

## **Precise** thinking

## **Model List for NovAtel**

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### **OEM6® Receivers**

The OEM6 receiver family is NovAtel's newest generation GNSS platform capable of supporting all satellite constellations and signals for optimized GNSS precise positioning with unparalleled availability. Flexible GNSS positioning modes offer scalable accuracy for any application from centimeter-level accuracy with AdVance RTK to sub-meter performance of OmniSTAR VBS/XP/HP, SBAS. In addition, ALIGN is also available for precise Heading and Relative Positioning and GL1DE for consistant, repeatable pass-to-pass accuracy. The OEM6 family also offers Receiver Autonomous Integrity Monitoring (RAIM) for fault detection and exclusion for increased measurement and positioning robustness.

All OEM6 receivers use Pulse Aperture Correlator (PAC) technology to mitigate the effects of multipath to produce high quality GNSS measurements. Included with each receiver are NovAtel's Windows®-based software utilities, NovAtel CDU and Convert, and product manuals.

All of the OEM6 receivers are RoHS-compliant.

A subscription is required for OmniSTAR HP/XP/VBS service, which may not be available in all areas.

SBAS corrections, including WAAS, MSAS, and EGNOS, may not be available in all areas.

#### **OEM615 Series Receivers**

The OEM615 is NovAtel's compact, yet powerful GNSS receiver measuring only 71 x 46 mm and 1consuming less than 1.0 Watt and delivering high performance GNSS positioning. The OEM615 features 120 dynamic channels configurable for optimized single or dual frequency GPS and GLONASS satellite signal tracking for high performance satellite positioning with maximum availability.

#### Card

#### OEM615 Card

#### L1/L2 Dual-Frequency

OEM615-D2S-R0G-TT0	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-G2S-R0G-TT0	GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-D2S-B0G-TT0	GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-G2S-B0G-TT0	GPS RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-D2S-00G-0T0	GPS L1/L2 plus GLONASS L1/L2 code positions and DGPS, SBAS, 20 Hz
OEM615-G2S-00G-0T0	GPS L1/L2 SBAS positions, 20 Hz
OEM615-D2S-Y0G-TT0	GPS+GLONASS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1DE, 20 Hz Measurement Output, 20 Hz Position Output
OEM615-G2S-Y0G-TT0	GPS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1DE, 20 Hz Measurement Output, 20 Hz Position Output
OEM615-D2S-Y0G-0T0	GPS+GLONASS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1DE, No Measurement Output, 20 Hz Position Output
OEM615-G2S-Y0G-0T0	GPS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1DE, No Measurement Output, 20 Hz Position Output
OEM615-D2S-Z00-000	GPS+GLONASS L1/L2, SBAS, ALIGN Heading, No Baseline Length Limitation, 20 Hz
OEM615-G2S-Z00-000	GPS L1/L2, SBAS, ALIGN Heading, No Baseline Length Limitation, 20 Hz
Single-Frequency	
OEM615-D1S-R3G-TT0	GPS plus GLONASS 2 cm real-time kinematic positions, RTK corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-D1S-F0G-TT0	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-G1S-F0G-TT0	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-T1S-B0R-TT0	GPS plus GLONASS plus Galileo, RT-2L1TE corrections and raw data, code positions and DGPS, SBAS, RAIM, 20 Hz

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OEM615-T1S-B0G-TT0	GPS plus GLONASS plus Galileo, RT-2L1TE corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-D1S-B0G-TT0	GPS plus GLONASS RT-2L1TE corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-W1S-B0G-TT0	GPS plus Galileo, RT-2L1TE corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-G1S-B0G-TT0	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM615-D1S-Y3G-TT0	GPS+GLONASS L1, SBAS, ALIGN Relative Positioning , 3 km Baseline Length Limitation, GL1DE, 2
	Hz Measurement Output, 20 Hz Position Output
OEM615-D1S-Y3G-0T0	GPS+GLONASS L1, SBAS, ALIGN Relative Positioning , 3 km Baseline Length Limitation, GL1DE, N
	Measurement Output, 20 Hz Position Output
OEM615-D1S-00G-0T0	GPS plus GLONASS code positions and DGPS, SBAS, 20 Hz
OEM615-G1S-00R-0T0	GPS code positions and DGPS, SBAS, 20 Hz, RAIM support
OEM615-G1S-00G-0F0	GPS code positions and DGPS, SBAS, 50 Hz
OEM615-G1S-00G-0T0	GPS code positions and DGPS, SBAS, 20 Hz
OEM615-D1S-Z30-000	GPS+GLONASS L1, SBAS, ALIGN Heading, 3km Baseline Length Limitation, 20 Hz

#### **OEM628 Series Receivers**

OEM628 receivers feature 120 dynamic channels configurable for optimized single, dual or triple frequency satellite signal tracking with low power consumption. OEM628 products are capable of tracking GPS, GLONASS, Galileo, QZSS and Compass signals for maximum satellite availability and optimized positioning performance. L-Band tracking allows decimeter level positioning using the OmniStar XP/HP service. Ethernet onboard allows easy connectivity to the internet and comprehensive NTRIP Client and Server support allows easy base and rover integration into RTK networks.

The OEM628 card is available standalone in a 60 x 100 mm form factor or in a FlexPak enclosure, and is configurable as a rover or base station.

#### Card

#### OEM628 Card

Triple-Frequency	
OEM628-TAS-R0G-TTN	GPS+GLONASS+Galileo L1/L2/L5/E1/E5a/E5b/AltBOC 1 cm real-time kinematic positions, RT-2
	corrections and raw data, code positions and DGPS, SBAS, 20 Hz, NTRIP Support
OEM628-T5S-R0G-TTN	GPS+GLONASS+Galileo L1/L2/L5/E1/E5a 1 cm real-time kinematic positions, RT-2 corrections and raw
	data, code positions and DGPS, SBAS, 20 Hz, NTRIP Support
OEM628-TAS-B0G-TTN	GPS+GLONASS+Galileo L1/L2/L5/E1/E5a/E5b/AltBOC, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM628-T5S-B0G-TTN	GPS+GLONASS+Galileo L1/L2/L5/E1/E5a RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM628-D5S-B0G-TTN	GPS L1/L2/L5, GLONASS L1/L2, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM628-G5S-B0G-TTN	GPS L1/L2/L5, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
L1/L5 Dual-Frequer	ncy
OEM628-DBS-B0G-TTN	GPS plus GLONASS L1/L5, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEM628-WBS-B0G-TTN	GPS+Galileo L1/L5/E1/E5a/E5b, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20
	Hz
OEM628-GBS-B0G-TTN	GPS L1/L5, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
L1/L2 Dual-Frequer	ncy
OEM628-D2L-R0G-TTR	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
OEM628-G2L-R0G-TTR	GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
OEM628-D2L-B0G-TTR	GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
OEM628-G2L-B0G-TTR	GPS RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
OEM628-D2L-00G-0TR	GPS L1/L2 plus GLONASS L1/L2 code positions and DGPS, OmniSTAR HP/XP/VBS/G2, SBAS, 20 Hz
OEM628-G2L-00G-0TR	GPS code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
OEM628-G2S-00G-0TN	L1L2 SBAS positions, 20 Hz
OEM628-D2L-00G-05R	GPS L1/L2 plus GLONASS L1/L2 code positions and DGPS, OmniSTAR HP/XP/VBS/G2, SBAS, 5 Hz
OEM628-G2L-00G-05R	GPS code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 5 Hz

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OEM628-D2S-Y0G-TTN	GPS+GLONASS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, 20 Hz Measurement Output, 20 Hz Position Output, NTRIP	GL1DE,
OEM628-G2S-Y0G-TTN	GPS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1DE, 20 Measurement Output, 20 Hz Position Output, NTRIP	Hz
OEM628-D2S-Y0G-0TN	GPS+GLONASS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, No Measurement Output, 20 Hz Position Output, NTRIP	GL1DE,
OEM628-G2S-Y0G-0TN	GPS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1DE, No Measurement Output, 20 Hz Position Output, NTRIP	
OEM628-D2S-Z00-00N	GPS+GLONASS L1/L2, SBAS, ALIGN Heading, No Baseline Length Limitation, NTRIP, 20 F	Ηz
OEM628-G2S-Z00-00N	GPS L1/L2, SBAS, ALIGN Heading, No Baseline Length Limitation, NTRIP, 20 Hz	
Single-Frequency		
OEM628-D1S-R3G-TTN	GPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and racode positions and DGPS, SBAS, 20 Hz, NTRIP Support	aw data,
OEM628-T1S-B0G-TTN	GPS+GLONASS+Galileo L1/E1, RT-20 corrections and raw data, code positions and DGPS, S Hz	SBAS, 20
OEM628-D1L-F0G-TTR	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, corpositions and DGPS, NTRIP, OmniSTAR VBS, SBAS, 20 Hz	de
OEM628-G1L-F0G-TTR	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and NTRIP, OmniSTAR VBS, SBAS, 20 Hz	DGPS,
OEM628-D1S-B0G-TTN	GPS plus GLONASS RT-2L1TE corrections and raw data, code positions and DGPS, SBAS, 2	20 Hz
OEM628-G1S-B0G-TTN-A	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz, API	
OEM628-G1S-B0G-TTN	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
OEM628-G1L-00G-0TR	GPS code positions and DGPS, OmniSTAR VBS, SBAS positions, 20 Hz	
OEM628-G1S-00G-0TN	GPS code positions, DGPS, SBAS, 20 Hz	
OEM628-D1S-Y3G-TTN	GPS+GLONASS L1, SBAS, ALIGN Relative Positioning, 3km Baseline Length Limitation, 20 Hz Measurement Output, 20 Hz Position Output, NTRIP	GL1DE,
OEM628-D1S-Y3G-0TN	GPS+GLONASS L1, SBAS, ALIGN Relative Positioning, 3km Baseline Length Limitation, No Measurement Output, 20 Hz Position Output, NTRIP	GL1DE,
OEM628-D1S-Z30-00N	GPS+GLONASS L1, SBAS, ALIGN Heading, 3km Baseline Length Limitation, NTRIP, 20 H	Z
Enclosure		

#### FlexPak6 Enclosure

Triple-Frequency	
FLEX6-T5S-R0R-TTN	GPS+GLONASS+Galileo L1/L2/L5/E1/E5a 1 cm real-time kinematic positions, RT-2 corrections and raw
	data, code positions and DGPS, SBAS, 20 Hz, NTRIP Support, RAIM Support
FLEX6-T5S-B0G-TTN	GPS+GLONASS+Galileo L1/L2/L5/E1/E5a RT-2 corrections and raw data, code positions and DGPS,
	SBAS, 20 Hz
FLEX6-D5S-B0G-TTN	GPS L1/L2/L5, GLONASS L1/L2, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20
	Hz
FLEX6-W5S-B0G-TTN	GPS+Galileo L1/L2/L5/E1/E5a/E5b, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20
	Hz
FLEX6-G5S-B0G-TTN	GPS L1/L2/L5, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
L1/L5 Dual-Frequency	
FLEX6-DBS-B0G-TTN	GPS plus GLONASS L1/L5, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
FLEX6-GBS-B0G-TTN	GPS L1/L5, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
L1/L2 Dual-Frequency	
FLEX6-D2L-R0G-TTR-A	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions
	and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20 Hz, API
FLEX6-D2L-R0G-TTR	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions
	and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
FLEX6-G2L-R0G-TTR	GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS,
	NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
FLEX6-D2L-B0G-TTR	GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR
	HP/XP/VBS, SBAS, 20 Hz
FLEX6-G2L-B0G-TTR	GPS RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS,
	20 Hz
FLEX6-D2L-00G-0TR	GPS L1/L2 plus GLONASS L1/L2 code positions and DGPS, OmniSTAR HP/XP/VBS/G2, SBAS, 20 Hz
FLEX6-G2L-00G-0TR	GPS code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
FLEX6-G2S-00G-0TN	L1L2 SBAS positions, 20 Hz

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FLEX6-D2S-Y0G-TTN	GPS+GLONASS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1D	E,
	20 Hz Measurement Output, 20 Hz Position Output, NTRIP	
FLEX6-G2S-Y0G-TTN	GPS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1DE, 20 Hz	
	Measurement Output, 20 Hz Position Output, NTRIP	
FLEX6-D2S-Y0G-0TN	GPS+GLONASS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1D No Measurement Output, 20 Hz Position Output, NTRIP	Έ,
FLEX6-G2S-Y0G-0TN	GPS L1/L2, SBAS, ALIGN Relative Positioning, No Baseline Length Limitation, GL1DE, No Measurement Output, 20 Hz Position Output, NTRIP	
FLEX6-D2S-Z00-00N	GPS+GLONASS L1/L2, SBAS, ALIGN Heading, No Baseline Length Limitation, NTRIP, 20 Hz	
FLEX6-G2S-Z00-00N	GPS L1/L2, SBAS, ALIGN Heading, No Baseline Length Limitation, NTRIP, 20 Hz	
Single-Frequency		
FLEX6-D1S-R3G-TTN	GPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 Hz, NTRIP Support	а,
FLEX6-D1L-F0G-TTR	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR VBS, SBAS, 20 Hz	
FLEX6-G1L-F0G-TTR	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS NTRIP, OmniSTAR VBS, SBAS, 20 Hz	1
FLEX6-D1S-B0G-TTN	GPS plus GLONASS RT-2L1TE corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
FLEX6-G1S-B0G-TTN	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
FLEX6-D1S-Z30-00N	GPS+GLONASS L1, SBAS, ALIGN Heading, 3km Baseline Length Limitation, NTRIP, 20 Hz	
FLEX6-G1L-00G-0TR	GPS code positions and DGPS, OmniSTAR VBS, SBAS positions, 20 Hz	
FLEX6-G1S-00G-0TN	GPS code positions, DGPS, SBAS, 20 Hz	
GPStation-6		
Triple-Frequency		
GPSTATION6-TAS-B0P-11S	GPStation-6 Ionospheric scintillation monitor with GPS/GLONASS/Galileo L1/L2/L5 and SBAS L1/L5 signal support, 50 Hz scintillation data, 1 Hz range data, 1 Hz position data.	
GPSTATION6-TAQ-B0P-11S	GPStation-6 Ionospheric scintillation monitor with GPS/GLONASS/Galileo L1/L2/L5, QZSS L1/L2/L5 - SBAS L1/L5 signal support, 50 Hz scintillation data, 1 Hz range data, 1 Hz position data.	and
GPSTATION6-WAS-B0P-11S	GPStation-6 Ionospheric scintillation monitor with GPS/Galileo L1/L2/L5 and SBAS L1/L5 signal supp 50 Hz scintillation data, 1 Hz range data, 1 Hz position data.	ort,
GPSTATION6-WAQ-B0P-11S	GPStation-6 Ionospheric scintillation monitor with GPS/Galileo L1/L2/L5, QZSS L1/L2/L5 and SBAS L1/L5 signal support, 50 Hz scintillation data, 1 Hz range data, 1 Hz position data.	
GPSTATION6-D5S-B0P-F1S	GPStation-6 Ionospheric scintillation monitor with GPS/GLONASS L1/L2/L5 and SBAS L1/L5 signal support, 50 Hz scintillation data, 50 Hz range data, 1 Hz position data.	
GPSTATION6-D5Q-B0P-F1S	GPStation-6 Ionospheric scintillation monitor with GPS/GLONASS L1/L2/L5, QZSS L1/L2/L5 and SB/ L1/L5 signal support, 50 Hz scintillation data, 50 Hz range data, 1 Hz position data.	AS
GPSTATION6-G5S-B0P-F1S	GPStation-6 Ionospheric scintillation monitor with GPS L1/L2/L5 and SBAS L1/L5 signal support, 50 I scintillation data, 50 Hz range data, 1 Hz position data.	Hz
GPSTATION6-G5Q-B0P-F1S	GPStation-6 Ionospheric scintillation monitor with GPS L1/L2/L5, QZSS L1/L2/L5 and SBAS L1/L5 signature support, 50 Hz scintillation data, 50 Hz range data, 1 Hz position data.	gnal
L1/L2 Dual-Frequence		
GPSTATION6-D2S-B0P-F1S	GPStation-6 Ionospheric scintillation monitor with GPS/GLONASS L1/L2 and SBAS L1 signal suppor	t. 50
	Hz scintillation data, 50 Hz range data, 1 Hz position data.	.,
GPSTATION6-D2Q-B0P-F1S	GPStation-6 Ionospheric scintillation monitor with GPS/GLONASS L1/L2, QZSS L1/L2 and SBAS L1 signal support, 50 Hz scintillation data, 50 Hz range data, 1 Hz position data.	
GPSTATION6-G2S-B0P-F1S	GPStation-6 Ionospheric scintillation monitor with GPS L1/L2 and SBAS L1 signal support, 50 Hz scintillation data, 50 Hz range data, 1 Hz position data.	
GPSTATION6-G2Q-B0P-F1S	GPStation-6 Ionospheric scintillation monitor with GPS L1/L2, QZSS L1/L2 and SBAS L1 signal supp 50 Hz scintillation data, 50 Hz range data, 1 Hz position data.	ort,
05400.0.0		

#### **OEM6** Software

Application Development Kit, OEM6 Software

### Software

### Application Development Kit

OEM6-API-DEV-KIT	API support development kit for OEM6 Family Receivers
G-CC-ARM-NO-INT-W	Green Hills Software Compiler, Windows OS, Floating License.
G-CC-ARM-NO-INT-L	Green Hills Software Compiler, Linux OS, Floating License.
G-CC-ARM-NO-INT-N	Green Hills Software Compiler, Windows OS, Node Locked License.

OEM6-API-Information-Kit	API Information kit for OEM6 Family Receivers, API User Manual, Sample applications, and release
	notes



### **OEMV® Receivers**

The OEMV family receivers are available in single, dual, or triple-frequency hardware variants and feature our patented PAC technology. All OEMV receivers use the AdVance<sup>™</sup> RTK GNSS engine for state of the art centimeter level positioning performance and ALIGN for precise Heading and Relative Positioning. In addition, NovAtel's GL1DE<sup>™</sup> positioning offers users of autonomous L1, or any code positioning modes, superior positioning stability previously only available in carrier phase solutions. Included with each receiver are NovAtel's Windows®-based software utilities, CDU and Convert, and product manuals. Upgrades to more feature-intensive models are available via e-mail, telephone or fax.

All of the OEMV receivers are RoHS-compliant.

A subscription is required for OmniSTAR HP/XP/VBS service, which may not be available in all areas.

SBAS corrections, including WAAS, MSAS, and EGNOS, may not be available in all areas.

#### **OEMV-1** Receivers

The OEMV-1 is a 36-channel, single-frequency GPS L1 plus L-band receiver with low power consumption. All OEMV-1 receivers offer position, velocity, and time (PVT) output up to 50 Hz, real-time DGPS positioning, support for RTCA and RTCM messages.

The DGPS positioning available in the OEMV-1 receivers, including SBAS and OmniSTAR VBS, provides the extra precision required in L1 applications. L-band enabled models can also act as a L-Band receiver to relay raw OmniStar corrections to other NovAtel receivers. NovAtel's RT-20<sup>™</sup> model is available for L1 carrier-phase positioning up to 50 Hz.

The OEMV-1 card is available standalone in a 46 x 71 mm form factor, in a FlexPak<sup>™</sup> enclosure, or in a SMART ANTENNA, and is configurable as a rover or base station.

#### Card

#### OEMV-1 Card

Single-Frequency	
OEMV-1-RT20-F	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 50 Hz
OEMV-1-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
OEMV-1-L1-VBS	GPS RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
OEMV-1-VBS	GPS code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
OEMV-1-L1-F	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 Hz
OEMV-1-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-1-PVT	GPS code positions and DGPS, SBAS, 20 Hz
OEMV-1-1HZ	GPS code positions and raw data, DGPS, SBAS, 1Hz
Enclosure	

#### Enclosure

#### FlexPak-G2-V1 Enclosure

Single-Frequency

FLEXG2-V1-RT20-F	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 50 Hz
FLEXG2-V1-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
FLEXG2-V1-L1-VBS	GPS RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
FLEXG2-V1-VBS	GPS code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
FLEXG2-V1-L1-F	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 Hz
FLEXG2-V1-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
FLEXG2-V1-PVT	GPS code positions and DGPS, SBAS, 20 Hz
FLEXG2-V1-1HZ	GPS code positions and raw data, DGPS, SBAS, 1Hz

### **SMART** Antenna

#### SMART-V1-2US Antenna

#### **RS-232 Version**

#### Single-Frequency

SMART-V1-2US-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
SMART-V1-2US-L1-VBS	GPS RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
SMART-V1-2US-VBS	GPS code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
SMART-V1-2US-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
SMART-V1-2US-PVT	GPS code positions, SBAS, DGPS, 20 Hz
SMART-V1-2US-1HZ	GPS code positions and raw data, DGPS, SBAS, 1Hz

#### SMART-V1-2CS Antenna

#### **RS-232 Version**

#### Single-Frequency

SMART-V1-2CS-1HZ	GPS code positions and raw data, DGPS, SBAS, 1Hz, API support
SMART-V1-2CS-PVT	GPS code positions, SBAS, DGPS, 20 Hz, API support

#### SMART-V1-4XS Antenna

#### **RS-422 Version**

#### Single-Frequency

SMART-V1-4XS-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
SMART-V1-4XS-L1-VBS	GPS RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
SMART-V1-4XS-VBS	GPS code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
SMART-V1-4XS-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
SMART-V1-4XS-PVT	GPS code positions, SBAS, DGPS, 20 Hz
SMART-V1-4XS-1HZ	GPS code positions and raw data, DGPS, SBAS, 1Hz

#### **OEMV-1DF Receivers**

The OEMV-1DF is a 36-channel, dual frequency GPS receiver with low power consumption. All OEMV-1DF receivers offer enhanced interference and multipath rejection for consistent carrier phase measurements without interruption in the harshest of GPS environments. All OEMV-1DF receivers offer measurement and position output up to 20 Hz, support for RTCMV3, RTCM, CMR and RTCA messages.

The OEMV-1DF receiver is only available as a stand alone card with a 46 x71 mm form-factor.

#### Card

#### **OEMV-1DF Card**

L1/L2 Dual-Frequenc	у	
OEMV-1DF-RT2	GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
OEMV-1DF-L1L2	GPS RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
OEMV-1DF-SBAS	L1L2 SBAS positions, 20 Hz	
OEMV-1DF-L1L2-Y-Z	GPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 H	
OEMV-1DF-SBAS-Y-Z	GPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 Hz	
OEMV-1DF-Z	GPS L1/L2, ALIGN Heading, 10 Hz	
Single-Frequency		
OEMV-1DF-RT20 GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions a SBAS, 20 Hz		
OEMV-1DF-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	

#### **OEMV-1G Receivers**

The OEMV-1G is a 36-channel, single frequency GPS plus GLONASS L1 receiver with low power consumption. All OEMV-1G receivers offer position, velocity, and time (PVT) output up to 50 Hz, real-time DPGS positioning, support for RTCA and RTCM messages.

The OEMV-1G offers GPS plus GLONASS real-time positions and measurements, depending on which model is purchased. The addition of GLONASS satellites provides more available data for positioning in challenging environments.

The OEMV-1G card is available standalone in a 46 x71 mm form-factor, in a FlexPak enclosure, or in a SMART Antenna, and is configurable as a rover or base station.

Card

#### **OEMV-1G Card**

Single-Frequency	
OEMV-1G-RT2L1-G	GPS plus GLONASS 2 cm real-time kinematic positions, RTK corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-1G-RT20-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-1G-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-1G-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-1G-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-1G-PVT-G	GPS plus GLONASS code positions, SBAS, DGPS, 20 Hz
OEMV-1G-PVT	GPS code positions and DGPS, SBAS, 20 Hz
OEMV-1G-L1-G-Y-Z	GPS plus GLONASS, ALIGN Relative Positioning with 3km baseline length limitation, raw data, code positions and DGPS, SBAS, 10 Hz
OEMV-1G-PVT-G-Y-Z	GPS plus GLONASS, ALIGN Relative Positioning with 3km baseline length limitation, code positions and DGPS, SBAS, 10 Hz
OEMV-1G-G-Z	GPS L1 plus GLONASS L1, ALIGN Heading, 10 Hz
OEMV-1G-HV Card	

#### Sinale-Freauencv

engie i requeire,	
OEMV-1G-HV-L1-F	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 Hz
OEMV-1G-HV-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-1G-HV-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-1G-HV-1HZ-G	GPS plus GLONASS code positions and raw data, SBAS, DGPS 1Hz
OEMV-1G-HV-1Hz	GPS code positions and raw data, DGPS, SBAS, 1Hz

#### Enclosure

#### FlexPak-G2-V1G Enclosure

#### Single-Frequency

en gre i requerier		
FLEXG2-V1G-RT2L1-G	GPS plus GLONASS 2 cm real-time kinematic positions, RTK corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
FLEXG2-V1G-RT20-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, coc positions and DGPS, SBAS, 20 Hz	
FLEXG2-V1G-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
FLEXG2-V1G-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
FLEXG2-V1G-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
FLEXG2-V1G-PVT-G	GPS plus GLONASS code positions, SBAS, DGPS, 20 Hz	
FLEXG2-V1G-PVT	GPS code positions and DGPS, SBAS, 20 Hz	
FLEXG2-V1G-L1-G-Y-Z	GPS L1 plus GLONASS L1, ALIGN Relative Positioning with 3km Baseline Length Limitation, ra measurements, code positions and DGPS, SBAS, 10 Hz	
FLEXG2-V1G-PVT-G-Y-Z	GPS L1 plus GLONASS L1, ALIGN Relative Positioning with 3km Baseline Length Limitation, cod positions and DGPS, SBAS, 10 Hz	
FLEXG2-V1G-G-Z	GPS L1 plus GLONASS L1, ALIGN Heading, 10 Hz	
CMADT Antonno		

#### SMART Antenna

SMART-V1G-2US Antenna

#### **RS-232** Version

Single-Frequency SMART-V1G-2US-RT20-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code	
SWART-V10-203-R120-0	positions and DGPS, SBAS, 20 Hz	
SMART-V1G-2US-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 Hz	
SMART-V1G-2US-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
SMART-V1G-2US-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
SMART-V1G-2US-PVT-G	GPS plus GLONASS code positions, SBAS, DGPS, 20 Hz	
SMART-V1G-2US-PVT	GPS code positions, SBAS, DGPS, 20 Hz	
SMART-V1G-2US-1HZ-G	GPS plus GLONASS code positions and raw data, SBAS, DGPS, 1Hz	
SMART-V1G-2US-1HZ	GPS code positions and raw data, DGPS, SBAS, 1Hz	
SMART-V1G-4XS An RS-422 Version		
SMART-V1G-4XS An		
SMART-V1G-4XS An RS-422 Version		
SMART-V1G-4XS An RS-422 Version Single-Frequency SMART-V1G-4XS-RT20-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code	
SMART-V1G-4XS An RS-422 Version Single-Frequency SMART-V1G-4XS-RT20-G SMART-V1G-4XS-RT20	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS	
SMART-V1G-4XS An RS-422 Version Single-Frequency SMART-V1G-4XS-RT20-G SMART-V1G-4XS-RT20 SMART-V1G-4XS-PVT-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 Hz	
SMART-V1G-4XS An RS-422 Version Single-Frequency SMART-V1G-4XS-RT20-G SMART-V1G-4XS-RT20 SMART-V1G-4XS-PVT-G SMART-V1G-4XS-PVT	<ul> <li>GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz</li> <li>GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 Hz</li> <li>GPS plus GLONASS code positions, SBAS, DGPS, 20 Hz</li> </ul>	
SMART-V1G-4XS An RS-422 Version Single-Frequency SMART-V1G-4XS-RT20-G SMART-V1G-4XS-RT20 SMART-V1G-4XS-PVT-G SMART-V1G-4XS-PVT SMART-V1G-4XS-L1-G	<ul> <li>GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz</li> <li>GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 Hz</li> <li>GPS plus GLONASS code positions, SBAS, DGPS, 20 Hz</li> <li>GPS code positions, SBAS, DGPS, 20 Hz</li> </ul>	
SMART-V1G-4XS An RS-422 Version Single-Frequency	<ul> <li>GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz</li> <li>GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 Hz</li> <li>GPS plus GLONASS code positions, SBAS, DGPS, 20 Hz</li> <li>GPS code positions, SBAS, DGPS, 20 Hz</li> <li>GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz</li> </ul>	

#### **OEMV-2 Receivers**

The OEMV-2 is a parallel 72-channel dual-frequency or 36-channel single-frequency receiver with low power consumption. OEMV-2 receivers feature GPS plus GLONASS position, velocity, and time (PVT) and raw data output, real-time DGPS and SBAS positioning, support for RTCA and RTCM messages.

The OEMV-2 receivers are capable of tracking the new L2C civilian signal. The L2C signal promises stronger signal tracking and better crosscorrelation protection. The OEMV-2 also offers GPS plus GLONASS real-time positions and measurements, depending on which model is purchased. The addition of GLONASS satellites provides more available data for positioning in challenging environments.

The OEMV-2 card is available standalone in a 60 x 100 mm form factor or in a FlexPak enclosure, and is configurable as a rover or base station.

#### Card

#### OEMV-2 Card

#### L1/L2 Dual-Frequency

OEMV-2-RT2-G	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2® corrections and raw data, code positions	
	and DGPS, SBAS, 20 Hz	
OEMV-2-RT2	GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS,	
	SBAS, 20 Hz	
OEMV-2-L1L2-G	GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
OEMV-2-L1L2	GPS RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
OEMV-2-SBAS	L1L2 SBAS positions, 20 Hz	
OEMV-2-L1L2-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and	
	DGPS, SBAS, 10 Hz	
OEMV-2-L1L2-Y-Z	GPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 F	
OEMV-2-SBAS-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10	
OEMV-2-SBAS-Y-Z	GPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 Hz	
OEMV-2-G-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 Hz	
OEMV-2-Z	GPS L1/L2, ALIGN Heading, 10 Hz	
Single-Frequency		
OEMV-2-RT20-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code	
	positions and DGPS, SBAS, 20 Hz	

OEMV-2-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-2-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-2-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-2-L1-G-Y-Z	GPS plus GLONASS, ALIGN Relative Positioning with 3km baseline length limitation, raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-2-PVT-G-Y-Z	GPS plus GLONASS, ALIGN Relative Positioning with 3km baseline length limitation, code positions and DGPS, SBAS, 20 Hz

#### Enclosure

#### FlexPak-G2-V2 Enclosure

### L1/L2 Dual-Frequency

DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-G-Y-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10FLEXG2-V2-L1L2-Y-ZGPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-G-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 HzFLEXG2-V2-ZGPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20-FGPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 HzFLEXG2-V2-L1-GGPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-RT2-G	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positio and DGPS, SBAS, 20 Hz	
FLEXG2-V2-L1L2GPS RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 HzFLEXG2-V2-SBASL1L2 SBAS positions, 20 HzFLEXG2-V2-L1L2-G-Y-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-G-Y-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-G-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-ZGPS L1/L2, ALIGN Heading, 10 HzSingle-FrequencyGPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20-FGPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 HzFLEXG2-V2-L1-GGPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS SBAS, 20 Hz	FLEXG2-V2-RT2		
FLEXG2-V2-SBASL1L2 SBAS positions, 20 HzFLEXG2-V2-L1L2-G-Y-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-G-Y-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-L1L2-Y-ZGPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-G-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 HzFLEXG2-V2-ZGPS L1/L2, ALIGN Heading, 10 HzSingle-FrequencyFLEXG2-V2-RT2L1-GFLEXG2-V2-RT2L1-GGPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20-FGPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 HzFLEXG2-V2-L1-GGPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 HzFLEXG2-V2-L1-GGPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-L1L2-G	GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
FLEXG2-V2-L1L2-G-Y-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-G-Y-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-L1L2-Y-ZGPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-G-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-G-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 HzFLEXG2-V2-ZGPS L1/L2, ALIGN Heading, 10 HzFLEXG2-V2-RT2L1-GGPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20-FGPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 HzFLEXG2-V2-L1-GGPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-L1L2		
DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-G-Y-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10FLEXG2-V2-L1L2-Y-ZGPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-G-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 HzFLEXG2-V2-ZGPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20-FGPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 HzFLEXG2-V2-L1-GGPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-SBAS		
FLEXG2-V2-L1L2-Y-ZGPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-G-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 HzFLEXG2-V2-ZGPS L1/L2, ALIGN Heading, 10 HzSingle-FrequencyFLEXG2-V2-RT2L1-GGPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20-FGPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 50 HzFLEXG2-V2-RT20GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 HzFLEXG2-V2-L1-GGPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS SBAS, 20 HzFLEXG2-V2-L1-GGPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-L1L2-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 Hz	
FLEXG2-V2-SBAS-Y-ZGPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 HzFLEXG2-V2-G-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 HzFLEXG2-V2-ZGPS L1/L2, ALIGN Heading, 10 HzSingle-FrequencyFLEXG2-V2-RT2L1-GGPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20-FGPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 50 HzFLEXG2-V2-RT20GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS SBAS, 20 HzFLEXG2-V2-L1-GGPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS 	FLEXG2-V2-SBAS-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 Hz	
FLEXG2-V2-G-ZGPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 HzFLEXG2-V2-ZGPS L1/L2, ALIGN Heading, 10 HzSingle-FrequencyFLEXG2-V2-RT2L1-GGPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20-FGPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 HzFLEXG2-V2-RT20GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 HzFLEXG2-V2-RT20GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 HzFLEXG2-V2-L1-GGPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-L1L2-Y-Z	GPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 Hz	
FLEXG2-V2-Z       GPS L1/L2, ALIGN Heading, 10 Hz         Single-Frequency         FLEXG2-V2-RT2L1-G       GPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-RT20-F       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 Hz         FLEXG2-V2-RT20       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-RT20       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-L1-G       GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-SBAS-Y-Z	GPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 Hz	
Single-Frequency         FLEXG2-V2-RT2L1-G       GPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-RT20-F       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 Hz         FLEXG2-V2-RT20       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-RT20       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-L1-G       GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-G-Z		
FLEXG2-V2-RT2L1-G       GPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-RT20-F       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 Hz         FLEXG2-V2-RT20       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-RT20       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-L1-G       GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-Z		
code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-RT20-F       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 Hz         FLEXG2-V2-RT20       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-L1-G       GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	Single-Frequency		
SBAS, 50 Hz         FLEXG2-V2-RT20       GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz         FLEXG2-V2-L1-G       GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-RT2L1-G	GPS plus GLONASS 2 cm real-time kinematic positions, 3 km baseline RTK corrections and raw data	
SBAS, 20 Hz         FLEXG2-V2-L1-G       GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	FLEXG2-V2-RT20-F		
	FLEXG2-V2-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
ELEXC2 V2 L1 CPS PT 20 corrections and raw data, code positions and DCPS_SBAS_20 Hz	FLEXG2-V2-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
GESTEROUS and Taw data, code positions and DGES, SDAS, 20 Hz	FLEXG2-V2-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	

#### **OEMV-3 Receivers**

The OEMV-3 is a parallel 72-channel dual-frequency or 36-channel single-frequency receiver with low power consumption. All OEMV-3 cards feature GPS plus GLONASS position, velocity, and time (PVT) and raw data output, integrated real-time DGPS positioning (including SBAS, and OmniSTAR), support for RTCA and RTCM messages.

The OEMV-3 offers GPS plus GLONASS real-time positions and measurements, depending on which model is purchased. The addition of GLONASS satellites provides more available data for positioning in challenging environments.

The OEMV-3 card is available standalone in an 85 x 125 mm form factor, in a ProPak® enclosure, or in a DL-V3 enclosure, and is configurable as a rover or base station.

#### Card

#### **OEMV-3 Card**

#### Triple-Frequency

OEMV-3-L1L2L5-G	GPS L1/L2/L5, GLONASS L1/L2, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-3-L1L2L5	GPS L1/L2/L5, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
L1/L2 Dual-Fre	quency
OEMV-3-RT2-G	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
OEMV-3-L1L5-G	GPS plus GLONASS L1/L5, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
OEMV-3-L1L5	GPS L1/L5, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz

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OEMV-3-RT2	GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code position OmniSTAR HP/XP/VBS, SBAS, 20 Hz	ons and DGPS,
OEMV-3-L1L2-G	GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VE SBAS, 20 Hz	
OEMV-3-L1L2-F	GPS RT-2 corrections and raw data, code positions and DGPS, SBAS, 50 Hz	
OEMV-3-L1L2	GPS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/	VBS, SBAS, 20 Hz
OEMV-3-HP	GPS code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz	
OEMV-3-SBAS	L1L2 SBAS positions, 20 Hz	
OEMV-3-L1L2-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 Hz	
OEMV-3-L1L2-Y-Z	GPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DG	PS, SBAS, 10 Hz
OEMV-3-SBAS-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and I	OGPS, SBAS, 10 Hz
OEMV-3-SBAS-Y-Z	GPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 Hz	
OEMV-3-G-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 Hz	
OEMV-3-Z	GPS L1/L2, ALIGN Heading, 10 Hz	
Single-Frequency		
OEMV-3-RT20-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz	
OEMV-3-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz	
OEMV-3-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
OEMV-3-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
OEMV-3-VBS	GPS code positions, and DGPS, OmniSTAR VBS, SBAS positions, 20 Hz	
OEMV-3-L1-G-Y-Z	GPS plus GLONASS, ALIGN Relative Positioning with 3km baseline length limitation, raw data, code positions and DGPS, SBAS, 20 Hz	
OEMV-3-PVT-G-Y-Z	GPS plus GLONASS, ALIGN Relative Positioning with 3km baseline length limitation, code positions a DGPS, SBAS, 20 Hz	

#### ProPak-V3 Enclosure

#### **RS-232 Version**

#### Triple-Frequency

PROPAK-V3-L1L2L5-G	GPS L1/L2/L5, GLONASS L1/L2, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20	
	Hz	
PROPAK-V3-L1L2L5	GPS L1/L2/L5, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
PROPAK-V3-L1L5	GPS L1/L5, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
L1/L2 Dual-Frequ	ency	

GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions PROPAK-V3-RT2-G and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz PROPAK-V3-RT2 GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz PROPAK-V3-L1L2-G GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz PROPAK-V3-L1L2 GPS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz GPS code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz PROPAK-V3-HP PROPAK-V3-SBAS L1L2 SBAS positions, 20 Hz GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and PROPAK-V3-L1L2-G-Y-Z DGPS, SBAS, 10 Hz PROPAK-V3-L1L2-Y-Z GPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, SBAS, 10 Hz GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 Hz PROPAK-V3-SBAS-G-Y-Z GPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 Hz PROPAK-V3-SBAS-Y-Z GPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 Hz PROPAK-V3-G-Z PROPAK-V3-Z GPS L1/L2, ALIGN Heading, 10 Hz Single-Frequency PROPAK-V3-RT20-G GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz PROPAK-V3-VBS GPS code positions, and DGPS, OmniSTAR VBS, SBAS positions, 20 Hz

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PROPAK-V3-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions OmniSTAR VBS, SBAS, 20 Hz	and DGPS,
PROPAK-V3-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS,	DGPS, 20 Hz
PROPAK-V3-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
RS-422 Version		
Triple-Frequency		
PROPAK-V3-424-L1L5	GPS L1/L5, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
L1/L2 Dual-Frequenc	•	
PROPAK-V3-424-RT2-G	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz	code positions
PROPAK-V3-424-RT2	GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions a OmniSTAR HP/XP/VBS, SBAS, 20 Hz	nd DGPS,
PROPAK-V3-424-L1L2-G	GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, OmniST SBAS, 20 Hz	AR HP/XP/VBS,
PROPAK-V3-424-L1L2	GPS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS,	SBAS 20 Hz
PROPAK-V3-424-HP	GPS code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz	50/(5, 20 HZ
PROPAK-V3-424-L1L2-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code DGPS, SBAS, 10 Hz	positions and
PROPAK-V3-424-L1L2-Y-Z	GPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, S	
PROPAK-V3-424-SBAS-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS	
	· · · · ·	», SBAS, 10 HZ
PROPAK-V3-424-SBAS-Y-Z	GPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 Hz	
PROPAK-V3-424-Z	GPS L1/L2, ALIGN Heading, 10 Hz	
Single-Frequency		
PROPAK-V3-424-RT20-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw dat positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz	a, code
PROPAK-V3-424-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions OmniSTAR VBS, SBAS, 20 Hz	and DGPS,
PROPAK-V3-424-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS,	20 Hz
PROPAK-V3-424-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
PROPAK-V3-424-VBS	GPS code positions, and DGPS, OmniSTAR VBS, SBAS positions, 20 Hz	
DL-V3 Enclosure		
RS-232 Version		
Triple-Frequency		
DL-V3-L1L2L5-G	GPS L1/L2/L5, GLONASS L1/L2, RT-2 corrections and raw data, code positions and DG Hz	PS, SBAS, 20
DL-V3-L1L2L5	GPS L1/L2/L5, RT-2 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
L1/L2 Dual-Frequenc	<i>y</i>	
DL-V3-RT2-G	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz	code positions
DL-V3-RT2-F	GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions a SBAS, 50 Hz (Data rate is limited to 20 Hz when logging RTK data to the CF card. 50 Hz logging raw/RTK data to the serial ports and only raw data to the CF card.)	
DL-V3-RT2	GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions a OmniSTAR HP/XP/VBS, SBAS, 20 Hz	nd DGPS,
DL-V3-L1L2-G	GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, OmniST SBAS, 20 Hz	AR HP/XP/VBS,
DL-V3-L1L2-F	GPS RT-2 corrections and raw data, code positions and DGPS, SBAS, 50 Hz	
DL-V3-L1L2	GPS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS,	SBAS, 20 Hz
DL-V3-HP-G	GPS L1/L2 plus GLONASS L1/L2 code positions and DGPS, OmniSTAR HP/XP/VBS/G2 API support	
DL-V3-HP	GPS code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz	
DL-V3-L1L5	GPS L1/L5, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
DL-V3-L1L2-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, raw measurements, code DGPS, SBAS, 10 Hz	positions and
DL-V3-L1L2-Y-Z	GPS L1/L2, ALIGN Relative Positioning, raw measurements, code positions and DGPS, S	SBAS, 10 Hz
DL-V3-SBAS-G-Y-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Relative Positioning, code positions and DGPS	
DL-V3-SBAS-Y-Z	GPS L1/L2, ALIGN Relative Positioning, code positions and DGPS, SBAS, 10 Hz	,,

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DL-V3-SBAS	L1L2 SBAS positions, 20 Hz	
DL-V3-G-Z	GPS L1/L2 plus GLONASS L1/L2, ALIGN Heading, 10 Hz	
Single-Frequency		
DL-V3-RT20-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, co positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz	ode
DL-V3-RT20-F	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and OmniSTAR VBS, SBAS, 50 Hz	d DGPS,
DL-V3-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and OmniSTAR VBS, SBAS, 20 Hz, API support	d DGPS,
DL-V3-L1-G	GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 I	Ηz
DL-V3-L1-F	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 Hz	
DL-V3-L1	GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz	
DL-V3-VBS	GPS code positions and DGPS, OmniSTAR VBS, SBAS positions, 20 Hz	

#### **SE Receivers**

The SE is a highly configurable receiver, specially designed for GNSS applications. It outputs raw measurement data or solution data over several communication protocols or to a removable SD card. Multiple GPS-synchronous strobes and event input lines offer easy integration into a larger system. For applications requiring an external heading reference, a dual antenna version of SE is available. Combining the SE with a SPAN-supported IMU creates a complete GNSS/INS system.

#### Enclosure

#### SE-S Enclosure

L1/L2 Dual-Frequenc	У
SE-S-RT2-F	Single Antenna SE Receiver with GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, SBAS, 50 Hz
SE-S-RT2-G	Single Antenna SE Receiver with GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
SE-S-RT2	Single Antenna SE Receiver with GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
SE-S-L1L2-F	Single Antenna SE Receiver with GPS RT-2 corrections and raw data, code positions and DGPS, SBAS, 50 Hz
SE-S-L1L2-G	Single Antenna SE Receiver with GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
SE-S-L1L2	Single Antenna SE Receiver with GPS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
SE-S-SBAS	Single Antenna SE Receiver with L1L2 SBAS positions, 20 Hz.
Single-Frequency	
SE-S-RT20-F	Single Antenna SE Receiver with GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 50 Hz
SE-S-RT20-G	Single Antenna SE Receiver with GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz
SE-S-RT20	Single Antenna SE Receiver with GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, OmniSTAR VBS, SBAS, 20 Hz.
SE-S-L1-F	Single Antenna SE Receiver with GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 50 Hz
SE-S-L1-G	Single Antenna SE Receiver with GPS plus GLONASS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz.
SE-S-L1	Single Antenna SE Receiver with GPS RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz.

#### SE-D Enclosure

L1/L2 Dual-F	requency
SE-D-RT2-G	Dual-Antenna SE Receiver with GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz. SW upgrade required to support ALIGN.
SE-D-RT2	Dual-Antenna SE Receiver with GPS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz. SW upgrade required to support ALIGN.
SE-D-L1L2-G	Dual-Antenna SE Receiver with GPS plus GLONASS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz. SW upgrade required to support ALIGN.

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SE-D-L1L2 Dual-Antenna SE Receiver with GPS RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz. SW upgrade required to support ALIGN.

#### **OEMV** Software Software

#### Application Development Kit

API-Dev-Kit

API support development kit



### **OEMStar™ Receivers**

The OEMStar is a 14 channel, single frequency GPS plus GLONASS L1 receiver with low power consumption. All OEMStar receivers offer position, velocity, and time (PVT) output, real-time DPGS positioning, support for RTCA and RTCM messages, two serial ports, and a USB port. The OEMStar can be upgraded to offer GPS plus GLONASS real-time positions & measurements, and 10Hz output depending on which model is purchased. The addition of GLONASS satellites provides more available data for positioning in challenging environments.

SBAS corrections, including WAAS, MSAS and EGNOS, may not be available in all areas. OEMStar receivers are not capable of operating with OmniSTAR.

The OEMStar card has a 46 x71 mm form-factor and all OEMStar receivers are RoHS-compliant.

### **OEMStar Receivers**

#### Card

#### **OEMStar Card**

#### Single-Frequency

onigio i roquonoy	
OEMSTAR-10HZ-G-I	GPS plus GLONASS code positions and raw data, SBAS, 10Hz, GL1DE, RAIM
OEMSTAR-10HZ-I	GPS code positions and raw data, SBAS, 10Hz, GL1DE, RAIM
OEMSTAR-10HZ-G-A	GPS plus GLONASS code positions and raw data, SBAS, 10Hz, GL1DE, API
OEMSTAR-10HZ-A	GPS code positions and raw data, SBAS, 10Hz, GL1DE, API
OEMSTAR-10HZ-D-G	GPS plus GLONASS code positions and raw data, DGPS code corrections transmit, SBAS,10 Hz, GL1DE
OEMSTAR-10HZ-G	GPS plus GLONASS code positions and raw data, SBAS, 10Hz, GL1DE
OEMSTAR-10HZ-D	GPS code positions and raw data, DGPS code corrections transmit, SBAS,10 Hz, GL1DE
OEMSTAR-PVT-10HZ-G	GPS plus GLONASS code positions, SBAS, 10Hz
OEMSTAR-10HZ	GPS code positions and raw data, SBAS, 10Hz, GL1DE
OEMSTAR-PVT-10HZ	GPS code positions only, SBAS, 10Hz
OEMSTAR-1HZ-D-G	GPS plus GLONASS code positions and raw data, DGPS code corrections transmit, SBAS,1 Hz, GL1DE
OEMSTAR-1HZ-G	GPS plus GLONASS code positions and raw data, SBAS, 1Hz, GL1DE
OEMSTAR-1HZ-D	GPS code positions and raw data, DGPS code corrections transmit, SBAS,1 Hz, GL1DE
OEMSTAR-PVT-1HZ-G	GPS plus GLONASS code positions only, SBAS, 1Hz
OEMSTAR-1HZ	GPS code positions and raw data, SBAS, 1Hz, GL1DE
OEMSTAR-PVT-1HZ	GPS code positions only, SBAS, 1Hz
OEMStar BA Card	

#### **OEMStar RA Card**

#### Single-Frequency

Englagyma	
OEMSTAR-RA-PVT-1HZ	GPS code positions only, SBAS, 1Hz, Right Angle RF
OEMSTAR-RA-1HZ	GPS code positions and raw data, SBAS, 1Hz, GL1DE, Right Angle RF
OEMSTAR-RA-10HZ	GPS code positions and raw data, SBAS, 10Hz, GL1DE, Right Angle RF
OEMSTAR-RA-10HZ-G	GPS and GLONASS code positions and raw data, SBAS, 10Hz, GL1DE, Right Angle RF
	GL1DE, Right Angle RF
OEMSTAR-RA-10HZ-D-G	GPS plus GLONASS code positions and raw data, DGPS code corrections transmit, SBAS,10 Hz,
OEMSTAR-RA-10HZ-A	GPS code positions and raw data, SBAS, 10Hz, GL1DE, API, Right Angle RF
OEMSTAR-RA-10HZ-G-A	GPS and GLONASS code positions and raw data, SBAS, 10Hz, GL1DE, API, Right Angle RF

#### Enclosure

#### FlexPak-G2-OEMStar

#### **RS-232 Version**

#### Single-Frequency

FLEXG2-STAR-10HZ-D-G

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FLEXG2-STAR-10HZ-G	GPS plus GLONASS code positions and raw data, SBAS, 10Hz, GL1DE	
FLEXG2-STAR-10HZ-D	GPS code positions and raw data, DGPS code corrections transmit, SBAS,10 Hz, GL1DE	
FLEXG2-STAR-10HZ	GPS code positions and raw data, SBAS, 10Hz, GL1DE	
FLEXG2-STAR-1HZ-D-G	GPS plus GLONASS code positions and raw data, DGPS code corrections transmit, SBAS, 1	Hz, GL1DE
FLEXG2-STAR-1HZ-G	GPS plus GLONASS code positions and raw data, SBAS, 1Hz, GL1DE	
FLEXG2-STAR-1HZ-D	GPS code positions and raw data, DGPS code corrections transmit, SBAS, 1 Hz, GL1DE	
FLEXG2-STAR-1HZ	GPS code positions and raw data, SBAS, 1Hz, GL1DE	
FLEXG2-STAR-PVT-10HZ-G	GPS plus GLONASS code positions only, SBAS, 10Hz	
FLEXG2-STAR-PVT-10HZ	GPS code positions only, SBAS, 10Hz	
FLEXG2-STAR-PVT-1HZ-G	GPS plus GLONASS code positions only, SBAS, 1Hz	
FLEXG2-STAR-PVT-1HZ	GPS code positions only, SBAS, 1Hz	



### **SMART Antenna Products**

#### SMART AG Antenna

The SMART-AG<sup>™</sup> GNSS antenna features 14 channels for L1 GPS, 12 channels for L1 GLONASS, and 2 channels for SBAS. Measurement and position data is provided at up to 20 Hz. Smooth position outputs with excellent pass-to-pass accuracy are assured with NovAtel's GL1DE<sup>™</sup> technology.

The SMART-AG provides an integrated L1 GPS plus GLONASS receiver and antenna in a single rugged housing with built-in magnets to simplify mounting. Fixed mounting is also supported. Two NMEA 0183 compatible RS-232 serial ports and an NMEA2000 compatible CAN port ensure the SMART-AG delivers maximum flexibility. A simulated radar ground speed output, a one pulse per second output (1PPS), and an event mark input are also provided. Three daylight readable status LEDs simplify diagnoses in the event of field problems.

#### **SMART** Antenna

#### SMART Ag

#### Single-Frequency

0 1 1	
SMART-AG-RT2L1-G	SMART-AG w/2 cm real-time kinematic positions, RTK Corrections, Raw data, Code positions, DGPS, 20Hz
SMART-AG-RT20-G	GPS plus GLONASS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
SMART-AG-RT20	GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS, SBAS, 20 Hz
SMART-AG-L1-G	SMART-AG, RT20 Corrections, Raw data, Code Positions, DGPS, 20Hz, GLONASS
SMART-AG-PVT-G	GPS plus GLONASS code positions, SBAS, DGPS, 20 Hz
SMART-AG-PVT-G-S	GPS plus GLONASS code positions, SBAS, DGPS, 5 Hz
SMART-AG-PVT	GPS code positions, SBAS, DGPS, 20 Hz
SMART-AG-PVT-S	GPS code positions, SBAS, DGPS, 5 Hz

#### Smart Ag with Bluetooth

#### Single-Frequency

SMART-AG w/Bluetooth, 20 cm real-time kinematic positions, RT-20 corrections and raw data, code
positions and DGPS, SBAS, 20 Hz, GLONASS
SMART-AG w/Bluetooth, 20 cm real-time kinematic positions, RT-20 corrections and raw data, code
positions and DGPS, SBAS, 20 Hz
SMART-AG w/Bluetooth, GLONASS, 20hz
SMART-AG w/Bluetooth, GLONASS, 5hz
SMART-AG w/Bluetooth, GPS code positions and DGPS, SBAS, 20 Hz
SMART-AG w/Bluetooth, GPS code positions and DGPS, SBAS, 5 Hz

#### SMART Ag with Tilt and Bluetooth

#### Single-Frequency

SMART-AG-TB-PVT-S	SMART-AG w/Bluetooth, Tilt, GPS code positions, SBAS, DGPS, 5 Hz
SMART-AG-TB-PVT	SMART-AG w/Bluetooth, Tilt, GPS code positions, SBAS, DGPS, 20 Hz
SMART-AG-TB-PVT-G	SMART-AG w/Bluetooth, Tilt, GPS code positions, SBAS, DGPS, 20 Hz, GLONASS
	data, code positions, DGPS, SBAS, 20 Hz
SMART-AG-TB-RT20	SMART-AG w/Bluetooth and Tilt, RT20, 20 cm real-time kinematic positions, RT-20 corrections, Raw
SMART-AG-TB-RT20-G	SMART-AG w/Bluetooth and Tilt, RT20, GLONASS

#### Other

#### Development Kit for SMART-AG Antenna

SMART-AG-KT

Development kit for the SMART-AG antenna

#### SMART-MR Antenna

#### **SMART** Antenna

#### SMART-MR10

SMART-MR15-HSPA-E-RT20

SMART-MR15-CDMA-Generic

L1/L2 Dual-Frequenc	у
SMART-MR10-RT2-G	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw
	data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20 Hz
SMART-MR10-HP-G	GPS plus GLONASS dual-frequency code positions, SBAS, DGPS, OmniSTAR G2/HP/XP/VBS, 20Hz
SMART-MR10-PVT1-G	GPS plus GLONASS single-frequency code positions, SBAS, DGPS, 20Hz
SMART-MR10-G-Z	GPS plus GLONASS heading vector, including heading and separation between master and remote;
	10Hz; must be paired with another receiver, DGPS
SMART-MR15	
L1/L2 Dual-Frequenc	У
SMART-MR15-CDMA-RT2-G	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions
	and DGPS, SBAS, 20 Hz, with integrated CDMA modem for use on Verizon network.
SMART-MR15-HSPA-N-RT2-G	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions
	and DGPS, SBAS, 20 Hz, with integrated GPRS/HSPA modem. North American Version.
SMART-MR15-HSPA-E-RT2-G	GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions
	and DGPS, SBAS, 20 Hz, with integrated GPRS/HSPA modem. European Version.

SBAS, 20 Hz, with integrated GPRS/HSPA modem. European Version.

Hardware only, requires a firmware upgrade to produce output.

GPS 20 cm real-time kinematic positions, RT-20 corrections and raw data, code positions and DGPS,



### **SPAN™** Technology

NovAtel's Synchronized Position Attitude Navigation (SPAN) Technology products feature tight integration of a NovAtel GPS receiver and an Inertial Measurement Unit (IMU). SPAN provides continuous operation through short GPS outages with accurate position and attitude measurements. Designed for dynamic applications, SPAN also provides precise velocity, acceleration, and attitude solutions.

By complementing GPS with inertial measurements, SPAN Technology provides robust positioning in challenging conditions where GPS alone is less reliable. During short periods of GPS outage, or when less than four satellites are received, SPAN Technology offers uninterrupted position and attitude output. The tight coupling of inertial technology with GPS also provides the benefits of faster satellite reacquisition and faster RTK initialization after outages.

A subscription is required for OmniSTAR HP/XP/VBS service, which may not be available in all areas. SBAS corrections, including WAAS, MSAS, and EGNOS, may not be available in all areas.

#### SPAN OEM6 GPS Receiver

SPAN capable OEM6 receiver

#### Enclosure

#### **OEM-615 Cards for SPAN**

#### L1/L2 Dual-Frequency

L1/L2 Dual-Frequency	
OEM615-G2S-R0R-TT0-S1	SPAN enabled. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS 1 cm real-time kinematic
	positions, RT-2 corrections, raw data, code positions and DGPS, SBAS, 20Hz, RAIM support
OEM615-G2S-R0R-TT0-S2	SPAN enabled. Supports NovAtel's range of -2 low grade tactical IMU options. GPS 1 cm real-time
	kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS, 20Hz, RAIM support
OEM615-G2S-R0R-TT0-S3	SPAN enabled. Supports NovAtel's range of -3 high grade IMU options. GPS 1 cm real-time kinematic
	positions, RT-2 corrections, raw data, code positions and DGPS, SBAS, 20Hz, RAIM support
OEM615-G2S-R0R-TT0-S4	SPAN enabled. Supports NovAtel's range of -4 navigation grade IMU options. GPS 1 cm real-time
	kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS, 20Hz, RAIM support
OEM615-G2S-R0R-TT0-W1	SPAN enabled, Heave message enabled. Supports NovAtel's range of -1 grade MEMS IMU Options.
	GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS,
	20Hz, RAIM support
OEM615-G2S-R0R-TT0-W2	SPAN enabled, Heave message enabled. Supports NovAtel's range of -2 low grade tactical IMU options.
	GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS,
	20Hz, RAIM support
OEM615-G2S-R0R-TT0-W3	SPAN enabled, Heave message enabled. Supports NovAtel's range of -3 high grade IMU options. GPS 1
	cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS, 20Hz,
	RAIM support
OEM615-G2S-R0R-TT0-W4	SPAN enabled, Heave message enabled. Supports NovAtel's range of -4 navigation grade IMU options.
	GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS,
	20Hz, RAIM support
OEM615-G2S-R0R-TT0-K1	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS 1
	cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS, 20Hz,
	RAIM support
OEM615-G2S-R0R-TT0-K2	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -2 low grade tactical IMU options.
	GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS,
	20Hz, RAIM support
OEM615-G2S-R0R-TT0-K3	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -3 high grade IMU options. GPS 1
	cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS, 20Hz,
	RAIM support
OEM615-G2S-R0R-TT0-K4	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -4 navigation grade IMU options.
	GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, SBAS,
	20Hz, RAIM support
OEM615-G2S-R0R-TT0-K0	SPAN enabled. Generic IMU interface. No NovAtel IMU support. GPS 1 cm real-time kinematic positions,
	RT-2 corrections, raw data, code positions and DGPS, SBAS, 20Hz, RAIM support

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OEM615-D2S-R0R-TT0-S1	SPAN enabled. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS plus real-time kinematic positions, RT-2 corrections and raw data, code positions and DGF RAIM support	
OEM615-D2S-R0R-TT0-S2	SPAN enabled. Supports NovAtel's range of -2 low grade tactical IMU options. GPS p cm real-time kinematic positions, RT-2 corrections and raw data, code positions and l RAIM support	
OEM615-D2S-R0R-TT0-S3	SPAN enabled. Supports NovAtel's range of -3 high grade IMU options. GPS plus GL time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, S support	
OEM615-D2S-R0R-TT0-S4	SPAN enabled. Supports NovAtel's range of -4 navigation grade IMU options. GPS p real-time kinematic positions, RT-2 corrections and raw data, code positions and DGF RAIM support	
OEM615-D2S-R0R-TT0-W1	SPAN enabled, Heave message enabled. Supports NovAtel's range of -1 grade MEN GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw date and DGPS, SBAS, 20Hz, RAIM support	
OEM615-D2S-R0R-TT0-W2	SPAN enabled, Heave message enabled. Supports NovAtel's range of -2 low grade to GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data and DGPS, SBAS, 20Hz, RAIM support	-
OEM615-D2S-R0R-TT0-W3	SPAN enabled, Heave message enabled. Supports NovAtel's range of -3 high grade plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, co DGPS, SBAS, 20Hz, RAIM support	•
OEM615-D2S-R0R-TT0-W4	SPAN enabled, Heave message enabled. Supports NovAtel's range of -4 navigation GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw da and DGPS, SBAS, 20Hz, RAIM support	
OEM615-D2S-R0R-TT0-K1	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -1 grade MEMS I plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, co DGPS, SBAS, 20Hz, RAIM support	•
OEM615-D2S-R0R-TT0-K2	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -2 low grade tact GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw da and DGPS, SBAS, 20Hz, RAIM support	
OEM615-D2S-R0R-TT0-K3	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -3 high grade IMI GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code p SBAS, 20Hz, RAIM support	
OEM615-D2S-R0R-TT0-K4	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -4 navigation gra GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw da and DGPS, SBAS, 20Hz, RAIM support	
OEM615-D2S-R0R-TT0-K0	SPAN enabled. Generic IMU interface. No NovAtel IMU support. GPS plus GLONAS: kinematic positions, RT-2 corrections and raw data, code positions and DGPS, SBAS support	
OEM-628 Cards for S	SPAN	

#### L1/L2 Dual-Frequency

OEM628-G2L-R0R-TTR-S1	SPAN enabled. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
OEM628-G2L-R0R-TTR-S2	SPAN enabled. Supports NovAtel's range of -2 low grade tactical IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
OEM628-G2L-R0R-TTR-S3	SPAN enabled. Supports NovAtel's range of -3 high grade IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
OEM628-G2L-R0R-TTR-S4	SPAN enabled. Supports NovAtel's range of -4 navigation grade IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
OEM628-G2L-R0R-TTR-W1	SPAN enabled, Heave message enabled. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
OEM628-G2L-R0R-TTR-W2	SPAN enabled, Heave message enabled. Supports NovAtel's range of -2 low grade tactical IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support

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OEM628-G2L-R0R-TTR-W3	SPAN enabled, Heave message enabled. Supports NovAtel's range of -3 high grade IMU cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, I OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	•
OEM628-G2L-R0R-TTR-W4	SPAN enabled, Heave message enabled. Supports NovAtel's range of -4 navigation grac GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and I OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-G2L-R0R-TTR-K1	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -1 grade MEMS IMU cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-G2L-R0R-TTR-K2	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -2 low grade tactical GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and I OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-G2L-R0R-TTR-K3	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -3 high grade IMU op cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, I OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-G2L-R0R-TTR-K4	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -4 navigation grade I GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and I OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-G2L-R0R-TTR-K0	SPAN enabled. Generic IMU interface. No NovAtel IMU support. GPS 1 cm real-time kine RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, S RAIM support	
OEM628-D2L-R0R-TTR-S1	SPAN enabled. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS plus GLC real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-D2L-R0R-TTR-S2	SPAN enabled. Supports NovAtel's range of -2 low grade tactical IMU options. GPS plus cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGF OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-D2L-R0R-TTR-S3	SPAN enabled. Supports NovAtel's range of -3 high grade IMU options. GPS plus GLON time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-D2L-R0R-TTR-S4	SPAN enabled. Supports NovAtel's range of -4 navigation grade IMU options. GPS plus of real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-D2L-R0R-TTR-W1	SPAN enabled, Heave message enabled. Supports NovAtel's range of -1 grade MEMS IN GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-D2L-R0R-TTR-W2	SPAN enabled, Heave message enabled. Supports NovAtel's range of -2 low grade tactic GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-D2L-R0R-TTR-W3	SPAN enabled, Heave message enabled. Supports NovAtel's range of -3 high grade IMU plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	•
OEM628-D2L-R0R-TTR-W4	SPAN enabled, Heave message enabled. Supports NovAtel's range of -4 navigation grac GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
OEM628-D2L-R0R-TTR-K1	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -1 grade MEMS IMU plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	•
OEM628-D2L-R0R-TTR-K2	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -2 low grade tactical GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	•
OEM628-D2L-R0R-TTR-K3	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -3 high grade IMU op GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code posit NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	•
OEM628-D2L-R0R-TTR-K4	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -4 navigation grade I GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	•
OEM628-D2L-R0R-TTR-K0	SPAN enabled. Generic IMU interface. No NovAtel IMU support. GPS plus GLONASS 1 kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTRIP, O HP/XP/VBS, SBAS, 20Hz, RAIM support	

#### FlexPak-6 Enclosure for SPAN

L1/L2 Dual-Frequency	
FLEX6-G2L-R0R-TTR-S1	SPAN enabled. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS 1 cm real-time kinematic
	positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-S2	SPAN enabled. Supports NovAtel's range of -2 low grade tactical IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-S3	SPAN enabled. Supports NovAtel's range of -3 high grade IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-S4	SPAN enabled. Supports NovAtel's range of -4 navigation grade IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-W1	SPAN enabled, Heave message enabled. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-W2	SPAN enabled, Heave message enabled. Supports NovAtel's range of -2 low grade tactical IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-W3	SPAN enabled, Heave message enabled. Supports NovAtel's range of -3 high grade IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-W4	SPAN enabled, Heave message enabled. Supports NovAtel's range of -4 navigation grade IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-K1	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-K2	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -2 low grade tactical IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-K3	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -3 high grade IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-R0R-TTR-K4	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -4 navigation grade IMU options. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-G2L-ROR-TTR-K0	SPAN enabled. Generic IMU interface. No NovAtel IMU support. GPS 1 cm real-time kinematic positions, RT-2 corrections, raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-D2L-R0R-TTR-S1	SPAN enabled. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-D2L-R0R-TTR-S2	SPAN enabled. Supports NovAtel's range of -2 low grade tactical IMU options. GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-D2L-R0R-TTR-S3	SPAN enabled. Supports NovAtel's range of -3 high grade IMU options. GPS plus GLONASS 1 cm real- time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-D2L-R0R-TTR-S4	SPAN enabled. Supports NovAtel's range of -4 navigation grade IMU options. GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-D2L-R0R-TTR-W1	SPAN enabled, Heave message enabled. Supports NovAtel's range of -1 grade MEMS IMU Options. GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support
FLEX6-D2L-R0R-TTR-W2	SPAN enabled, Heave message enabled. Supports NovAtel's range of -2 low grade tactical IMU options. GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support

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FLEX6-D2L-R0R-TTR-W3	SPAN enabled, Heave message enabled. Supports NovAtel's range of -3 high grad plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	•
FLEX6-D2L-R0R-TTR-W4	SPAN enabled, Heave message enabled. Supports NovAtel's range of -4 navigatic GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	0
FLEX6-D2L-R0R-TTR-K1	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -1 grade MEM plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
FLEX6-D2L-R0R-TTR-K2	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -2 low grade ta GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
FLEX6-D2L-R0R-TTR-K3	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -3 high grade GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw data, cod NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	
FLEX6-D2L-R0R-TTR-K4	SPAN enabled. Generic IMU interface. Supports NovAtel's range of -4 navigation g GPS plus GLONASS 1 cm real-time kinematic positions, RT-2 corrections and raw and DGPS, NTRIP, OmniSTAR HP/XP/VBS, SBAS, 20Hz, RAIM support	, i
FLEX6-D2L-R0R-TTR-K0	SPAN enabled. Generic IMU interface. No NovAtel IMU support. GPS plus GLONA kinematic positions, RT-2 corrections and raw data, code positions and DGPS, NT HP/XP/VBS, SBAS, 20Hz, RAIM support	

# SPAN Inertial Measurement Units IMU

#### IMU-LN200

IMU-LN200-L	Enclosure with LN200-L IMU. Same gyros performance as IMU-LN200 LN200. Max accelerometer bias of 1.5mg.
UIMU-LN200	Universal enclosure with LN200 IMU (includes cable)
UIMU-LN200-L	Universal enclosure with LN200-L IMU (includes cable). Same gyros performance as IMU-LN200 LN200. Max accelerometer bias of 1.5mg.
IMU-LN200	Enclosure with LN200 IMU
OEM-IMU-LN200	LN200 IMU without enclosure
OEM-IMU-LN000	Interface Card assembly for IMU-LN200
UIMU-LN000	Universal LN200 Enclosure without IMU.
IMU-LN000	Enclosure without IMU
IMU-FSAS	
<b>RS-422</b> Version	
IMU-SE-FSAS-E-EI-O	SPAN-SE-S or SE-D compatible IMU-FSAS with Wheel Sensor Interface. Compatible with Optical
	Encoder style wheel sensors. For magnetic wheel sensor, also order IMAR-IMWS-V2.
IMU-FSAS-E-EI-O	SPAN ProPak-V3 compatible IMU-FSAS with Wheel Sensor Interface. Compatible with Optical Encoder
	style wheel sensors. For magnetic wheel sensor, also order IMAR-IMWS-V2.
IMU-HG	
UIMU-H58	Universal enclosure with HG1700 AG58 IMU (includes cable)
IMU-H58	HG1700 enclosure with HG1700 AG58 IMU (includes all cables)
OEM-IMU-HG1700-H58	HG1700 AG58 IMU without enclosure, formerly OEM-IMU-H58
UIMU-H62	Universal enclosure with HG1700 AG62 IMU (includes cable)
IMU-H62	HG1700 enclosure with HG1700 AG62 IMU (includes all cables)
OEM-IMU-HG1700-H62	HG1700 AG62 IMU without enclosure, formerly OEM-IMU-H62
UIMU-H00	Universal enclosure without HG1700 IMU (includes cable)
IMU-H00	HG1700 enclosure without an IMU (includes all cables)
OEM-IMU-H00	SDLC Interface card assembly for HG1700 IMUs with cabling.
OEM-IMU-HG1700-SDLC	SDLC (IMU Interface Card) for HG1700 IMU, includes associated cabling and IMU interface card. No
	IMU. Optional alternative to OEM-IMU-H00, uses locking connector and PCB based connector on the
	IMU. Note: SDLC boards are not interchangeable between product variants.
IMU-LCI	
UIMU-LCI	Universal enclosure, Northrop Grumman Litef LCI-1 IMU inside environmentally sealed enclosure.

IMU-CPT	Tactical-Grade IMU containing fiber optic gyroscopes and MEMS accelerometers. Standalone IMU
	offering based on the SPAN-CPT
IMU-CPT-FP-6	Tactical-Grade IMU containing fiber optic gyroscopes and MEMS accelerometers. Standalone IMU
	offering based on the SPAN-CPT. This item will contain all necessary cables to connect to a FlexPak6
	receiver.

### SPAN OEMV GPS Receivers

Card

#### **OEMV-2 Cards for SPAN**

L1/L2 Dual-Fr	equency
OEMV-2-RT2J	GPS 1 cm real-time kinematic positions, raw data, SBAS, 200 Hz,
OEMV-2-RT2i	GPS 1 cm real-time kinematic positions, raw data, SBAS, 100 Hz, IMU-HG support
OEMV-2-RT2c	GPS 1 cm real-time kinematic positions, raw data, SBAS, 100 Hz, -C grade IMU support

#### **OEMV-3 Cards for SPAN**

#### L1/L2 Dual-Frequency

OEMV-3-RT2j	GPS 1 cm real-time kinematic positions, raw data, OmniSTAR HP/XP/VBS, SBAS, 200 Hz, IMU-LN200 and IMU-FSAS support
OEMV-3-RT2i	GPS 1 cm real-time kinematic positions, raw data, OmniSTAR HP/XP/VBS, SBAS, 100 Hz, IMU-HG support
OEMV-3-RT2c	GPS 1 cm real-time kinematic positions, raw data, OmniSTAR HP/XP/VBS, SBAS, 100 Hz, -C Grade IMU support

#### **OEMV-1DF Cards for SPAN**

#### L1/L2 Dual-Frequency

OEMV-1DF-RT2j	GPS 1 cm real-time kinematic positions, raw data, SBAS, 100 Hz, -J Grade IMU options
OEMV-1DF-RT2i	GPS 1 cm real-time kinematic positions, raw data, SBAS, 100 Hz, -I Grade IMU options
OEMV-1DF-RT2c	GPS 1 cm real-time kinematic positions, raw data, SBAS, 100 Hz, -C Grade IMU options

#### Enclosure

#### **ProPak-V3 Enclosures for SPAN**

#### **RS-232 Version**

#### L1/L2 Dual-Frequency

PROPAK-V3-RT2j	GPS 1 cm real-time kinematic positions, raw data, OmniSTAR HP/XP/VBS, SBAS, 200 Hz, IMU-LN200
	support
PROPAK-V3-RT2i	GPS 1 cm real-time kinematic positions, raw data, OmniSTAR HP/XP/VBS, SBAS, 100 Hz, IMU-HG support
PROPAK-V3-RT2c	GPS 1 cm real-time kinematic positions, raw data, OmniSTAR HP/XP/VBS, SBAS, 100 Hz, -C grade IMU support

#### **RS-422 Version**

#### L1/L2 Dual-Frequency

PROPAK-V3-424-RT2j	GPS 1 cm real-time kinematic positions, raw data, OmniSTAR HP/XP/VBS, SBAS, 200 Hz, IMU-LN200 and IMU-FSAS support
PROPAK-V3-424-RT2i	GPS 1 cm real-time kinematic positions, raw data, OmniSTAR HP/XP/VBS, SBAS, 100 Hz, IMU-HG support

#### SPAN-SE Receivers

The SPAN-SE is a highly configurable receiver, specially designed for GNSS/INS applications. Combining SPAN-SE with a SPAN-supported IMU creates a complete GNSS/INS system. It outputs raw measurement data or solution data over several communication protocols or to a removable SD card. Multiple GPS-synchronous strobes and event input lines offer easy integration into a larger system. For applications requiring an external heading reference, a dual antenna version of SPAN-SE is available

#### Card

#### **OEM-SPAN-SE-D** Cards

#### L1/L2 Dual-Frequency

OEM-SPAN-SE-D-RT2-G-J-Z

Internal SPAN-SE components. Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS Supported. ALIGN Heading Aiding Enabled. Supports NovAtel's range of -J Grade IMU Options.

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OEM-SPAN-SE-D-RT2-J-Z	Internal SPAN-SE components. Dual GPS Antenna support. Raw data, AdVance RTK, RT code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. ALIGN Heading Aiding Supports NovAtel's range of -J Grade IMU Options.	
OEM-SPAN-SE-D-RT2-G-I-Z	Internal SPAN-SE components. Dual GPS/GNSS Antenna support. Raw data, AdVance F corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS ALIGN Heading Aiding Enabled. Supports NovAtel's range of -I Grade IMU Options.	
OEM-SPAN-SE-D-RT2-I-Z	Internal SPAN-SE components. Dual GPS/GNSS Antenna support. Raw data, AdVance F corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. ALIGN He Enabled. Supports NovAtel's range of -I Grade IMU Options.	
OEM-SPAN-SE-D-RT2-G-C-Z	Internal SPAN-SE components. Dual GPS/GNSS Antenna support. Raw data, AdVance F corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS ALIGN Heading Aiding Enabled. Supports NovAtel's range of -C Grade IMU Options.	
OEM-SPAN-SE-D-RT2-C-Z	Internal SPAN-SE components. Dual GPS/GNSS Antenna support. Raw data, AdVance F corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, and SBAS positioning. ALIG Aiding Enabled. Supports NovAtel's range of -C Grade IMU Options.	
OEM-SPAN-SE-S Cards		
L1/L2 Dual-Frequency		
	Internal CDAN CE componente Cingle CDC/CNCC Antenna support Dovu data AdVance	

UEM-SPAN-SE-S-R12-G-J	corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS Supported. Supports NovAtel's range of -J Grade IMU Options.
OEM-SPAN-SE-S-RT2-J	Internal SPAN-SE components. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. Supports NovAtel's range of -J Grade IMU Options.
OEM-SPAN-SE-S-RT2-G-I	Internal SPAN-SE components. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS Supported. Supports NovAtel's range of -I Grade IMU Options.
OEM-SPAN-SE-S-RT2-I	Internal SPAN-SE components. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. Supports NovAtel's range of -I Grade IMU Options.
OEM-SPAN-SE-S-RT2-G-C	Internal SPAN-SE components. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. Supports NovAtel's range of -C Grade IMU Options.
OEM-SPAN-SE-S-RT2-C	Internal SPAN-SE components. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. Supports NovAtel's range of -C Grade IMU Options.

### Enclosure

#### SPAN-SE-D Enclosures

#### L1/L2 Dual-Frequency

SPAN-SE-D-RT2-G-J-Z-W	SE ENCL Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, CDGPS, and SBAS positioning. GLONASS Supported. ALIGN Heading Aiding Enabled. Supports NovAtel's range of -J Grade IMU OptionsW Option enables NovAtel Heave message output for dynamic wave motion measurement.
SPAN-SE-D-RT2-G-J-Z	SE ENCL Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS Supported. ALIGN Heading Aiding Enabled. Supports NovAtel's range of -J Grade IMU Options.
SPAN-SE-D-RT2-J-Z-W	SE ENCL Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, CDGPS, and SBAS positioning. ALIGN Heading Aiding Enabled. Supports NovAtel's range of -J Grade IMU OptionsW Option enables NovAtel Heave message output for dynamic wave motion measurement.
SPAN-SE-D-RT2-J-Z	SE ENCL Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. ALIGN Heading Aiding Enabled. Supports NovAtel's range of -J Grade IMU Options.
SPAN-SE-D-RT2-G-I-Z-W	SE ENCL Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, CDGPS, and SBAS positioning. GLONASS Supported. ALIGN Heading Aiding Enabled. Supports NovAtel's range of -I Grade IMU OptionsW Option enables NovAtel Heave message output for dynamic wave motion measurement.
SPAN-SE-D-RT2-G-I-Z	SE ENCL Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 corrections, code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS Supported. ALIGN Heading Aiding Enabled. Supports NovAtel's range of -I Grade IMU Options.

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SPAN-SE-D-RT2-I-Z-W	SE ENCL Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 correction positions, DGPS, OmniSTAR HP/XP/VBS, CDGPS, and SBAS positioning. ALIGN Head Enabled. Supports NovAtel's range of -I Grade IMU OptionsW Option enables NovAtel output for dynamic wave motion measurement.	ing Aiding
SPAN-SE-D-RT2-I-Z	SE ENCL Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT-2 correction positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. ALIGN Heading Aiding Ena NovAtel's range of -I Grade IMU Options.	
SPAN-SE-D-RT2-G-C-Z-W	SPAN-SE enclosure. Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT- code positions, DGPS, OmniSTAR HP/XP/VBS, CDGPS, and SBAS positioning. GLONA ALIGN Heading Aiding Enabled. Supports NovAtel's range of -C Grade IMU OptionsW NovAtel Heave message output for dynamic wave motion measurement.	ASS Supported.
SPAN-SE-D-RT2-G-C-Z	SPAN-SE enclosure. Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT- code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS Supporte Heading Aiding Enabled. Supports NovAtel's range of -C Grade IMU Options.	
SPAN-SE-D-RT2-C-Z-W	SPAN-SE enclosure. Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT- code positions, DGPS, OmniSTAR HP/XP/VBS, CDGPS, and SBAS positioning. ALIGN Enabled. Supports NovAtel's range of -C Grade IMU OptionsW Option enables NovAte message output for dynamic wave motion measurement.	Heading Aiding
SPAN-SE-D-RT2-C-Z	SPAN-SE enclosure. Dual GPS/GNSS Antenna support. Raw data, AdVance RTK, RT- code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. ALIGN Heading Aidir Supports NovAtel's range of -C Grade IMU Options.	
SPAN-SE-S Enclosures		
L1/L2 Dual-Frequency		
SPAN-SE-S-RT2-G-K	SPAN-SE enclosure., Single GPS/GNSS Antenna support., Raw data, AdVance RTK, RT code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning., GLONASS Supporte NovAtel's Generic IMU Interface Option.	
SPAN-SE-S-RT2-G-J	SPAN-SE enclosure. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS Supporte NovAtel's range of -J Grade IMU Options.	
SPAN-SE-S-RT2-J	SPAN-SE enclosure. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. Supports NovAtel's ra IMU Options.	
SPAN-SE-S-RT2-G-I	SPAN-SE enclosure. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT code positions, DGPS, OmniSTAR HP/XP/VBS,SBAS positioning. GLONASS Supported NovAtel's range of -I Grade IMU Options.	
SPAN-SE-S-RT2-I	SPAN-SE enclosure. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. Supports NovAtel's ra IMU Options.	
SPAN-SE-S-RT2-G-C	SPAN-SE enclosure. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. GLONASS Supporte NovAtel's range of -C Grade IMU Options.	
SPAN-SE-S-RT2-C	SPAN-SE enclosure. Single GPS/GNSS Antenna support. Raw data, AdVance RTK, RT code positions, DGPS, OmniSTAR HP/XP/VBS, SBAS positioning. Supports NovAtel's ra IMU Options.	

### **SPAN-MPPC** Receivers

The SPAN-MPPC is designed to connect directly to NovAtel's OEMV-3 receiver to create a powerful GNSS/INS receiver board-stack. When connected to a SPAN-supported IMU, the MPPC creates a continuous GNSS/INS navigation system that delivers accurateposition, velocity and attitude. It outputs raw measurement data or solution data over several communication protocols. Multiple GNSS-synchronous strobes and event input lines ensure the MPPC is easy to integrate into larger systems.

#### Card

#### SPAN-MPPC-D Cards

L1/L2	Dual-Frequency
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	<i>,</i>
SPAN-MPPC-D-J	SPAN-MPPC processor board, requires a separate compatible OEMV3 receiver to create a powerful SPAN board stack. Dual GPS/GNSS Antenna support. Supports NovAtel's range of -J Grade IMU Options.
SPAN-MPPC-D-I	SPAN-MPPC processor board, requires a separate compatible OEMV3 receiver to create a powerful SPAN board stack. Dual GPS/GNSS Antenna support. Supports NovAtel's range of -I Grade IMU Options.

SPAN-MPPC-D-C

SPAN-MPPC processor board, requires a separate compatible OEMV3 receiver to create a powerful

	SPAN board stack. Dual GPS/GNSS Antenna support. Supports NovAtel's range of -C Grade IMU Options.
SPAN-MPPC-S Cards	
L1/L2 Dual-Frequency	,
SPAN-MPPC-S-J	SPAN-MPPC processor board, requires a separate compatible OEMV3 receiver to create a powerful SPAN board stack. Single GPS/GNSS Antenna support. Supports NovAtel's range of -J Grade IMU Options.
SPAN-MPPC-S-I	SPAN-MPPC processor board, requires a separate compatible OEMV3 receiver to create a powerful SPAN board stack. Single GPS/GNSS Antenna support. Supports NovAtel's range of -I Grade IMU Options.
SPAN-MPPC-S-C	SPAN-MPPC processor board, requires a separate compatible OEMV3 receiver to create a powerful SPAN board stack. Single GPS/GNSS Antenna support. Supports NovAtel's range of -C Grade IMU Options.

#### **OEMV-3 Cards for SPAN-MPPC**

#### L1/L2 Dual-Frequency

OEMV-3-RT2-LGQ	OEMV-3 card compatible with SPAN-MPPC with GPS plus GLONASS 1cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS.
OEMV-3-RT2Q	OEMV-3 card compatible with SPAN-MPPC with GPS 1cm real-time kinematic positions, RT-2 corrections and raw data, code positions and DGPS, OmniSTAR HP/XP/VBS, SBAS.

#### Other

#### Accessories for SPAN-MPPC

01018504	SPAN-MPPC development kit break-out board
01018484	SPAN-MPPC Heat Sink for extended temperature operation

#### SPAN OEMV GPS Receivers

#### Enclosure

#### SPAN-CPT

#### L1/L2 Dual-Frequency

SPAN-CPT	Single-enclosure containing OEMV-3 GPS receiver, fiber optic gyros, and MEMS accelerometers
SPAN-CPT-W	Single-enclosure containing OEMV-3 GPS receiver, fiber optic gyros, and MEMS accelerometersW
	Option enables NovAtel Heave message output for dynamic wave motion measurement.

#### SPAN MEMS Inertial Measurement Units

The family of MEMS based IMU's for the SPAN product line are listed below. Designed to offer integrators a powerful board stack option when paired with the OEMV1-DF SPAN receiver (sold separately). The MEMS kit includes applicable cabling for the IMU and can also be interfaced with NovAtel's ranged of SPAN enabled receivers.

#### IMU

#### **OEM-IMU-HG**

OEM-IMU-HG1900-CA50	Honeywell HG1900 CA50 IMU. Designed to be paired with "i" model SPAN receivers. IMU only.
OEM-IMU-HG1930-CA50	Honeywell HG1930 CA50 IMU. Designed to be paired with "c" model SPAN receivers. IMU only.
OEM-IMU-HG1900-MIC	MIC (MEMS Interface Card) for HG1900 IMU, includes associated cabling and IMU interface card. No IMU.
OEM-IMU-HG1700-MIC	MIC (MEMS Interface Card) for HG1700 IMU, includes associated cabling and IMU interface card. No IMU.
OEM-IMU-HG1930-MIC	MIC (MEMS Interface Card) for HG1930 IMU, includes associated cabling and IMU interface card. No IMU.
OEM-IMU-HG1900-SDLC	SDLC (IMU Interface Card) for HG1900 IMU, includes associated cabling and IMU interface card. No IMU.
OEM-IMU-HG1930-SDLC	SDLC (IMU Interface Card) for HG1930 IMU, includes associated cabling and IMU interface card. No IMU.
OEM-IMU-ADIS	
OEM-IMU-ADIS-MIC	MIC (MEMS Interface Card) for ADIS series IMUs, includes associated cabling and IMU interface card. No IMU.
OEM-IMU-ADIS-16488	ADIS16488 IMU. Designed to be paired with S1 model SPAN receivers. IMU only.



### **Waypoint Products Group®**

Purchases of Waypoint products, including new licenses, updates, and upgrades, include new software releases and Post-Contractual Support (PCS) for one year. Date of purchase is verified by your four-digit software key serial number. PCS includes technical support by phone, fax, and email. Support may be denied if payment is delinquent.

Please note that the part numbers by default indicate a USB security key. Parallel key support is no longer available for Waypoint products. Waypoint Products are RoHS compliant.

#### GrafNav/GrafNet

NovAtel offers a complete selection of Waypoint post-processing software, including Inertial Explorer<sup>®</sup> for use with NovAtel's SPAN Technology. New licenses include 12 months of software support and version updates.

#### Software

#### GrafNav/GrafNet Software License

oftware (data conversion, download, data logging, and coordinate conversion)		
GrafNav Lite post-processing software (1 Hz, L1 only)		
SW-PP-GNST-U GrafNav/GrafNet Static post-processing software (no kinematic processing)		
oost-processing software		
V-PP-GMOV-U GrafMov post-processing software (GrafNav/GrafNet <sup>™</sup> with moving baseline option)		

GrafNav/GrafNet F	PCS
SW-UD-3Y-PP-GMOV	Three years of software updates for GrafMov
SW-UD-2Y-PP-GMOV	Two years of software updates for GrafMov
SW-UD-PP-GMOV	One year of software updates for GrafMov
SW-UD-3Y-PP-GNVT	Three years of software updates for GrafNav/GrafNet
SW-UD-2Y-PP-GNVT	Two years of software updates for GrafNav/GrafNet
SW-UD-PP-GNVT	One year of software updates for GrafNav/GrafNet
SW-UD-3Y-PP-GNST	Three years of software updates for GrafNav/GrafNet - Static Only
SW-UD-2Y-PP-GNST	Two years of software updates for GrafNav/GrafNet - Static Only
SW-UD-PP-GNST	One year of software updates for GrafNav/GrafNet - Static Only
SW-UD-3Y-PP-LGNV	Three years of software updates for GrafNav Lite
SW-UD-2Y-PP-LGNV	Two years of software updates for GrafNav Lite
SW-UD-PP-LGNV	One year of software updates for GrafNav Lite
SW-UD-3Y-PP-UTIL	Three years of software updates for GrafNav Utilities
SW-UD-2Y-PP-UTIL	Two years of software updates for GrafNav Utilities
SW-UD-PP-UTIL	One year of software updates for GrafNav Utilities
0	

#### GrafNav/GrafNet Product Upgrades

<b>A</b> . <b>I</b>	
SW-UG-PP-GNST	Upgrade to GrafNav/GrafNet (Static Only)
SW-UG-PP-GNVT	Upgrade to GrafNav/GrafNet
SW-UG-PP-GMOV	Upgrade to GrafMov

#### Other

#### GrafNav/GrafNet Product Upgrades

SW-PP-EXCH-GMOV	Exchange Parallel key for USB for GrafMov	
GrafNav/GrafNet U	ISB Key Exchanges	
SW-PP-EXCH-GNVT	Exchange Parallel key for USB for GrafNav/GrafNet	
SW-PP-EXCH-GNST	Exchange Parallel key for USB for GrafNav/GrafNet (Static Only)	
SW-PP-EXCH-LGNV	Exchange Parallel key for USB for GrafNav Lite	
SW-PP-EXCH-UTIL	Exchange Parallel key for USB for GrafNav Utilities	
GrafNav/GrafNet N	lanuals	
OM-20000106 Printed copy of Inertial Explorer Manual, which allows you to effectively navigate and post-proc		

GNSS, IMU (Inertial Measurement Unit), and wheel sensor data.

#### RTKNav

New licenses include 12 months of software support and version updates.

#### Software

#### RTKNav Software License

SW-RT-R20-U	RTKNav 1-20 Remotes. Full RTK capabilities + Moving Baseline	
SW-RT-R6-U	RTKNav 1-6 Remotes. Full RTK capabilities + Moving Baseline	
SW-RT-R3-U	RTKNav 1-3 Remotes. Full RTK capabilities + Moving Baseline	
SW-RT-MV-U	RTKNav 1 Remote. Full RTK capabilities + Moving Baseline + Heading	
SW-RT-R1-U	RTKNav 1 Remote. Full RTK capabilities	
SW-RT-AZ-U	Azimuth Determination Only	
RTKNav PCS		
SW-UD-RT-R20	One year of software updates for RT-R20	
SW-UD-RT-R6	One year of software updates for RT-R6	
SW-UD-RT-R3	One year of software updates for RT-R3	
SW-UD-RT-MV	One year of software updates for RT-MV	
SW-UD-RT-R1	One year of software updates for RT-R1	
SW-UD-RT-AZ	One year of software updates for RT-AZ	
RTKNav Produc	t Upgrades	
SW-UG-RT-R20	Upgrade to RT-R20	

SW-UG-RT-R20	Upgrade to RT-R20	
SW-UG-RT-R6	Upgrade to RT-R6	
SW-UG-RT-R3	Upgrade to RT-R3	
SW-UG-RT-MV	Upgrade to RT-MV	

#### Development Tools

SW-RT-DEV-U

RtDLL/SIOGPS DLL Developer's Kit for processing and interface (one time cost and must be purchased with one of the above RTKNav licenses)

#### Other

#### RTKNav USB Key Exchanges

SW-RT-EXCH-R20	Exchange Parallel key for USB for RT-R20
SW-RT-EXCH-R6	Exchange Parallel key for USB for RT-R6
SW-RT-EXCH-R3	Exchange Parallel key for USB for RT-R3
SW-RT-EXCH-MV	Exchange Parallel key for USB for RT-MV
SW-RT-EXCH-R1	Exchange Parallel key for USB for RT-R1
SW-RT-EXCH-AZ	Exchange Parallel key for USB RT-AZ
DTKNay Manuals	

#### RTKNav Manuals

OM-20000107

Printed copy of RTKNav Manual, which allows you to effectively navigate and process GPS data.

#### Inertial Explorer

Software

#### Inertial Explorer Software License

SW-PP-GPSIMU-U	Inertial Explorer post-processing software for GPS/INS applications	
Inertial Explorer PC	S	
SW-UD-3Y-PP-GPSIMU	Three years of software updates for Inertial Explorer	
SW-UD-2Y-PP-GPSIMU	Two years of software updates for Inertial Explorer	
SW-UD-PP-GPSIMU	One year of software updates for Inertial Explorer	

#### Inertial Explorer Product Upgrades

SW-UG-PP-GPSIMU	Upgrade to Inertial Explorer	
<b>A</b> /I		

#### Other

#### Inertial Explorer Manuals

 OM-20000105
 Printed copy of GrafNav/GrafNet Manual, which allows you to effectively navigate and post-process

 GNSS data. For use with GrafNav/GrafNet, GrafNav Lite, GrafNav/GrafNet Static, and GrafMov.

Inertia	l Explorer	Product	Upgrades

SW-PP-EXCH-GPSIMU	Exchange Parallel key for USB for Inertial Explorer	



### **Receiver Accessories**

### **OEM6** Accessories

Cable

#### Accessories for FlexPak6 Enclosures

01018649	FlexPak6 breakout cable; Connects to 15 pin I/O port and provides Ethernet jack, DB9 connector for
	CANbus, and HD15 connector for I/O signals, RoHS compliant
01018948	FlexPak6 breakout cable for operating with the IMU-FSAS-E-EI-O-FP-6 or IMU-CPT-FP-6 by bridging the
	VARF line out to the IMU for timing.
01017663	Accessory Power Cable, 4-pin LEMO with automotive adapter for DL-4plus, DL-V3, ProPak-G2plus,
	ProPak-V3, FlexPak6 and FlexPak-G2, RoHS compliant. For use at 12VDC only.
01017658	Null-modem cable with 2 female DB-9 connectors for DL-V3, ProPak-V3, FlexPak6 and FlexPak-G2
	enclosures, RoHS compliant
01017659	Straight serial cable (extension) with male and female DB-9 connectors for DL-4plus, DL-V3, EuroPak™
	enclosures, ProPak-G2plus, ProPak-V3, FlexPak6 and FlexPak-G2, RoHS compliant
01018651	I/O strobe port interface cable with DB15HD female connector and open wires for FlexPak6, RoHS
	compliant
40023114	AC adapter with auto receptacle for ProPak-V3, FlexPak-G2, FlexPak6, SMART Antenna, and all
	EuroPaks, RoHS compliant
60323078	2 meter USB A to Mini-B cable, RoHS compliant
Accessories f	or GPStation-6 Enclosures

30W AC to DC power adapter. 4-pin LEMO to wall socket, with plug kit (US, UK, Euro, Aus).

01018931

#### **OEMV** Accessories

Cable

#### Accessories for FlexPak-G2 Enclosures

01017663	Accessory Power Cable, 4-pin LEMO with automotive adapter for DL-4plus, DL-V3, ProPak-G2plus, ProPak-V3, FlexPak6 and FlexPak-G2, RoHS compliant. For use at 12VDC only.
01017278	8.5 cm RF cable with right-angle MCX male plug and straight TNC bulkhead jack connectors, RoHS compliant
01017658	Null-modem cable with 2 female DB-9 connectors for DL-V3, ProPak-V3, FlexPak6 and FlexPak-G2 enclosures, RoHS compliant
01017659	Straight serial cable (extension) with male and female DB-9 connectors for DL-4plus, DL-V3, EuroPak™ enclosures, ProPak-G2plus, ProPak-V3, FlexPak6 and FlexPak-G2, RoHS compliant
01017660	I/O strobe port interface cable with DB-9 male connector and open wires for DL-4plus, DL-V3, EuroPak enclosures, ProPak-G2plus, ProPak-V3 and FlexPak-G2, RoHS compliant
40023114	AC adapter with auto receptacle for ProPak-V3, FlexPak-G2, FlexPak6, SMART Antenna, and all EuroPaks, RoHS compliant
60323078	2 meter USB A to Mini-B cable, RoHS compliant
Accessories for	r FlexPak Enclosures
01017278	8.5 cm RF cable with right-angle MCX male plug and straight TNC bulkhead jack connectors, RoHS compliant
01017823	Straight serial cable with Deutsch and male DB-9 connectors (included with OEMV FlexPak enclosures), RoHS compliant
01017820	USB cable (Host Side) to female 13-pin Deutsch circular connector (included with OEMV FlexPak enclosures), RoHS compliant
40023114	AC adapter with auto receptacle for ProPak-V3, FlexPak-G2, FlexPak6, SMART Antenna, and all EuroPaks, RoHS compliant

#### Accessories for SMART-V1 and SMART-V1G Antennas

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<b>RS-232</b> Version	
01017923	5 meter interface cable with 18-pin connector and tagged open wires (USB) for SMART-V1-2US, and SMART-V1G, RoHS compliant
01017922	3 meter interface cable with 18-pin connector and tagged open wires (CAN) for SMART-V1-2CS, RoHS compliant
01017894	3 meter interface cable with 18-pin connector, 2 x DB-9 (serial), 1 x DB-9 (CAN), and tagged open wires for SMART-V1-2CS, RoHS compliant
01017893	5 meter interface cable with 18-pin connector, 2 x DB-9 (serial), 1 x USB and tagged open wires for SMART-V1-2US and SMART-V1G, RoHS compliant
RS-422 Version	
01018024	5 meter interface cable with 18-pin connector and tagged open wires for SMART-V1-4XS, RoHS compliant
01018017	5 meter interface cable with 18-pin connector, 3 x DB-9 (serial) and tagged open wires for SMART-V1- 4XS, RoHS compliant
Accessories for Prol	Pak-V3 Enclosures
01017663	Accessory Power Cable, 4-pin LEMO with automotive adapter for DL-4plus, DL-V3, ProPak-G2plus, ProPak-V3, FlexPak6 and FlexPak-G2, RoHS compliant. For use at 12VDC only.
01018221	Cable assembly for IMU-FSAS and ProPak-V3, 1 m, not RoHS compliant
01017658	Null-modem cable with 2 female DB-9 connectors for DL-V3, ProPak-V3, FlexPak6 and FlexPak-G2
01017659	enclosures, RoHS compliant Straight serial cable (extension) with male and female DB-9 connectors for DL-4plus, DL-V3, EuroPak™
01017660	enclosures, ProPak-G2plus, ProPak-V3, FlexPak6 and FlexPak-G2, RoHS compliant I/O strobe port interface cable with DB-9 male connector and open wires for DL-4plus, DL-V3, EuroPak
01017664	enclosures, ProPak-G2plus, ProPak-V3 and FlexPak-G2, RoHS compliant USB cable (Host Side) to DB-9 female connector for DL-4plus, ProPak-G2plus, and ProPak-V3, RoHS compliant
01018222	Cable assembly for IMU-FSAS and ProPak-V3, 2 m, not RoHS compliant
40023114	AC adapter with auto receptacle for ProPak-V3, FlexPak-G2, FlexPak6, SMART Antenna, and all EuroPaks, RoHS compliant
Accessories for DL-	V3 Enclosures
01017663	Accessory Power Cable, 4-pin LEMO with automotive adapter for DL-4plus, DL-V3, ProPak-G2plus, ProPak-V3, FlexPak6 and FlexPak-G2, RoHS compliant. For use at 12VDC only.
01017658	Null-modem cable with 2 female DB-9 connectors for DL-V3, ProPak-V3, FlexPak6 and FlexPak-G2 enclosures, RoHS compliant
01017659	Straight serial cable (extension) with male and female DB-9 connectors for DL-4plus, DL-V3, EuroPak™ enclosures, ProPak-G2plus, ProPak-V3, FlexPak6 and FlexPak-G2, RoHS compliant
01017660	I/O strobe port interface cable with DB-9 male connector and open wires for DL-4plus, DL-V3, EuroPak enclosures, ProPak-G2plus, ProPak-V3 and FlexPak-G2, RoHS compliant
01017664	USB cable (Host Side) to DB-9 female connector for DL-4plus, ProPak-G2plus, and ProPak-V3, RoHS compliant
40023114	AC adapter with auto receptacle for ProPak-V3, FlexPak-G2, FlexPak6, SMART Antenna, and all EuroPaks, RoHS compliant
Other	
Accessories for Prol	Pak-V3 Enclosures
01017678	External mounting bracket kit for ProPak-V3 and DL-V3 receivers.
Accessories for DL-	V3 Enclosures
01017678	External mounting bracket kit for ProPak-V3 and DL-V3 receivers.
<i>OEM Cards</i> Other	
Development Kit	
-	
RS-232 Version	Dovolopment kit for evaluating OEM CNSS receivers - Marke with OEMSter, OEMV 1, OEMV 10
OEM-DEV-KIT	Development kit for evaluating OEM GNSS receivers. Works with OEMStar, OEMV-1, OEMV-1G, OEMV-2, OEMV-3, OEMV-1DF, OEM615, and OEM628.
SUPERSTAR II Acces	sories

#### Cable

40023114	AC adapter with auto receptacle for ProPak-V3, FlexPak-G2, FlexPak6, SMART Antenna, and all
<b>A</b>	EuroPaks, RoHS compliant
	SUPERSTAR II SMART Antenna
40023114	AC adapter with auto receptacle for ProPak-V3, FlexPak-G2, FlexPak6, SMART Antenna, and all EuroPaks, RoHS compliant
SPAN Accessorie	es
Cable	
Accessories for	'IMU-FSAS
01018221	Cable assembly for IMU-FSAS and ProPak-V3, 1 m, not RoHS compliant
01018222	Cable assembly for IMU-FSAS and ProPak-V3, 2 m, not RoHS compliant
01018977	FSAS and LCI IMU Cable for FlexPak6 receivers.
Accessories for	r IMU-HG
01017384	Interface cable for HG1700 IMUs (included with IMU-G2-xxx), not RoHS compliant
Accessories for	ŚPAN-CPT
60723108	Terminated DB-9 & USB SPAN-CPT power/data cable
60723114	Terminated IMU-CPT power/data cable for SPAN-SE
Accessories for	' SPAN-SE
01018133	SPAN-SE I/O 2 (Yellow) Cable
01018134	SPAN-SE I/O 1 (Green) Cable
01018135	SPAN-SE Power Cable
01018977	FSAS and LCI IMU Cable for FlexPak6 receivers.
Accessories for	<sup>r</sup> IMU-LCI
01018977	FSAS and LCI IMU Cable for FlexPak6 receivers.
Accessories for	<sup>r</sup> IMU-CPT-FP-6
01018966	Terminated DB-9 & USB IMU-CPT-6 power/data cable for use with FlexPak 6 SPAN capable receiver.
01018948	FlexPak6 breakout cable for operating with the IMU-FSAS-E-EI-O-FP-6 or IMU-CPT-FP-6 by bridging the VARF line out to the IMU for timing.
Other	
Accessories for	'IMU-FSAS
IMAR-IMWS-V2	iMAR Magnetic Wheel hardware, including magnetic strip, compatible with IMU-FSAS-EI-O, not RoHS- compliant
01018223	Transportation case for IMU-FSAS, water resistant, plastic
01018224	iMWS magnetic strip, 2 m, for IMU-FSAS-EI-O and IMAR-IMWS-V2, not RoHS compliant

### SMART-MR Accessories

01018578

01018625 01018624

01018623

#### **SMART** Antenna

#### Accessories for SMART-MR10

01018515	SMART-MR10/15 Evaluation Cable
01018526	SMART-MR10/15 Streamlined Cable
01018578	Quick release kit - SMART-MR10/15
01018625	Universal mounting kit - SMART-MR10/15
01018624	Pole mount kit - SMART-MR10/15
01018623	Adapter kit for AgGPS 262 to SMART-MR10/15
Accessories f	or SMART-MR15
01018515	SMART-MR10/15 Evaluation Cable
01018526	SMART-MR10/15 Streamlined Cable

Quick release kit - SMART-MR10/15

Pole mount kit - SMART-MR10/15

Universal mounting kit - SMART-MR10/15

Adapter kit for AgGPS 262 to SMART-MR10/15

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12023296	CDMA Antenna, 2.2 / 4 dBi, 824-896 MHz / 1850 - 1900 MHz, NMO	
12023303	GSM/HSPA Antenna, 3 / 4 dBi, 806-960 MHz / 1710 - 2500 MHz, NMO	
12023300	GSM/HSPA Antenna Base, NMO magnetic mount to TNC, 3.65m cable	
01018684	Antenna Ground Plane Kit for use on non-metallic mounting surfaces	
12023301	CDMA Antenna Base, NMO magnetic mount to TNC, 0.3m cable	



### **Specialty Products**

Specialty Products are not RoHS-compliant, except where otherwise noted.

#### **Euro-3 Receivers**

The Euro-3 GPS receiver features Signal Quality Monitoring (SQM) and advanced cross-correlation verification algorithm. The standard version includes 14 channels for L1/L2 tracking and 4 channels for L1 GEO tracking. Alternately, the Euro-3 is offered with Multipath Estimating Delay Lock Loop (MEDLL®) multipath reduction technology combined with 8 L1/L2 channels and 1 L1 GEO channel. An enclosure for the Euro-3 card is also available with an optional high-stability internal Oven Controlled Crystal Oscillator (OCXO).

#### Card

#### Euro-3 Cards

#### L1/L2 Dual-Frequency

Englagura	
EURO-3-L1L2GEO	14-channel L1/L2 tracking and 4-channel L1 GEO tracking
EURO-3-MEDLL	8-channel L1/L2 tracking and 1-channel L1 GEO tracking with MEDLL

#### Enclosure

#### EuroPak-3 Enclosures

EUROPAK-3T-MEDLLT	Enclosed Euro-3-MEDLL receiver with internal OCXO
EUROPAK-3-MEDLL	Enclosed Euro-3-MEDLL receiver
EUROPAK-3T-L1L2GEOT	Enclosed Euro-3 receiver with internal OCXO
EUROPAK-3-L1L2GEO	Enclosed Euro-3 receiver

#### LGR Receiver

Card

#### CMA-4048

Single-Frequency

17523025

Dual L1/L1 24 Channel LAAS Ground Station GPS Receiver (LGR) with Signal Quality Monitoring

#### Accessories for Specialty Products

#### Cable

#### Accessories for EuroPak Enclosures

Power cable with automotive adapter for EuroPak enclosures, not RoHS compliant
Straight serial cable (extension) with male and female DB-9 connectors for DL-4plus, DL-V3, EuroPak™ enclosures, ProPak-G2plus, ProPak-V3, FlexPak6 and FlexPak-G2, RoHS compliant
I/O strobe port interface cable with DB-9 male connector and open wires for DL-4plus, DL-V3, EuroPak enclosures, ProPak-G2plus, ProPak-V3 and FlexPak-G2, RoHS compliant
30 W AC adapter with auto receptacle and IEC-320-C14 input for ProPak, FlexPak, SSII SMART Antenna, GPStation-6, and EuroPak (North American plug included, requires additional region-specific plug for use outside North America), RoHS compliant
AC adapter with auto receptacle for ProPak-V3, FlexPak-G2, FlexPak6, SMART Antenna, and all EuroPaks, RoHS compliant



### **Extended Warranties**

### **OEM6 Extended Warranties**

#### Warranty

#### **Extended Warranties For OEM615 Products**

EW-1-A-OEM615	One-year extended warranty for OEM615 cards for purchase after sale of product.
EW-1-T-OEM615	One-year extended warranty for OEM615 cards for purchase at time of sale.
EW-2-A-OEM615	Two-year extended warranty for OEM615 cards for purchase after sale of product.
EW-2-T-OEM615	Two-year extended warranty for OEM615 cards for purchase at time of sale.

#### **Extended Warranties For OEM628 Products**

EW-1-A-OEM628	One-year extended warranty for OEM628 cards for purchase after sale of product.
EW-1-T-OEM628	One-year extended warranty for OEM628 cards for purchase at time of sale.
EW-2-A-OEM628	Two-year extended warranty for OEM628 cards for purchase after sale of product.
EW-2-T-OEM628	Two-year extended warranty for OEM628 cards for purchase at time of sale.
EW-1-A-FLEX6	One-year extended warranty for FlexPak6 enclosures for purchase after sale of product.
EW-1-T-FLEX6	One-year extended warranty for FlexPak6 enclosures for purchase at time of sale.
EW-2-A-FLEX6	Two-year extended warranty for FlexPak6 enclosures for purchase after sale of product.
EW-2-T-FLEX6	Two-year extended warranty for FlexPak6 enclosures for purchase at time of sale.
EW-1-A-GPSTATION6	One-year extended warranty for GPStation-6 enclosures for purchase after sale of product.
EW-1-T-GPSTATION6	One-year extended warranty for GPStation-6 enclosures for purchase at time of sale.
EW-2-A-GPSTATION6	Two-year extended warranty for GPStation-6 enclosures for purchase after sale of product.
EW-2-T-GPSTATION6	Two-year extended warranty for GPStation-6 enclosures for purchase at time of sale.

### OEMV Extended Warranties Warranty

#### **Extended Warranties For OEMV-1 Products**

EW-1-T-OEMV-1	One-year extended warranty for OEMV-1 cards for purchase at time of sale.
EW-2-A-OEMV-1	Two-year extended warranty for OEMV-1 cards for purchase after sale of product.
EW-2-T-OEMV-1	Two-year extended warranty for OEMV-1 cards for purchase at time of sale.
EW-1-A-FLEXG2-V1	One-year extended warranty for FlexPak-G2-V1 enclosures for purchase after sale of product.
EW-1-T-FLEXG2-V1	One-year extended warranty for FlexPak-G2-V1 enclosures for purchase at time of sale.
EW-2-A-FLEXG2-V1	Two-year extended warranty for FlexPak-G2-V1 enclosures for purchase after sale of product.
EW-2-T-FLEXG2-V1	Two-year extended warranty for FlexPak-G2-V1 enclosures for purchase at time of sale.
EW-1-A-SMART-V1	One-year extended warranty for SMART-V1 antenna for purchase after sale of product.
EW-1-T-SMART-V1	One-year extended warranty for SMART-V1 antenna for purchase at time of sale.
EW-2-A-SMART-V1	Two-year extended warranty for SMART-V1 antenna for purchase after sale of product.
EW-2-T-SMART-V1	Two-year extended warranty for SMART-V1 antenna for purchase at time of sale.
Extended Warrant	ies For OEMV-1DF Products
EW-1-A-OEMV-1DF	One-year extended warranty for OEMV-1DF cards for purchase after sale of product.
EW-1-T-OEMV-1DF	One-year extended warranty for OEMV-1DF cards for purchase at time of sale.
EW-2-A-OEMV-1DF	Two-year extended warranty for OEMV-1DF cards for purchase after sale of product.
EW-2-T-OEMV-1DF	Two-year extended warranty for OEMV-1DF cards for purchase at time of sale.
Extended Warrant	ies For OEMV-1G Products
EW-1-A-OEMV-1G	One-year extended warranty for OEMV-1G cards for purchase after sale of product.
EW-1-T-OEMV-1G	One-year extended warranty for OEMV-1G cards for purchase at time of sale.
EW-2-A-OEMV-1G	Two-year extended warranty for OEMV-1G cards for purchase after sale of product.
EW-2-T-OEMV-1G	Two-year extended warranty for OEMV-1G cards for purchase at time of sale.
EW-1-A-FLEXG2-V1G	One-year extended warranty for FlexPak-G2-V1G enclosures for purchase after sale of product.

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Extended Warranti	es For OEMV-2 Products	
EW-2-T-SMART-V1G	Two-year extended warranty for SMART-V1G antenna for purchase at time of sale.	
EW-2-A-SMART-V1G	Two-year extended warranty for SMART-V1G antenna for purchase after sale of product.	
EW-1-T-SMART-V1G	One-year extended warranty for SMART-V1G antenna for purchase at time of sale.	
EW-1-A-SMART-V1G	One-year extended warranty for SMART-V1G antenna for purchase after sale of product.	
EW-2-T-FLEXG2-V1G	Two-year extended warranty for FlexPak-G2-V1G enclosures for purchase at time of sale.	
EW-2-A-FLEXG2-V1G	Two-year extended warranty for FlexPak-G2-V1G enclosures for purchase after sale of product.	
EW-1-T-FLEXG2-V1G	One-year extended warranty for FlexPak-G2-V1G enclosures for purchase at time of sale.	

EW-1-A-OEMV-2	One-year extended warranty for OEMV-2 cards for purchase after sale of product.	
EW-1-T-OEMV-2	One-year extended warranty for OEMV-2 cards for purchase at time of sale.	
EW-2-A-OEMV-2	Two-year extended warranty for OEMV-2 cards for purchase after sale of product.	
EW-2-T-OEMV-2	Two-year extended warranty for OEMV-2 cards for purchase at time of sale.	
EW-1-A-FLEXG2-V2	One-year extended warranty for FlexPak-G2-V2 enclosures for purchase after sale of product.	
EW-1-T-FLEXG2-V2	One-year extended warranty for FlexPak-G2-V2 enclosures for purchase at time of sale.	
EW-2-A-FLEXG2-V2	Two-year extended warranty for FlexPak-G2-V2 enclosures for purchase after sale of product.	
EW-2-T-FLEXG2-V2	Two-year extended warranty for FlexPak-G2-V2 enclosures for purchase at time of sale.	

#### **Extended Warranties For OEMV-3 Products**

EW-1-A-OEMV-3	One-year extended warranty for OEMV-3 cards for purchase after sale of product.	
EW-1-T-OEMV-3	One-year extended warranty for OEMV-3 cards for purchase at time of sale.	
EW-2-A-OEMV-3	Two-year extended warranty for OEMV-3 cards for purchase after sale of product.	
EW-2-T-OEMV-3	Two-year extended warranty for OEMV-3 cards for purchase at time of sale.	
EW-1-A-PROPAK-V3	One-year extended warranty for ProPak-V3 enclosures for purchase after sale of product.	
EW-1-T-PROPAK-V3	One-year extended warranty for ProPak-V3 enclosures for purchase at time of sale.	
EW-2-A-PROPAK-V3	Two-year extended warranty for ProPak-V3 enclosures for purchase after sale of product.	
EW-2-T-PROPAK-V3	Two-year extended warranty for ProPak-V3 enclosures for purchase at time of sale.	
EW-1-A-DL-V3	One-year extended warranty for DL-V3 enclosures for purchase after sale of product.	
EW-1-T-DL-V3	One-year extended warranty for DL-V3 enclosures for purchase at time of sale.	
EW-2-A-DL-V3	Two-year extended warranty for DL-V3 enclosures for purchase after sale of product.	
EW-2-T-DL-V3	Two-year extended warranty for DL-V3 enclosures for purchase at time of sale.	

#### **Extended Warranties For OEMV-1 Products**

EW-1-A-OEMV-1

One-year extended warranty for OEMV-1 cards for purchase after sale of product.

### **SPAN Extended Warranties** Warranty

#### **Extended Warranties For SPAN OEM Board Products**

One-year extended warranty for SPAN OEMV-2 for purchase after sale of product. One-year extended warranty for SPAN OEMV-2 for purchase at time of sale. Two-year Extended warranty for SPAN OEMV-2 for purchase after sale of product. Two-year Extended warranty for SPAN OEMV-2 for purchase at time of sale. One-year extended warranty for SPAN OEMV-3 for purchase after sale of product.	
Two-year Extended warranty for SPAN OEMV-2 for purchase after sale of product. Two-year Extended warranty for SPAN OEMV-2 for purchase at time of sale.	
Two-year Extended warranty for SPAN OEMV-2 for purchase at time of sale.	
One-year extended warranty for SPAN OEMV-3 for purchase after sale of product.	
One-year extended warranty for SPAN OEMV-3 for purchase at time of sale.	
Two-year Extended warranty for SPAN OEMV-3 for purchase after sale of product.	
Two-year Extended warranty for SPAN OEMV-3 for purchase at time of sale.	
One-year extended warranty for OEM-SPAN-SE-CARD for purchase after sale of product.	
One-year extended warranty for OEM-SPAN-SE-CARD for purchase at time of sale.	
Two-year Extended warranty for OEM-SPAN-SE-CARD for purchase after sale of product.	
Two-year Extended warranty for OEM-SPAN-SE-CARD for purchase at time of sale.	
One-year extended warranty for SPAN-MPPC-CARDS for purchase after sale of product.	
One-year extended warranty for SPAN-MPPC-CARDS for purchase at time of sale.	
Two-year Extended warranty for SPAN-MPPC-CARDS for purchase after sale of product.	
Two-year Extended warranty for SPAN-MPPC-CARDS for purchase at time of sale.	

#### **Extended Warranties For SPAN Enclosure Products**

EW-1-A-SPAN-PROPAK-V3	One-year extended warranty for SPAN PROPAK-V3 for purchase after sale of product.
EW-1-T-SPAN-PROPAK-V3	One-year extended warranty for SPAN PROPAK-V3 for purchase at time of sale.
EW-2-A-SPAN-PROPAK-V3	Two-year Extended warranty for SPAN PROPAK-V3 for purchase after sale of product.
EW-2-T-SPAN-PROPAK-V3	Two-year Extended warranty for SPAN PROPAK-V3 for purchase at time of sale.
EW-1-A-SPAN-SE-S	One-year extended warranty for SPAN-SE-S for purchase after sale of product.

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EW-2-T-SPAN-SE-D	Two-year Extended warranty for SPAN-SE-D for purchase at time of sale.	
EW-2-A-SPAN-SE-D	Two-year Extended warranty for SPAN-SE-D for purchase after sale of product.	
EW-1-T-SPAN-SE-D	One-year extended warranty for SPAN-SE-D for purchase at time of sale.	
EW-1-A-SPAN-SE-D	One-year extended warranty for SPAN-SE-D for purchase after sale of product.	
EW-2-T-SPAN-SE-S	Two-year Extended warranty for SPAN-SE-S for purchase at time of sale.	
EW-2-A-SPAN-SE-S	Two-year Extended warranty for SPAN-SE-S for purchase after sale of product.	
EW-1-T-SPAN-SE-S	One-year extended warranty for SPAN-SE-S for purchase at time of sale.	

#### Extended Warranties for SE Products

Externueu warr	Extended Warranties for SE Froducts	
EW-1-A-SE-S	One-year extended warranty for SE-S for purchase after sale of product.	
EW-1-T-SE-S	One-year extended warranty for SE-S for purchase at time of sale.	
EW-2-A-SE-S	Two-year Extended warranty for SE-S for purchase after sale of product.	
EW-2-T-SE-S	Two-year Extended warranty for SE-S for purchase at time of sale.	
EW-1-A-SE-D	One-year extended warranty for SE-D for purchase after sale of product.	
EW-1-T-SE-D	One-year extended warranty for SE-D for purchase at time of sale.	
EW-2-A-SE-D	Two-year Extended warranty for SE-D for purchase after sale of product.	
EW-2-T-SE-D	Two-year Extended warranty for SE-D for purchase at time of sale.	

### Specialty Products Extended Warranties Warranty

#### **Extended Warranties For Euro-3 Products**

One-year extended warranty for Euro-3 cards for purchase after sale of product.	
One-year extended warranty for Euro-3 cards for purchase at time of sale.	
Two -year extended warranty for Euro-3 cards for purchase after sale of product.	
Two-year extended warranty for Euro-3 cards for purchase at time of sale.	
One-year extended warranty for EuroPak-3 enclosures for purchase after sale of product.	
One-year extended warranty for EuroPak-3 enclosures for purchase at time of sale.	
Two-year extended warranty for EuroPak-3 enclosures for purchase after sale of product.	
Two-year extended warranty for EuroPak-3 enclosures for purchase at time of sale.	

#### Extended Warranties for LAAS Ground Reference Products

EW-2-T-CMA Two-year extended warranty for CMA-4048 cards for purchase at time of sale.



### **Professional Services**

### Customer Training

#### On Site Training

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Training-On-Site-Daily	Full, 7.5-hour day, per class	
In House Training		
Training-In-House-Daily	Full, 7.5-hour day, per person	
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#### **Consulting Services**

#### On Site Consulting or Support

Consulting-Daily	Full, 7.5-hour day
Consulting-Hourly	Each hour, only available in addition to one or more full days



### **High Performance Antennas**

Provide the performance of a choke ring antenna without the size and weight. Typical applications include: survey, ground mapping, agriculture, construction & mining, temporary and permanent reference stations

#### **Quadruple-Frequency**

GPS-704-X Suitable for receiving GPS L1/L2/L5, Galileo E1/E5a/E5b/E6, and GLONASS L1/L2, TNC connector	
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#### **Triple-Frequency**

GPS-703-GGG L1/L2/L5 GPS, L1/L2 GLONASS Antenna, TNC connector

#### L1/L2 Dual-Frequency

GPS-702-GG	L1/L2, GPS + GLONASS, kinematic, zero-offset antenna, TNC connector
GPS-702-GG-N	L1/L2, GPS + GLONASS, kinematic, zero-offset antenna, N connector
GPS-702-GGL	L1/L2/L-Band, GPS+GLONASS kinematic, zero-offset antenna, TNC connector
GPS-702L	L1/L2/L-Band, kinematic, zero-offset antenna, TNC connector

### Single-Frequency

GPS-701-GG	L1, GPS + GLONASS kinematic, zero-offset antenna, TNC connector
GPS-701-GGL	L1/L-Band, GPS+GLONASS kinematic, zero-offset antenna, TNC connector



### **Compact Antennas**

Smaller GNSS antennas in a range of form factors designed to meet specific application requirements. Typical applications include: unmanned vehicles, agriculture, construction & mining

### **Triple-Frequency**

### 2.6" CIRCULAR

ANT-2GNSSA-TW	Active L1/L2/L5/L-Band GPS and L1/L2 GLONASS Antenna, 2.6" circular, Fixed Mount Configuration, TNC- connector, white
3.5" CIRCULAR	
	Active 1.1/1.2/1.E/L. Dand CDS and 1.1/1.2.CLONASS Antenna, 2.E." eizeular. Eived Mount configuration. TNC

ANT-3GNSSA-TW	Active L1/L2/L5/L-Band GPS and L1/L2 GLONASS Antenna, 3.5" circular, Fixed Mount configuration, TNC-
	connector, white

#### **ARINC 743**

ANT-42GNSSA-TW Active L1/L2/L5/L-Band GPS and L1/L2 GLONASS Antenna, Avionic Arinc 743 configuration, TNC-connector, white
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### L1/L2 Dual-Frequency

### 3.5" CIRCULAR

ANT-35C2GA-TW	Active L1/L2 GPS Antenna, 3.5" circular, 33 dB, TNC connector, white	
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#### **ARINC 743**

ANT-A72GOLA-TW	Active L1/L2 GPS, L1/L2 GLONASS, and L-band Antenna,	
	Arinc 743, 33dB, TNC Connector, white	
ANT-A72GLA4-TW-N	Active L1/L2/L-Band GPS Antenna, Arinc 743, 40 dB, TNC connector, white	
ANT-A72GLA-TW-N	Active L1/L2/L-Band GPS Antenna, Arinc 743, 33 dB, TNC connector, white	
ANT-A72GA-TW-N	Active L1/L2 GPS Antenna, Arinc 743, 33 dB, TNC connector, white	

### Single-Frequency

#### 2.6" CIRCULAR

ARINC 743	
ANT-35C1GLA-TRW	Active L1/L-Band GPS Antenna, 3.5" circular, 33 dB, centre TNC connector, white
ANT-35C1GA-TW-N	Active L1 GPS Antenna, 3.5" circular, 33 dB, TNC connector, white
3.5" CIRCULAR	
ANT-26C1GA-TBW-N Active L1 GPS Antenna, 2.6" circular, 33 dB, TNC Bulkhead connector, white	
ANT-26C1GOA-196MNSE	Active L1/L-Band GPS/GLONASS Antenna, 2.6" circular, 33 dB, magnet or screw mount, 5 m cable with SMA connector, black



### **Fixed Reference Antennas**

Deliver exceptional availability and high precision in permanently installed and continuously operating applications. Typical applications include: network RTK reference stations, CORS systems

#### **Quadruple-Frequency**

GNSS-750 Active GPS L1/L2/L2C/L5, GLONASS L1/L2/L3, Galileo L1/E5/E5a/E5b/E6, Compass B1/B2/B3, and L-band signals, Choke-ring, N connector

#### **Triple-Frequency**

ANT-72GNSSA-TW Active L1/L2/L5/L-Band GPS and L1/L2 GLONASS, small choke ring configuration, TNC-connector, white

#### L1/L2 Dual-Frequency

ANT-C2GA-TW-N Active L1/L2 GPS Antenna, choke-ring, 33 dB, TNC connector, white





### Antenna Magnetic Mounts

12023172	Magnetic antenna mount (4" standoff) with 5/8"-11 threads, RoHS-compliant
12023274	Magnetic antenna mount (4" standoff) with 1"-14 threads, RoHS-compliant
12023275	1" (14 UNS-2A thread) to 5/8" (11 UNC-2B thread) bushing insert.



### Antenna Radomes

01018195

Optional radome for GNSS-750 antenna



### Cables

1-800-NOVATEL	All prices are in USD	D11873 Revision 22	www.novatel.com	
GPS-C032	30 meter, low-loss RF cable with straight TNC male plug connectors (for GPS-xxx antennas), RoHS compliant			
GPS-C016	15 meter RF cable with straight TNC male plug connectors (for GPS-xxx antennas), not RoHS compliant			
GPS-C006	5 meter RF cable with straight TNC male plug connectors (for GPS-xxx antennas), RoHS compliant			