |                   |
| Storage            | Transmission Speed               | Wi-Fi : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)<br>3G : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)   |                   |
|                    | Max. Remote Users                | Live 1  |                   |
|                    | Internal HDD                     | Up to 6 SATA HDDs   | Up to 5 SATA HDDs |
|                    | External HDD                     | Up to 2 expansion bay (Up to 4 HDD each)  |                   |
| Security           | DVD Writer (Back up)             | N/A   | Yes               |
|                    | USB (Back up)                    | 3 USB ports   |                   |
|                    | File Format (Back up)            | AVI, BU (DVR player), EXE (Include player)  |                   |
|                    | Password Protection              | 1 Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function   |                   |
| <b>INTERFACE</b>   |                                  |   |                   |
| Monitors           | VGA                              | 1 VGA (800 x 600, 1024 x 768, 1280 x 1024)  |                   |
|                    | HDMI                             | 480p / 720p / 1080p resolution  |                   |
|                    | Main Composite                   | 1 BNC, 1 Vp-p, 75 ohm   |                   |
|                    | Spot Composite                   | Digital spot (2 BNC, 1 Vp-p, 75 ohm), support multi screen and camera title   |                   |
| Audio              | Loop Outputs                     | 8   |                   |
|                    | Inputs / Output                  | 8CH line in (Built-in 4CH, option : audio extension cable) / 1CH line out   |                   |
|                    | Compression                      | ADPCM   |                   |
|                    | Sampling Rate                    | 16KHz   |                   |
| Alarm              | Inputs / Output                  | Terminal 8 inputs (NO/NC) / Terminal 4 relay outputs (NO/NC),<br>Rating : 30V DC / 2A, 125V AC / 0.5A   |                   |
|                    | Remote Notification              | Notification via e-mail   |                   |
|                    | Ethernet                         | 1 RJ-45 10/100/1000 Base-T  |                   |
|                    | Serial Interface                 | RS-232/RS-485 for PTZ, Samsung system keyboard  |                   |
| Connections        | USB                              | USB 2.0, 3 ports  |                   |
|                    | eSATA                            | 2 External SATA ports   |                   |
|                    | Application Support              | Mouse, Remote controller  |                   |
|                    | Protocol Support                 | Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, Vicon<br>* SRD-870DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (Coaxitron)]   |                   |
| <b>GENERAL</b>     |                                  |   |                   |
| Electrical         | Input Voltage / Current          | 100 ~ 240V AC $\pm$ 10%, 50/60Hz, Autoranging   |                   |
|                    | Power Consumption                | Max. 60W (With 1x HDD)  |                   |
| Environmental      | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH  |                   |
|                    | Dimensions (WxHxD)               | 440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")  |                   |
| Mechanical         | Weight (With hard disks)         | Approx. 7.5Kg (16.53 lb)  |                   |
|                    | Rack Mount Kit                   | 2ea   |                   |
| Language           |                                  | Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thailandais, Rumanian, Serbian, Croatian, Hungarian, Greek (22 Language)               |                   |

# SRD-850/850D/850DC



8CH CIF H.264 Real-time Digital Video Recorder

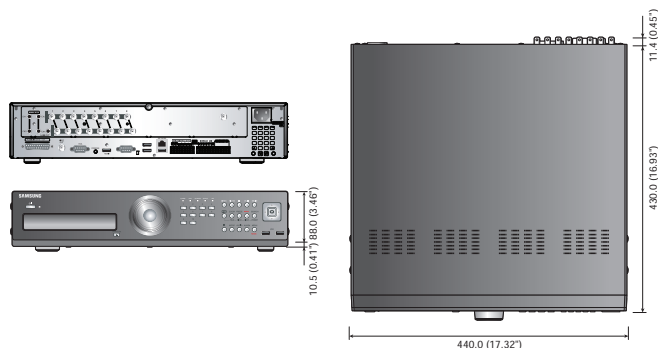


## Key Features

- 8CH CIF real-time DVR
- Up to 240(NTSC) / 200(PAL)fps recording rate
- SRD-850 : Max. 6 internal HDD (HDD x 6)  
SRD-850D(C) : Max. 5 internal HDD (HDD x 5)
- SRD-850DC : PTZ control via coaxial cable  
[Samsung CCVC, Pelco-C (Coaxitron)]
- SRD-850D(C) : DVD-RW
- Support for smart phone

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                    |                                  | SRD-850   | SRD-850D          |
|--------------------|----------------------------------|---|-------------------|
| <b>DISPLAY</b>     |                                  |   |                   |
| Video              | Inputs                           | 8 Composite video 0.5-1 Vp-p, 75 ohm automatic termination  |                   |
|                    | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Frame Rate                       | NTSC : 240fps / PAL : 200fps  |                   |
| Live               | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Multi Screen Display             | 1 / 4 / 6 / 8 / 9 / 13 / PIP  |                   |
| <b>PERFORMANCE</b> |                                  |   |                   |
| Operating System   | Embedded                         | Linux   |                   |
|                    | Compression                      | H.264   |                   |
|                    | Record Rate                      | NTSC : Up to 60fps@704 x 480 / PAL : Up to 50fps@704 x 576<br>NTSC : Up to 120fps@704 x 240 / PAL : Up to 100fps@704 x 288<br>NTSC : Up to 240fps@352 x 240 / PAL : Up to 200fps@352 x 288  |                   |
| Recording          | Mode                             | NTSC : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.9 / 1.9 / 3.8 / 7.5 / 15 / 30fps)<br>PAL : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.8 / 1.6 / 3.1 / 6.2 / 12.5 / 25fps) |                   |
|                    | Overwrite Modes                  | Continuous  |                   |
|                    | Pre-alarm                        | Up to 30sec (5, 10, 20, 30sec)  |                   |
| Search & Playback  | Post-alarm                       | Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)  |                   |
|                    | Search Mode                      | Date/Time, Event, Back up, Pos, Motion (*All search include preview function)   |                   |
|                    | Playback Function                | Fast forward / backward, Slow forward / backward, Step forward / backward   |                   |
| Network            | Transmission Speed               | CIF 240/200fps  |                   |
|                    | Bandwidth                        | Up to 8Mbps, Unlimited (8M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps  |                   |
|                    | Bandwidth Control                | Selectable  |                   |
| Smart Phone        | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)  |                   |
|                    | Max. Remote Users                | Search 3 / Live unicast 10 / Live multicast 20  |                   |
|                    | Protocol Support                 | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP   |                   |
| Storage            | Monitoring                       | NET-i viewer, SmartViewer, Webviewer  |                   |
|                    | Smart Phone                      | Android, i-Phone  |                   |
|                    | Protocol Support                 | RTSP/RTP (UDP), CGI, HTTP   |                   |
| Security           | Transmission Speed               | Wi-Fi : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)<br>3G : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)   |                   |
|                    | Max. Remote Users                | Live 1  |                   |
|                    | Internal HDD                     | Up to 6 SATA HDDs   | Up to 5 SATA HDDs |
| Interface          | External HDD                     | Up to 2 expansion bay (Up to 4 HDD each)  |                   |
|                    | DVD Writer (Back up)             | N/A   | Yes               |
|                    | USB (Back up)                    | 3 USB ports   |                   |
| Monitors           | File Format (Back up)            | AVI, BU (DVR player), EXE (Include player)  |                   |
|                    | Password Protection              | 1 Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function   |                   |
|                    | Data Authentication              | Watermark   |                   |
| Audio              | VGA                              | 1 VGA (800 x 600, 1024 x 768, 1280 x 1024)  |                   |
|                    | HDMI                             | 480p / 720p / 1080p resolution  |                   |
|                    | Main Composite                   | 1 BNC, 1 Vp-p, 75 ohm   |                   |
| Alarm              | Spot Composite                   | Digital spot (1 BNC, 1 Vp-p, 75 ohm), support multi screen and camera title   |                   |
|                    | Loop Outputs                     | 8   |                   |
|                    | Inputs / Output                  | 8CH line in (Built-in 4CH, option : audio extension cable) / 1CH line out   |                   |
| Connections        | Compression                      | ADPCM   |                   |
|                    | Sampling Rate                    | 16KHz   |                   |
|                    | Inputs / Output                  | Terminal 8 inputs (NO/NC) / Terminal 4 relay outputs (NO/NC),<br>Rating : 30V DC / 2A, 125V AC / 0.5A   |                   |
| GENERAL            | Remote Notification              | Notification via e-mail   |                   |
|                    | Ethernet                         | 1 RJ-45 10/100/1000 Base-T  |                   |
|                    | Serial Interface                 | RS-232C/RS-485 for PTZ, Samsung system keyboard   |                   |
| Electrical         | USB                              | USB 2.0, 3 ports  |                   |
|                    | eSATA                            | 2 External SATA ports   |                   |
|                    | Application Support              | Mouse, Remote controller  |                   |
| Environmental      | Protocol Support                 | Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, Vicon<br>* SRD-850DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (Coaxitron)]   |                   |
|                    | Input Voltage / Current          | 100 ~ 240V AC $\pm 10\%$ , 50/60Hz, Autoranging   |                   |
|                    | Power Consumption                | Max. 60W (With 1x HDD)  |                   |
| Mechanical         | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH  |                   |
|                    | Dimensions (WxHxD)               | 440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")  |                   |
|                    | Weight (With hard disks)         | Approx. 7.5Kg (16.53 lb)  |                   |
| Language           | Rack Mount Kit                   | 2ea   |                   |
|                    |                                  | Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thailandais, Rumanian, Serbian, Croatian, Hungarian, Greek (22 Language)               |                   |
|                    |                                  |   |                   |



# SRD-830/830D/830DC



8CH H.264 Digital Video Recorder

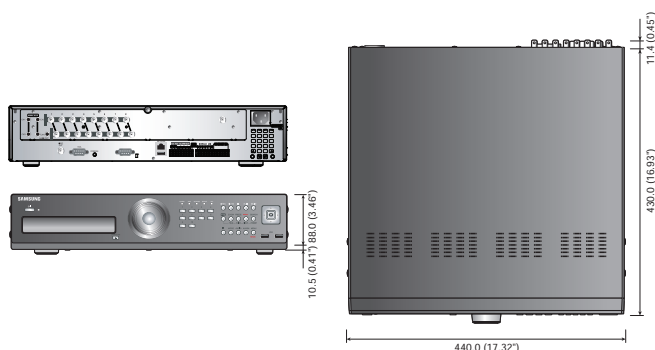


## Key Features

- 8CH DVR
- Up to 120(NTSC) / 100(PAL)fps recording rate
- SRD-830 : Max. 6 internal HDD (HDD x 6)  
SRD-830D : Max. 5 internal HDD (HDD x 5)
- SRD-830DC : PTZ control via coaxial cable  
[Samsung CCVC, Pelco-C (Coaxitron)]
- SRD-830D(C) : DVD-RW
- Support for smart phone

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                    |                                  | SRD-830   | SRD-830D          |
|--------------------|----------------------------------|---|-------------------|
| <b>DISPLAY</b>     |                                  |   |                   |
| Video              | Inputs                           | 8 Composite video 0.5-1 Vp-p, 75 ohm automatic termination  |                   |
|                    | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Frame Rate                       | NTSC : 240fps / PAL : 200fps  |                   |
| Live               | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |                   |
|                    | Multi Screen Display             | 1 / 4 / 6 / 8 / 9 / 13 / PIP  |                   |
| <b>PERFORMANCE</b> |                                  |   |                   |
| Operating System   | Embedded                         | Linux   |                   |
|                    | Compression                      | H.264   |                   |
| Recording          | Record Rate                      | NTSC : Up to 30fps@704 x 480 / PAL : Up to 25fps@704 x 576<br>NTSC : Up to 60fps@704 x 240 / PAL : Up to 50fps@704 x 288<br>NTSC : Up to 120fps@352 x 240 / PAL : Up to 100fps@352 x 288  |                   |
|                    | Mode                             | NTSC : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.9 / 1.9 / 3.8 / 7.5 / 15 / 30fps)<br>PAL : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.8 / 1.6 / 3.1 / 6.2 / 12.5 / 25fps) |                   |
|                    | Overwrite Modes                  | Continuous  |                   |
|                    | Pre-alarm                        | Up to 30sec (5, 10, 20, 30sec)  |                   |
| Search & Playback  | Post-alarm                       | Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)  |                   |
|                    | Search Mode                      | Date/Time, Event, Back up, Pos, Motion (*All search include preview function)   |                   |
|                    | Playback Function                | Fast forward / backward, Slow forward / backward, Step forward / backward   |                   |
|                    | Transmission Speed               | CIF 240/200fps  |                   |
| Network            | Bandwidth                        | Up to 4Mbps, Unlimited (4M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps  |                   |
|                    | Bandwidth Control                | Selectable  |                   |
|                    | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)  |                   |
|                    | Max. Remote Users                | Search 3 / Live unicast 10 / Live multicast 20  |                   |
| Smart Phone        | Protocol Support                 | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP   |                   |
|                    | Monitoring                       | NET-i viewer, SmartViewer, Webviewer  |                   |
|                    | Smart Phone                      | Android, i-Phone  |                   |
|                    | Protocol Support                 | RTSP/RTP (UDP), CGI, HTTP   |                   |
| Storage            | Transmission Speed               | Wi-Fi : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)<br>3G : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)   |                   |
|                    | Max. Remote Users                | Live 1  |                   |
|                    | Internal HDD                     | Up to 6 SATA HDDs   | Up to 5 SATA HDDs |
|                    | DVD Writer (Back up)             | N/A   | Yes               |
| Security           | USB (Back up)                    | 3 USB ports   |                   |
|                    | File Format (Back up)            | AVI, BU (DVR player), EXE (Include player)  |                   |
|                    | Password Protection              | 1 Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function   |                   |
|                    | Data Authentication              | Watermark   |                   |
| <b>INTERFACE</b>   |                                  |   |                   |
| Monitors           | VGA                              | 1 VGA (800 x 600, 1024 x 768, 1280 x 1024)  |                   |
|                    | Main Composite                   | 1 BNC, 1 Vp-p, 75 ohm   |                   |
|                    | Spot Composite                   | Digital spot (1 BNC, 1 Vp-p, 75 ohm), support multi screen and camera title   |                   |
|                    | Loop Outputs                     | 8   |                   |
| Audio              | Inputs / Output                  | 4CH line in / 1CH line out  |                   |
|                    | Compression                      | ADPCM   |                   |
|                    | Sampling Rate                    | 16KHz   |                   |
| Alarm              | Inputs / Output                  | Terminal 8 inputs (NO/NC) / Terminal 4 relay outputs (NO/NC),<br>Rating : 30V DC / 2A, 125V AC / 0.5A   |                   |
|                    | Remote Notification              | Notification via e-mail   |                   |
|                    | Ethernet                         | 1 RJ-45 10/100/1000 Base-T  |                   |
|                    | Serial Interface                 | RS-232/RS-485 for PTZ, Samsung system keyboard  |                   |
| Connections        | USB                              | USB 2.0, 3 ports  |                   |
|                    | Application Support              | Mouse, Remote controller  |                   |
|                    | Protocol Support                 | Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, Vicon  |                   |
|                    |                                  | * SRD-830DC : PTZ control via coaxial cable [Samsung CCVC, Pelco-C (Coaxitron)]   |                   |
| <b>GENERAL</b>     |                                  |   |                   |
| Electrical         | Input Voltage / Current          | 100 ~ 240V AC $\pm$ 10%, 50/60Hz, Autoranging   |                   |
|                    | Power Consumption                | Max. 60W (With 1x HDD)  |                   |
| Environmental      | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH  |                   |
|                    | Dimensions (WxHxD)               | 440.0 x 88.0 x 430.0mm (17.32" x 3.46" x 16.93")  |                   |
| Mechanical         | Weight (With hard disks)         | Approx. 7.5Kg (16.53 lb)  |                   |
|                    | Rack Mount Kit                   | 2ea   |                   |
| Language           |                                  | Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thailanda, Rumanian, Serbian, Croatian, Hungarian, Greek (22 Language)                 |                   |

# SRD-470/470D



4CH 4CIF H.264 Real-time Digital Video Recorder

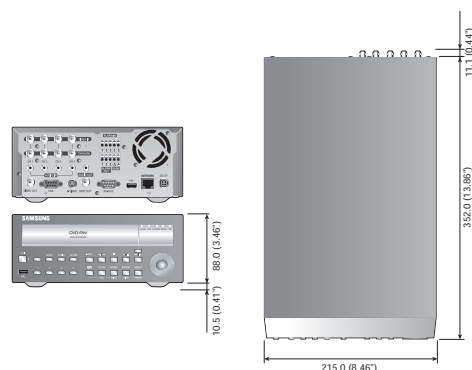


## Key Features

- 4CH 4CIF real-time DVR
- 4CIF Resolution real-time recording capability
- SRD-470 : SATA I/F HDD support (Internal Max. HDD x 2)  
SRD-470D : SATA I/F HDD support (Internal Max. HDD x 1)
- SRD-470D : DVD-RW
- Support for smart phone

## Dimensions

Unit : mm (inch)



## Technical Specifications

|  | SRD-470                          | SRD-470D  |
|--|----------------------------------|---|
| <b>DISPLAY</b>   |                                  |   |
| Video  | Inputs                           | 4 Composite video 0.5-1 Vpp, 75 ohm automatic termination   |
|  | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |
|  | Frame Rate                       | NTSC : 120fps / PAL : 100fps  |
| Live   | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |
|  | Multi Screen Display             | 1 / 4 / PIP   |
| <b>PERFORMANCE</b>   |                                  |   |
| Operating System   | Embedded                         | Linux   |
|  | Compression                      | H.264   |
| Recording  | Record Rate                      | NTSC : Up to 120fps@704 x 480 / PAL : Up to 100fps@704 x 576<br>NTSC : Up to 120fps@704 x 240 / PAL : Up to 100fps@704 x 288<br>NTSC : Up to 120fps@352 x 240 / PAL : Up to 100fps@352 x 288  |
|  | Mode                             | NTSC : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.9 / 1.9 / 3.8 / 7.5 / 15 / 30fps)<br>PAL : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (0.8 / 1.6 / 3.1 / 6.2 / 12.5 / 25fps) |
|  | Overwrite Modes                  | Continuous  |
|  | Pre-alarm                        | Up to 30sec (5, 10, 20, 30sec)  |
| Search & Playback  | Post-alarm                       | Up to 6hour (5, 10, 20, 30sec, 1, 3, 5, 10, 20min, 1, 2, 3, 4, 5, 6hour)  |
|  | Search Mode                      | Date/Time, Event, Back up, Pos, Motion (*All search include preview function)   |
|  | Playback Function                | Fast forward / backward, Slow forward / backward, Step forward / backward   |
|  | Transmission Speed               | CIF 120/100fps  |
| Network  | Bandwidth                        | Up to 6Mbps, Unlimited (6M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps  |
|  | Bandwidth Control                | Selectable  |
|  | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)  |
|  | Max. Remote Users                | Search 3 / Live unicast 10 / Live multicast 20  |
| Smart Phone  | Protocol Support                 | TCP/IP, DHCP, PPPoE, SMTP, NTP, HTTP, DDNS, RTP, RTSP   |
|  | Monitoring                       | NET-i viewer, SmartViewer, Webviewer  |
|  | Smart Phone                      | Android, i-Phone  |
|  | Protocol Support                 | RTSP/RTP (UDP), CGI, HTTP   |
| Storage  | Transmission Speed               | Wi-Fi : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)<br>3G : CIF Max. 4fps (Single channel) / CIF Max. 4fps (Quad channel)   |
|  | Max. Remote Users                | Live 1  |
|  | Internal HDD                     | Up to 2 SATA HDDs   |
|  | DVD Writer (Back up)             | N/A   |
| Security   | USB (Back up)                    | Yes   |
|  | File Format (Back up)            | 3 USB ports   |
|  | Password Protection              | AVI, BU (DVR player), EXE (Include player)  |
|  | Data Authentication              | 1 Admin, 10 Group, 20 User per 1 group, User can be assigned authority for function   |
| <b>INTERFACE</b>   |                                  |   |
| Monitors   | VGA                              | 1 VGA (800 x 600, 1024 x 768, 1280 x 1024)  |
|  | Main Composite                   | 1 BNC, 1.0 Vp-p, 75 ohm   |
|  | Spot Composite                   | Digital spot (1 BNC, 1 Vp-p, 75 ohm), support multi screen and camera title   |
|  | Loop Outputs                     | 4   |
| Audio  | Inputs / Output                  | 4CH line in / 1CH line out  |
|  | Compression                      | ADPCM   |
|  | Sampling Rate                    | 16KHz   |
| Alarm  | Inputs / Output                  | Terminal 4 inputs (NO/NC) / Terminal 4 relay outputs (NO/NC),<br>Rating : 30V DC / 2A, 125V AC / 0.5A   |
|  | Remote Notification              | Notification via e-mail   |
|  | Ethernet                         | 1 RJ-45 10/100/1000 Base-T  |
|  | Serial Interface                 | RS-232/RS-485 for PTZ, Samsung system keyboard  |
| Connections  | USB                              | USB 2.0, 2 ports  |
|  | Application Support              | Mouse, Remote controller  |
|  | Protocol Support                 | Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, Vicon  |
| <b>GENERAL</b>   |                                  |   |
| Electrical   | Input Voltage / Current          | 100 ~ 240V AC $\pm 10\%$ , 50/60Hz, 55watt  |
|  | Power Consumption                | Max. 36W (With 1x HDD)  |
| Environmental  | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH  |
|  | Dimensions (WxHxD)               | 215.0 x 88.0 x 352.0mm (8.46" x 3.46" x 13.86")   |
| Mechanical   | Weight (With hard disks)         | Approx. 3Kg (6.61 lb)   |
|  | Rack Mount Kit                   | 2ea   |
| <b>Language</b>  |                                  |   |
| Korean, Japanese, Chinese, English, French, German, Spanish, Italian, Russian, Polish, Czech, Turkish, Netherlands, Portuguese, Swedish, Danish, Thai, Rumanian, Serbian, Croatian, Hungarian, Greek (22 Language) |                                  |   |

# SRD-450

## 4CH CIF H.264 Digital Video Recorder

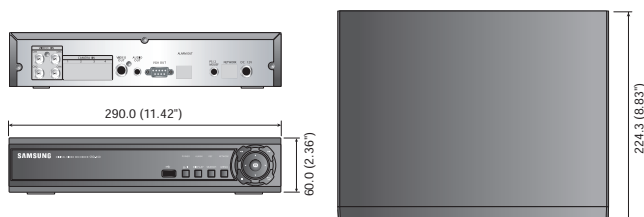


### Key Features

- 4CH CIF real-time DVR
- CIF resolution real-time recording capability (4CIF recording available)
- Internal Max. HDD x 1
- Smart phone support

### Dimensions

Unit : mm (inch)



### Technical Specifications

| SRD-450            |                                  |   |
|--------------------|----------------------------------|---|
| <b>DISPLAY</b>     |                                  |   |
| Video              | Inputs                           | 4 Composite video 0.5-1 Vpp, 75 ohm   |
|                    | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |
| Live               | Frame Rate                       | NTSC : 120fps / PAL : 100fps  |
|                    | Resolution                       | NTSC : 704 x 480 / PAL : 704 x 576  |
|                    | Multi Screen Display             | 1 / 4 / SEQUENCE  |
| <b>PERFORMANCE</b> |                                  |   |
| Operating System   | Embedded                         | Linux   |
| Recording          | Compression                      | H.264   |
|                    | Record Rate                      | NTSC : Up to 30fps@704 x 480 / PAL : Up to 25fps@704 x 576  |
|                    |                                  | NTSC : Up to 60fps@704 x 240 / PAL : Up to 50fps@704 x 288  |
|                    |                                  | NTSC : Up to 120fps@352 x 240 / PAL : Up to 100fps@352 x 288  |
|                    | Mode                             | NTSC : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (1 / 2 / 3 / 7 / 15 / 30fps)<br>PAL : Manual, Schedule (Continuous / Event), Event (Pre / Post), Time lapse (1 / 2 / 3 / 7 / 13 / 25fps) |
|                    | Overwrite Modes                  | Continuous  |
|                    | Pre-alarm                        | Up to 5sec (1, 2, 3, 4, 5sec)   |
| Search & Playback  | Post-alarm                       | Up to 180sec (5, 10, 15, 20, 30, 60, 120, 180sec)   |
|                    | Search Mode                      | Date/Time, Event  |
|                    | Playback Function                | Fast forward / Backward (2x, 4x, 8x, 16x, 32x, 64x), Step forward / Backward (2x, 4x, 8x, 16x, 32x, 64x)  |
| Network            | Transmission Speed               | CIF 120/100fps  |
|                    | Bandwidth                        | Up to 8Mbps, Unlimited (8M) / 2 / 1.5 / 1Mbps / 800 / 600 / 500 / 400 / 300 / 200 / 100 / 50kbps  |
|                    | Bandwidth Control                | Selectable  |
|                    | Stream                           | H.264 (4CIF / 2CIF / CIF selectable)  |
|                    | Max. Remote Users                | Up to 4 (Live 4 or Search 4)  |
|                    | Protocol Support                 | TCP/IP, DHCP, DDNS, NTP, HTTP, RTSP   |
|                    | Monitoring                       | Webviewer, CMS (SmartViewer, NET-i)   |
| Smart Phone        | Smart Phone                      | i-Phone   |
|                    | Protocol Support                 | RTSP, HTTP  |
|                    | Transmission Speed               | Wi-Fi : CIF Max. 14fps (Single channel) / CIF Max. 3.5fps (Quad channel)<br>3G : CIF Max. 14fps (Single channel) / CIF Max. 3.6fps (Quad channel)   |
| Storage            | Max. Remote Users                | Live 1  |
|                    | Internal HDD                     | Up to 1 SATA HDD  |
|                    | USB (Back up)                    | USB stick memory only (Up to 20GB)  |
| Security           | File Format (Back up)            | AVI   |
|                    | Password Protection              | 8 User (1 Admin, 7 Manager and user, Only English with special character)   |
| Interface          | Data Authentication              | Watermark   |
| <b>INTERFACE</b>   |                                  |   |
| Monitors           | VGA                              | 1 VGA (1024 x 768)  |
|                    | Main Composite                   | 1 BNC, 1.0 Vp-p, 75 ohm   |
|                    | Inputs / Output                  | 4CH line in / 1CH line out  |
| Audio              | Compression                      | ADPCM   |
|                    | Sampling Rate                    | 64KHz   |
| Alarm              | Inputs / Output                  | 4CH, Pulled up to 5V via 10K Ohm / 1CH, Relay   |
|                    | Remote Notification              | Notification via e-mail (With 1CH snapshot JPEG image attached)   |
| Connections        | Ethernet                         | 1 RJ-45 10/100 Base-T   |
|                    | USB                              | USB 2.0, 2 ports  |
|                    | Application Support              | Mouse (Not included), Remote controller (Include)<br>Upgrade - USB stick memory   |
| <b>GENERAL</b>     |                                  |   |
| Electrical         | Input Voltage / Current          | 12V DC adaptor, 3.3A, 100 ~ 240V AC, 50/60Hz  |
|                    | Power Consumption                | Max. 18.2W  |
| Environmental      | Operating Temperature / Humidity | +0°C ~ +40°C (+32°F ~ +104°F) / 20% ~ 85% RH  |
| Mechanical         | Dimensions (WxHxD)               | 290.0 x 60.0 x 224.3mm (11.42" x 2.36" x 8.83")   |
|                    | Weight (With hard disks)         | Approx. 1.84Kg (4.06 lb)  |
| Language           |                                  | NTSC : Korean, Japanese, English, French, Spanish   |
|                    |                                  | PAL : English, French, Spanish, German, Italian, Turkish, Russian   |

# SVS-5R/5E



RAID 5 Unit / HDD Extension Unit



## Key Features

### SVS-5R

- 1U 19-inch rack case
- Data transfer speed : Up to 3.0Gbps (SATA II)
- Available SATA HDD : Up to 4 (4TB)

### SVS-5E

- 1U 19-inch rack case
- Data transfer speed : Up to 3.0Gbps (SATA II)
- Available SATA HDD : Up to 4 (4TB)

## Technical Specifications

|                       | SVS-5R   | SVS-5E  |
|-----------------------|--|---|
| Transmission Speed    | Up to 3.0Gbps (SATA II)                          |   |
| Maximum Capacity      | Up to 4TB  |   |
| Internal HDD          | Up to 4 SATA HDDs<br>(Support hot-swap function) | Up to 4 SATA HDDs                             |
| RAID                  | RAID 0, 1, 0+1, 5                                | N/A   |
| eSATA                 | 1 External SATA ports for DVR connection         |   |
| USB                   | USB 2.0, RAID configuration only                 | N/A   |
| Operating Temperature | +5°C ~ +45°C (+41°F ~ +113°F)                    |   |
| Operating Humidity    | 20% ~ 70% RH                                     |   |
| Input Voltage         | 115 ~ 230V AC $\pm$ 10%, 50/60Hz, Autoranging    |   |
| Dimensions (WxHxD)    | 482.0 x 44.0 x 433.0mm (19" x 1.7" x 17")        | 484.0 x 44.0 x 450.0mm (19.1" x 1.7" x 17.7") |
| Weight                | Approx. 6.4Kg (14.1 lb)                          | Approx. 5.6Kg (12.3 lb)                       |
| Rack Mount Kit        | For mounting one unit in an EIA 19-inch rack     |   |
| Certifications        | FCC (Class A), UL/cUL listed, CE (Class A)       |   |

DVR

## Supported Model

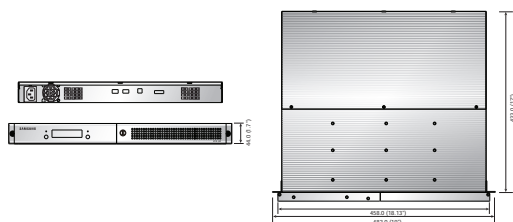
### SVS-5R

- SVR-3200/1680/1645/960/945

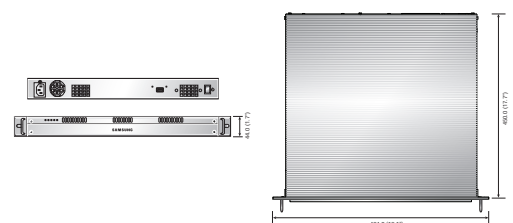
## Dimensions

Unit : mm (inch)

SVS-5R



SVS-5E











# MONITOR

Samsung Total Security Solution

# Monitor Selection

|                            | TFT-LCD Monitor   |   |  |   |
|----------------------------|---|---|--|---|
|                            | SMT-3223  | SMT-2231  | SMT-1923   | SMT-1922  |
|                            |  |  |  |  |
| Screen Size                | 32"   | 22"   | 19"  | 19"   |
| Resolution (pixels HxV)    | 1366 x 768  | 1920 x 1080   | 1280 x 1024  | 1280 x 1024   |
| Composite Video Resolution | 600TV lines   | NTSC : 600TV lines / PAL : 620TV lines  | NTSC : 600TV lines / PAL : 620TV lines   | NTSC : 600TV lines / PAL : 620TV lines  |
| Video In/Out               | 1   | 2 / 2   | 2 / 2  | 2 / 2   |
| S-Video In/Out             | N/A   | N/A   | 1 / 1  | 1 / 1   |
| RGB In                     | 1   | 1   | 1  | 1   |
| DVI / HDMI                 | 1 / 2   | 0 / 1   | N/A  | N/A   |
| Audio In (Stereo)          | 2   | 2   | 2  | 2   |
| Contrast Ratio             | 3500 : 1  | 1000 : 1  | 1000 : 1   | 1000 : 1  |
| Response Time              | 8ms (G to G)  | 5ms   | 5ms  | 5ms   |
| Brightness                 | 450cd/m <sup>2</sup>  | Above 300cd/m <sup>2</sup>  | Above 250cd/m <sup>2</sup>   | Above 250cd/m <sup>2</sup>  |
| Tempered Glass Screen      | N/A   | Yes   | Yes  | Yes   |
| Picture In Picture         | N/A   | Yes   | Yes  | Yes   |
| Built-in Speakers          | Yes   | Yes   | Yes  | Yes   |
| Desktop Stand              | General (Option)  | General (Option)  | Height adjustable  | Height adjustable   |
| Sync Format                | NTSC : 3.5 / PAL : 4.43   | NTSC : 3.5 / PAL : 4.43   | NTSC : 3.5 / PAL : 4.43  | NTSC : 3.5 / PAL : 4.43   |
| Power                      | 100 ~ 240V AC   | 100 ~ 240V AC   | 12V DC external  | 100 ~ 240V AC   |

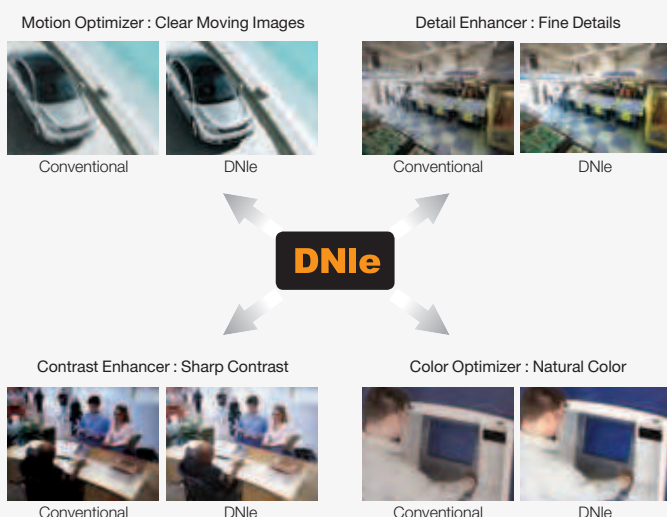
|                            | TFT-LCD Monitor   |   |  |   |
|----------------------------|---|---|--|---|
|                            | SMT-1912  | SMT-1712  | SMT-1723   | SMT-1722  |
|                            |  |  |  |  |
| Screen Size                | 19"   | 17"   | 17"  | 17"   |
| Resolution (pixels HxV)    | 1280 x 1024   | 1280 x 1024   | 1280 x 1024  | 1280 x 1024   |
| Composite Video Resolution | N/A   | N/A   | NTSC : 600TV lines / PAL : 620TV lines   | NTSC : 600TV lines / PAL : 620TV lines  |
| Video In/Out               | N/A   | N/A   | 2 / 2  | 2 / 2   |
| S-Video In/Out             | N/A   | N/A   | 1 / 1  | 1 / 1   |
| RGB In                     | 1   | 1   | 1  | 1   |
| Audio In (Stereo)          | N/A   | N/A   | 2  | 2   |
| Contrast Ratio             | 1000 : 1 (DC 5000 : 1)  | 1000 : 1 (DC 5000 : 1)  | 1000 : 1   | 1000 : 1  |
| Response Time              | 5ms   | 5ms   | 5ms  | 5ms   |
| Brightness                 | Above 250cd/m <sup>2</sup>  | Above 250cd/m <sup>2</sup>  | Above 250cd/m <sup>2</sup>   | Above 250cd/m <sup>2</sup>  |
| Tempered Glass Screen      | Yes   | Yes   | Yes  | Yes   |
| Picture In Picture         | N/A   | N/A   | Yes  | Yes   |
| Built-in Speakers          | N/A   | N/A   | Yes  | Yes   |
| Desktop Stand              | General   | General   | Height adjustable  | Height adjustable   |
| Sync Format                | NTSC : 3.5 / PAL : 4.43   | NTSC : 3.5 / PAL : 4.43   | NTSC : 3.5 / PAL : 4.43  | NTSC : 3.5 / PAL : 4.43   |
| Power                      | 100 ~ 240V AC   | 100 ~ 240V AC   | 12V DC external  | 100 ~ 240V AC   |

# Monitor Terms & Features

## DNle (Digital Natural Image engine)

Samsung proprietary technology embedded in premium LCD TV to enhance picture quality for the best performance. By utilizing DNle technology, monitors provide enhanced image reproduction quality with optimized color, enhanced contrast and higher resolution. It delivers rich color and crystal clear image for more comfortable reading and for reducing eye fatigue.

\* DNle (Digital Natural Image Engine) : Samsung's proprietary technology embedded in premium LCD TV to enhance picture quality for the best performance.



## Tempered Glass Screen

Monitors with tempered glass screen design protects the screen from dirt, repetitive touching or scratching. The screen can be easily cleaned with common cleaning solution such as water, alcohol.



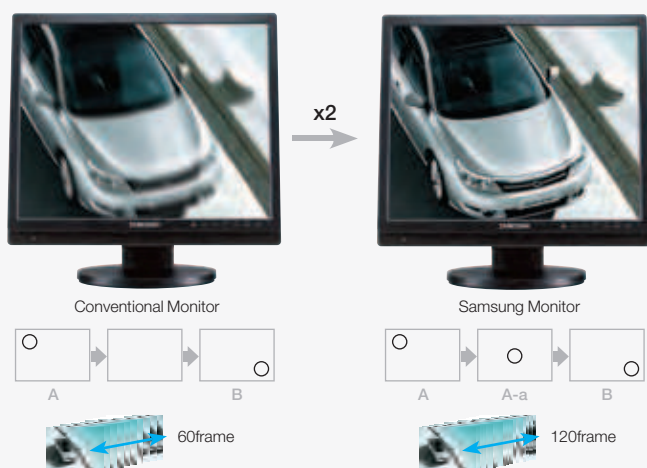
## PIP (Picture in Picture), PBP (Picture by Picture)

The picture-in-picture or picture-by-picture capability allows a security manager to use a PC and view a CCTV camera at the same time. It could also allow the manager to always have a video of important camera in the corner at all times.



## 120Hz Motion Technology

With twice the amount of processing power, 120Hz Motion Technology allows you to monitor clear and vivid images that are twice as fast as 60Hz, and two times faster than conventional TVs.



## HAS (Height Adjustable Stand)

Samsung monitors with HAS feature can be adjusted to users' comfort level. Maximize monitor can be adjusted to your comfort level. Maximize your efficiency with the convenient height adjustable stand.



# SMT-3223

32" TFT-LCD Monitor

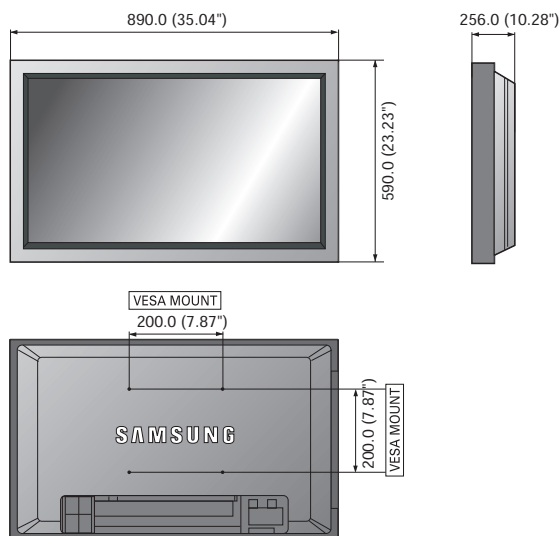


## Key Features

- Support up to 1366 x 768 resolution
- High contrast ratio 3500 : 1
- Fast response time 8ms
- 120Hz motion technology

## Dimensions

Unit : mm (inch)



## Technical Specifications

### SMT-3223

|                     |                                  |  |
|---------------------|----------------------------------|--|
| DISPLAY             |                                  |  |
| Screen Size         |                                  | 32"  |
| Max. Resolution     |                                  | 1,366 x 768  |
| Brightness          |                                  | 450cd/m <sup>2</sup>   |
| Contrast Ratio      |                                  | 3,500 : 1  |
| Aspect Ratio        |                                  | 16 : 9   |
| Viewing Angle (H/V) |                                  | 178° / 178°  |
| Display Color       |                                  | 16.7million  |
| Response Time       |                                  | 8ms (G to G)   |
| Video System        |                                  | NTSC / PAL   |
| Panel Life          |                                  | 50,000hours  |
| Filter Type         |                                  | 3D combfilter  |
| INTERFACE           |                                  |  |
| Video               | Connector                        | CVBS, HDMI 1, HDMI 2, Component (D-sub 15pin)  |
|                     | Connector                        | Analog D-sub, DVI-D, Display port  |
|                     | Input Signal                     | 0.7 Vp-p ±5%   |
| RGB / DVI           | Available Format                 | 640 x 350@70Hz<br>720 x 400@70Hz<br>640 x 480@60Hz/72Hz/75Hz (VGA)<br>800 x 600@56Hz/60Hz/72Hz/75Hz (SVGA)<br>1,024 x 768@60Hz/70Hz/75Hz (XGA)<br>1,152 x 864@75Hz<br>1,152 x 870@75Hz<br>1,280 x 960@60Hz<br>1,280 x 1,024@60Hz/75Hz (SXGA)<br>1,360 x 768@60Hz<br>1,366 x 768@60Hz |
|                     |                                  |  |
|                     |                                  |  |
|                     |                                  |  |
|                     |                                  |  |
|                     |                                  |  |
|                     |                                  |  |
|                     |                                  |  |
|                     |                                  |  |
|                     |                                  |  |
| HDMI                | Connector                        | HDMI 1, HDMI 2   |
|                     | Available Format                 | 640 x 480p@60Hz, 720 x 480i@60Hz, 720 x 480p@60Hz<br>720 x 576i@50Hz, 720 x 576p@50Hz, 1,280 x 720p@50Hz/60Hz<br>1,920 x 1,080i@50Hz/60Hz, 1,920 x 1,080p@50Hz/60Hz  |
| Audio               | Connector                        | RCA (L/R), Stereo mini jack  |
|                     | Output Signal                    | Loop-through line level (PC only), Speakers : 2 x 5W   |
| Application Support |                                  | Remote controller  |
| ON SCREEN DISPLAY   |                                  |  |
| Functions           |                                  | VESA™ DPM compatible   |
| Language            |                                  | English, Spanish, French, German, Italian, Portuguese, Russian, Swedish, Turkey, Taiwanese, Chinese, Japanese, Korean  |
| GENERAL             |                                  |  |
| Electrical          | Input Voltage                    | 100 ~ 240V AC (50/60Hz)  |
|                     | Power Consumption                | Type 1 50W   |
| Environmental       | Operating Temperature            | 0 ~ +40°C (+32°F ~ +104°F)   |
|                     | Operating Humidity               | 10% ~ 80% (Non-condensing)   |
| Mechanical          | Dimensions with Stand (WxHxD)    | 890.0 x 590.0 x 256.0mm (35.04" x 23.23" x 10.08")   |
|                     | Dimensions without Stand (WxHxD) | 780.0 x 482.0 x 109.0mm (30.7" x 19" x 4.3")   |
|                     | Weight                           | 13.7Kg (30.2 lb)   |
|                     | Cabinet Color                    | Black  |
|                     | Rack Mounts                      | Optional   |
|                     | VESA Mounts Interface            | 200 x 200mm  |
| Accessory           |                                  | SBM-320ST  |



# SMT-2231

22" Wide Full-HD TFT-LCD Monitor

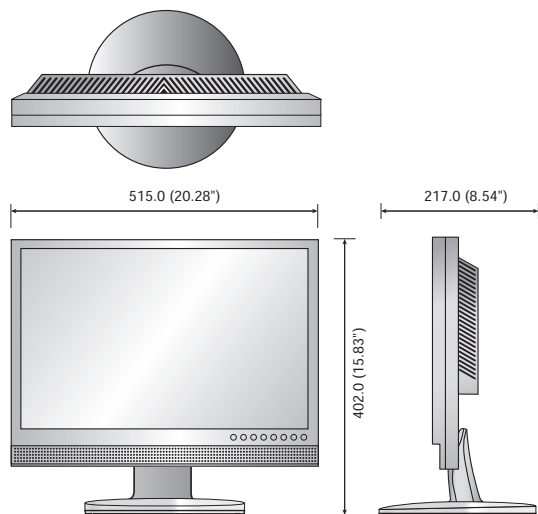


## Key Features

- Support up to 1920 x 1080 resolution
- High contrast ratio 1000 : 1
- Fast response time 5ms
- 120Hz motion technology

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                     |                                  | SMT-2231   |
|---------------------|----------------------------------|--|
| DISPLAY             |                                  |  |
| Screen Size         |                                  | 22"  |
| Max. Resolution     |                                  | 1,920 x 1,080  |
| Brightness          |                                  | 300cd/m <sup>2</sup>   |
| Contrast Ratio      |                                  | 1,000 : 1  |
| Aspect Ratio        |                                  | 16 : 9   |
| Viewing Angle (H/V) |                                  | 170° / 160°  |
| Display Color       |                                  | 16.7million  |
| Response Time       |                                  | 5ms  |
| Video System        |                                  | NTSC / PAL   |
| Panel Life          |                                  | 50,000hours  |
| Filter Type         |                                  | 3D combfilter  |
| INTERFACE           |                                  |  |
| Video               | Connector                        | BNC types (2 in / 2 out)   |
|                     | Connector                        | 1 Analog RGB 15-pin D-sub  |
| RGB / DVI           | Input Signal                     | 0.7 Vp-p ±5%   |
|                     | Available Format                 | 720 x 400@70Hz   |
|                     |                                  | 640 x 480@60Hz/72Hz/75Hz (VGA)   |
|                     |                                  | 800 x 600@56Hz/60Hz/72Hz/75Hz (SVGA)   |
|                     |                                  | 1,024 x 768@60Hz/70Hz/75Hz (XGA)   |
|                     |                                  | 1,152 x 864@75Hz   |
|                     |                                  | 1,280 x 960@60Hz   |
|                     |                                  | 1,280 x 1,024@60Hz/75Hz (SXGA)   |
|                     |                                  | 1,280 x 720@60Hz   |
|                     |                                  | 1,600 x 1,200@60Hz/70Hz  |
|                     |                                  | 1,920 x 1,080@50Hz/60Hz  |
| HDMI                | Connector                        | 1 HDMI input (Type A connector)  |
|                     | Available Format                 | 640 x 480p@60Hz, 720 x 480i@60Hz, 720 x 480p@60Hz  |
|                     |                                  | 720 x 576i@50Hz, 720 x 576p@50Hz, 1,280 x 720p@50Hz/60Hz   |
| Audio               | Connector                        | 2 RCA type (2 Stereo inputs)   |
|                     | Output Signal                    | Speakers : 2 x 1W  |
| Application Support |                                  | Remote controller  |
| ON SCREEN DISPLAY   |                                  |  |
| Functions           |                                  | VESA™ DPM compatible   |
| Language            |                                  | English, Spanish, French, German, Italian, Portuguese, Russian, Dutch, Swedish, Turkey, Taiwanese, Chinese, Japanese, Korean |
| GENERAL             |                                  |  |
| Electrical          | Input Voltage                    | 100 ~ 240V AC (50/60Hz)  |
|                     | Power Consumption                | Type 46W   |
| Environmental       | Operating Temperature            | 0 ~ +40°C (+32°F ~ +104°F)   |
|                     | Operating Humidity               | 20% ~ 90% (Non-condensing)   |
| Mechanical          | Dimensions with Stand (WxHxD)    | 515.0 x 402.0 x 217.0mm (20.28" x 15.83" x 8.54")  |
|                     | Dimensions without Stand (WxHxD) | 515.0 x 331.0 x 69.0mm (20.28" x 13.03" x 2.72")   |
|                     | LCD Protection Glass             | Yes  |
|                     | Cabinet Color                    | Black  |
|                     | Rack Mounts                      | Optional   |
|                     | VESA Mounts Interface            | 100 x 100mm  |

# SMT-1923/1922

19" TFT-LCD Monitor

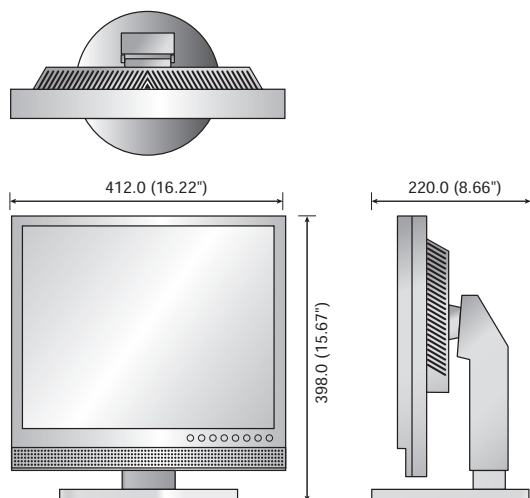


## Key Features

- Support up to 1280 x 1024 resolution
- High contrast ratio 1000 : 1
- Fast response time 5ms
- 120Hz motion technology

## Dimensions

Unit : mm (inch)



## Technical Specifications

### SMT-1923/1922

| DISPLAY             |   |
|---------------------|---|
| Screen Size         | 19"   |
| Max. Resolution     | 1,280 x 1,024   |
| Brightness          | 250cd/m <sup>2</sup>  |
| Contrast Ratio      | 1,000 : 1   |
| Aspect Ratio        | 4 : 3   |
| Viewing Angle (H/V) | 170° / 160°   |
| Display Color       | 16.7million   |
| Response Time       | 5ms   |
| Video System        | NTSC / PAL  |
| Panel Life          | 40,000hours   |
| Filter Type         | 3D combfilter   |
| INTERFACE           |   |
| Video               | Connector BNC types (2 in / 2 out)  |
| S-Video             | Connector 1CH input (Y/C), Loop through out   |
| RGB / DVI           | Connector 1 Analog RGB 15-pin D-sub   |
|                     | Input Signal 0.7 Vp-p ±5%   |
| RGB / DVI           | Available Format  |
|                     | 720 x 400@70Hz  |
|                     | 640 x 480@60Hz/72Hz/75Hz (VGA)  |
|                     | 800 x 600@56Hz/60Hz/72Hz/75Hz (SVGA)  |
|                     | 1,024 x 768@60Hz/70Hz/75Hz (XGA)  |
|                     | 1,152 x 864@75Hz  |
|                     | 1,280 x 720@60Hz  |
| Audio               | 1,280 x 960@60Hz  |
|                     | 1,280 x 1,024@60Hz/75Hz (SXGA)  |
| Audio               | Connector 2 RCA type (2 Stereo inputs)  |
|                     | Output Signal Speakers : 2 x 1W   |
| Application Support | Remote controller   |
| ON SCREEN DISPLAY   |   |
| Functions           | Motion technology (120Hz), VESA™ DPM compatible, PIP/PBP  |
| Language            | English, Spanish, French, German, Italian, Portuguese, Dutch, Russian, Swedish, Chinese, Japanese, Korean |
| GENERAL             |   |
| Electrical          | Input Voltage SMT-1923 : 12V DC (External power supply)   |
|                     | SMT-1922 : 100 ~ 240V AC (50/60Hz)  |
| Environmental       | Power Consumption Type 26W  |
|                     | Operating Temperature 0 ~ +40°C (+32°F ~ +104°F)  |
| Mechanical          | Operating Humidity 20% ~ 90% (Non-condensing)   |
|                     | Dimensions with Stand 412.0 x 398.0 x 220.0mm   |
|                     | (16.22" x 15.67" x 8.66")   |
|                     | Dimensions without Stand 412.0 x 361.0 x 69.0mm   |
|                     | (16.22" x 14.21" x 2.72")   |
|                     | Weight 6.85Kg (15.1 lb)   |
|                     | LCD Protection Glass Yes  |
| Mechanical          | Cabinet Color Black   |
|                     | VESA Mounts Interface 100 x 100mm   |

# SMT-1912/1712

19"/17" TFT-LCD Monitor



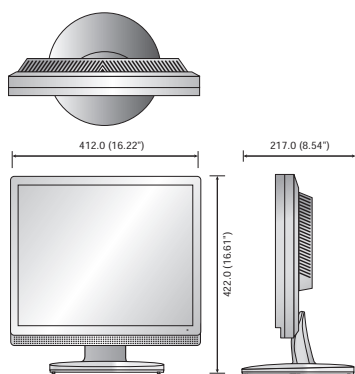
## Key Features

- Support up to 1280 x 1024 resolution
- High contrast ratio 1000 : 1
- Fast response time 5ms

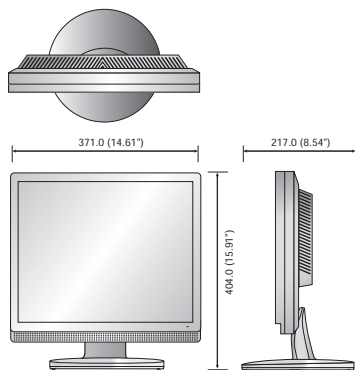
## Dimensions

Unit : mm (inch)

SMT-1912



SMT-1712



## Technical Specifications

| SMT-1912/1712       |  |  |
|---------------------|--|--|
| DISPLAY             |  |  |
| Screen Size         | SMT-1912 : 19" , SMT-1712 : 17"  |  |
| Max. Resolution     | 1,280 x 1,024  |  |
| Brightness          | 250cd/m <sup>2</sup>   |  |
| Contrast Ratio      | 1,000 : 1  |  |
| Aspect Ratio        | 4 : 3  |  |
| Viewing Angle (H/V) | 170° / 160°  |  |
| Display Color       | 16.7million  |  |
| Response Time       | 5ms  |  |
| Video System        | NTSC / PAL   |  |
| Panel Life          | SMT-1912 : 40,000hours, SMT-1712 : 50,000hours   |  |
| INTERFACE           |  |  |
| RGB / DVI           | Connector  | 1 Analog RGB 15-pin D-sub  |
|                     | Input Signal   | 0.7 Vp-p (0.5 ~ 1 Vrms)  |
|                     | Available Format   | 640 x 350@70Hz   |
|                     |  | 720 x 400@70Hz   |
|                     |  | 640 x 480@60Hz/72Hz/75Hz (VGA)   |
|                     |  | 800 x 600@56Hz/60Hz/72Hz/75Hz (SVGA)   |
|                     |  | 1,024 x 768@60Hz/70Hz/75Hz (XGA)   |
|                     |  | 1,152 x 864@75Hz   |
|                     |  | 1,152 x 870@75Hz   |
|                     |  | 1,280 x 720@60Hz   |
|                     |  | 1,280 x 960@60Hz   |
|                     |  | 1,280 x 1,024@60Hz/75Hz (SXGA)   |
| Application Support | Remote controller  |  |
| ON SCREEN DISPLAY   |  |  |
| Functions           | VESA™ DPM compatible   |  |
| Language            | English, Spanish, French, German, Italian, Portuguese,<br>Dutch, Russian, Swedish, Chinese, Japanese, Korean |  |
| GENERAL             |  |  |
| Electrical          | Input Voltage  | 100 ~ 240V AC (50/60Hz)  |
|                     | Power Consumption  | SMT-1912 : Type 19.5W, SMT-1712 : Type 17.5W   |
| Environmental       | Operating Temperature  | 0 ~ +40°C (+32°F ~ +104°F)   |
|                     | Operating Humidity   | 10% ~ 80% (Non-condensing)   |
| Mechanical          | Dimensions with Stand (WxHxD)  | SMT-1912 : 412.0 x 422.0 x 217.0mm (16.22" x 16.61" x 8.54")<br>SMT-1712 : 371.0 x 404.0 x 217.0mm (14.61" x 15.91" x 8.54") |
|                     | Dimensions without Stand (WxHxD)   | SMT-1912 : 412.0 x 361.0 x 70.0mm (16.22" x 14.21" x 2.76")<br>SMT-1712 : 371.0 x 331.0 x 70.0mm (14.61" x 13.03" x 2.76")   |
|                     | Weight   | SMT-1912 : 5.5Kg (12.13 lb), SMT-1712 : 4.9Kg (10.8 lb)  |
|                     | LCD Protection Glass   | Yes  |
|                     | Cabinet Color  | Black  |
|                     | VESA Mounts Interface  | 100 x 100mm  |

# SMT-1723/1722

17" TFT-LCD Monitor



**1000:1**  
High Contrast Ratio

**1280x1024**  
Resolution

**5ms**  
Response Time

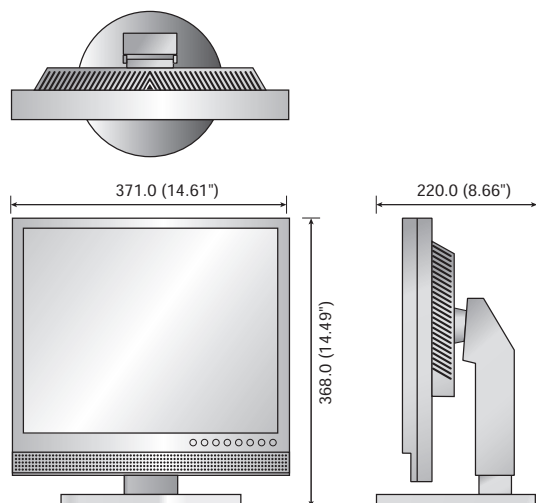


## Key Features

- Support up to 1280 x 1024 resolution
- High contrast ratio 1000 : 1
- Fast response time 5ms
- 120Hz motion technology

## Dimensions

Unit : mm (inch)



## Technical Specifications

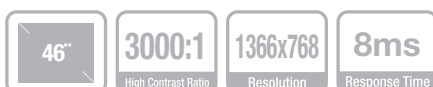
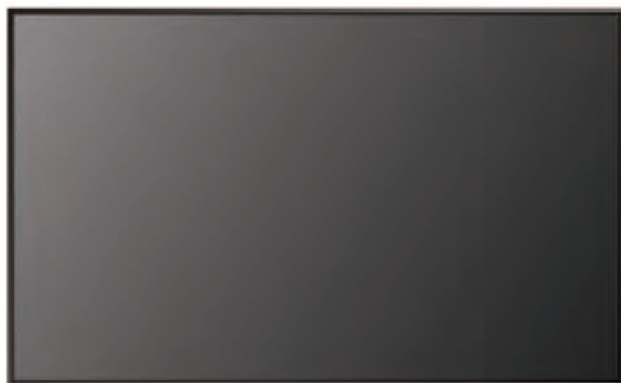
### SMT-1723/1722

| DISPLAY             |   |
|---------------------|---|
| Screen Size         | 17"   |
| Max. Resolution     | 1,280 x 1,024   |
| Brightness          | 250cd/m <sup>2</sup>  |
| Contrast Ratio      | 1,000 : 1   |
| Aspect Ratio        | 4 : 3   |
| Viewing Angle (H/V) | 170° / 160°   |
| Display Color       | 16.7million   |
| Response Time       | 5ms   |
| Video System        | NTSC / PAL  |
| Panel Life          | 50,000hours   |
| Filter Type         | 3D combfilter   |
| INTERFACE           |   |
| Video               | Connector BNC types (2 in / 2 out)  |
| S-Video             | Connector 1CH input (Y/C), Loop through out   |
| RGB / DVI           | Connector 1 Analog RGB 15-pin D-sub   |
|                     | Input Signal 0.7 Vp-p ±5%   |
| RGB / DVI           | Available Format  |
|                     | 720 x 400@70Hz  |
|                     | 640 x 480@60Hz/72Hz/75Hz (VGA)  |
|                     | 800 x 600@56Hz/60Hz/72Hz/75Hz (SVGA)  |
|                     | 1,024 x 768@60Hz/70Hz/75Hz (XGA)  |
|                     | 1,152 x 864@75Hz  |
|                     | 1,280 x 720@60Hz  |
| Audio               | 1,280 x 960@60Hz  |
|                     | 1,280 x 1,024@60Hz/75Hz (SXGA)  |
| Audio               | Connector 2 RCA type (2 Stereo inputs)  |
|                     | Output Signal Speakers : 2 x 1W   |
| Application Support | Remote controller   |
| ON SCREEN DISPLAY   |   |
| Functions           | Motion technology (120Hz), VESA™ DPM compatible, PIP/PBP  |
| Language            | English, Spanish, French, German, Italian, Portuguese, Dutch, Russian, Swedish, Chinese, Japanese, Korean |
| GENERAL             |   |
| Electrical          | Input Voltage SMT-1723 : 12V DC (External power supply)   |
|                     | SMT-1722 : 100 ~ 240V AC (50/60Hz)  |
| Environmental       | Power Consumption Type 23W  |
|                     | Operating Temperature 0 ~ +40°C (+32°F ~ +104°F)  |
| Mechanical          | Operating Humidity 20% ~ 90% (Non-condensing)   |
|                     | Dimensions with Stand 371.0 x 368.0 x 220.0mm   |
|                     | (14.61" x 14.49" x 8.66")   |
|                     | Dimensions without Stand 371.0 x 331.0 x 67.0mm   |
|                     | (14.61" x 13.03" x 2.64")   |
|                     | Weight 5.95Kg (13.12 lb)  |
|                     | LCD Protection Glass Yes  |
| Mechanical          | Cabinet Color Black   |
|                     | VESA Mounts Interface 100 x 100mm   |



# SMS-4600M/4610M/4620

## 46" Super Narrow Bezel LCD Block Module

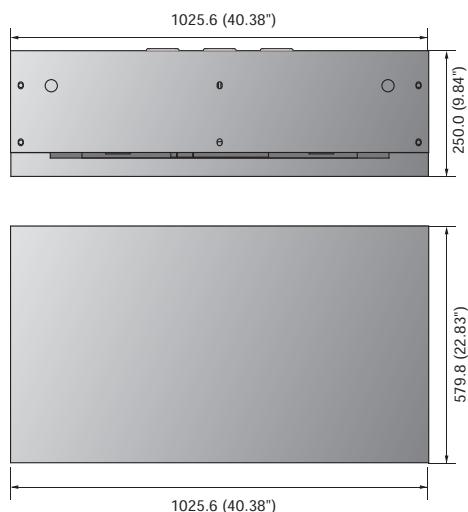


### Key Features

- Super narrow bezel LCD (bezel to bezel 6.7mm)
- Built-in matrix switcher (SMS-4600M)
- GUI software control (Ethernet, RS-232C)
- Easy to install and maintain  
(LCD panel slide open, back panel tilt/open)

### Dimensions

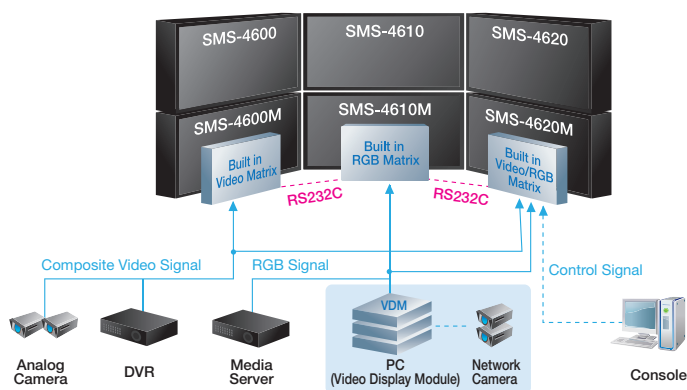
Unit : mm (inch)



### Technical Specifications

|                                  |                          | SMS-4600M   | SMS-4610M                   | SMS-4620              |
|----------------------------------|--------------------------|---|-----------------------------|-----------------------|
| LCD PANEL CAPABILITIES           |                          |   |                             |                       |
| LCD Technology                   |                          | S-PVA, Normally black, DID technology for extensive usage, AIR anti image retention circuitry |                             |                       |
| Diagonal Size                    |                          | 46"   |                             |                       |
| Resolution                       |                          | 1,366 x 768 (WXGA)  |                             |                       |
| Luminance                        |                          | 700cd/m²  |                             |                       |
| Viewing Angle (H/V)              |                          | 178° x 178°   |                             |                       |
| Contrast Ratio                   |                          | 3,000 : 1   |                             |                       |
| Color                            |                          | 10 bit color resolution – 1.07 B colors   |                             |                       |
| Response Time                    |                          | 8ms   |                             |                       |
| Back Light                       | Operating Life Time      | 50,000hours   |                             |                       |
|                                  | White Point              | 10,000K   |                             |                       |
| Dimensions (WxHxD)               |                          | 1025.6 x 579.8 x 250.0mm (40.38" x 22.83" x 9.84")  |                             |                       |
| Bezel Width                      |                          | Right, Bottom < 2.4mm, Left, Top < 4.3mm  |                             |                       |
| Weight                           |                          | 38Kg (83.78 lb) (LCD Panel : 18, Frame : 20)  |                             |                       |
| INPUT / OUTPUT SIGNAL            |                          |   |                             |                       |
| Pixel Clock                      |                          | 25.2 ~ 165MHz   |                             |                       |
| Horizontal / Vertical Range      |                          | 30 ~ 68KHz / 50~60Hz  |                             |                       |
| CVBS Signal                      | Connector                | BNC in / out  | N/A                         | BNC in / out          |
|                                  | Number of Input / Output | Typ.16 / 16<br>Max. 128 / 64  | N/A                         | 1 / 1                 |
|                                  | Color System             | NTSC / PAL / SECAM  | N/A                         | NTSC / PAL / SECAM    |
| RGB Signal                       | Connector                | N/A   | 15pins D-sub In / Out       | 15pins D-sub In / Out |
|                                  | Number of Input / Output | N/A   | Typ.16 / 16<br>Max. 48 / 48 | 1 / 1                 |
|                                  | Sync                     | N/A   | Separate                    | Separate              |
| POWER                            |                          |   |                             |                       |
| Input Voltage                    |                          | 100 ~ 240V AC, 50 ~ 60HZ  |                             |                       |
| Power Consumption                |                          | Type 300W   |                             |                       |
| WALL CONTROL                     |                          |   |                             |                       |
| Control Signal                   |                          | Ethernet, RS-232C   |                             |                       |
| ENVIRONMENTAL                    |                          |   |                             |                       |
| Operating Temperature / Humidity |                          | 0 ~ +50°C (+32°F ~ +122°F) / 20% ~ 80%  |                             |                       |
| Storage Temperature / Humidity   |                          | -20 ~ +60°C (+2°F ~ +140°F) / 10% ~ 90%   |                             |                       |
| WALL CONTROL                     |                          |   |                             |                       |
| Control Signal                   |                          | CE-EMC, CB, CUL, FCC & ROHS   |                             |                       |

### System Configuration



\* Each model can be installed separately or along with other products, depending on the video signal

# CONTROLLER

Samsung Total Security Solution



# SPC-6000

## System Control Keyboard

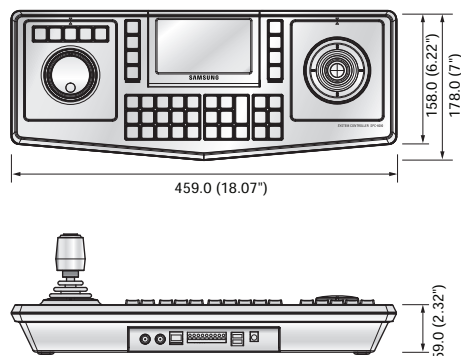


### Key Features

- 5" TFT touch LCD
- Control PTZ dome cameras, DVRs and matrix switchers
- Centralized control up to 255 units with a single controller
- Connect to a system up to 16 controllers
- Ergonomic design and easy-to-use keypad
- 3D joystick to control PTZ function
- Detachable joystick/jogshuttle for universal use (right/left hand use)
- Multi-protocol support
- User friendly GUI

### Dimensions

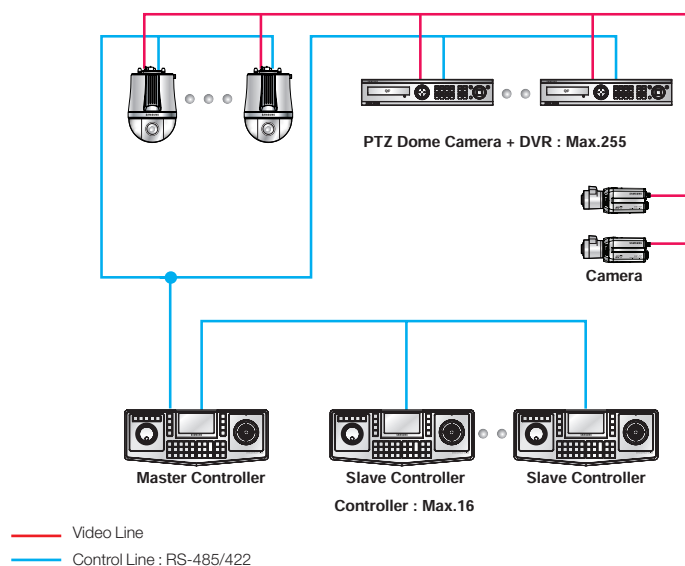
Unit : mm (inch)



### Technical Specifications

|                         |             | SPC-6000  |
|-------------------------|-------------|---|
| COMMUNICATION           |             |   |
| Interface               |             | RS-485/422 (Operating distance 1km), TTL (Matrix)   |
| Data Port               |             | 8-pin RJ-45 connector (Female) (RS-485 serial port)<br>BNC (Video input, Loop through), USB 2.0 (F/W updatable)                     |
| Baud Rate               |             | 2,400 ~ 38,400bps   |
| Protocol                | PTZ         | Samsung-T/E, Pelco-D/P, Panasonic, Vicon, AD, Honeywell, ELMO, Bosch, GE  |
|                         | Zoom Camera | SCZ-3430/2430, SCP-3370/2370/3250/2250  |
|                         | DVR         | SRD, SVR  |
|                         | Matrix      | SMX-25632   |
|                         | Receiver    | Samsung-T   |
| OPERATIONAL             |             |   |
| LCD Display             |             | 5" TFT touch LCD  |
| Joystick                |             | 3 Axis twist zoom   |
| Jog Shuttle             |             | DVR playback control  |
| On Screen Display       |             | English, French, German, Spanish, Italian, Chinese, Russian, Polish, Czech, Romanian, Serbian, Swedish, Danish, Turkish, Portuguese |
| ENVIRONMENTAL           |             |   |
| Operating Temperature   |             | 0°C ~ 40°C  |
| Operating Humidity      |             | 10 ~ 70% (Non-condensing)   |
| ELECTRICAL              |             |   |
| Input Voltage / Current |             | 12V DC / 4A   |
| Power Consumption       |             | Max. 4W   |
| MECHANICAL              |             |   |
| Dimensions (WxHxD)      |             | 459.0 x 59.0 x 178.0mm (18.07" x 2.32" x 7")  |
| Weight                  |             | 1.5Kg (3.3 lb)  |

### System Configuration



# SPC-1010

## PTZ Control Keyboard



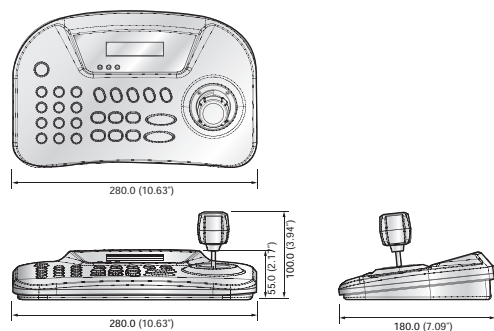
CONTROLLER

### Key Features

- Control up to 255 PTZ cameras
- Superior system compatibility : Multi protocols support
- OSD menu, 3D joystick control
- RS-485 and RS-422 compatibility

### Dimensions

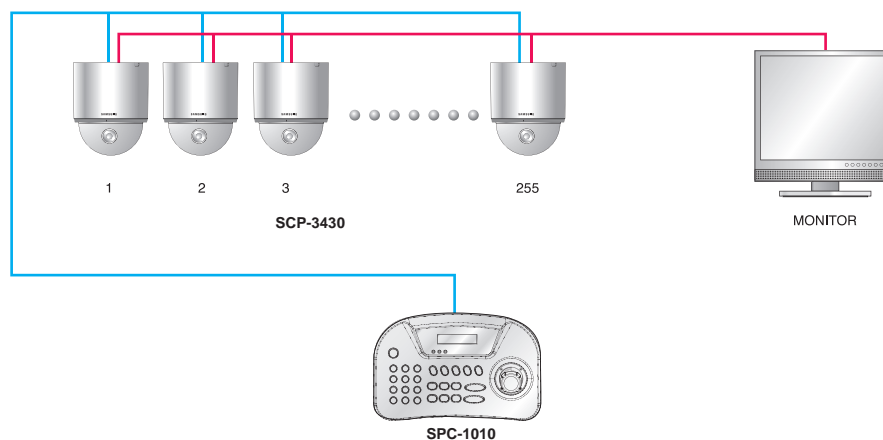
Unit : mm (inch)



### Technical Specifications

| SPC-1010              |                |   |
|-----------------------|----------------|---|
| LCD Display           |                | 16 x 2 character LCD                                      |
| Speed Control         |                | Joystick (3-axis twist zoom)                              |
| Protocol              | PTZ            | Samsung-T/E, Pelco-D/P, Panasonic, Vicon, AD, Honeywell   |
|                       | Zoom Camera    | SCZ-3430/2430, SCP-3370/2370/3250/2250                    |
|                       | Receiver       | Samsung-T   |
| Control Capacity      |                | Up to 255 Cameras (Suitable for Mid-, Large- size system) |
| Communications        | Standards      | RS-485/422 (Remote control : 1Km)                         |
|                       | Transfer Speed | 2,400 ~ 57,600bps   |
| Voltage               |                | 12V DC, 140mA   |
| Operating Temperature |                | 0°C ~ +45°C (+32°F ~ +113°F)                              |
| Operating Humidity    |                | 10% ~ 70%   |
| Dimensions (WxHxD)    |                | 280.0 x 100.0 x 180.0mm (10.63" x 3.94" x 7.09")          |
| Weight                |                | Approx. 0.7Kg (1.54 lb) (Without adapter)                 |

### System Configuration



— Video Line  
— Control Line : RS-485/422

# SPC-2000

## Network Controller

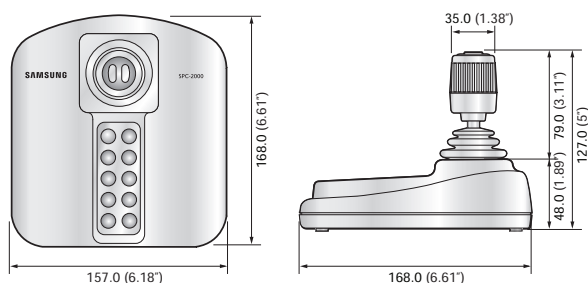


### Key Features

- Superior system compatibility
- 3D joystick control
- Quick and easy installation
- NET-i viewer support

### Dimensions

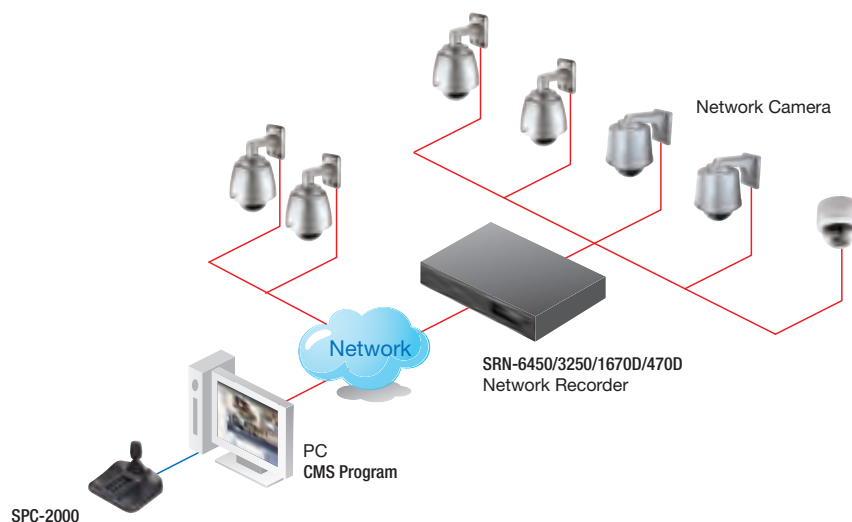
Unit : mm (inch)



### Technical Specifications

|                       | SPC-2000                                     |
|-----------------------|--|
| PTZ Control           | Joystick (3-axis twist zoom)                 |
| Interface             | USB 2.0, DirectX                             |
| Voltage               | 5V DC, 32mA (USB)                            |
| Operating Temperature | -25°C ~ +70°C (-13°F ~ +158°F)               |
| Operating Humidity    | 10% ~ 70%                                    |
| Dimensions (WxHxD)    | 157.0 x 127.0 x 166.0mm (6.18" x 5" x 6.61") |
| Weight                | 440g (0.97 lb)                               |

### System Configuration





# SPC-300

## Coaxial Remote Controller



CONTROLLER

### Key Features

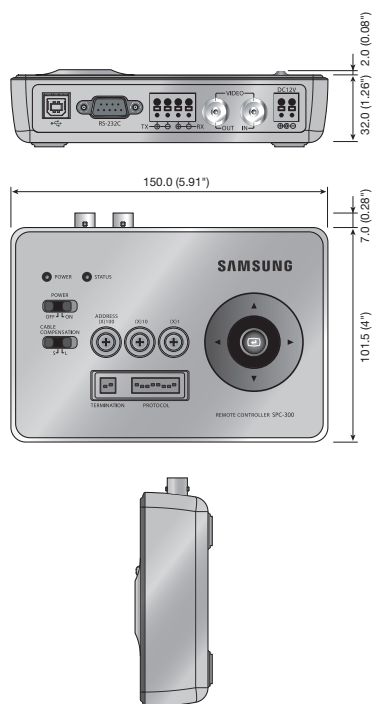
- Control via coaxial cable or RS-485
- Camera connected : 1 unit
- Cable extension : Max. 500m (with 5C-2V cable)
- External control interface : RS-232C, RS-485
- Power input : 12V DC adaptor or 4AA battery

### Technical Specifications

| SPC-300                    |                         |   |
|----------------------------|-------------------------|---|
| Control                    | 1 Coaxial cable         |   |
|                            | RS-485 (Multi-protocol) |   |
| Signal                     | Input                   | Composite video                             |
|                            | Output                  | VBS 1.0Vp-p/75ohms                          |
| Cable                      | Extension               | Max. 500m (With 5C-2V cable)                |
|                            | Compensation            | 2 steps by a switch                         |
| External Control Interface |                         | RS-232C, RS-485                             |
| Power                      |                         | 12V DC adaptor, 4AA battery                 |
| Dimensions (WxHxD)         |                         | 150.0 x 34.0 x 101.5mm (5.91" x 1.34" x 4") |
| Weight                     |                         | 200g (0.44 lb)                              |

### Dimensions

Unit : mm (inch)





# PERIPHERAL

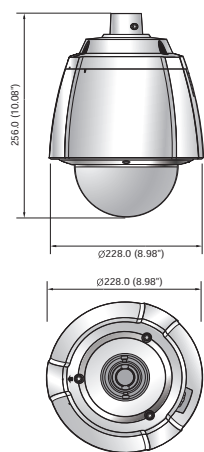
Samsung Total Security Solution

# PTZ Housings

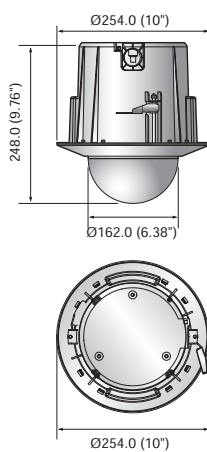
|                       |          |   |  |   |
|-----------------------|----------|---|--|---|
|                       |          |  |  |  |
|                       |          | <b>SHP-3700H</b>  | <b>SHP-3700F</b>   | <b>STB-370NPC</b>   |
| Operating Temperature |          | -50°C ~ +50°C (-58°F ~ +122°F)  | -10°C ~ +50°C (+14°F ~ +122°F)   | -10°C ~ +50°C (+14°F ~ +122°F)  |
| Operating Humidity    |          | 0 ~ 90% RH  | 0 ~ 90% RH   | 0 ~ 90% RH  |
| Materials             | Body     | Aluminum + Poly carbonate   | Poly carbonate   | PC + ABS  |
|                       | Bubble   | Poly carbonate  | Poly carbonate   | N/A   |
| Ingress Protection    |          | IP66  | N/A  | N/A   |
| Dimensions<br>(WxHxD) | External | Ø228.0 x 256.0mm (8.98" x 10.08")   | Ø257.0 x 248.0mm (Ø10.12" x 9.76")   | Ø164.0 x 41.0mm (Ø6.45" x 1.61")  |
|                       | Internal | Ø195.0 x 230.0mm (Ø7.68" x 9.06")   | Ø186.0 x 242.0 (145 at Housing)mm (Ø7.32" x 9.53")                                 |   |
| Weight                |          | 2.5Kg (5.51 lb)   | 702g (1.55 lb)   | 1.3Kg (2.87 lb)   |
| Input Voltage         |          | 24V AC  | N/A  | N/A   |
| Power Consumption     |          | Max. 47W  | N/A  | N/A   |
| Color                 |          | Ivory   | Ivory  | Silver  |
| Applicable Model      |          | SCP-3430/2430<br>SCP-3370/2370<br>SCP-2330/2270<br>SCP-3250/2250<br>SNP-3370      | SCP-3430/2430<br>SCP-3370/2370<br>SCP-2330/2270<br>SCP-3250/2250                   | SNP-3370/3301   |

## Dimensions

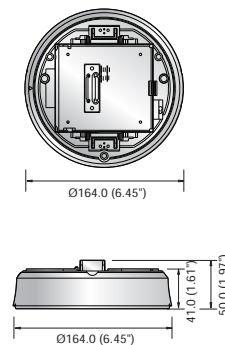
Unit : mm (inch)



SHP-3700H







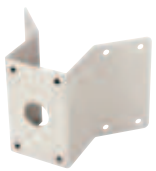


SHP-3700F



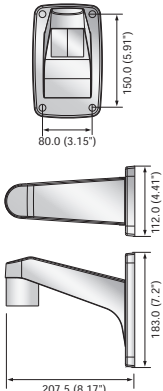
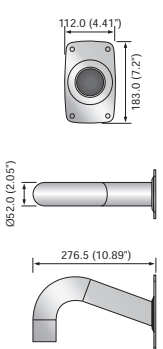
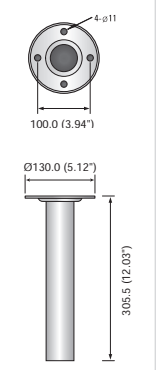
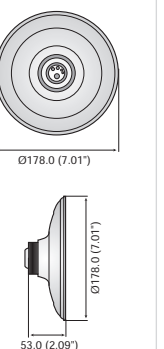
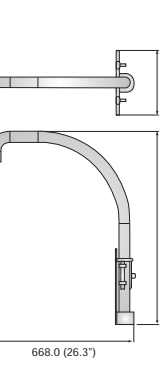
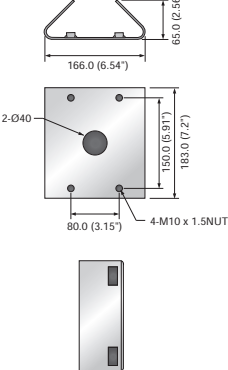
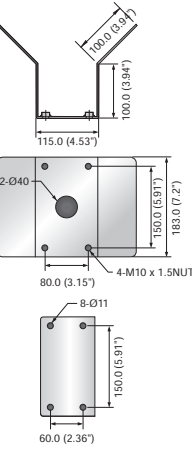
STB-370NPC

# PTZ/Dome Mounts

|                    |  |  |  |  |  |   |   |
|--------------------|--|--|--|--|--|---|---|
|                    |                                       |                                       |                                       |                                   |                                     |  |  |
|                    | <b>SBP-300WM1</b>  | <b>SBP-300WM<br/>SCX-300WM</b>   | <b>SBP-300CM<br/>SCX-300CM</b>   | <b>SBP-300HM1<br/>SCX-300HM</b>  | <b>SBP-300LM<br/>SCX-300LM</b>   | <b>SBP-300PM<br/>SCX-300PM</b>  | <b>SBP-300KM<br/>SCX-300KM</b>  |
| Materials          | Aluminum + SECC  | Aluminum + SECC  | Aluminum + SECC  | Aluminum   | Aluminum + SECC  | SECC  | SECC  |
| Dimensions (WxHxD) | 112.0 x 183.0 x 207.5mm<br>(4.41" x 7.2" x 8.17")  | 112.0 x 183.0 x 276.5mm<br>(4.41" x 7.2" x 10.89")   | Ø130.0 x 305.5mm<br>(Ø5.12" x 12.03")  | Ø178.0 x 53.0mm<br>(Ø7.01" x 2.09")  | 297.0 x 897.0 x 668.0mm<br>(11.69" x 35.31" x 26.3")   | 166.0 x 183.0 x 65.0mm<br>(6.54" x 7.2" x 2.56")                                    | 115.0 x 183.0 x 100.0mm<br>(4.53" x 7.2" x 3.94")                                   |
| Weight             | 800g (1.76 lb)   | 850g (1.87 lb)   | 700g (1.54 lb)   | 500g (1.1 lb)  | 3.5Kg (7.72 lb)  | 1.4Kg (3.09 lb)   | 2.2Kg (4.85 lb)   |
| Color              | SCX series : Light gray / SBP series : Ivory   |  |  |  |  |   |   |
| Applicable Model   | SCP-3430H/2430H<br>SCP-3370TH/3370H<br>SCP-2370TH/2370H<br>SCP-3250H/2250H<br>SCP-3120VH<br>SNP-5200H/3120VH<br>SBP-37 | SCP-3430H/2430H<br>SCP-3370TH/3370H<br>SCP-2370TH/2370H<br>SCP-3250H/2250H<br>SCP-3120VH<br>SNP-5200H/3120VH<br>SBP-37 | SCP-3430H/2430H<br>SCP-3370TH/3370H<br>SCP-2370TH/2370H<br>SCP-3250H/2250H<br>SCP-3120VH<br>SNP-5200H/3120VH<br>SBP-37 | SCP-3430/2430<br>SCP-3370/2370<br>SCP-2700/2300<br>SCP-3250/2250<br>SCP-3120V/3120<br>SNP-5200/3370/3301<br>SBP-37 | SCP-3430H/2430H<br>SCP-3370TH/3370H<br>SCP-2370TH/2370H<br>SCP-3250H/2250H<br>SCP-3120VH<br>SNP-5200H/3120VH<br>SBP-37 | SBP-300WM1<br>SBP-300WM<br>SCX-300WM  | SBP-300WM1<br>SBP-300WM<br>SCX-300WM  |

## Dimensions

Unit : mm (inch)

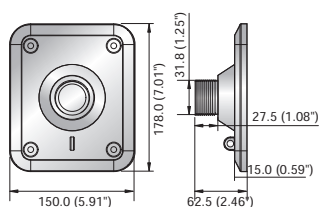
|  |  |  |   |   |  |  |
|--|--|--|---|---|--|--|
|  <p>SBP-300WM1</p> |  <p>SBP-300WM<br/>SCX-300WM</p> |  <p>SBP-300CM<br/>SCX-300CM</p> |  <p>SBP-300HM1<br/>SCX-300HM</p> |  <p>SBP-300LM<br/>SCX-300LM</p> |  <p>SBP-300PM<br/>SCX-300PM</p> |  <p>SBP-300KM<br/>SCX-300KM</p> |
|--|--|--|---|---|--|--|

# PTZ Mounts

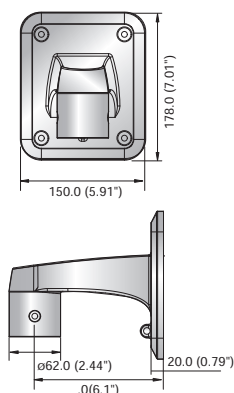
|                    |   |   |   |   |   |
|--------------------|---|---|---|---|---|
|                    |  |  |  |  |  |
|                    | <b>STB-300PP</b>  | <b>STB-300PW</b>  | <b>STB-40PF</b>   | <b>SBP-43</b>   | <b>SBP-37</b>   |
| Materials          | ALDC12  | ALDC12  | ALDC12  | Aluminum  | Aluminum  |
| Dimensions (WxHxD) | 150.0 x 178.0 x 62.5mm<br>(5.91" x 7.01" x 2.46")                                 | 150.0 x 178.0 x 155.0mm<br>(5.91" x 7.01" x 6.1")                                 | Ø63.8 x 82.0mm<br>(Ø2.51" x 3.23")  | Ø63.8 x 82.0mm<br>(Ø2.51" x 3.23")  | Ø63.8 x 82.0mm<br>(Ø2.51" x 3.23")  |
| Weight             | 540g (1.19 lb)  | 750g (1.65 lb)  | 160g (0.35 lb)  | 200g (0.44 lb)  | 160g (0.35 lb)  |
| Color              | Silver  | Silver  | Silver  | Silver  | Silver  |
| Applicable Model   | SNP-3370TH/3301H<br>SBP-43  | SNP-3370TH/3301H<br>SBP-43  | SNP-3370TH/3301H<br>SBP-43  | Change pipe thread<br>1.25" to 1.5"<br>SBP-300WM1/CM/LM<br>SCX-300WM/CM/LM          | Change pipe thread<br>1.5" to 1.25"<br>STB-300PW<br>STB-355PPM                      |

## Dimensions

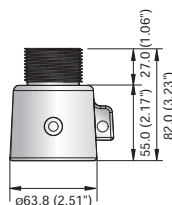
Unit : mm (inch)



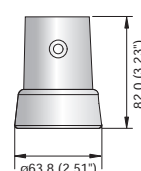
STB-300PP



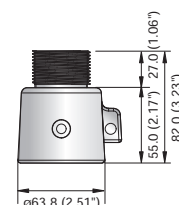
STB-300PW



STB-40PF



SBP-43



SBP-37

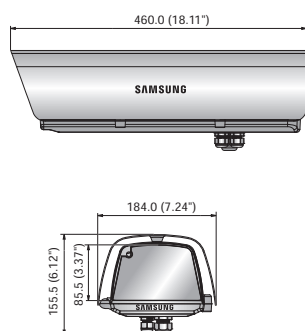


# Fixed Housings

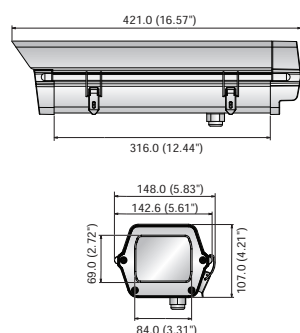
|                       |          |   |   |   |   |   |   |   |
|-----------------------|----------|---|---|---|---|---|---|---|
|                       |          |  |  |  |  |  |  |  |
|                       |          | <b>SHB-4300H</b>  | <b>SHB-4300H1</b>   | <b>SHB-4300H2</b>   | <b>SHB-4200H</b>  | <b>SHB-4200</b>   | <b>STH-500</b>  | <b>STH-200</b>  |
| Open Type             |          | Side open   | Side open   | Side open   | Side open   | Side open   | Side open   | Side open   |
| Cable Entry           |          | Nylon gland   | Nylon gland   | Nylon gland   | Nylon gland   | Nylon gland   | Nylon gland   | Nylon gland   |
| Operating Temperature | Set      | -35°C ~ +50°C<br>(-31°F ~ +122°F)   | -50°C ~ +50°C<br>(-58°F ~ +122°F)   | -50°C ~ +50°C<br>(-58°F ~ +122°F)   | -35°C ~ +50°C<br>(-31°F ~ +122°F)   | -10°C ~ +50°C<br>(14°F ~ +122°F)  | -10°C ~ +50°C<br>(14°F ~ +122°F)  | -40°C ~ +50°C<br>(-40°F ~ +122°F)   |
|                       | Heater   | 5°C ± 5°C on  | 5°C ± 5°C on  | 5°C ± 5°C on  | 4°C ± 3°C on  | N/A   | N/A   | N/A   |
|                       | Blower   | +45°C ~ +5°C on   | +45°C ~ +5°C on   | +45°C ~ +5°C on   | +45°C ~ +5°C on   | N/A   | N/A   | N/A   |
| Defroster             |          | N/A   | Constant  | Constant  | N/A   | N/A   | N/A   | N/A   |
| Operating Humidity    |          | -20% ~ 49% RH   | -20% ~ 49% RH   | -20% ~ 49% RH   | -20% ~ 49% RH   | -20% ~ 49% RH   | -20% ~ 49% RH   | -20% ~ 49% RH   |
| Materials             |          | Aluminum  | Aluminum  | Aluminum  | Aluminum  | Aluminum  | Aluminum  | Aluminum  |
| Ingress Protection    |          | IP66  | IP66  | IP66  | IP66  | IP66  | N/A   | N/A   |
| Dimensions (WxHxD)    | External | 184.0 x 127.0 x 460.0mm<br>(7.24" x 5" x 18.11")                                  | 184.0 x 127.0 x 460.0mm<br>(7.24" x 5" x 18.11")                                  | 184.0 x 127.0 x 460.0mm<br>(7.24" x 5" x 18.11")                                  | 148.0 x 107.0 x 421.0mm<br>(5.83" x 4.21" x 16.57")                               | 148.0 x 107.0 x 421.0mm<br>(5.8" x 4.21" x 16.57")                                  | 144.0 x 100.0 x 500.0mm<br>(5.67" x 3.94" x 19.69")                                 | 118.0 x 92.0 x 405.0mm<br>(4.65" x 3.62" x 15.94")                                  |
|                       | Internal | 100.0 x 80.0 x 383.0mm<br>(3.94" x 3.15" x 15.08")                                | 100.0 x 80.0 x 383.0mm<br>(3.94" x 3.15" x 15.08")                                | 100.0 x 80.0 x 383.0mm<br>(3.94" x 3.15" x 15.08")                                | 84.0 x 69.0 x 319.0mm<br>(3.31" x 2.72" x 12.56")                                 | 84.0 x 69.0 x 319.0mm<br>(3.31" x 2.72" x 12.56")                                   | 88.0 x 68.0 x 383.0mm<br>(3.46" x 2.68" x 15.08")                                   | 70.0 x 56.0 x 360.0mm<br>(2.76" x 2.2" x 14.17")                                    |
| Weight                |          | 3.5Kg (7.72 lb)   | 3.7Kg (8.16 lb)   | 3.7Kg (8.16 lb)   | 1.1Kg (2.3 lb)  | 1Kg (2.2 lb)  | 1.5Kg (3.31 lb)   | 1Kg (2.2 lb)  |
| Input Voltage         |          | 24V AC  | 24V AC  | 230V AC   | 24V AC  | N/A   | N/A   | N/A   |
| Color                 |          | Ivory   | Ivory   | Ivory   | Ivory   | Ivory   | Ivory   | Ivory   |
| Applicable Model      |          | Box Cameras<br>(Network/Analogue)   | Box Cameras<br>(Network/Analogue)   | Box Cameras<br>(Network/Analogue)   | Box Cameras<br>(Network/Analogue)   | Box Cameras<br>(Network/Analogue)   | Box Cameras<br>(Network/Analogue)   | Box Cameras<br>(Network/Analogue)   |

## Dimensions

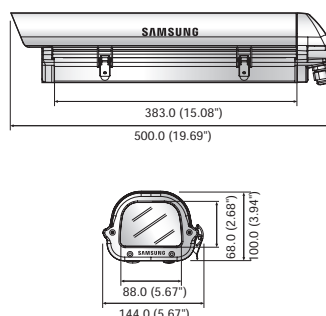
Unit : mm (inch)



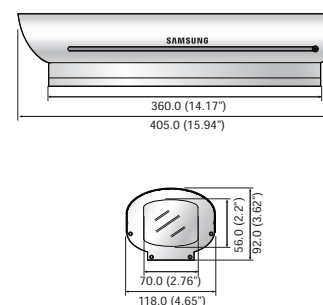
SHB-4300H/4300H1/4300H2



SHB-4200H/4200



STH-500



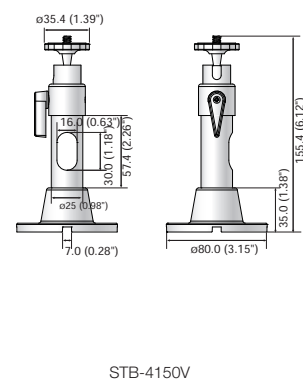
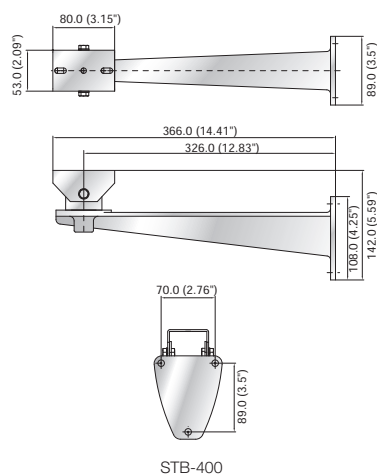
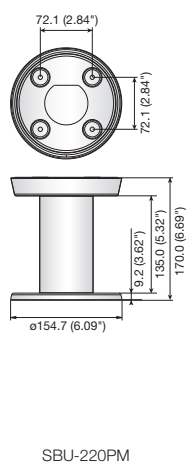
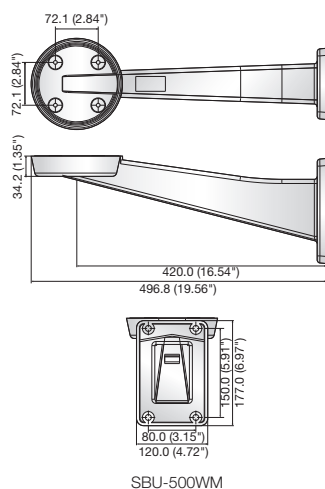
STH-200

# Fixed Mounts

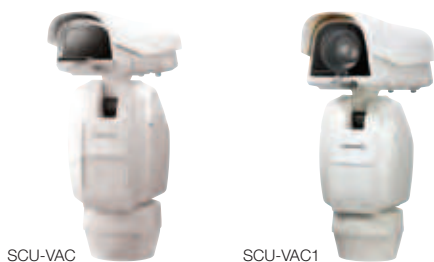
|                    |   |   |  |   |
|--------------------|---|---|--|---|
|                    |  |  |  |  |
|                    | <b>SBU-500WM</b>  | <b>SBU-220PM</b>  | <b>STB-400</b>   | <b>STB-4150V</b>  |
| Load Weight        | 20Kg (44.09 lb)   | 20Kg (44.09 lb)   | 5Kg (11.02 lb)   | 0.4Kg (0.88 lb)   |
| Tilt               | N/A   | N/A   | Manual   | Manual  |
| Materials          | ALDC  | ALDC  | Aluminum   | Aluminum  |
| Dimensions (WxHxD) | 120.0 x 496.8 x 177.0mm<br>(4.72" x 19.56" x 6.97")                               | Ø154.7 x 170.0mm<br>(Ø6.09" x 6.69")  | 89.0 x 108.0 x 366.0mm<br>(3.5" x 4.25" x 14.41")                                  | Ø80.0 x 155.4mm<br>(Ø3.15" x 6.12")   |
| Weight             | 1.79Kg (3.95 lb)  | 1.5Kg (3.31 lb)   | 1Kg (2.2 lb)   | 400g (0.88 lb)  |
| Color              | Ivory   | Ivory   | Ivory  | Silver  |
| Applicable Model   | SCU-2370<br>SCU-9051<br>SCU-VAC/VAC1  | SCU-2370<br>SCU-9051<br>SCU-VAC/VAC1  | STH-500<br>STH-200   | Box Cameras   |

## Dimensions

Unit : mm (inch)



# Positioning/UTP System



SCU-VAC

SCU-VAC1

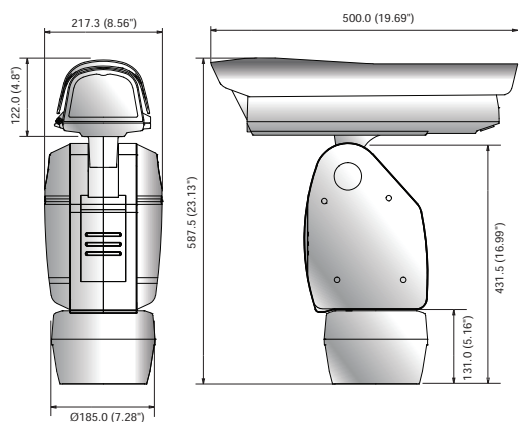
| SCU-VAC/VAC1  |                       |   |
|---------------|-----------------------|---|
| Electrical    | Input Voltage         | 24V AC  |
|               | Power Consumption     | Max. 100W   |
| Operational   | Pan Range             | 360° Endless  |
|               | Pan Speed             | Preset : 0.1° ~ 120°/sec, Manual : 0.1°/sec ~ 36°/sec (Turbo : 120°/sec)  |
|               | Tilt Range            | -85° ~ 40°  |
|               | Tilt Speed            | Preset : 0.1° ~ 36°/sec, Manual : 0.1°/sec ~ 36°/sec  |
|               | Preset Positions      | 255   |
|               | Preset Accuracy       | ±0.1°   |
|               | Operating Temperature | -50°C ~ +50°C (-58°F ~ +122°F)  |
| Environmental | Operating Humidity    | 0% ~ 90% RH   |
| Mechanical    | Material              | Aluminum diecasting   |
|               | Dimensions (WxHxD)    | 217.3 x 587.5 x 500.0mm (8.56" x 23.13" x 19.69") : SCU-VAC<br>220.3 x 636.0 x 582.8mm (8.67" x 25.04" x 22.94") : SCU-VAC1 |
|               | Weight                | 17Kg (37.48 lb) : SCU-VAC / 18.6kg (41.01 lb) : SCU-VAC1  |
|               | Ingress Protection    | IP66  |
|               | Certificate           | FCC(Class A), UL/cUL Listed, CE(Class A)  |



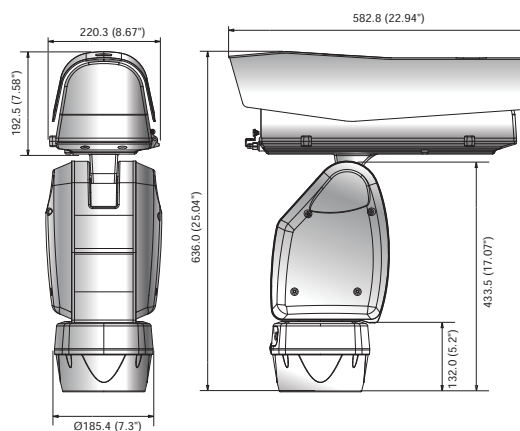
| SPU-100TR             |                |   |
|-----------------------|----------------|---|
| Video Input Signal    |                | CVBS 1.0Vp-p, 75Ω / Balanced differential signal 100Ω |
| Video Output Signal   |                | Balanced differential signal 100Ω / CVBS 1.0Vp-p, 75Ω |
| Video                 | Freq. Response | DC to 5MHz  |
|                       | Impedance      | Coax, BNC 75ohms / UTP, RJ-45 50ohms                  |
| Max. Distance         | Power          | N/A   |
|                       | Video          | 225m (750ft)  |
| Port                  | Video Input    | 2P terminal block or BNC-male                         |
|                       | Video Output   | 2P terminal block or BNC-male                         |
| Operating Temperature |                | -10°C ~ +50°C (+14°F ~ +122°F)                        |
| Operating Humidity    |                | 0% ~ 80% RH   |
| Materials             |                | ABS   |
| Dimensions (WxHxD)    |                | 17.0 x 17.0 x 56.0mm (0.67" x 0.67" x 2.2")           |
| Weight                |                | 20g (0.04 lb)   |

## Dimensions

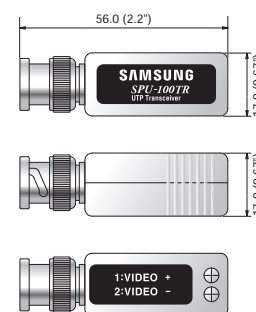
Unit : mm (inch)



SCU-VAC



SCU-VAC1

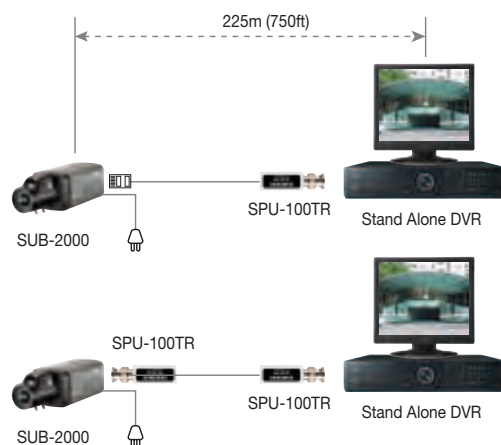


SPU-100TR

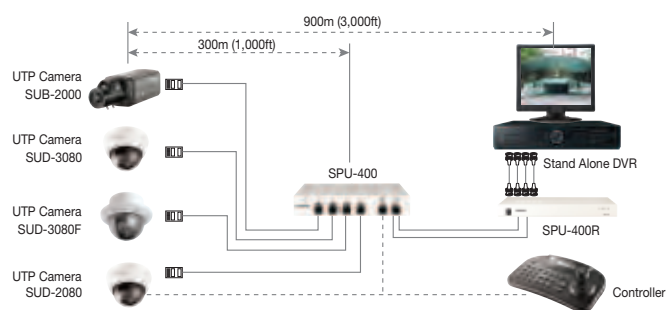
# UTP System



## System Configuration

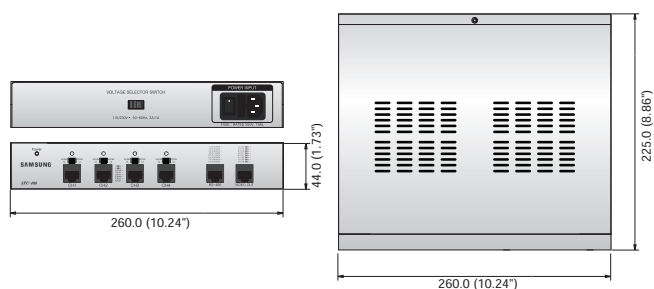


|                       | SPU-400   | SPU-400R  |
|-----------------------|---|---|
| Video Input Signal    | Cable link                                      | Balanced differential signal 100Ω               |
| Video Output Signal   | Cable link                                      | CVBS 1.0Vp-p, 75Ω                               |
| Video                 | Freq. Response                                  | N/A   |
|                       | Common-mode Rejection                           | N/A   |
|                       | Impedance                                       | N/A   |
| Max. Distance         | Power   | 300m (1,000ft)                                  |
|                       | Video   | Cable link                                      |
|                       | Display   | LED   |
| Power                 | Input   | 115 / 230V AC, 50/60Hz                          |
|                       | Output  | 24V AC / 28V AC, 1Amp.                          |
|                       | Voltage Control                                 | 24V AC / Off / 28V AC switchable                |
|                       | Power on Display                                | Green   |
|                       | Protection                                      | 4A fuse   |
|                       | Video Input                                     | 4port (RJ-45)                                   |
|                       | Video Output                                    | 1port (RJ-45)                                   |
| Port                  | DATA  | 1port (RJ-45)                                   |
|                       | Red   | Short shutdown condition                        |
| LED Display           | Green   | Load connected and working                      |
|                       | Amber   | Overload  |
|                       | Off   | Not connected                                   |
| Operating Temperature | -10°C ~ +50°C (+14°F ~ +122°F)                  | -10°C ~ +50°C (+14°F ~ +122°F)                  |
| Operating Humidity    | 0% ~ 80% RH                                     | 0% ~ 80% RH                                     |
| Materials             | Steel   | Steel   |
| Dimensions (WxHxD)    | 260.0 x 44.0 x 225.0mm (10.24" x 1.73" x 8.86") | 430.0 x 43.0 x 250.0mm (16.93" x 1.69" x 9.84") |
| Weight                | 4.35Kg (9.59 lb)                                | 2.56Kg (5.64 lb)                                |

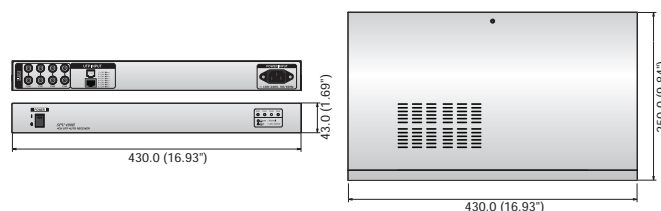


## Dimensions

Unit : mm (inch)














SPU-400

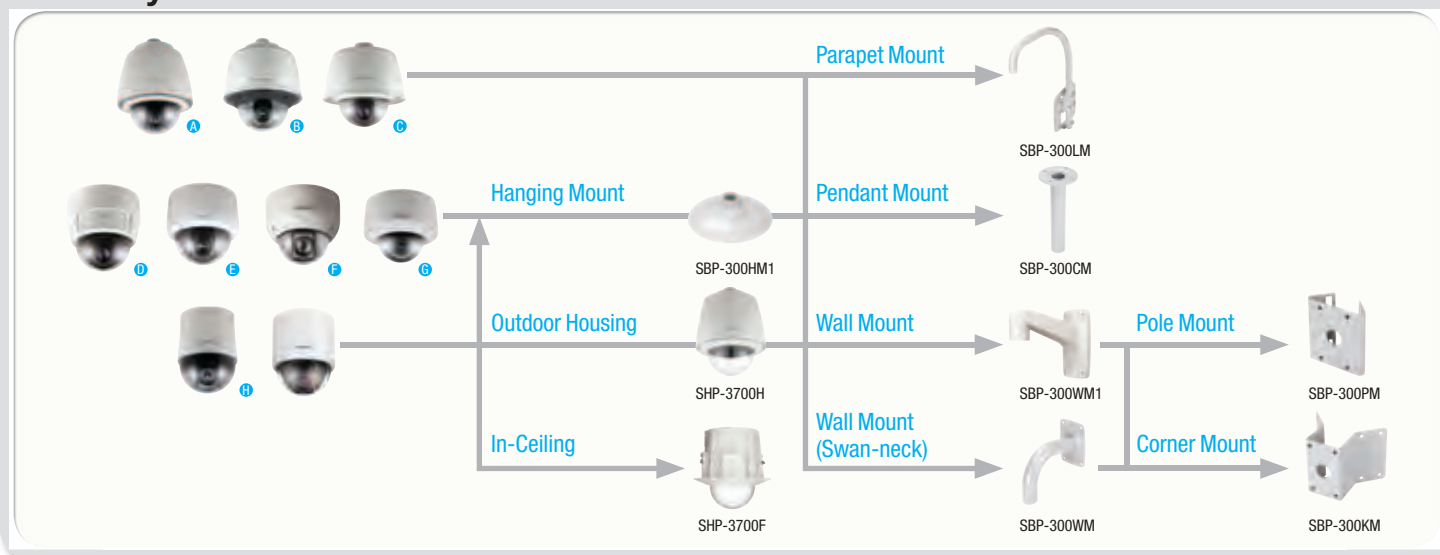


SPU-400R

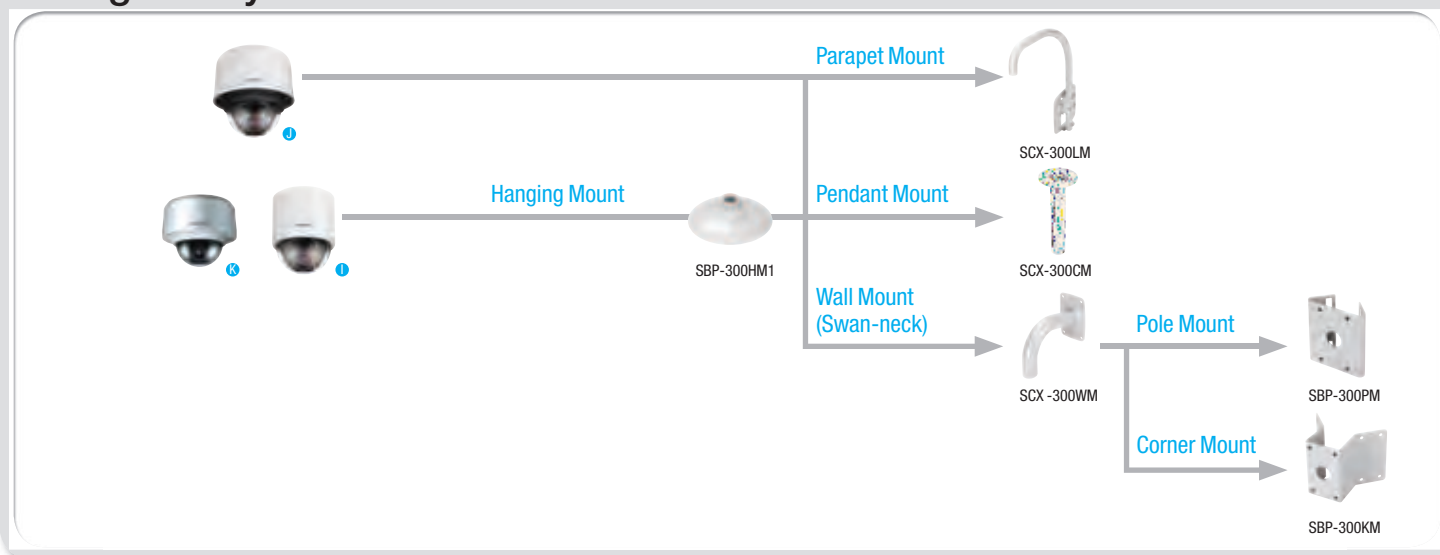
# Accessories Configuration

|       | PTZ   |   |   |   |   | Vandal-Resistant  |  | PTZ   |   |   | Vandal-Resistant  |
|-------|---|---|---|---|---|---|--|---|---|---|---|
| Shape |          |  |  |  |  |  |  |  |  |  |  |
| Color | Ivory   |   |   |   |   |   |  | Light gray  |   |   |   |
| Model | SCP-3370TH<br>SCP-3370H<br>SCP-2370TH<br>SCP-2370H<br>SCP-2330H<br>SCP-2270H<br>SNP-5200H | SNP-3430H   | SCP-3120VH<br>SNP-3120VH  | SCP-3120V<br>SNP-3120V  | SCP-3120<br>SCP-2120  | SCV-2120<br>SCV-2120R   | SNP-7080   | SCP-3370<br>SCP-2370<br>SCP-2330<br>SCP-2270<br>SNP-5200                            | SCP-3430<br>SCP-2430<br>SCP-3250<br>SCP-2250  | SCP-3430H<br>SCP-2430H<br>SCP-3250H<br>SCP-2250H                                    | SCV-3080<br>SCV-2080<br>SNV-5080  |

## Ivory Color



## Light Gray Color

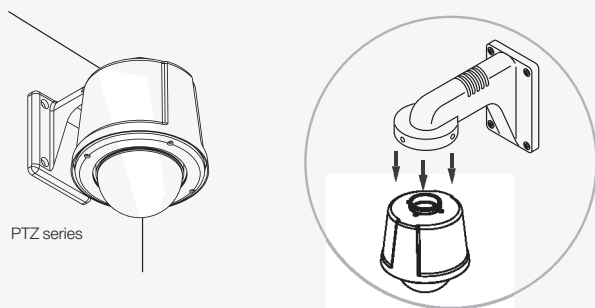




# Accessories Configuration

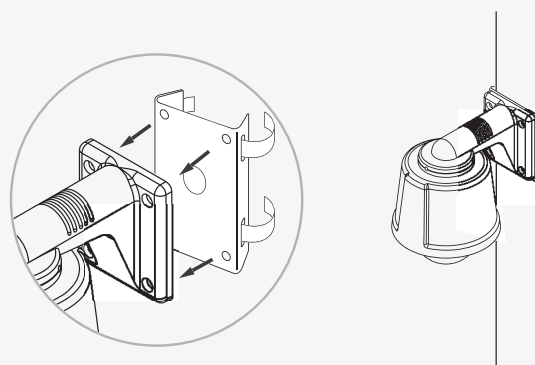
## Wall Mount

STB-270PWV + PTZ Dome Housing + PTZ Camera



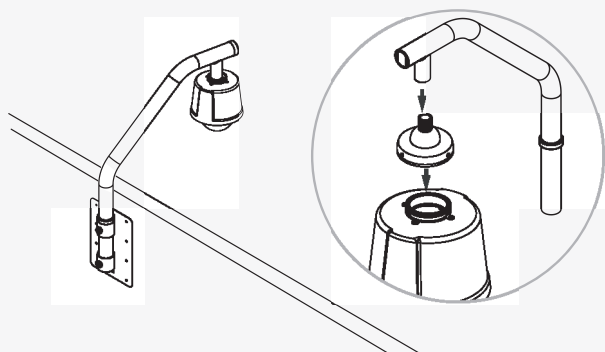
## Pole Mount

STB-330PPM + STB-270PWV + PTZ Dome Housing + PTZ Camera



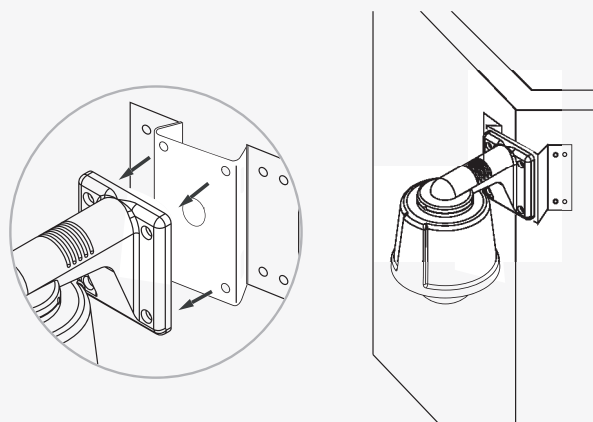
## Parapet Mount

STB-350PPM + STB-30PF + PTZ Dome Housing + PTZ Camera

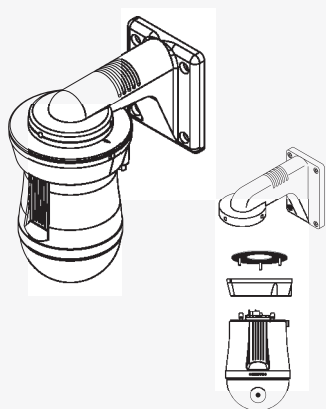


## Corner Mount

STB-340PCM + STB-270PWV + PTZ Dome Housing + PTZ Camera

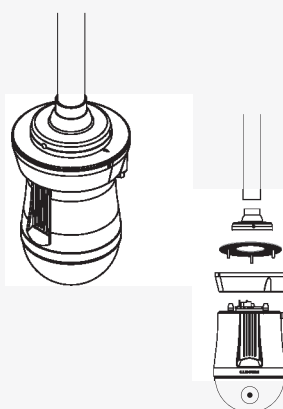


## Flange

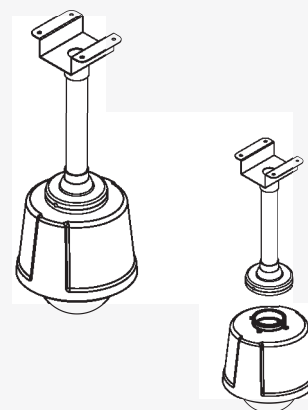


STB-270PWV + STB-25PF + STB-370(N)PC + PTZ Camera

## Pendant Mount



STB-30PF + STB-25PF + STB-370(N)PC + PTZ Camera



STB-496PPV (STB-30PF included) + PTZ Dome Housing + PTZ Camera

# Business Solutions

## Seaport

There are many activities for importing and exporting in harbor. Many containers are shipped with valuable goods that may attract intruders. A high security system is necessary also for the sea surveillance for unexpected attack from forces unknown. It is important to have an efficient surveillance system for national security and property protection.

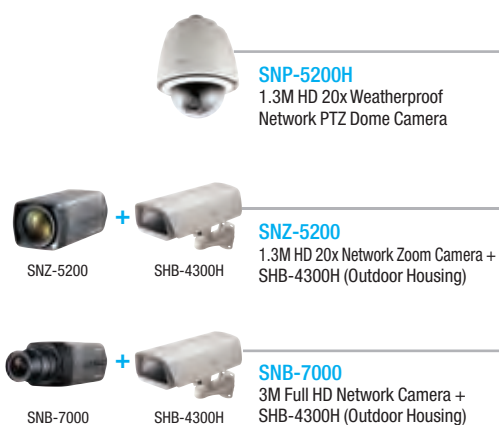
### Main Mission

- Protect containers for importing/exporting
- Keep a watch on emergency situation
- Enhance national safety



### Configuration (Network System)

#### Network Camera



#### CMS NET-i viewer



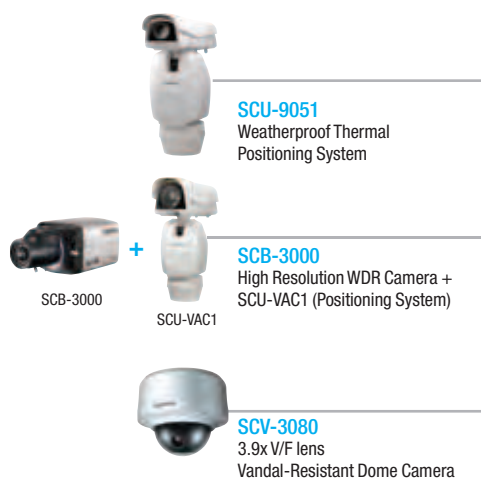
**SCB-9051/9050**  
Weatherproof Thermal Camera

**Encoder  
SPE-100**  
1CH Network Video Encoder

**NVR  
SRN-6450/1670D**  
64CH/16CH Network Video Recorder

### Configuration (Analogue System)

#### Analogue Camera



**Monitor**



**DVR  
SRD-1670D/870D/470D**  
16CH/8CH/4CH 4CIF Real-time Digital Video Recorder

**SRD-1670D/870D**  
**SRD-470D**

# Business Solutions

## City & Road Surveillance

Samsung's security solution offers useful tool for city surveillance in protecting citizens from theft and other crimes. It is also very helpful for road surveillance. Our solution helps to create a secure environment by informing watchers of any criminal situations.

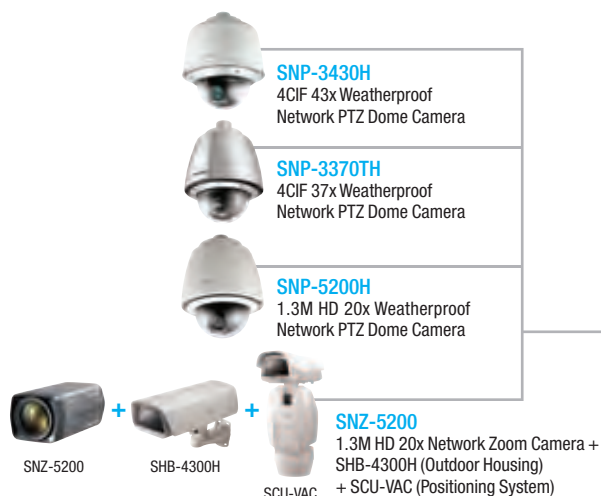
### Main Mission

- Protect citizens and property
- Increase urban safety and city value



### Configuration (Network System)

#### Network Camera



#### CMS NET-i viewer



#### SCU-2370 37x High Resolution Weatherproof Positioning System



#### Encoder SPE-100 1CH Network Video Encoder



#### NVR SRN-1670D 16CH Network Video Recorder

### Configuration (Analogue System)

#### Analogue Camera



#### Monitor



#### DVR SRD-1650D/850D 16CH/8CH CIF Real-time Digital Video Recorder



# Business Solutions

## Banking

The video surveillance in banking institution not only about protecting against thieves, but it is also providing more safer environment for staff members and customers. From a small town facilities to large offices with many branches, Samsung provides customized solution for each facility.

### Main Mission

- Prevent theft
- Provide secure environment



### Configuration (Network System)

#### Network Camera

Entrance



**SNP-3120**  
4CIF 12x Network  
PTZ Dome Camera

Indoor



**SND-3080F/5080F**  
4CIF WDR Network Dome Camera  
/ 1.3M HD Network Dome Camera

ATM



**SNB-3000**  
4CIF WDR Network Camera

Safe



**SND-7080F**  
3M Full HD Network Dome Camera



**CMS**  
**NET-i viewer**



**NVR**  
**SRN-1670D**  
16CH Network Video Recorder

### Configuration (Analogue System)

#### Analogue Camera

Entrance



**SCB-3000**  
High Resolution WDR Camera

Indoor



**SCD-3080**  
3.9x V/F lens Indoor Dome Camera

ATM



**SCD-2020**  
3.7mm Fixed lens  
Indoor Dome Camera



**SCB-3020**  
3.7mm Fixed lens ATM Camera

Safe



**SCV-2080R**  
3.6x V/F lens Vandal-Resistant  
IR Dome Camera



**Monitor**



**DVR**  
**SRD-1670D**  
16CH 4CIF Real-time  
Digital Video Recorder

# Business Solutions

## Healthcare

As healthcare facilities become larger and more professional, needs for safety and efficient managing also become more important issue. Samsung offers a solution to improve overall safety at your facilities and, at the same time, provides patients and activities monitoring in hospital or other healthcare facilities.





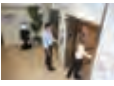



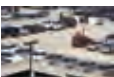

### Main Mission

- Improve the safety in facilities
- Efficient patient or activities monitoring in patient care
- Protect physical and intellectual property



### Configuration (Network System)

#### Network Camera

|                  |   |   |  |
|------------------|---|---|--|
| Entrance         |    |    | <b>SNP-3120</b><br>4CIF 12x Network<br>PTZ Dome Camera             |
| Hallway,<br>Room |   |   | <b>SND-1010</b><br>VGA Network Dome Camera                         |
| Elevator         |  |  | <b>SNV-5010</b><br>1.3M HD Vandal-Resistant<br>Network Flat Camera |
| Counter          |  |  | <b>SND-5080F</b><br>1.3M HD Network Dome Camera                    |
| Parking lot      |  |  | <b>SNB-3000</b><br>4CIF WDR Network Camera                         |






**CMS**  
**NET-i viewer**



**NVR**  
**SRN-1670D**  
16CH Network Video Recorder

### Configuration (Analogue System)

#### Analogue Camera

|                  |   |   |   |
|------------------|---|---|---|
| Entrance         |  |  | <b>SCB-3000</b><br>High Resolution WDR Camera             |
| Hallway,<br>Room |  |  | <b>SCD-2080</b><br>3.6x V/F lens Indoor Dome Camera       |
| Elevator         |  |  | <b>SCB-2010</b><br>3mm Fixed lens Small Box Camera        |
| Counter          |  |  | <b>SCP-2370</b><br>37x High Resolution<br>PTZ Dome Camera |
|                  |   |  | <b>SCD-2080</b><br>3.6x V/F lens Indoor Dome Camera       |
| Parking lot      |  |  | <b>SCB-2000</b><br>High Resolution Camera                 |



**Monitor**



**DVR**  
**SRD-1630D/1610D/830D**  
16CH/8CH  
Digital Video Recorder



**Controller**  
**SPC-1010**  
PTZ Control Keyboard



# Business Solutions

## Casino

Gaming facilities such as casino and other entertainment operations need the most powerful tool for high surveillance. The clear capture of the sleight of hand and quick movement is what you need the most. Samsung's CCTV products can meet the needs and also guarantee to provide enjoyable and safe moment to customers who visit the facilities.

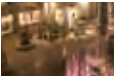







### Main Mission

- Help customers managing
- Prevent cheating and deter criminal actions
- Provide safety environment to customers



### Configuration (Network System)

#### Network Camera

|              |   |   |  |
|--------------|---|---|--|
| Entrance     |    |    | <b>SNZ-5200</b><br>1.3M HD 20x Network Zoom Camera                 |
| Slot machine |   |   | <b>SNP-5200</b><br>1.3M HD 20x Network PTZ Dome Camera             |
| Table        |  |  | <b>SNP-5200</b><br>1.3M HD 20x Network PTZ Dome Camera             |
| Exchange     |  |  | <b>SNV-7080</b><br>3M Full HD Vandal-Resistant Network Dome Camera |











**CMS**  
**NET-i viewer**



**NVR**  
**SRN-1670D**  
16CH Network Video Recorder

### Configuration (Analogue System)

#### Analogue Camera

|              |   |   |   |
|--------------|---|---|---|
| Entrance     |  |  | <b>SCB-3000</b><br>High Resolution WDR Camera   |
| Slot machine |  |  | <b>SCB-2020</b><br>3.7mm Fixed lens ATM Camera  |
| Table        |  |  | <b>SCP-3370/3370TH</b><br>37x High Resolution WDR PTZ Dome Camera /<br>37x High Resolution Weatherproof PTZ Dome Camera (Auto Tracking) |
| Exchange     |  |  | <b>SCB-2000</b><br>High Resolution Camera   |



**Monitor**



**DVR**  
**SRD-1670D/870D/470D**  
16CH/8CH/4CH 4CIF Real-time Digital Video Recorder



**Matrix**  
**SMX-25632**



**Controller**  
**SPC-6000**  
System Control Keyboard

# Business Solutions

## Retail

When you encounter theft and other managing issue at your shop, Samsung's security solution can provide the most practical way to solve your difficulties. With 24/7 monitoring, your shop business get safety and efficiency.

### Main Mission

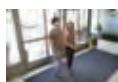
- Prevent thieves and 24/7 all day monitoring
- Provide better service to customers
- Improve staff and customer safety



### Configuration (Network System)

#### Network Camera

Entrance



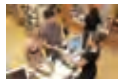
**SND-3080C**  
4CIF People Counting  
Network Dome Camera

Indoor



**SND-1010/SNV-5010**  
VGA Network Dome Camera /  
1.3M HD Vandal-Resistant  
Network Flat Camera

Counter



**SND-5080**  
1.3M HD Network Dome Camera



**CMS**  
**NET-i viewer**

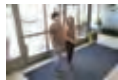


**NVR**  
**SRN-470D**  
4CH Network Video Recorder

### Configuration (Analogue System)

#### Analogue Camera

Entrance



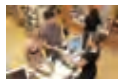
**SCD-3080**  
3.9x V/F lens Indoor Dome Camera

Indoor



**SCD-2020**  
3.7mm Fixed lens Indoor Dome Camera

Counter



**SCD-2080**  
3.6x V/F lens Indoor Dome Camera



**Monitor**



**DVR**  
**SRD-470D/450**  
4CH Digital Video Recorder

# Business Solutions

## Education

Recent news tells us about, how educational facilities are exposed to kidnapping, violence, and vandalism. That's why Samsung offers security solution to solve such issues. From a single building to large areas such as a whole university campus ground, we can meet your specific needs properly.











### Main Mission

- Prevent any criminal action
- Enhance safety for students and staffs
- Monitor all campus area in real-time



### Configuration (Network System)

#### Network Camera

|                       |   |   |   |
|-----------------------|---|---|---|
| Gate                  |    |    | <b>SNP-3301H</b><br>4CIF 30x Weatherproof<br>Network PTZ Dome Camera  |
| Playground            |   |   | <b>SNP-3301H</b><br>4CIF 30x Weatherproof<br>Network PTZ Dome Camera  |
| Classroom,<br>Hallway |  |  | <b>SNV-3080/3120, SNO-5080R</b><br>4CIF WDR/4CIF 12x Vandal-Resistant<br>Network Dome Camera, 1.3M HD<br>Weatherproof Network IR Camera |
| Outside               |  |  | <b>SNP-3370TH</b><br>4CIF 37x Weatherproof Network<br>PTZ Dome Camera (Auto Tracking)   |
| Rooftop               |  |  | <b>SNP-3370TH</b><br>4CIF 37x Weatherproof Network<br>PTZ Dome Camera (Auto Tracking)   |



**CMS**  
**NET-i viewer**



**NVR**  
**SRN-1670D**  
16CH Network Video Recorder

### Configuration (Analogue System)

#### Analogue Camera

|                       |   |   |  |
|-----------------------|---|---|--|
| Gate                  |  |  | <b>SCB-3001</b><br>Premium Resolution WDR Camera   |
| Playground            |  |  | <b>SCP-2370H</b><br>37x High Resolution Weatherproof<br>PTZ Dome Camera                  |
| Classroom,<br>Hallway |  |  | <b>SCV-3080</b><br>3.9x V/F lens Vandal-Resistant<br>Dome Camera                         |
| Outside               |  |  | <b>SCP-2370TH</b><br>37x High Resolution Weatherproof<br>PTZ Dome Camera (Auto Tracking) |
| Rooftop               |  |  | <b>SCU-2370</b><br>37x High Resolution Weatherproof<br>Positioning System                |



**Monitor**



**DVR**  
**SRD-1650D/850D**  
16CH/8CH  
Digital Video Recorder

# Business Solutions

## Government

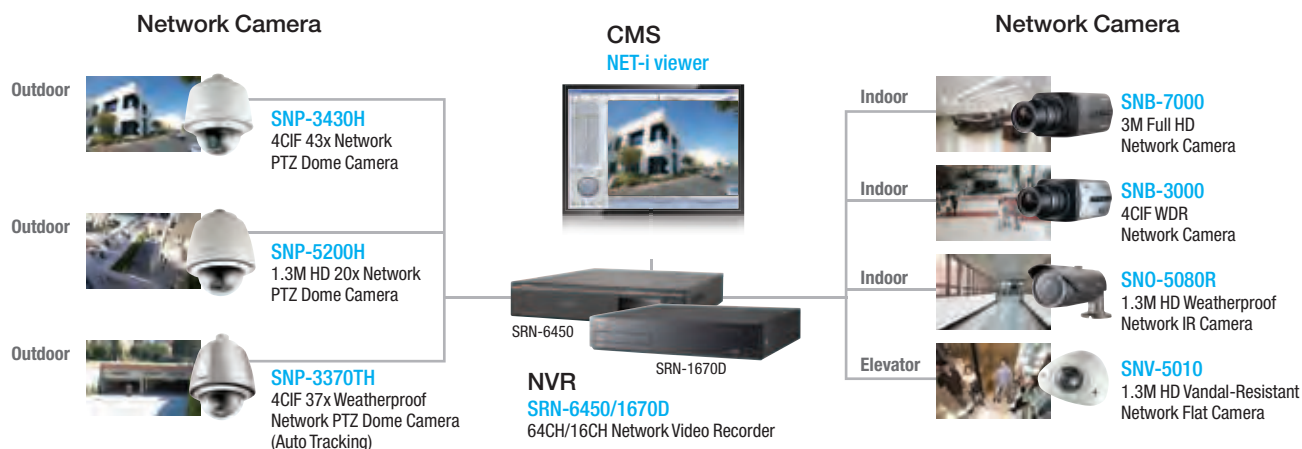
For any government the most important issue is public safety and security. Samsung's security solution is ready to support all government agencies from any emergency like criminal actions and natural calamities.

### Main Mission

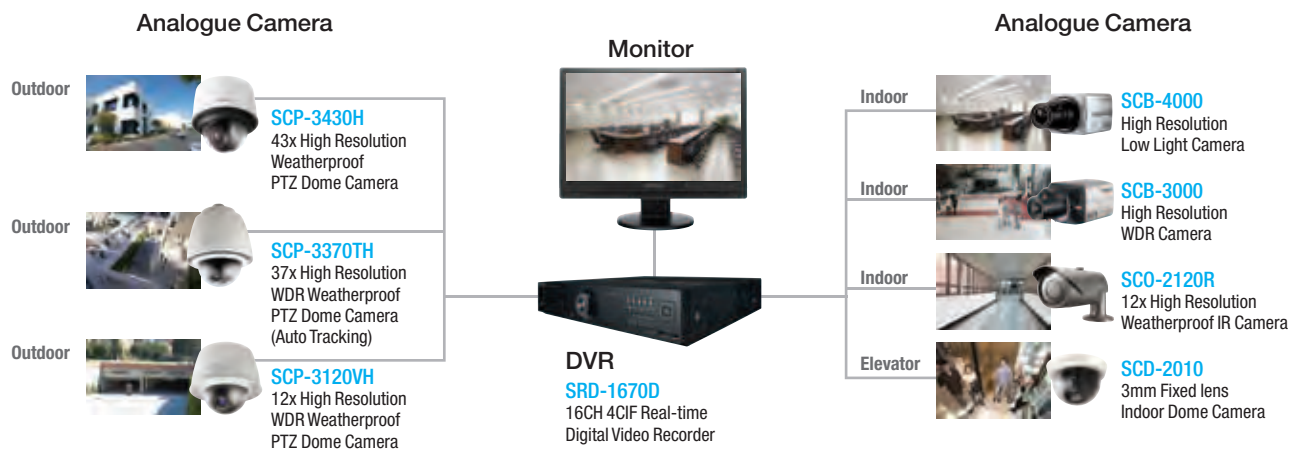
- Protect nation's property and infrastructure
- Build security for internal and external
- Public safety



### Configuration (Network System)



### Configuration (Analogue System)







# INTRUSION ALARM SYSTEM

Samsung Total Security Solution

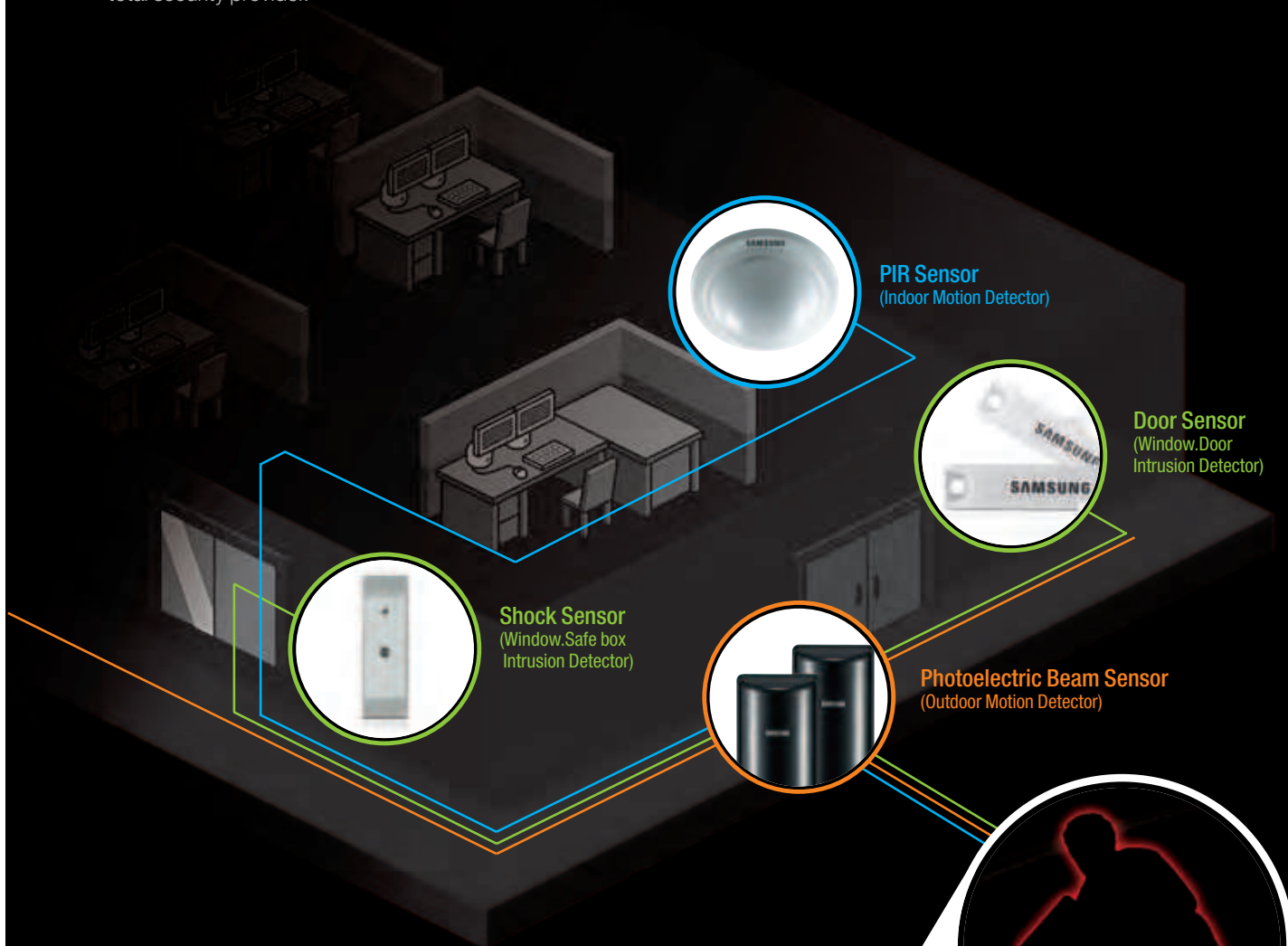


# Intrusion Alarm System Solution

## The Completion of Total Security Provider!

### Smart security solution for high level security

Beyond the following up of events already occurred, Intrusion alarm system can pre-detect the danger and alert a manager. Samsung Techwin's intrusion alarm system can be integrated with CCTV cameras, recorders, and access control systems, adding value as a total security provider.



### Integration with other Security Systems



CMS Events check



PTZ Control



Event Recording



Wall pad events check



# SIC-0800/0400

## 8/4 Wired Zones Alarm System

### Key Features

#### SIC-0800

- 8 programmable wired zones
- 6 receive phones : 2 for central station and 4 for private telephones
- Communication protocol : ADEMCO 4+1 and contact ID
- Remote control by telephone
- 1 bell output, 1 PGM output
- Keypad buzzer indication
- Bell call back function
- 200 event log
- Anti-tamper and anti-cut for both control panel and keypad wire
- Emergency keystroke on keypad

\* This model is not available in America

#### SIC-0400

- 4 programmable wired zones
- 6 receive phones : 2 for central station and 4 for private telephones
- Communication protocol : ADEMCO 4+1 and contact ID
- Remote control through telephone
- Bell output, buzzer indication
- Bell callback function
- 250 event log
- Anti-tamper function of control panel
- Approval listing : EN50131-1 Grade 2



SIC-0800

SIC-0001

SIC-0400

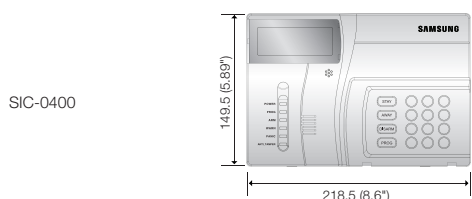
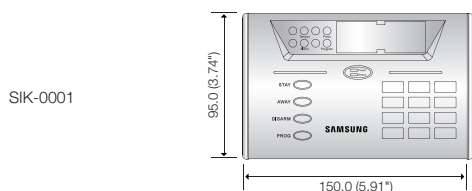
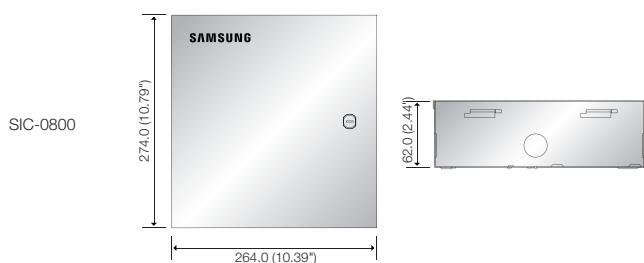
### Technical Specifications

| SIC-0800                         |  |
|----------------------------------|--|
| Zone                             | 8  |
| Receive Phone                    | 6 (2 Central station, 4 private call)            |
| Connect Keypad                   | 4  |
| Protocol                         | ADEMCO 4+1 / Contact ID                          |
| Output                           | 1 Bell, 1 PGM                                    |
| Event Log                        | 200  |
| Anti-tamper / Cut                | Yes  |
| Input Voltage / Current          | 220V AC / Max. 70mA                              |
| Operating Temperature / Humidity | -10 ~ +55°C (+14°F ~ +122°F) / Less than 95%     |
| Dimensions (WxHxD)               | 264.0 x 274.0 x 62.0mm (10.39" x 10.79" x 2.44") |
| Weight                           | 2.88Kg (6.35 lb)                                 |

| SIC-0400                         |   |
|----------------------------------|---|
| Zone                             | 4   |
| Receive Phone                    | 6 (2 Central station, 4 private call)         |
| Protocol                         | ADEMCO 4+1 / Contact ID                       |
| Output                           | 1 Bell  |
| Event Log                        | 250   |
| Anti-tamper / Cut                | Yes   |
| Input Voltage / Current          | 12V DC / Max. 130mA                           |
| Operating Temperature / Humidity | -10 ~ +55°C (+14°F ~ +122°F) / Less than 95%  |
| Dimensions (WxHxD)               | 218.5 x 149.5 x 39.0mm (8.6" x 5.89" x 1.54") |
| Weight                           | 770g (1.7 lb)                                 |

### Dimensions

Unit : mm (inch)



# SIA-0010I/0010/0030/0060/0120

10m/30m/60m/120m Twin Beam Sensor



SIA-0010I

SIA-0010/0030/0060

SIA-0120

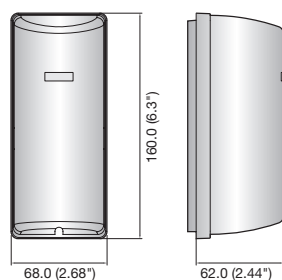
## Key Features

- Outdoor twin beam sensor
- Against frost & dew (A.G.C)
- Adjustable beam interruption period
- FCC, CE approved
- IP65
- SIA-0010I/0010 (outdoor 10m)
- SIA-0030 (outdoor 30m)
- SIA-0060 (outdoor 60m)
- SIA-0120 (outdoor 120m)
- Applicable accessories (except SIA-0120) : SIB-0001/0002/0003

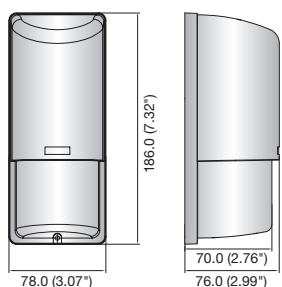
## Dimensions

Unit : mm (inch)

SIA-0010I  
SIA-0010/0030/0060



SIA-0120



## Technical Specifications

|                                  | SIA-0010I/0010/0030/0060                                     |
|----------------------------------|--|
| Max. Detection Range             | Outdoor 10m (SIA-0010I/0010), 30m (SIA-0030), 60m (SIA-0060) |
| Beam                             | Twin beam  |
| Interruption Period              | 50 ~ 500ms   |
| Alarm Output                     | NC / NO  |
| Tamper Switch                    | NC   |
| LED Indicator                    | 2 steps  |
| Ingress Protection               | IP65   |
| Input Voltage / Current          | 10.2 ~ 13.8V DC / Max.41mA                                   |
| Operating Temperature / Humidity | -25 ~ +60°C (-13°F ~ +140°F) / Less than 95%                 |
| Dimensions (WxHxD)               | 68.0 x 160.0 x 62.0mm (2.68" x 6.3" x 2.44")                 |
| Weight                           | 470g (1.04 lb)   |

|                                  | SIA-0120                                      |
|----------------------------------|---|
| Max. Detection Range             | Outdoor 120m                                  |
| Beam                             | Twin beam                                     |
| Interruption Period              | 50 ~ 500ms                                    |
| Alarm Output                     | NC / NO                                       |
| Tamper Switch                    | NC  |
| LED Indicator                    | 2 steps                                       |
| Ingress Protection               | IP65  |
| Input Voltage / Current          | 10.2 ~ 13.8V DC / Max.41mA                    |
| Operating Temperature / Humidity | -25 ~ +60°C (-13°F ~ +140°F) / Less than 95%  |
| Dimensions (WxHxD)               | 78.0 x 186.0 x 76.0mm (3.07" x 7.32" x 2.99") |
| Weight                           | 622g (1.37 lb)                                |

## Optional Accessory



SIB-0001



SIB-0002



SIB-0003

# SIA-0030D/0060D/0120D

## Digital Twin Beam Sensor



SIA-0030D/0060D

SIA-0120D

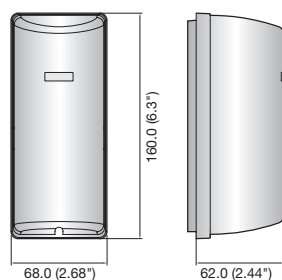
### Key Features

- Outdoor digital twin beam sensor
- 4 way frequency selection
- Against frost & dew (A.G.C)
- Adjustable beam interruption period
- FCC, CE approved
- IP65
- SIA-0030D (outdoor 30m)
- SIA-0060D (outdoor 60m)
- SIA-0120D (outdoor 120m)
- Applicable accessories (except SIA-0120D) : SIB-0001/0002/0003

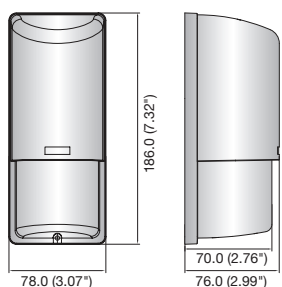
### Dimensions

Unit : mm (inch)

SIA-0030D/0060D



SIA-0120D



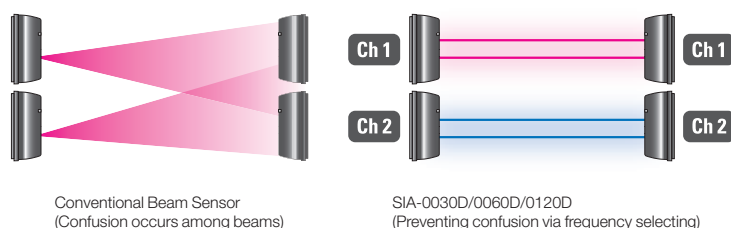
### Technical Specifications

|                                  | SIA-0030D/0060D                              |
|----------------------------------|--|
| Max. Detection Range             | Outdoor 30m (SIA-0030D), 60m (SIA-0060D)     |
| Beam                             | Twin beam                                    |
| Selectable Beam Freq.            | 4 channels                                   |
| Interruption Period              | 50 ~ 500ms                                   |
| Alarm Output                     | NC / NO                                      |
| Tamper Switch                    | NC   |
| LED Indicator                    | 2 steps                                      |
| Ingress Protection               | IP65   |
| Input Voltage / Current          | 10.2 ~ 13.8V DC / Max.41mA                   |
| Operating Temperature / Humidity | -25 ~ +60°C (-13°F ~ +140°F) / Less than 95% |
| Dimensions (WxHxD)               | 68.0 x 160.0 x 62.0mm (2.68" x 6.3" x 2.44") |
| Weight                           | 468g (1.03 lb)                               |

|                                  | SIA-0120D                                     |
|----------------------------------|---|
| Max. Detection Range             | Outdoor 120m                                  |
| Beam                             | Twin beam                                     |
| Selectable Beam Freq.            | 4 channels                                    |
| Interruption Period              | 50 ~ 500ms                                    |
| Alarm Output                     | NC / NO                                       |
| Tamper Switch                    | NC  |
| LED Indicator                    | 2 steps                                       |
| Ingress Protection               | IP65  |
| Input Voltage / Current          | 10.2 ~ 13.8V DC / Max.62mA                    |
| Operating Temperature / Humidity | -25 ~ +60°C (-13°F ~ +140°F) / Less than 95%  |
| Dimensions (WxHxD)               | 78.0 x 186.0 x 76.0mm (3.07" x 7.32" x 2.99") |
| Weight                           | 622g (1.37 lb)                                |

### 4 Way Frequency Selection

Users can prevent the confusion among beams, by setting a receiving channel and a transmitting channel.



# SIA-0100Q/0200Q

Digital Quad Beam Sensor



INTRUSION ALARM  
SYSTEM

## Key Features

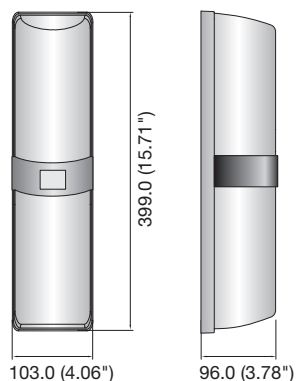
- Outdoor quad beam sensor
- 4 way frequency selection
- Against frost & dew (A.G.C)
- Send the environment signal
- 15 steps LED indicator
- Adjustable beam interruption period
- FCC, CE approved
- SIA-0100Q (outdoor 100m)  
SIA-0200Q (outdoor 200m)

## Technical Specifications

|                                  | SIA-0100Q/0200Q   |
|----------------------------------|---|
| Max. Detection Range             | Outdoor 100m (SIA-0100Q), 200m (SIA-0200Q)                    |
| Beam                             | Quad beam   |
| Selectable Beam Freq.            | 4 channels  |
| Interruption Period              | 50 ~ 700ms  |
| Alarm Output                     | NC / NO   |
| Tamper Switch                    | NC  |
| LED Indicator                    | 15 steps  |
| Ingress Protection               | IP65  |
| Input Voltage / Current          | 10.2 ~ 13.8V DC / Max.75mA : SIA-0100Q, Max.100mA : SIA-0200Q |
| Operating Temperature / Humidity | -25 ~ +60°C (-13°F ~ +140°F) / Less than 95%                  |
| Dimensions (WxHxD)               | 103.0 x 399.0 x 96.0mm (4.06" x 15.71" x 3.78")               |
| Weight                           | 2.5Kg (5.51 lb)   |

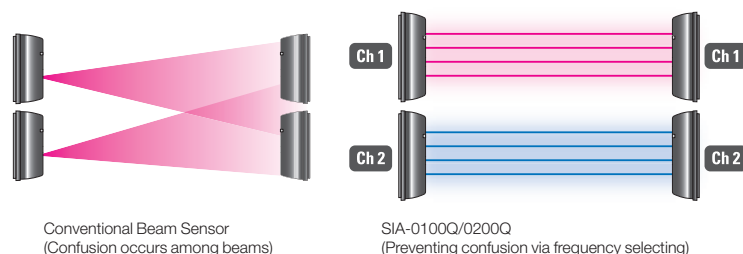
## Dimensions

Unit : mm (inch)



## 4 Way Frequency Selection

Users can prevent the confusion among beams, by setting a receiving channel and a transmitting channel.





# SIT-1212W

## Microwave PIR Sensor

### Key Features

- Doppler effect+power analysis
- X-Band plane antenna
- Microwave detecting distance adjustable
- Auto temperature compensation, reducing false alarm
- Dynamic threshold adjustment technology with high interference immunity
- Look-down window design, avoiding dead angle
- Alarm output N.C. / N.O. optional for different alarm controller
- Intelligence technology differing intruder from interference signal
- Approval listing : EN50131-1 Grade 2

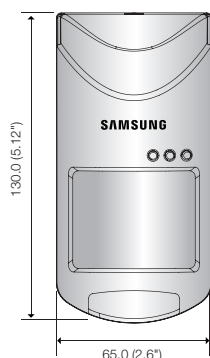
### Bracket



SIB-0004

### Dimensions

Unit : mm (inch)

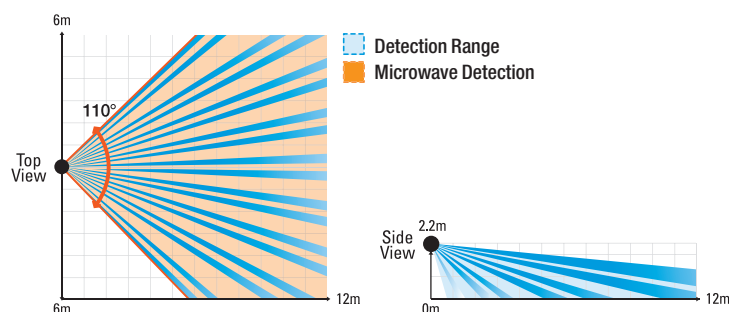


### Technical Specifications

|                                  | SIT-1212W                                    |
|----------------------------------|--|
| Coverage                         | 110° x 12 x 12m                              |
| Alarm Output                     | NC / NO                                      |
| PIR Sensitivity                  | H / L  |
| Tamper Switch                    | NC   |
| Mounting Height                  | 2.2m   |
| Input Voltage / Current          | 9 ~ 16V DC / Max.30mA                        |
| Operating Temperature / Humidity | -10 ~ +50°C (+14°F ~ +122°F) / Less than 95% |
| Dimensions (WxHxD)               | 65.0 x 130.0 x 53.5mm (2.6" x 5.12" x 2.11") |
| Weight                           | 133g (0.29 lb)                               |

### Dual Technology

SIT-1212W supports dual detection function utilizing microwaves. While conventional PIR sensor only detects the changes in temperature and sometimes result in false alarm, microwave detection help to find out whether the temperature has changed by intrusion or just by external environment.



# SIP-1212W

PIR Sensor



INTRUSION ALARM  
SYSTEM

## Key Features

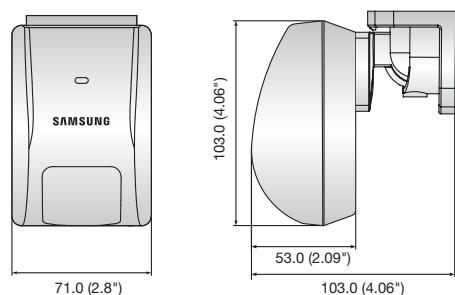
- Reliable sensor with mirror lens
- Silent relay
- FCC, CE approved
- Pet immunity
- Look down zone
- Approval listing : EN50131-1 Grade 2

## Technical Specifications

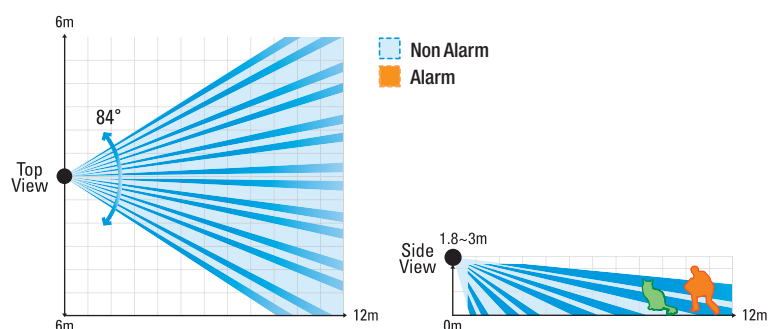
|                                  | SIP-1212W                                    |
|----------------------------------|--|
| Coverage                         | 84° x 12 x 12m                               |
| Alarm Output                     | NC / NO                                      |
| Tamper Switch                    | NC   |
| Detectable Speed                 | 0.2 ~ 1.5ms                                  |
| Pet Immunity                     | Max. 20Kg                                    |
| Pulse Count                      | 2 / 4  |
| Mounting Height                  | 1.8 ~ 3m                                     |
| LED Status                       | Blinks for 3 minutes when the memory set up  |
| Input Voltage / Current          | 10.2 ~ 13.8V DC / Max.17mA                   |
| Operating Temperature / Humidity | -10 ~ +50°C (+14°F ~ +122°F) / Less than 95% |
| Dimensions (WxHxD)               | 71.0 x 103.0 x 53.0mm (2.8" x 4.06" x 2.09") |
| Weight                           | 110g (0.24 lb)                               |

## Dimensions

Unit : mm (inch)



## Detection Range



# SIP-0008DC/0012DA/1201DD

## PIR Sensor

### Key Features

#### SIP-0008DC

- Ceiling mount type
- Auto temperature compensation to reduce false alarm
- Pulse count optional
- 360° viewing
- LED on & off optional
- Approval listing : EN50131-1 Grade 2

#### SIP-0012DA/1201DD

- Reliable sensor with mirror lens
- Silent relay
- FCC, CE approved
- Pet immunity (SIP-1201DA)
- Look down zone (SIP-1201DA)
- Direction setting function (SIP-1201DD)
- Approval listing : EN50131-1 Grade 2



SIP-0008DC



SIP-0012DA



SIP-1201DD

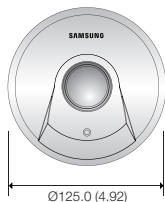
### Technical Specifications

|                                  | SIP-0008DC/0012DA/1201DD  |
|----------------------------------|---|
| Coverage                         | 360° x 8m (SIP-0008DC), 84° x 12 x 12m (SIP-0012DA), 15° x 12 x 1m (SIP-1201DD)   |
| Alarm Output                     | NC / NO   |
| Tamper Switch                    | NC (SIP-0008DC/0012DA)  |
| Detectable Speed                 | 0.2 ~ 1.5ms (SIP-0012DA/1201DD)   |
| Pet Immunity                     | Max. 20Kg (SIP-0012DA/1201DD)   |
| Pulse Count                      | 2 / 4 (SIP-0008DC/0012DA)   |
| PIR Sensitivity                  | H / L (SIP-0008DC/0012DA)   |
| Time setting                     | 5s, 1m, 2m, 4m (SIP-1201DD)   |
| Mounting Height                  | 2.5 ~ 3.6m (SIP-0008DC), 1.8 ~ 3m (SIP-0012DA/1201DD)   |
| LED Status                       | Blinks for 3 minutes when the memory set up (SIP-0012DA)<br>Green : Internal / left zone, Red : Alarm / Right zone (SIP-1201DD) |
| Input Voltage / Current          | 9 ~ 16V DC / Max.25mA (SIP-0008DC)<br>10.2 ~ 13.8V DC / Max.19mA (SIP-0012DA/1201DD)  |
| Operating Temperature / Humidity | -10 ~ +50°C (+14°F ~ +122°F) / Less than 95%  |
| Dimensions (WxH)                 | SIP-0008DC : Ø125.0 x 43.5mm (Ø4.92" x 1.71")<br>SIP-0012DA/1201DD : Ø132.0 x 52.0mm (Ø5.2" x 2.05")                            |
| Weight                           | SIP-0008DC : 150g (0.33 lb), SIP-0012DA/1201DD : 90g (0.2 lb)   |

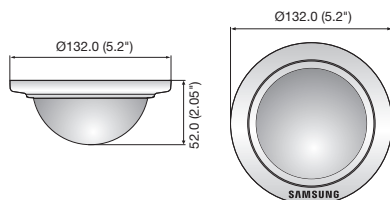
### Dimensions

Unit : mm (inch)

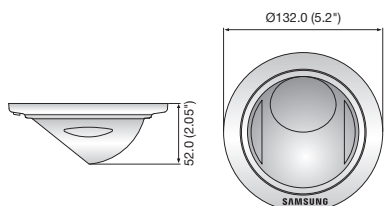
SIP-0008DC



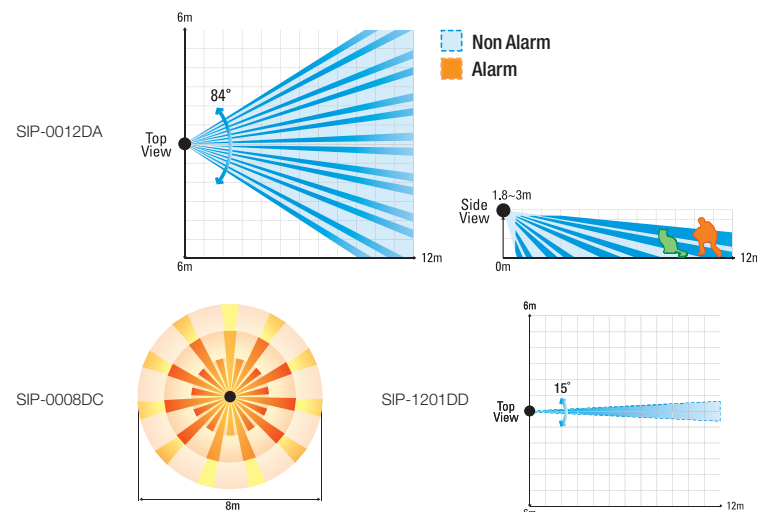
SIP-0012DA



SIP-1201DD



### Detection Range



# ●● SIM-0001/0002/SIS-0001/SIL-0001/SIE-0001

Door Sensor / Shock Sensor / Strobe Light



SIM-0001



SIM-0002



SIS-0001



SIL-0001/SIE-0001

## Key Features

### SIM-0001/0002

- Detect the opening of protected windows and doors
- With leads type (SIM-0001), contacts type (SIM-0002)
- NC alarm output
- Detection range : 30mm

### SIS-0001

- Detect the vibration
- Applicable place : glass window, safe box
- Pulse count : 1 / 2 / 3

### SIL-0001/SIE-0001

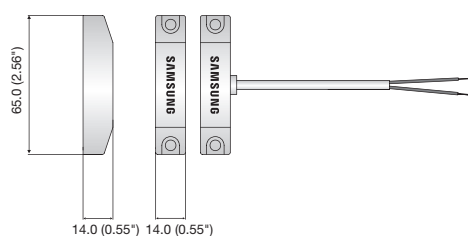
- Turn on light & siren when an intrusion is detected
- Light revolution cycle : 60/min
- Siren embedded (SIE-0001)

## Technical Specifications

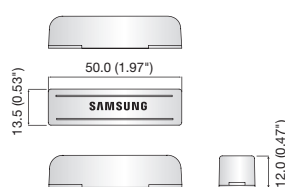
|                                  | SIM-0001/0002  |
|----------------------------------|--|
| Standard Gap                     | 30mm   |
| Alarm Output                     | NC   |
| Operating Temperature / Humidity | -20 ~ 50°C (-4°F ~ +122°F) / Less than 95%   |
| Dimensions (WxHxD)               | 65.0 x 14.0 x 14.0mm (2.56" x 0.55" x 0.55") : SIM-0001<br>50.0 x 13.5 x 12.0mm (1.97" x 0.53" x 0.47") : SIM-0002 |
| Weight                           | 42g (0.09 lb)  |
|                                  | SIS-0001   |
| Installation Site                | Safe box, Glass window   |
| Pulse Count                      | 1 / 2 / 3  |
| LED Status                       | Red : Lights up when an alarm occurs, Green : Lights up when counting  |
| Alarm Output                     | NC   |
| Input Voltage / Current          | 10.2 ~ 13.8V DC / Max.14mA   |
| Operating Temperature / Humidity | -20 ~ 50°C (-4°F ~ +122°F) / Less than 95%   |
| Dimensions (WxHxD)               | 28.0 x 88.0 x 20.5mm (1.1" x 3.46" x 0.81")  |
| Weight                           | 26g (0.06 lb)  |
|                                  | SIL-0001/SIE-0001  |
| Light Source                     | White light source power led   |
| Light Revolution Cycle           | 60/min   |
| Brightness                       | 10Lux (Base on 1m distance) : SIL-0001, 10Lux : SIE-0001   |
| Siren Activation Time            | 15sec : SIE-0001   |
| Siren dB                         | 90dB (Base on 30m distance) : SIL-0001, 90dB : SIE-0001  |
| Input Voltage / Current          | 10.2 ~ 13.8V DC / Max.14mA   |
| Operating Temperature / Humidity | -20 ~ 50°C (-4°F ~ +122°F) / Less than 95%   |
| Dimensions (WxHxD)               | Ø124.0 x 56.0mm (Ø4.88" x 2.2")  |
| Weight                           | 200g (0.44 lb)   |

## Dimensions

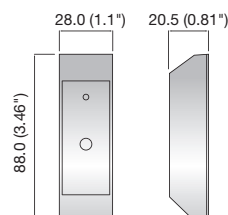
Unit : mm (inch)



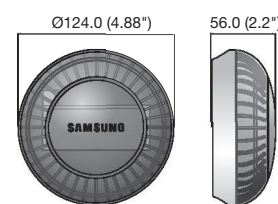
SIM-0001



SIM-0002



SIS-0001



SIL-0001/SIE-0001

# ACCESS CONTROL SYSTEM

Samsung Total Security Solution





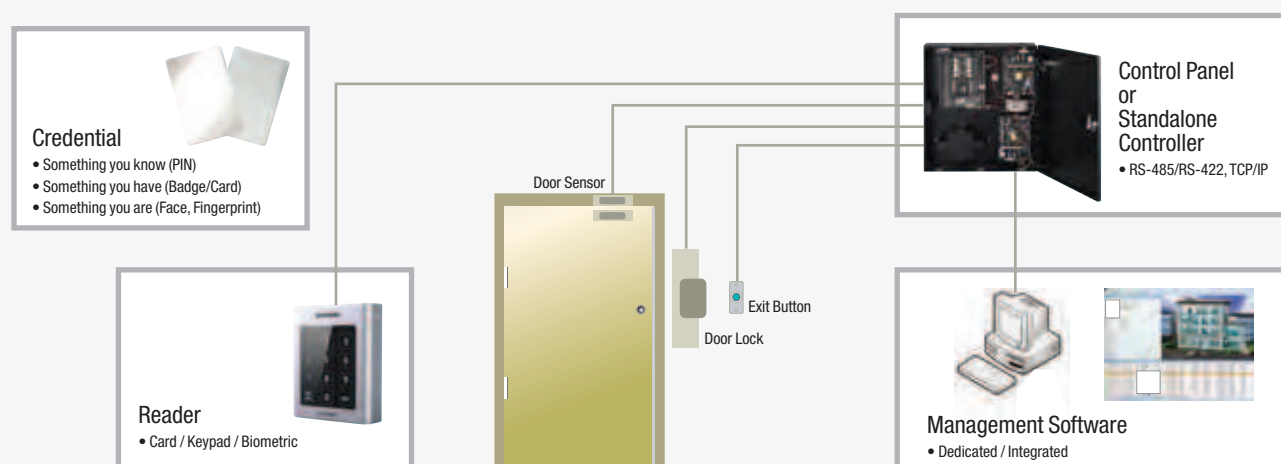
# Access Control System Terms & Features

## Access Control System

A system which enables an authority to control access to areas and resource in a given physical facility. In physical security, the term access control refers to the practice of restricting entrance to a property, a building, or a room to authorized persons. An access control system determines who is allowed to enter or exit, where, when, and how they are allowed to enter or exit.

## Access Control Product Types

An access control system includes the following product types : Control Panels, Standalone Controllers, Readers, Credentials, and Software.



## Control Panel

Control panel controls physical access through doors and communicates with the management software(PC) through a TCP/IP or serial RS-485/422 communication line.

## Standalone Controller

Standalone controller is one door control panel which has a built-in RFID, keypad, or biometric reader.

## Reader

Reader reads the information of credential and send it to control panel through a Wiegand communication line. Reader can have one or more interface, accommodating a combination of RFID cards as well as a keypad and biometric reader.

## Credential

A card or credential contain a pass code, number, or biometric information which identifies the user to the access control system.

## Management Software

Access control software enables the user to program custom database into the system. Cardholder access parameters can be set up as well as enabling automatic door control and a number of customized features.

# Access Control System Terms & Features

## Proximity Card

Proximity cards, or “prox cards”, are read-only devices that are encoded once and are then used to transmit a fixed numeric value to a reader in the 125KHz frequency band.

## Smart Card

Smart cards are contactless RF cards and tags operating in the 13.56MHz frequency band. 13.56MHz cards offer unique and secure ID codes and more memory than traditional proximity cards.

## MIFARE

MIFARE is the NXP-owned trademark of the reputedly most widely installed contactless smart card technology in the world. The MIFARE technology is based upon the ISO/IEC 14443 type A 13.56MHz contactless smart card standard.

## Fingerprint Reader

A fingerprint reader identify and compare unique patterns found on an individual's fingertip with patterns stored on a reader or standalone controller.



## Vandal-Resistant Reader and Standalone Controller

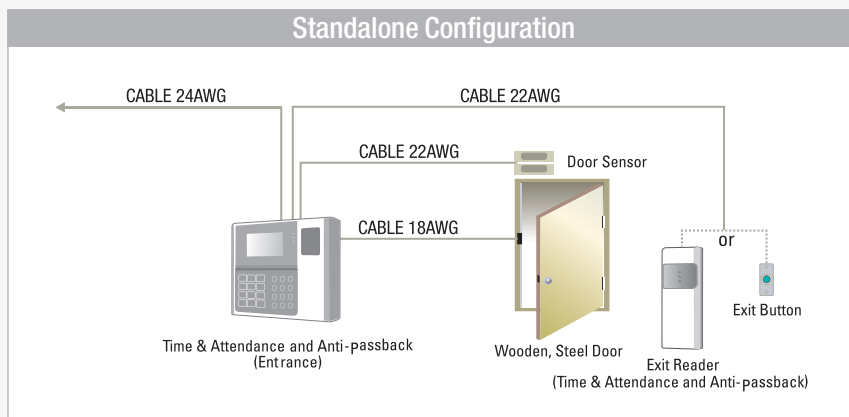
Vandal-resistant products are designed to be installed in a location and application where they may be subject to vandalism or tampering, as in the case of pedestrian crossing the products, or fraudulent or unauthorized use.



## AWG (American Wire Gauge)

AWG is a standardized wire gauge system used in US and other areas. In access control system, cables between AWG 18 to AWG 24 are widely used.

- Composed of standalone controllers with built-in reader
- Can be operated in network system



|                 |  |
|-----------------|--|
| SSA-S30x0/S30x1 | Fingerprint recognition, Proximity / Smart card, PIN |
| SSA-S2100/S2101 | Proximity / Smart card, PIN                          |
| SSA-S2000/S1000 | PIN / Proximity card (No connection to network)      |

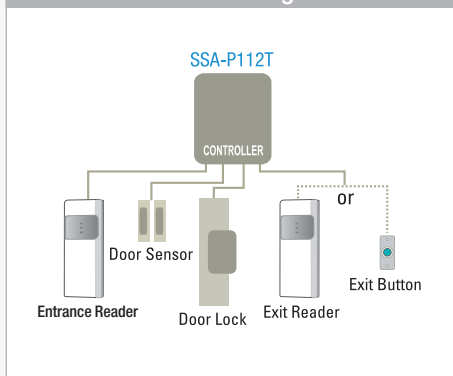


# Access Control System Configuration

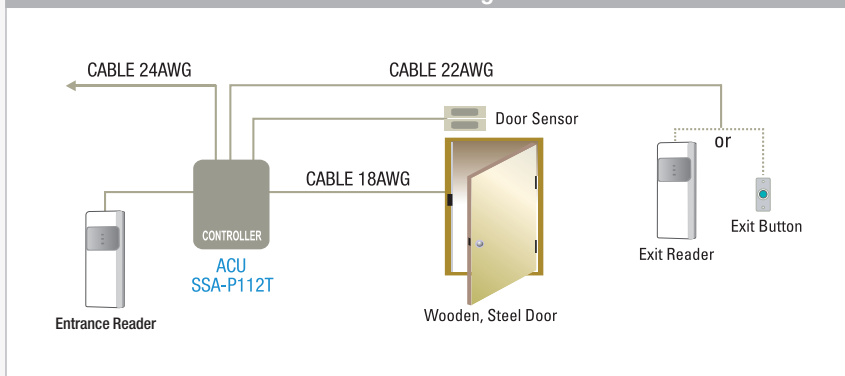
## System with Control Panels and Readers

- Composed of control panel such as SSA-P112T and readers (Standalone / General selectable)
- Communication via RS-485/422 or TCP/IP
- SSA-P102T : A panel type controller. Excluding power case from SSA-P112T

### Standalone Configuration

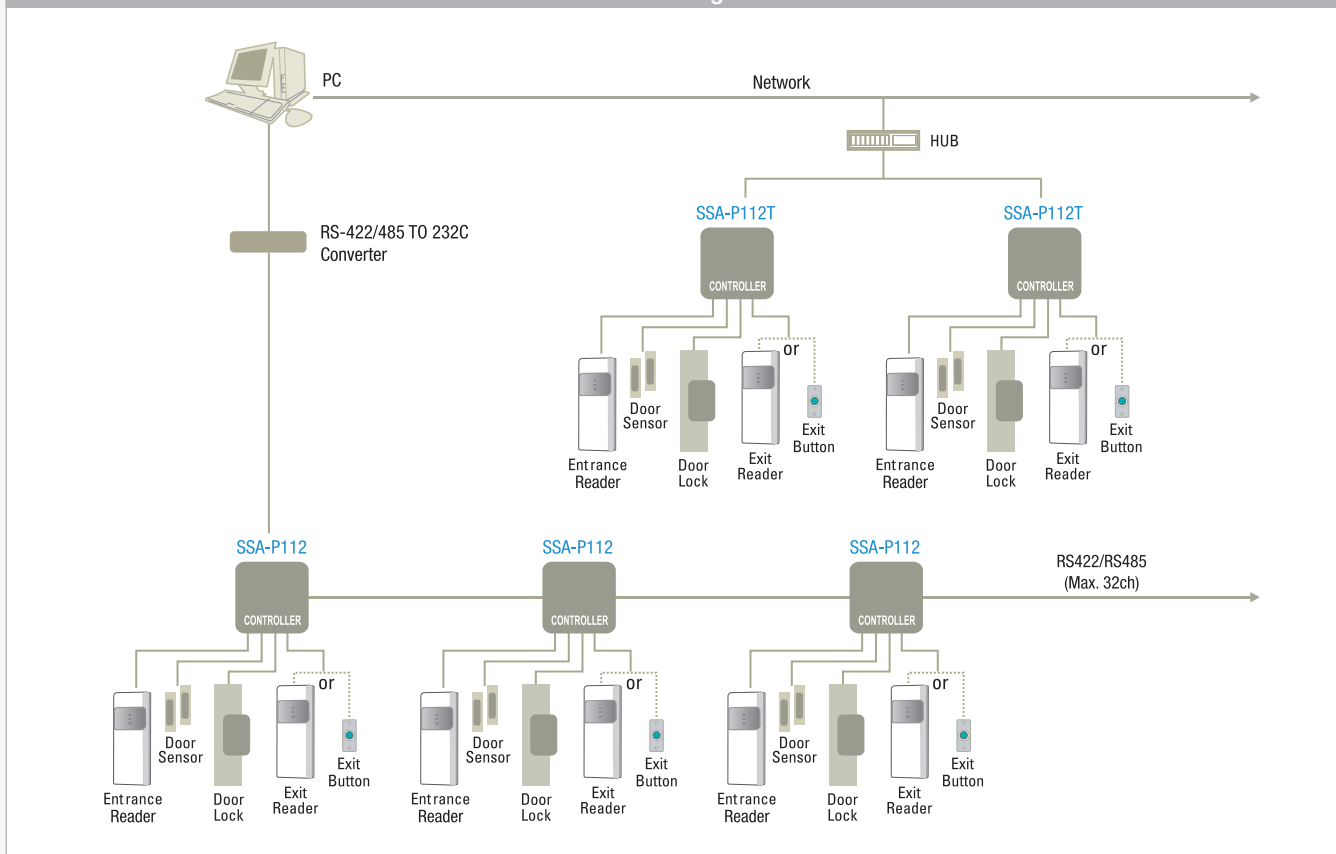


### Standalone Configuration



|              |                 |   |
|--------------|-----------------|---|
| <b>Model</b> | SSA-R20x0/R20x1 | Fingerprint recognition, Proximity / Smart card |
|              | SSA-R2000/2001  | Proximity / Smart card, PIN                     |
|              | SSA-R1100/1101  | Proximity / Smart card                          |
|              | SSA-R1000/1001  | Proximity / Smart card                          |

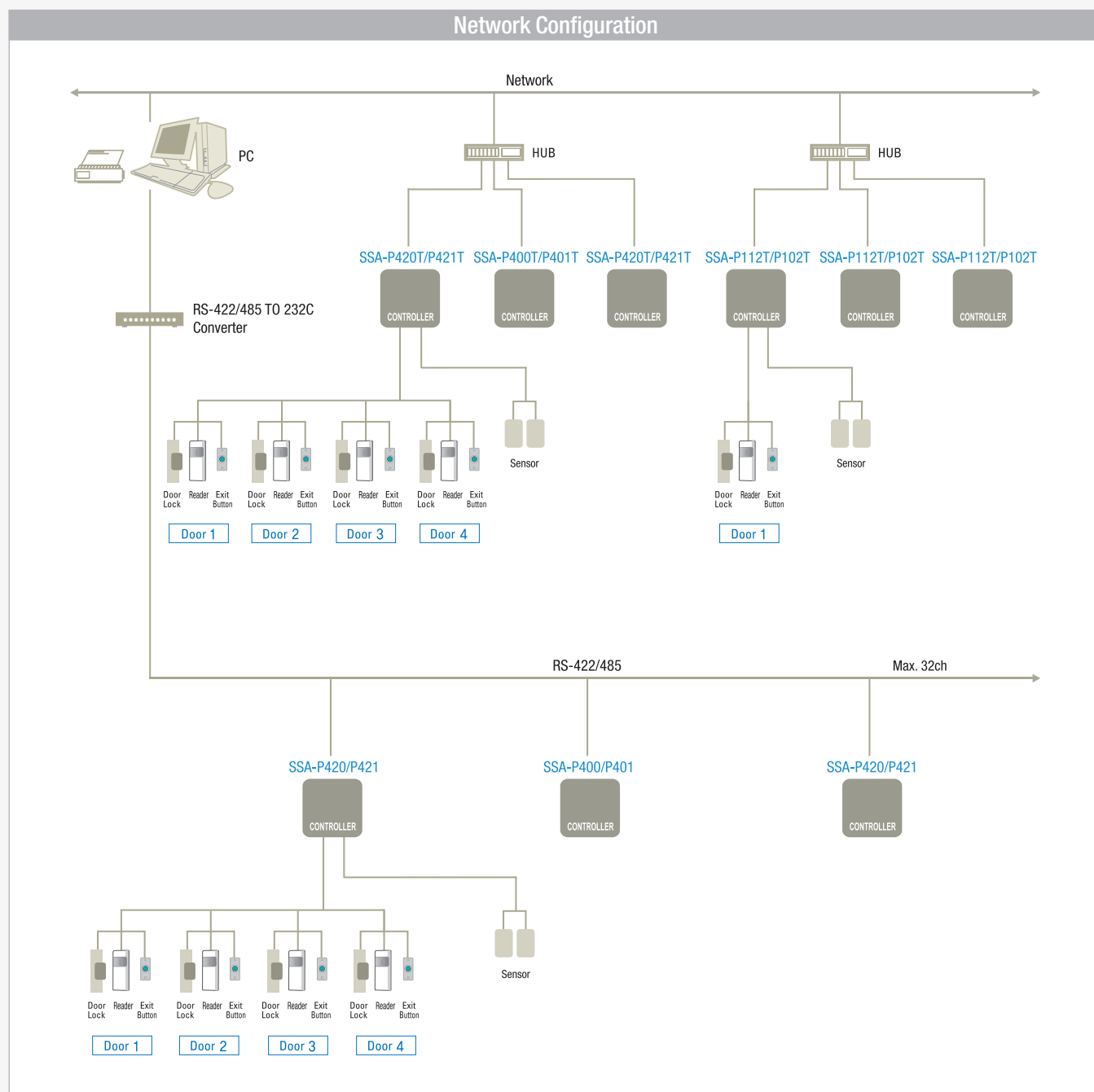
## Network Configuration



# Access Control System Configuration

## System with Control Panels and Readers

- Composed of control panel including SSA-P420(T)/P421(T)/P400(T)/P401(T) and SSA-P112(T)/P102(T)
  - SSA-P420(T)/P421(T) : Able to control 4 doors in connection with 4 readers.  
Can have input/output ports of 15ea
  - SSA-P400(T)/P401(T) : Excluding power case from SSA-P420(T)/P421(T)
  - SSA-P112(T) : Able to control single door in connection with 2 readers
  - SSA-P102(T) : Excluding power case from SSA-P112(T)
- Communication via RS-485/422 or TCP/IP
- Can use every reader type





# SSA-S3010/S3020/S3040 S3011/S3021/S3041

Fingerprint Recognition,  
Proximity / Smart Card & Pin,  
Time & Attendance Access Controller



\* SSA-S3010  
Product Design : 80%  
Features and Functions : 85%  
Installation : 80%  
Performance : 85%  
Overall Rating : 83%



## Key Features

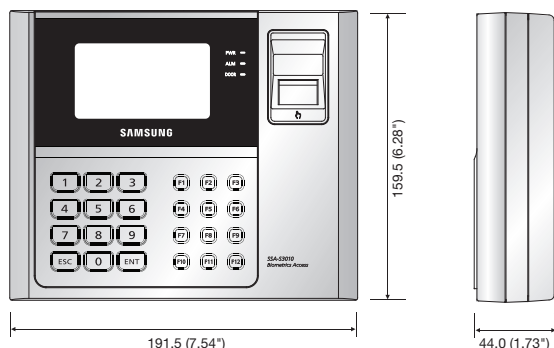
- 125KHz proximity / 13.56MHz contact-less smart card, PIN and fingerprint recognition
- Dual function for access control and time & attendance
- 1 : 1 verification and 1 : N identification storable 2 fingerprint templates
- Fingerprint quality display
- 1,000 / 2,000 / 4,000 fingerprint users
- 10,000 / 20,000 ID users and 20,000 / 10,000 event buffers (selectable)
- 4 level door open time setting by individual ID
- Time schedules setting by individual ID, input port, output port and reader mode
- Network communication via RS-232, RS-485 and built-in TCP/IP
- 4 input, 4 output (2 relay output)
- 26bit / 34bit wiegand input / output
- User name display on LCD
- 2 men operation mode / duress alarm function
- Graphic LCD of multi languages display
- Cut off check for input devices

## Technical Specifications

|  | SSA-S3010/S3020/S3040  | SSA-S3011/S3021/S3041 |
|--|--|-----------------------|
| USER / EVENT BUFFERS                             |  |                       |
| Total ID Users                                   | Up to 20,000 users   |                       |
| Fingerprint Users                                | 1,000 : SSA-S3010/S3011 / 2,000 : SSA-S3020/S3021 / 4,000 : SSA-S3040/S3041  |                       |
| Event Buffers                                    | Up to 20,000 event buffers   |                       |
| AUTHENTICATION                                   |  |                       |
| Method   | RFID, PIN, Fingerprint   |                       |
| Verification / Identification Time (Fingerprint) | Less than 1sec / Less than 2sec  |                       |
| INPUT / OUTPUT                                   |  |                       |
| Reader Port                                      | 1ea (26/34bit wiegand, 4/8bit burst for PIN for anti pass-back)  |                       |
| Input Port                                       | 4ea (Exit button, Door sensor, Aux#1, Aux#2)<br>2ea (2 form-C relay output / 12V ~ 18V DC, Rating max. 2A)<br>1ea (TTL output / 5V DC, Rating max. 20mA) |                       |
| Output Port                                      | 1ea (26/34bit wiegand out data 0,1), 26bit wiegand : SSA-S3010/S3020/S3040<br>34bit wiegand : SSA-S3011/S3020/S3041                                      |                       |
| LED Indicator                                    | 3 LED indicator (Red, Green, Yellow)   |                       |
| Beeper   | Piezo buzzer   |                       |
| OPERATIONAL                                      |  |                       |
| Frequency / Format                               | 125KHz / Samsung   | 13.56MHz / MIFARE     |
| On Screen Display                                | English, French, German, Spanish, Italian, Russian, Turkish, Chinese, Korean   |                       |
| Voice Out  | English, French, German, Spanish, Italian, Russian, Turkish, Chinese, Korean   |                       |
| LCD  | Graphic LCD (128 x 64dots), 72.5 x 39.5mm (2.85" x 1.56") view area  |                       |
| Keypad   | 24key numeric keypad with back lighting (12 function key included)   |                       |
| Communication                                    | TCP/IP, RS-232, RS-422, RS-485 (Max. 32CH)   |                       |
| ENVIRONMENTAL                                    |  |                       |
| Operating Temperature                            | 0°C ~ +50°C (+32°F ~ +122°F)   |                       |
| Operating Humidity                               | Less than 90% RH   |                       |
| ELECTRICAL                                       |  |                       |
| Input Voltage / Current                          | 12V DC / Max. 540mA  | 12V DC / Max. 560mA   |
| Power Consumption                                | Max. 6.5W  | Max. 6.8W             |
| MECHANICAL                                       |  |                       |
| Color / Material                                 | Silver and black / Polycarbonate   |                       |
| Dimensions (WxHxD)                               | 191.5 x 159.5 x 44.0mm (7.54" x 6.28" x 1.73")   |                       |
| Weight   | 760g (1.68 lb)   |                       |
| FINGERPRINT MODULE SPECIFICATIONS                |  |                       |
| Resolution                                       | 500dpi   |                       |
| Capture Image Size                               | 412 x 302pixels  |                       |
| Extraction Image Size                            | 260 x 300pixels  |                       |
| Sensing Area                                     | 13 x 15.2mm  |                       |
| Scanner  | High quality optical sensor  |                       |
| FAR  | 0.001%   |                       |
| FRR  | 0.1%   |                       |
| ESD  | 15KV   |                       |
| Verification Time                                | Less than 1sec   |                       |
| Identification Time                              | Less than 2sec   |                       |
| TIME SCHEDULES                                   |  |                       |
| Time Code  | 10   |                       |
| Time Interval                                    | 5  |                       |
| Holiday Code                                     | 10   |                       |
| Holiday  | 100  |                       |

## Dimensions

Unit : mm (inch)



# SSA-S2100/S2101

Proximity / Smart Card & PIN,  
Time & Attendance Access Controller



ACCESS CONTROL  
SYSTEM

## Key Features

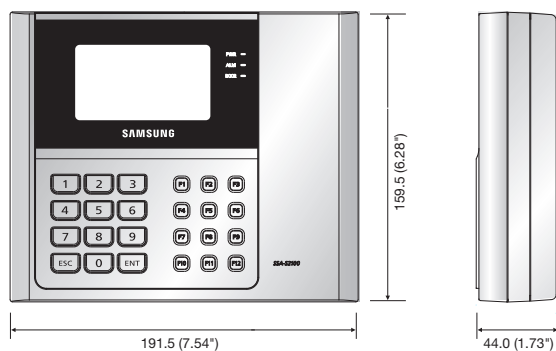
- 125KHz proximity / 13.56MHz contact-less smart card reader and PIN
- Dual function for access control and time & attendance
- 10,000 / 20,000 ID users and 20,000 / 10,000 event buffers (selectable)
- 4 level door open time setting by individual ID
- Time schedules setting by individual ID, input port, output port and reader mode
- Network communication via RS-232, RS-485 and built-in TCP/IP
- 4 input, 4 output (2 relay output)
- 26bit / 34bit wiegand input / output
- User name display on LCD
- 2 men operation mode / duress alarm function
- Graphic LCD of multi languages display
- Cut off check for input devices

## Technical Specifications

|                         | SSA-S2100  | SSA-S2101         |
|-------------------------|--|-------------------|
| USER / EVENT BUFFERS    |  |                   |
| Total ID Users          | Up to 20,000 users   |                   |
| Event Buffers           | Up to 20,000 event buffers   |                   |
| AUTHENTICATION          |  |                   |
| Method                  | RFID, PIN  |                   |
| INPUT / OUTPUT          |  |                   |
| Reader Port             | 1ea (26/34bit wiegand, 4/8bit burst for PIN for anti pass-back)  |                   |
| Input Port              | 4ea (Exit button, Door sensor, Aux#1, Aux#2)   |                   |
| Output Port             | 2ea (2 form-C relay output / 12V ~ 18V DC, Rating max. 2A)<br>1ea (TTL output / 5V DC, Rating max. 20mA)<br>1ea (26/34bit wiegand out data 0, 1), 26bit wiegand : SSA-S2100<br>34bit wiegand : SSA-S2101 |                   |
| LED Indicator           | 3 LED indicator (Red, Green, Yellow)   |                   |
| Beeper                  | Piezo buzzer   |                   |
| OPERATIONAL             |  |                   |
| Frequency / Format      | 125KHz / Samsung   | 13.56MHz / MIFARE |
| On Screen Display       | English, French, German, Spanish, Italian, Russian, Turkish, Chinese, Korean   |                   |
| Voice Out               | English, French, German, Spanish, Italian, Russian, Turkish, Chinese, Korean   |                   |
| LCD                     | Graphic LCD (128 x 64dots), 72.5 x 39.5mm (2.85" x 1.56") view area  |                   |
| Keypad                  | 24key numeric keypad with back lighting (12 function key included)   |                   |
| Communication           | TCP/IP, RS-232, RS-422, RS-485 (Max. 32CH)   |                   |
| ENVIRONMENTAL           |  |                   |
| Operating Temperature   | 0°C ~ +50°C (+32°F ~ +122°F)   |                   |
| Operating Humidity      | Less than 90% RH   |                   |
| ELECTRICAL              |  |                   |
| Input Voltage / Current | 12V DC / Max. 420mA  |                   |
| Power Consumption       | Max. 5.0W  |                   |
| MECHANICAL              |  |                   |
| Color / Material        | Silver and black / Polycarbonate   |                   |
| Dimensions (WxHxD)      | 191.5 x 159.5 x 44.0mm (7.54" x 6.28" x 1.73")   |                   |
| Weight                  | 710g (1.57 lb)   |                   |
| TIME SCHEDULES          |  |                   |
| Time Code               | 10   |                   |
| Time Interval           | 5  |                   |
| Holiday Code            | 10   |                   |
| Holiday                 | 100  |                   |

## Dimensions

Unit : mm (inch)



# SSA-S2000/S2000V/S1000/S1000V

Proximity & PIN Access Controller  
Proximity & Access Controller



SSA-S2000

SSA-S2000V

SSA-S1000

SSA-S1000V

## Key Features

### SSA-S2000/S2000V

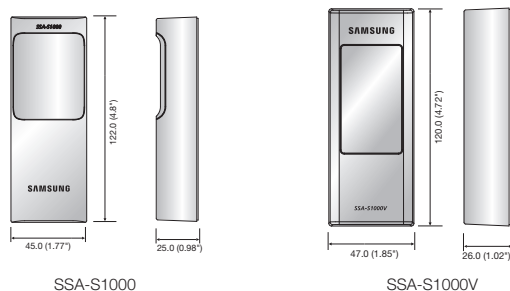
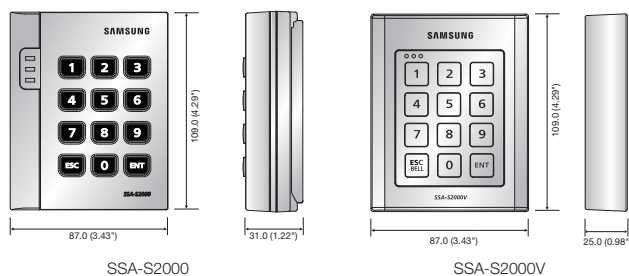
- 125KHz proximity & PIN access controller
- 512 users
- 1ea of external reader port for exit : 26bit wiegand
- All I/Os and operation time programmable by keypad
- Independent 5 inputs and 4 outputs including 2ea of 2 form-C relay outputs
- Keypad lock by try-out error alarm function
- Toggle mode for door opening / closing
- Safe (default) / secure mode available
- Lock control by door sensor
- Dual tamper switches
- Chime bell output
- 26bit wiegand output for reader mode
- SSA-S2000V : vandal-resistant / waterproof (IP68)

### SSA-S1000/S1000V

- 125KHz proximity access controller
- 512 users
- Direct control of door lock
- Power fail safe or power fail secure locks selectable
- Solid epoxy potted
- SSA-S1000 : weatherproof (IP66)
- SSA-S1000V : vandal-resistant / waterproof (IP68)

## Dimensions

Unit : mm (inch)



## Technical Specifications

|                         | SSA-S2000   | SSA-S2000V  |
|-------------------------|---|---|
| USER / EVENT BUFFERS    |   |   |
| Total ID Users          | 512 users   |   |
| AUTHENTICATION          |   |   |
| Method                  | RFID, PIN   |   |
| INPUT / OUTPUT          |   |   |
| Reader Port             | 1ea (26bit wiegand for exit)  |   |
| Input Port              | 5ea (Exit button, Door sensor, Aux#1, Aux#2, Aux#3)<br>2ea (2 form-C relay output / 12V ~ 18V DC, Rating max. 2A) |   |
| Output Port             | 1ea (Chime bell output / 5V DC, Rating max. 500mA)<br>1ea (TTL output / 5V DC, Rating max. 20mA)                  |   |
| LED Indicator           | 3 LED indicator (Red, Green, Yellow)  |   |
| Beeper                  | Piezo buzzer  |   |
| OPERATIONAL             |   |   |
| Frequency / Format      | 125KHz / Samsung  |   |
| Keypad                  | 12key numeric keypad with back lighting   |   |
| ENVIRONMENTAL           |   |   |
| Operating Temperature   | -30°C ~ +50°C (-22°F ~ +122°F)  |   |
| Operating Humidity      | Less than 90% RH  |   |
| Ingress Protection      | N/A   | IP68  |
| Vandal-Resistant        | N/A   | Yes   |
| ELECTRICAL              |   |   |
| Input Voltage / Current | 12V DC / Max. 110mA   |   |
| Power Consumption       | Max. 1.5W   |   |
| MECHANICAL              |   |   |
| Color / Material        | Silver and black / Polycarbonate  | Silver and black / Polycarbonate & aluminum die casting |
| Dimensions (WxHxD)      | 87.0 x 109.0 x 31.0mm (3.43" x 4.29" x 1.22")   | 87.0 x 109.0 x 25.0mm (3.43" x 4.29" x 0.98")           |
| Weight                  | 220g (0.49 lb)  | 440g (0.97 lb) ±10g (0.02 lb)                           |

|                         | SSA-S1000   | SSA-S1000V  |
|-------------------------|---|---|
| USER / EVENT BUFFERS    |   |   |
| Total ID Users          | 512 users   |   |
| AUTHENTICATION          |   |   |
| Method                  | RFID  |   |
| INPUT / OUTPUT          |   |   |
| Input Port              | 3ea (Exit button, Door sensor, Lock type select)          |   |
| Output Port             | 2ea (TR output / 12 ~ 18V DC, Rating max. 2A lock output) |   |
| LED Indicator           | 2LED indicator (Red, Green)                               |   |
| Beeper                  | Piezo buzzer  |   |
| OPERATIONAL             |   |   |
| Frequency / Format      | 125KHz / Samsung  |   |
| ENVIRONMENTAL           |   |   |
| Operating Temperature   | -20°C ~ +50°C (-4°F ~ +122°F)                             |   |
| Operating Humidity      | Less than 90% RH  |   |
| Ingress Protection      | IP66  | IP68  |
| Vandal-Resistant        | N/A   | Yes   |
| ELECTRICAL              |   |   |
| Input Voltage / Current | 12V DC / Max. 110mA                                       |   |
| Power Consumption       | Max. 1.5W   |   |
| MECHANICAL              |   |   |
| Color / Material        | Silver and black / Polycarbonate                          | Silver and black / Polycarbonate & aluminum die casting |
| Dimensions (WxHxD)      | 45.0 x 122.0 x 25.0mm (1.77" x 4.8" x 0.98")              | 47.0 x 120.0 x 26.0mm (1.85" x 4.72" x 1.02")           |
| Weight                  | 130g (0.29 lb)  | 250g (0.55 lb) ±10g (0.02 lb)                           |

# SSA-R2010/R2020/R2040 R2011/R2021/R2041

Fingerprint Recognition,  
Proximity / Smart Card Reader



ACCESS CONTROL  
SYSTEM

## Key Features

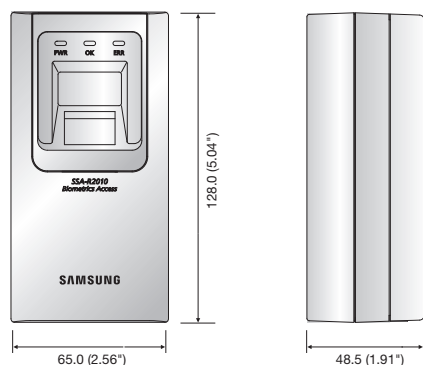
- 125KHz proximity / 13.56MHz contact-less smart card and fingerprint recognition
- 1 : 1 verification and 1 : N identification storable 2 fingerprint templates
- 1,000 / 2,000 / 4,000 fingerprint users and 10,000 ID users
- Auto touch sensor for fingerprint only identification
- Operating mode selectable by individual ID (RF only / fingerprint only / RF + fingerprint)
- Network communication via RS-232, RS-485, TCP/IP
- Master card for user registration and deletion
- 26bit / 34bit wiegand output
- Tamper switch

## Technical Specifications

|  | SSA-R2010/R2020/R2040   | SSA-R2011/R2021/R2041 |
|--|---|-----------------------|
| USER / EVENT BUFFERS                             |   |                       |
| Fingerprint Users                                | 1,000 : SSA-R2010/R2011 / 2,000 : SSA-R2020/R2021 / 4,000 : SSA-R2040/R2041                 |                       |
| AUTHENTICATION                                   |   |                       |
| Method   | RFID, Fingerprint   |                       |
| Verification / Identification Time (Fingerprint) | Less than 1sec / Less than 2sec   |                       |
| INPUT / OUTPUT                                   |   |                       |
| Reader Port                                      | 1ea (26bit / 34bit wiegand)   |                       |
| Input Port                                       | 3ea [External LED control, External buzzer control, Operating mode (RF/RF+ Finger) control] |                       |
| Output Port                                      | 2ea [Error- output, OK - output (Open collector output)]<br>26bit wiegand                   | 34bit wiegand         |
| LED Indicator                                    | 3 LED indicator (Red, Green, Yellow)  |                       |
| Beeper   | Piezo buzzer  |                       |
| OPERATIONAL                                      |   |                       |
| Frequency / Format                               | 125KHz / Samsung  | 13.56MHz / MIFARE     |
| Voice Out  | English, French, German, Spanish, Italian, Russian, Turkish, Chinese, Korean                |                       |
| Communication                                    | TCP/IP, RS-232, RS-485  |                       |
| ENVIRONMENTAL                                    |   |                       |
| Operating Temperature                            | 0°C ~ +50°C (+32°F ~ +122°F)  |                       |
| Operating Humidity                               | Less than 90% RH  |                       |
| ELECTRICAL                                       |   |                       |
| Input Voltage / Current                          | 12V DC / Max. 290mA   | 12V DC / Max. 310mA   |
| Power Consumption                                | Max. 3.5W   | Max. 3.8W             |
| MECHANICAL                                       |   |                       |
| Color / Material                                 | Silver and black / Polycarbonate  |                       |
| Dimensions (WxHxD)                               | 65.0 x 128.0 x 48.5mm (2.56" x 5.04" x 1.91")   |                       |
| Weight   | 240g (0.53 lb)  |                       |
| FINGERPRINT MODULE SPECIFICATIONS                |   |                       |
| Resolution                                       | 500dpi  |                       |
| Capture Image Size                               | 412 x 302pixels   |                       |
| Extraction Image Size                            | 260 x 300pixels   |                       |
| Sensing Area                                     | 13 x 15.2mm   |                       |
| Scanner  | High quality optical sensor   |                       |
| FAR  | 0.001%  |                       |
| FRR  | 0.1%  |                       |
| ESD  | 15KV  |                       |
| Verification Time                                | Less than 1sec  |                       |
| Identification Time                              | Less than 2sec  |                       |

## Dimensions

Unit : mm (inch)



# SSA-R2000/R2001/R2003 R2000V/R2001V

Proximity / Smart Card / EM & PIN Reader

Vandal-Resistant / Proximity / Smart Card / PIN Reader

## Key Features

### SSA-R2000/R2001/R2003

- 125KHz proximity / 13.56MHz contact-less smart card / EM and PIN reader
  - 26bit wiegand, 4/8bit burst for PIN output format (selectable)
  - 12 numeric keypads with back lighting
  - External LED control
  - External buzzer control
  - Tamper switch
  - Wall mount (US, EU, Asian gang box size)
  - Reverse polarity protection
  - Compatible controller
- : SSA-P420(T)/P421(T)/P112(T)/P400(T)/P401(T)/P102(T),  
standalone controller, third party controller

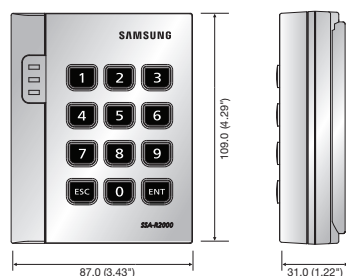
### SSA-R2000V/R2001V

- 125KHz Proximity / 13.56MHz contact-less smart card and PIN reader
  - Vandal-resistant & waterproof (IP68)
  - Longer cable for flexible application (1m)
  - 26/34bit wiegand, 4/8bit burst for PIN output format (selectable)
  - 12 numeric keypads with back lighting
  - External LED control
  - External buzzer control
  - Tamper switch
  - Wall mount (US, EU, Asian gang box size)
  - Reverse polarity protection
  - Compatible controller
- : SSA-P420(T)/P421(T)/P112(T)/P400(T)/P401(T)/P102(T),  
standalone controller, third party controller

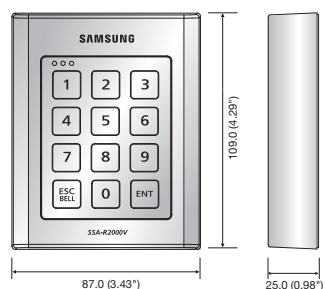
## Dimensions

Unit : mm (inch)

SSA-R2000/R2001/R2003



SSA-R2000V/R2001V



SSA-R2000/R2001/R2003



SSA-R2000V/R2001V

## Technical Specifications

|                         | SSA-R2000   | SSA-R2001  | SSA-R2003  |
|-------------------------|---|--|--|
| AUTHENTICATION          |   |  |  |
| Method                  | RFID, PIN   |  |  |
| INPUT / OUTPUT          |   |  |  |
| Input Port              | 2ea (External LED control, External buzzer control) |  |  |
| Output Port             | 26bit wiegand, 4/8bit burst for PIN (Selectable)    | 34bit wiegand, 4/8bit burst for PIN (Selectable) | 26bit wiegand, 4/8bit burst for PIN (Selectable) |
| LED Indicator           | 3 LED indicator (Red, Green, Yellow)                |  |  |
| Beeper                  | Piezo buzzer  |  |  |
| OPERATIONAL             |   |  |  |
| Frequency / Format      | 125KHz / Samsung                                    | 13.56MHz / MIFARE                                | 125KHz / EM                                      |
| Keypad                  | 12key numeric keypad with back lighting             |  |  |
| ENVIRONMENTAL           |   |  |  |
| Operating Temperature   | -30°C ~ +50°C (-22°F ~ +122°F)                      | -25°C to +50°C (-13°F ~ +122°F)                  | -30°C ~ +50°C (-22°F ~ +122°F)                   |
| Operating Humidity      | Less than 90% RH                                    |  |  |
| ELECTRICAL              |   |  |  |
| Input Voltage / Current | 12V DC / Max. 95mA                                  | 12V DC / Max. 75mA                               | 12V DC / Max. 95mA                               |
| Power Consumption       | Max. 1.2W   | Max. 1.0W  | Max. 1.2W  |
| MECHANICAL              |   |  |  |
| Color / Material        | Silver and black / Polycarbonate                    |  |  |
| Dimensions (WxHxD)      | 87.0 x 109.0 x 31.0mm (3.43" x 4.29" x 1.22")       |  |  |
| Weight                  | 160g (0.49 lb)                                      |  |  |

|                         | SSA-R2000V  |  | SSA-R2001V                                       |  |
|-------------------------|---|--|--|--|
| AUTHENTICATION          |   |  |  |  |
| Method                  | RFID, PIN   |  |  |  |
| INPUT / OUTPUT          |   |  |  |  |
| Input Port              | 2ea (External LED control, External buzzer control)     |  |  |  |
| Output Port             | 26bit wiegand, 4/8bit burst for PIN (Selectable)        |  | 34bit wiegand, 4/8bit burst for PIN (Selectable) |  |
| LED Indicator           | 3 LED indicator (Red, Green, Yellow)                    |  |  |  |
| Beeper                  | Piezo buzzer  |  |  |  |
| OPERATIONAL             |   |  |  |  |
| Frequency / Format      | 125KHz / Samsung  |  | 13.56MHz / MIFARE                                |  |
| ENVIRONMENTAL           |   |  |  |  |
| Operating Temperature   | -20°C ~ +50°C (-4°F ~ +122°F)                           |  |  |  |
| Operating Humidity      | Less than 90% RH  |  |  |  |
| Ingress Protection      | IP68  |  |  |  |
| Vandal-Resistant        | Yes   |  |  |  |
| ELECTRICAL              |   |  |  |  |
| Input Voltage / Current | 12V DC / Max. 100mA                                     |  |  |  |
| Power Consumption       | Max. 1.2W   |  | Max. 1.0W  |  |
| MECHANICAL              |   |  |  |  |
| Color / Material        | Silver and black / Polycarbonate & aluminum die casting |  |  |  |
| Dimensions (WxHxD)      | 87.0 x 109.0 x 25.0mm (3.43" x 4.29" x 0.98")           |  |  |  |
| Weight                  | 350g (0.77 lb) ±10g (0.02 lb)                           |  |  |  |



# SSA-R1000/R1001/R1003 R1100/R1101/R1103

Proximity / Smart Card / EM Reader



SSA-R1000/R1001/R1003



SSA-R1100/R1101/R1103

## Key Features

- 125KHz proximity / 13.56MHz contact-less smart card / EM reader
- 26/34bit wiegand output format
- External LED control
- External buzzer control
- Indoor / outdoor operation
- Solid epoxy potted
- Reverse polarity protection
- Weatherproof (IP66)
- Compatible controller  
: SSA-P420(T)/P421(T)/P112(T)/P400(T)/P401(T)/P102(T),  
standalone controller, third party controller

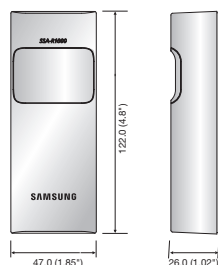
## Technical Specifications

|                         | SSA-R1000   | SSA-R1001                       | SSA-R1003                      |
|-------------------------|---|---------------------------------|--------------------------------|
| AUTHENTICATION          |   |                                 |                                |
| Method                  | RFID, PIN   |                                 |                                |
| INPUT / OUTPUT          |   |                                 |                                |
| Input Port              | 2ea (External LED control, External buzzer control) |                                 |                                |
| Output Port             | 26bit wiegand                                       | 34bit wiegand                   | 26bit wiegand                  |
| LED Indicator           | 2 LED indicator (Red, Green)                        |                                 |                                |
| Beeper                  | Piezo buzzer  |                                 |                                |
| OPERATIONAL             |   |                                 |                                |
| Frequency / Format      | 125KHz / Samsung                                    | 13.56MHz / MIFARE               | 125KHz / EM                    |
| ENVIRONMENTAL           |   |                                 |                                |
| Operating Temperature   | -30°C ~ +50°C (-22°F ~ +122°F)                      | -25°C to +50°C (-13°F ~ +122°F) | -30°C ~ +50°C (-22°F ~ +122°F) |
| Operating Humidity      | Less than 90% RH                                    |                                 |                                |
| ELECTRICAL              |   |                                 |                                |
| Input Voltage / Current | 12V DC / Max. 120mA                                 | 12V DC / Max. 80mA              | 12V DC / Max. 120mA            |
| Power Consumption       | Max. 1.5W   | Max. 1.0W                       | Max. 1.5W                      |
| MECHANICAL              |   |                                 |                                |
| Color / Material        | Silver and black / Polycarbonate                    |                                 |                                |
| Dimensions (WxHxD)      | 47.0 x 122.0 x 26.0mm (1.85" x 4.8" x 1.02")        |                                 |                                |
| Weight                  | 135g (0.3 lb)                                       | 140g (0.31 lb)                  | 135g (0.3 lb)                  |

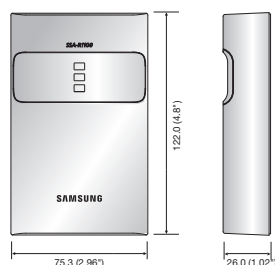
## Dimensions

Unit : mm (inch)

SSA-R1000/R1001/R1003



SSA-R1100/R1101/R1103



|                         | SSA-R1100   | SSA-R1101                       | SSA-R1103                      |
|-------------------------|---|---------------------------------|--------------------------------|
| AUTHENTICATION          |   |                                 |                                |
| Method                  | RFID, PIN   |                                 |                                |
| INPUT / OUTPUT          |   |                                 |                                |
| Input Port              | 2ea (External LED control, External buzzer control) |                                 |                                |
| Output Port             | 26bit wiegand                                       | 34bit wiegand                   | 26bit wiegand                  |
| LED Indicator           | 2 LED indicator (Red, Green)                        |                                 |                                |
| Beeper                  | Piezo buzzer  |                                 |                                |
| OPERATIONAL             |   |                                 |                                |
| Frequency / Format      | 125KHz / Samsung                                    | 13.56MHz / MIFARE               | 125KHz / EM                    |
| ENVIRONMENTAL           |   |                                 |                                |
| Operating Temperature   | -30°C ~ +50°C (-22°F ~ +122°F)                      | -25°C to +50°C (-13°F ~ +122°F) | -30°C ~ +50°C (-22°F ~ +122°F) |
| Operating Humidity      | Less than 90% RH                                    |                                 |                                |
| ELECTRICAL              |   |                                 |                                |
| Input Voltage / Current | 12V DC / Max. 120mA                                 | 12V DC / Max. 80mA              | 12V DC / Max. 120mA            |
| Power Consumption       | Max. 1.5W   | Max. 1.0W                       | Max. 1.5W                      |
| MECHANICAL              |   |                                 |                                |
| Color / Material        | Silver and black / Polycarbonate                    |                                 |                                |
| Dimensions (WxHxD)      | 75.3 x 122.0 x 26.0mm (2.96" x 4.8" x 1.02")        |                                 |                                |
| Weight                  | 150g (0.32 lb)                                      | 155g (0.34 lb)                  | 150g (0.32 lb)                 |

# SSA-R1000V/R1001V R1100V/R1101V

Vandal-Resistant / Proximity / Smart Card Reader



SSA-R1000V/R1001V



SSA-R1100V/R1101V

## Key Features

- 125KHz proximity / 13.56MHz contact-less smart card / EM reader
- 26/34bit wiegand output format
- External LED control
- External buzzer control
- Indoor / outdoor operation
- Solid epoxy potted
- Reverse polarity protection
- Vandal-resistant & waterproof (IP68)
- Compatible controller  
: SSA-P420(T)/P421(T)/P112(T)/P400(T)/P401(T)/P102(T),  
standalone controller, third party controller

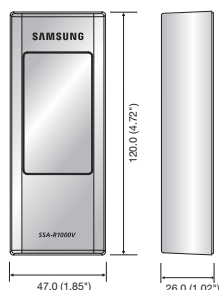
## Technical Specifications

|                         | SSA-R1000V  |  | SSA-R1001V                     |  |
|-------------------------|---|--|--------------------------------|--|
| AUTHENTICATION          |   |  |                                |  |
| Method                  | RFID  |  |                                |  |
| INPUT / OUTPUT          |   |  |                                |  |
| Input Port              | 2ea (External LED control, External buzzer control)     |  |                                |  |
| Output Port             | 26bit wiegand   |  | 34bit wiegand                  |  |
| LED Indicator           | 3 LED indicator (Red, Green, Yellow)                    |  |                                |  |
| Beeper                  | Piezo buzzer  |  |                                |  |
| OPERATIONAL             |   |  |                                |  |
| Frequency / Format      | 125KHz / Samsung  |  | 13.56MHz / MIFARE              |  |
| ENVIRONMENTAL           |   |  |                                |  |
| Operating Temperature   | -30°C ~ +50°C (-22°F ~ +122°F)                          |  | -25°C ~ +50°C (-13°F ~ +122°F) |  |
| Operating Humidity      | Less than 90% RH  |  |                                |  |
| Ingress Protection      | IP68  |  |                                |  |
| Vandal-Resistant        | Yes   |  |                                |  |
| ELECTRICAL              |   |  |                                |  |
| Input Voltage / Current | 12V DC / Max. 120mA                                     |  | 12V DC / Max. 150mA            |  |
| Power Consumption       | Max. 1.5W   |  | Max. 1.0W                      |  |
| MECHANICAL              |   |  |                                |  |
| Color / Material        | Silver and black / Polycarbonate & aluminum die casting |  |                                |  |
| Dimensions (WxHxD)      | 47.0 x 120.0 x 26.0mm (1.85" x 4.72" x 1.02")           |  |                                |  |
| Weight                  | 250g (0.55 lb) ±10g (0.02 lb)                           |  | 260g (0.57 lb) ±10g (0.02 lb)  |  |

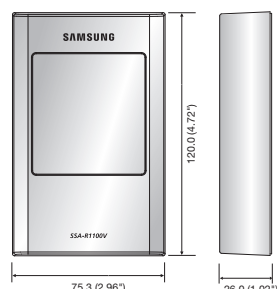
## Dimensions

Unit : mm (inch)

SSA-R1000V/R1001V



SSA-R1100V/R1101V

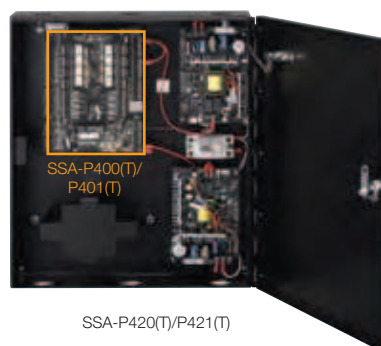


|                         | SSA-R1100V  |  | SSA-R1101V                     |  |
|-------------------------|---|--|--------------------------------|--|
| AUTHENTICATION          |   |  |                                |  |
| Method                  | RFID  |  |                                |  |
| INPUT / OUTPUT          |   |  |                                |  |
| Input Port              | 2ea (External LED control, External buzzer control)     |  |                                |  |
| Output Port             | 26bit wiegand   |  | 34bit wiegand                  |  |
| LED Indicator           | 3 LED indicator (Red, Green, Yellow)                    |  |                                |  |
| Beeper                  | Piezo buzzer  |  |                                |  |
| OPERATIONAL             |   |  |                                |  |
| Frequency / Format      | 125KHz / Samsung  |  | 13.56MHz / MIFARE              |  |
| ENVIRONMENTAL           |   |  |                                |  |
| Operating Temperature   | -30°C ~ +50°C (-22°F ~ +122°F)                          |  | -25°C ~ +50°C (-13°F ~ +122°F) |  |
| Operating Humidity      | Less than 90% RH  |  |                                |  |
| Ingress Protection      | IP68  |  |                                |  |
| Vandal-Resistant        | Yes   |  |                                |  |
| ELECTRICAL              |   |  |                                |  |
| Input Voltage / Current | 12V DC / Max. 120mA                                     |  | 12V DC / Max. 150mA            |  |
| Power Consumption       | Max. 1.5W   |  | Max. 1.0W                      |  |
| MECHANICAL              |   |  |                                |  |
| Color / Material        | Silver and black / Polycarbonate & aluminum die casting |  |                                |  |
| Dimensions (WxHxD)      | 75.3 x 120.0 x 26.0mm (2.96" x 4.72" x 1.02")           |  |                                |  |
| Weight                  | 340g (0.75 lb) ±10g (0.02 lb)                           |  | 360g (0.79 lb) ±10g (0.02 lb)  |  |

# SSA-P420(T)/P421(T)/P400(T)/P401(T)

Intelligent 4 Doors Access Control Panel with Power Package

Intelligent 4 Doors Access Control Panel



SSA-P420(T)/P421(T)



SSA-P400(T)/P401(T)

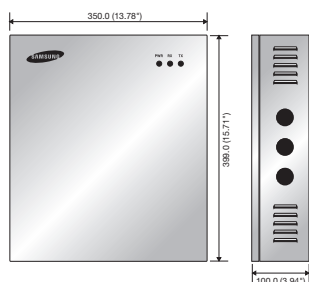
## Key Features

- Intelligent 4 doors access control panel with power package
- Up 50,000 users and up to 29,500 event buffers
- Network communication via RS-232/RS-422/RS-485, TCP/IP : SSA-P4xxT
- Independent 15 inputs and 15 outputs including 12ea of 2 form-C relay outputs
- 4ea of reader port for anti-passback function : 26bit/34bit wiegand and 4/8bit burst for PIN
- ARM / DISARM function for alarm panel
- 2 levels individual door opening time setting available for handicapped person
- Remain ID & event data and setting value in case of electric outage
- 2 men operation / duress mode function
- Alarm event monitoring using tamper switch
- Communication status via LED indicator

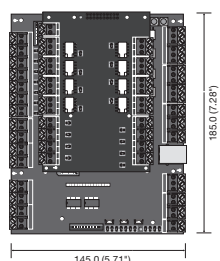
## Dimensions

Unit : mm (inch)

SSA-P420(T)/P421(T)



SSA-P400(T)/P401(T)

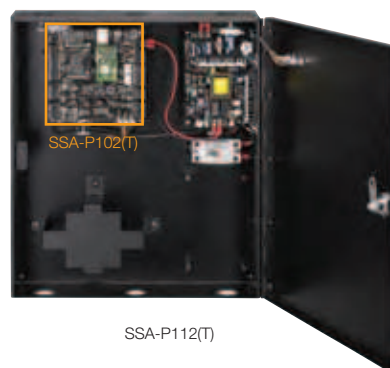


## Technical Specifications

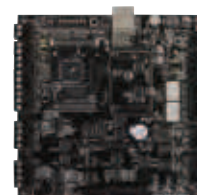
|                         | SSA-P420(T)   | SSA-P421(T)       | SSA-P400(T)                                    | SSA-P401(T)       |
|-------------------------|---|-------------------|--|-------------------|
| USER / EVENT BUFFERS    |   |                   |  |                   |
| Total ID Users          | Up to 50,000 users (Default : 20,000)   |                   |  |                   |
| Event Buffers           | Up to 29,500 event buffers (Default : 29,500)   |                   |  |                   |
| INPUT / OUTPUT          |   |                   |  |                   |
| Reader Port             | 4ea (26/34 bit wiegand, 4/8 bit burst for PIN),<br>26bit wiegand : SSA-P4x0(T), 34bit wiegand : SSA-P4x1(T) |                   |  |                   |
| Input Port              | 15ea  |                   |  |                   |
| Output Port             | 12ea (2 form-C relay output / 12V ~ 18V DC, Rating max. 2A)<br>3ea (TTL output / 5V DC, Rating max. 20mA)   |                   |  |                   |
| LED Indicator           | 38ea LED indicator (Red, Green, Yellow)   |                   |  |                   |
| Beeper                  | Piezo buzzer  |                   |  |                   |
| OPERATIONAL             |   |                   |  |                   |
| Frequency / Format      | 125KHz / Samsung or EM  | 13.56MHz / MIFARE | 125KHz / Samsung or EM                         | 13.56MHz / MIFARE |
| Communication           | TCP/IP : SSA-P4xxT / RS-232, RS-422, RS-485 (Max. 32CH)   |                   |  |                   |
| ENVIRONMENTAL           |   |                   |  |                   |
| Operating Temperature   | 0°C ~ +50°C (+32°F ~ +122°F)  |                   |  |                   |
| Operating Humidity      | Less than 90% RH  |                   |  |                   |
| ELECTRICAL              |   |                   |  |                   |
| Input Voltage / Current | 90 ~ 250V AC 50/60Hz / Max. 3A  |                   | 12V DC / Max. 430mA                            |                   |
| Power Consumption       | Max. 40.5W  |                   | Max. 5.2W                                      |                   |
| MECHANICAL              |   |                   |  |                   |
| Color / Material        | Black / Steel Case, PCB   |                   | Black / PCB                                    |                   |
| Dimensions (WxHxD)      | 350.0 x 399.0 x 100.0mm (13.78" x 15.71" x 3.94")   |                   | 145.0 x 185.0 x 18.0mm (5.71" x 7.28" x 0.71") |                   |
| Weight                  | 5.7Kg (12.57 lb)  |                   | 350g (0.77 lb)                                 |                   |
| TIME SCHEDULES          |   |                   |  |                   |
| Time Code               | 10  |                   |  |                   |
| Time Interval           | 5   |                   |  |                   |
| Holiday Code            | 10  |                   |  |                   |
| Holiday                 | 100   |                   |  |                   |

# SSA-P112(T)/P102(T)

Intelligent Single Door Access Control Panel with Power Package  
Intelligent Single Door Access Control Panel



SSA-P112(T)



SSA-P102(T)

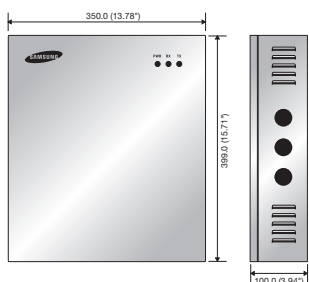
## Key Features

- Intelligent single door access control panel with power package
- Up to 50,000 users and up to 50,000 event buffers
- Standalone / network communication via RS-232/RS-422/RS-485, TCP/IP : SSA-P112T/P102T
- Independent 5 inputs and 4 outputs including  
2ea of 2 form-C relay outputs
- 2ea of Reader port for anti-passback function  
: 26/34bit wiegand (selectable), 4/8bit burst for PIN
- Remain ID & event data and setting value in case of electric outage
- Duress mode function
- Alarm event monitoring using tamper switch
- Communication status via LED indicator

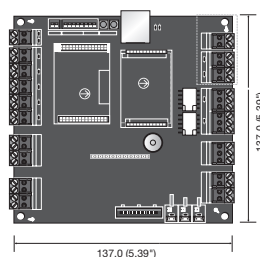
## Dimensions

Unit : mm (inch)

SSA-P112(T)



SSA-P102(T)



## Technical Specifications

| SSA-P112(T)             |   | SSA-P102(T)                                    |
|-------------------------|---|--|
| USER / EVENT BUFFERS    |   |  |
| Total ID Users          | Up to 50,000 users (Default : 10,000)   |  |
| Event Buffers           | Up to 50,000 event buffers (Default : 50,000)   |  |
| INPUT / OUTPUT          |   |  |
| Reader Port             | 2ea (26/34 bit wiegand selectable, 4/8 bit burst for PIN)   |  |
| Input Port              | 5ea (Exit button, Door sensor, Aux#1 ~ #3)  |  |
| Output Port             | 2ea (2 form-C relay output / 12V ~ 18V DC, Rating max. 2A)<br>2ea (TTL output / 5V DC, Rating max. 200mA) |  |
| LED Indicator           | 16ea LED indicator (Red, Blue, Yellow)  |  |
| Beeper                  | Piezo buzzer  |  |
| OPERATIONAL             |   |  |
| Frequency / Format      | 125KHz Samsung or EM / 13.56MHz MIFARE (Selectable)   |  |
| Communication           | TCP/IP : SSA-P1x2T / RS-232, RS-422, RS-485 (Max. 32CH)   |  |
| ENVIRONMENTAL           |   |  |
| Operating Temperature   | 0°C ~ +50°C (+32°F ~ +122°F)  |  |
| Operating Humidity      | Less than 90% RH  |  |
| ELECTRICAL              |   |  |
| Input Voltage / Current | 90 ~ 250V AC 50/60Hz / Max. 3A  | 12V DC / Max. 170mA                            |
| Power Consumption       | Max. 40.5W  | Max. 2.1W                                      |
| MECHANICAL              |   |  |
| Color / Material        | Black / Steel Case, PCB   | Black / PCB                                    |
| Dimensions (WxHxD)      | 350.0 x 399.0 x 100.0mm (13.78" x 15.71" x 3.94")   | 137.0 x 137.0 x 18.0mm (5.39" x 5.39" x 0.71") |
| Weight                  | 5.7Kg (12.57 lb)  | 160g (0.35 lb)                                 |
| TIME SCHEDULES          |   |  |
| Time Code               | 10  |  |
| Time Interval           | 5   |  |
| Holiday Code            | 10  |  |
| Holiday                 | 32  |  |

# SSA-X100

Power Package for Control Panel



ACCESS CONTROL  
SYSTEM

## Key Features

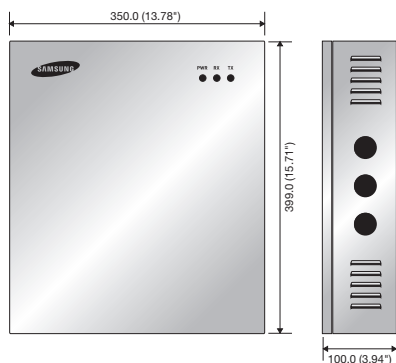
- Power package for control panel
- Communication status via LED indicator
- Surge protection (NFB)
- Low battery check
- AC power failure check
- Battery recharge circuit

## Technical Specifications

| SSA-X100                 |   |
|--------------------------|---|
| <b>POWER BOARD</b>       |   |
| Input                    | 90 ~ 250V AC, 50/60Hz                             |
| Output                   | +13V DC, 3.0A                                     |
| Power Consumption        | 40.5W   |
| Battery Recharge Circuit | Built-in battery recharge circuit                 |
| Dimensions (WxHxD)       | 350.0 x 399.0 x 100.0mm (13.78" x 15.71" x 3.94") |

## Dimensions

Unit : mm (inch)





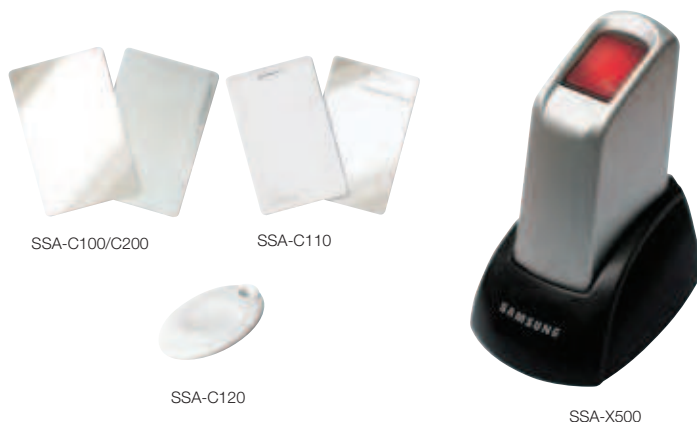
# SSA-C100/C200/C110/C120/X500

Proximity Card & Key Tag / Smart Card / Fingerprint Scanner

## Key Features

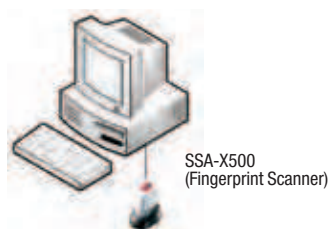
### SSA-C100/C200/C110/C120

- 125KHz / passive type : SSA-C100/C110/C120
- 13.56MHz / passive type : SSA-C200
- ISO credit card size and thickness : SSA-C100/C200
- Clamshell type : SSA-C110
- Key tag : SSA-C120



### SSA-X500

- Compact and elegant design, which is more convenient to use
- Excellent product durability that assures a long life
- Provides USB interface

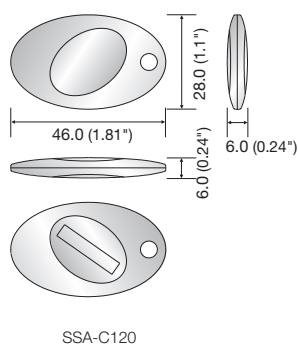
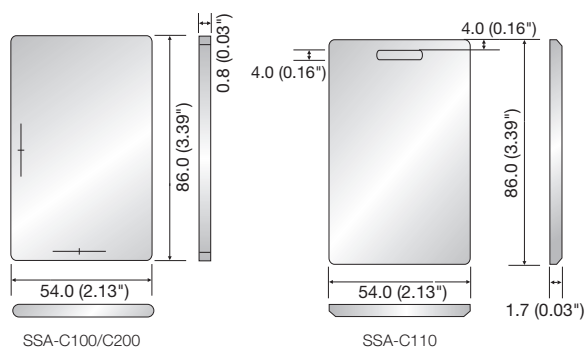


## Technical Specifications

|                    | SSA-C100                                    | SSA-C200                                    | SSA-C110                                    | SSA-C120                                   |
|--------------------|---|---|---|--|
| <b>OPERATIONAL</b> |   |   |   |  |
| Frequency / Format | 125KHz / Samsung                            | 13.56MHz / MIFARE                           | 125KHz / Samsung                            | 125KHz / Samsung                           |
| Encoding           | Compatible with PSK type of 125KHz          | Compatible with ISO14443 type A 13.56MHz    | Compatible with PSK type of 125KHz          | Compatible with PSK type of 125KHz         |
| <b>MECHANICAL</b>  |   |   |   |  |
| Color / Material   | PVC   | PVC   | ABS   | ABS  |
| Dimensions (WxHxD) | 54.0 x 0.8 x 86.0mm (2.13" x 0.03" x 3.39") | 54.0 x 0.8 x 86.0mm (2.13" x 0.03" x 3.39") | 54.0 x 1.7 x 86.0mm (2.13" x 0.03" x 3.39") | 46.0 x 6.0 x 28.0mm (1.81" x 0.24" x 1.1") |
| Weight             | 5.5g (0.01 lbs)                             | 5.5g (0.01 lbs)                             | 9g (0.02 lbs)                               | 4g (0.01 lbs)                              |

## Dimensions

Unit : mm (inch)



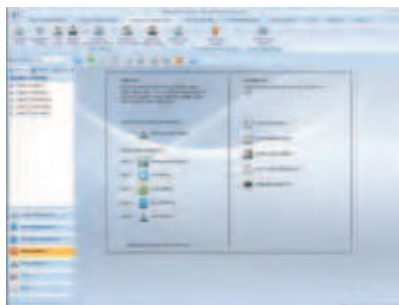
### SSA-X500

|  |  |
|--|--|
| Interface Type                           | USB                                      |
| External Interface Spec.                 | USB 1.1                                  |
| Fingerprint                              | OPU01M                                   |
| Recognition Sensor                       |  |
| Resolution (DPI)                         | 500 DPI                                  |
| Dimensions (WxHxD)                       | 25.3 x 40.7 x 67.7mm (1" x 1.6" x 2.67") |
| <b>FINGERPRINT MODULE SPECIFICATIONS</b> |  |
| Resolution                               | 500dpi                                   |
| Capture Image Size                       | 412 x 302pixels                          |
| Extraction Image Size                    | 260 x 300pixels                          |
| Sensing Area                             | 13 x 15.2mm                              |
| Scanner                                  | High quality optical sensor              |
| FAR                                      | 0.001%                                   |
| FRR                                      | 0.1%                                     |
| ESD                                      | 15KV                                     |
| Verification Time                        | Less than 1sec                           |
| Identification Time                      | Less than 2sec                           |



# SSA-M1000/M1100

SAMS (Samsung Access Management Software) Basic / Basic Lite



## Key Features

- Supports multiple site
- Supports multi language
- Dynamic management function for card holder and ID
- Graphic map
- Various type of access control reports
- Various type of export and conversion
- Various type of options
- Easy setting wizard
- Well balloon tooltips to help user
- User defined integrated monitoring
- Dynamic management features for personal history
- Distributed processing
- Supports mass storage database
- Applies latest UI

## Management for Card Holder and Multiple ID

User can store various information of card holders. Administrator may issue multiple ID card including a vehicle card for single card holder.



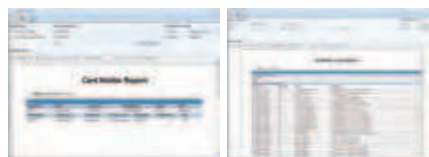
## Time Schedule Management

Using time schedule management, 24 hours may be divided into 5 different zones to manage access control of each doors, input, and output. Zones may applied differently for days, weeks up to 10 ~ 15 different time schedules depending on the access controller. Various colors and clock makes it easy and simple to set.



## Various Types of Report

SAMS Basic supports various reports such as card holder information report, card holder alarm status report, access status report, report of card holder's authority for each of the door and card holder. Conversion or transmission function is available for all the search / output function. User may export the data in excel or text form. In such case, it can be useful to integrate with other software such as Time & Attendance, Payment, and ERP. Also report itself may be exported as Excel or TEXT, PDF, RTF, XLS, HTML, and TIF files .



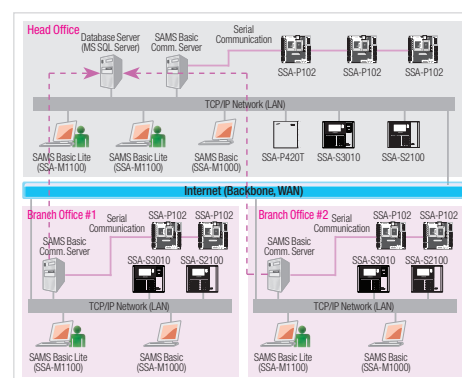
## User Definition Integrated Monitoring

Administrator may change how to view integrate monitoring screen by simple drag & drop method. The most convenience type of screen may be set for individual user. Also the information on status of event and alarm can be defined by user. Multiple monitors are supported.



## Server / Client Configuration

SAMS Basic supports server & client network configuration. SSA-M1000 is a server can add / delete controller or control panel. SSA-M1100 is a client supports all function as a server but does not support add / delete function for controller and control panel.



## Time & Attendance Management

Using in/out event data, administrator is able to manage time and attendance such as lateness, Searching, Night duty, Dispatch, Absence and holiday.



# SSA-M2000/M2100

SAMS (Samsung Access Management Software) Pro / Pro Lite



## Key Features

- Video surveillance integration allowing control of cameras and digital video recorders
- Supports multiple sites
- Supports multiple languages
- Dynamic card holder and ID management function
- Graphical map for ease of navigation
- Comprehensive access control reports
- Easily export and convert data
- Easy set-up wizard
- Balloon help tips to assist users
- Distributed processing
- Supports mass storage databases (MS SQL)
- Intuitive user-friendly interface
- User defined integrated monitoring

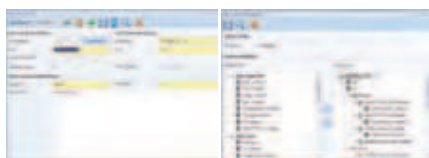
## Access Control & Integrated Video

SAMS Pro supports access control & integrated video. User can monitor all access events and the video related those events. The status of doors, digital video recorders and cameras can easily be monitored via a user defined map.



## Video Integration Management

SAMS Pro supports full video integration with access control. Users are able to select digital video recorders and cameras mapped against specific access control readers to enable visual verification of events.



## Cardholder Management

Users can be issued with multiple access cards, a vehicle card and a door entry card for example, and fully administered from a single point.



## Time Schedule Management

Time schedule management allows system administrators to set access rights at different times during the day. In any one 24 hour period, up to five time zones can be set across multiple days and weeks. Set-up is made easy through color coordinated time bars and clocks.



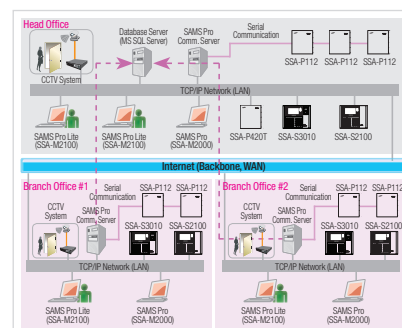
## User Customisable Screens

An administrator can easily change how to view the integrated video display by simple drag & drop commands. Screens are able to be set-up per user and remembered next time they log-on. In addition, other information such as status of event and alarms can be customized by individual users. Multiple monitors are also supported so that the user interface can be separated over different screens.



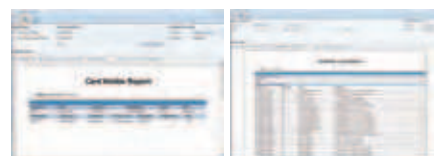
## Server / Client Configuration

SAMS Pro supports multiple server and client network configurations. SAMS Pro (SSA-M2000) is server software capable of setting up users and administering the system. SAMS Pro Lite (SSA-M2100) is client software that contains everything needed for day-to-day running of the system without device set-up options.



## Comprehensive Access Reports

SAMS Pro is able to output various standard reports such as card holder Information, card holder alarm status and access status reports. Administrators are able to export data in either spreadsheet or document formats to integrate with other software systems such as time & attendance, payment and ERP systems. Reports can also be exported as .xls, .txt, .pdf, and .tif files.



## Time & Attendance Management

Using fully searchable in/out event data, an administrator is able to manage numerous time and attendance activity such as entry time, leaving time and absence.



Samsung Total Security Solution



## Samsung Total Security Solution



The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.

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