

Progressive scan Monochrome CCD Camera KP-F1A Specifications

1. General

The KP-F1A is a monochrome (black and white) frame shutter camera utilizing a 1/2-inch full pixel readout CCD.

The image output is 30 frame (CCIR: 25 frame) Non-interlace (progressive scan: PS) single line.

KP-F1AN: EIA

KP-F1AP: CCIR

2. Specifications

- | | |
|-----------------------------|--|
| 1) Imaging device | 1/2 inch progressive scan interline CCD |
| Total pixels | EIA: 692(H)×504(V)
CCIR: 823(H)×592(V) |
| Effective pixels | EIA: 659(H)×494(V)
CCIR: 782(H)×582(V) |
| Pixel size | EIA: 9.9(H)×9.9(v)μm
CCIR: 8.3(H)×8.3(v)μm |
| 2) Sensing area | EIA: 6.52(H)×4.89(V)mm
CCIR: 6.49(H)×4.83(V)mm |
| 3) Scanning system | Progressive scan (30 frame)(CCIR: 25 frame)
2:1 interlace (60 field)(CCIR: 50 field) |
| 4) Lens attachment | C mount |
| 5) Flange back | 17.526 mm (not adjustable) |
| 6) Hor. scanning frequency | EIA: 15.734 kHz
CCIR: 15.625 kHz |
| 7) Vert. scanning frequency | EIA: 29.97 Hz / 59.94 Hz
CCIR: 25 Hz / 50 Hz |
| 8) Sync system | Internal/external(PS: Internal switch and External trigger) |
| 9) External sync input | HD & VD: 2 to 6V peak-to-peak negative
Input impedance: 1kΩ
Frequency deviation: ±1% |
| 10) Video output | 1.0 Vp-p, 75Ω, unbalanced, single line
Video component : 0.7 Vp-p
Sync component : 0.3 Vp-p negative |

11) Resolution	EIA: 500(H)×485(V) TV lines CCIR: 580(H)×575(V) TV lines
12) Sensitivity	400 lux, F8, 3200 K
13) Minimum object illumination	3 lux, F1.4, AGC and gamma on, without infrared cut filter
14) Signal to noise ratio	60 dB
15) Electronic shutter	Internal switch settings for off (standard exposure), 1/100(EIA), 1/120(CCIR), 1/125, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 second. Factory setting is off.
16) Gamma correction	Internal switch setting for 1 or compensate. Factory setting is 1(off).
17) Sensitivity selection	Exterior switch for fixed, AGC, manual. Factory setting is Fix (fixed gain).
18) Frame/field on demand	Internal on/off switch. Selectable One trigger, Two trigger and fixed shutter modes. Factory setting is off.
19) Power supply voltage	12 ±1 VDC
20) Power consumption	Approx. 2.4 W
21) Ambient temperature and humidity	Operating -10 to 50°C RH less than 90 % Storage -20 to 60°C RH less than 70 %

Caution: For continued stable operation, the camera should be used under 40°C or less when it is used continuously for extended period of time.

22) Anti-vibration	68.6m/s ² (10 to 60Hz, amplitude: 0.98mm constant, 60 to 200Hz, amplitude: variable) (10 to 150Hz, sweep:1 min., XYZ, 30 min.)
23) Resistance to shock	686m/s ² (Drop test, once each top, bottom, left and right)
24) Dimensions	44(W) × 44(H) × 67(L)mm
25) Mass	150g approx.

3. Composition

1) Black and white camera (With IR cut filter)	1
2) Operation manual	1

4. DC IN/SYNC connector

PIN NO.	KP-F1A	
	Normal	Frame on demand
1	GND	GND
2	+12V IN	+12V IN
3	VIDEO (GND)	VIDEO (GND)
4	VIDEO OUT (SIGNAL)	VIDEO OUT (SIGNAL)
5	[HD(GND)]	HD(GND)
6	[HD IN(SIGNAL)]	HD IN(SIGNAL)
7	[VD IN(SIGNAL)]	TRIG IN(SIGNAL)
8	GND	GND
9	NC	NC
10	GND	GND
11	+12V IN	+12V IN
12	[VD(GND)]	TRIG(GND)

5. Optional accessories

- 1) Tripod adaptor TA-M1
- 2) 12-pin plug HR10A-10P-12S(01)
- 3) 6-pin plug Hr10A-7P-6P(01)
- 4) AC adaptor, AP-130
- 5) Junction box JU-F1 and JU-M1A
- 6) Dummy glass ARC1214
- 7) Camera cables

	Mould type	Assy type	Shielded type
2m	C-201KSM	C-201KS	C-201KSS
5m	C-501KSM	C-501KS	C-501KSS
10m	C-102KSM	C-102KS	C-102KSS

Specify assembly or shielded type at time of order.

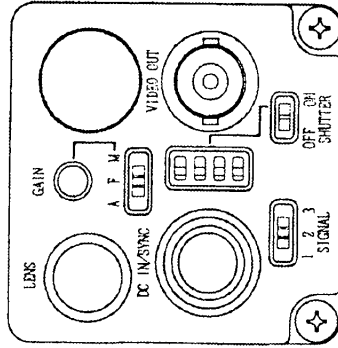
- 8) Trigger cable

	Assy type
2m	C-201RK
5m	C-501RK

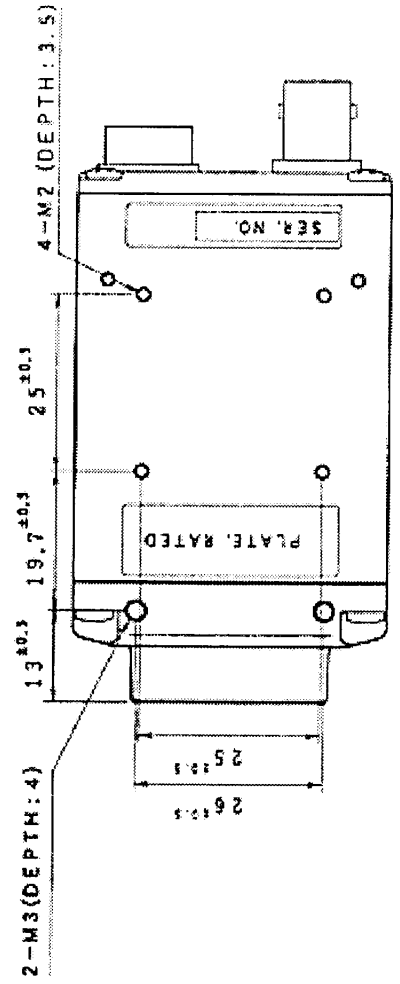
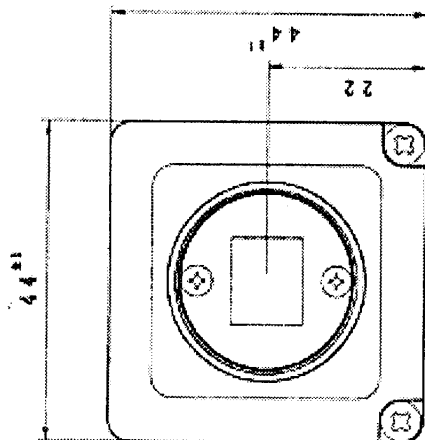
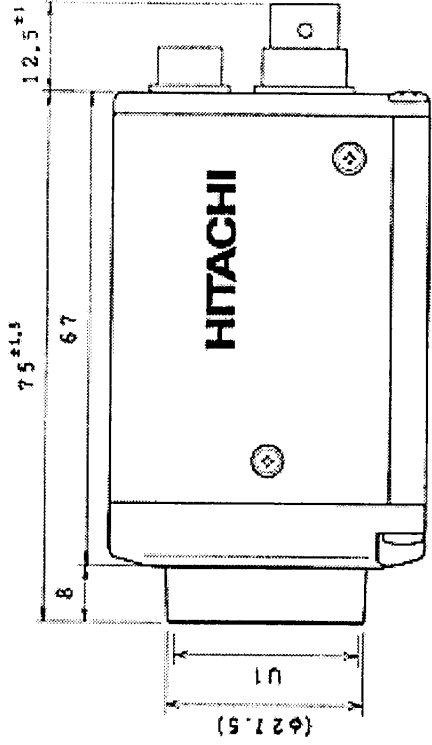
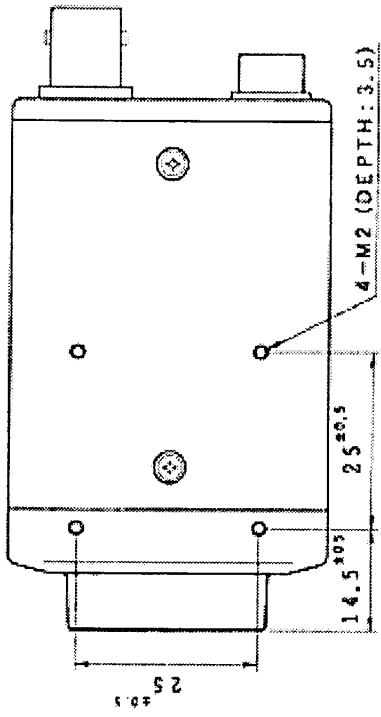
5. External view

MASS : APPROX. 150g

COLOR : BLACK



UNIT : mm



2-M3 (DEPTH: 4)

26±0.3

25±0.3