

FlexPak™



Features

Meter to centimeter-level accuracy in the same enclosure

Auxiliary strobe signals, including a configurable PPS output for time synchronization and event inputs

Shock and dust resistant; waterproof to IPX7

Rugged Deutsch connectors

Active antenna support

Benefits

Select the performance you need for your system without cabling changes

Ideal for low-payload UAV and robotics applications

All features of the OEMV-1 and OEMV-2 family, including dual-constellation support with common, field-upgradeable software for all OEMV family receivers

NovAtel's FlexPak now supports the new OEMV™ series of GNSS engines in a compact rugged enclosure for rapid integration. Users can choose price/performance requirements from among the FlexPak-V2, the FlexPak-V1, the FlexPak-V1G or the FlexPak-SuperStar II.

FlexPak-V2: gives access to GPS L2C and GLONASS L1/L2 signals

NovAtel's FlexPak-V2 is capable of tracking the new L2C civilian signal. The L2C signal promises stronger signal tracking and better cross-correlation protection. The FlexPak-V2 also offers L1 and L2 GLONASS measurement data which can be used in combination with GPS data to provide more satellites for positioning in challenging environments. Full GPS+GLONASS position and real-time kinematic (RTK) capabilities are available now with AdVance™ RTK.

FlexPak-V1: powerful L1 receiver with VBS and CDGPS capability

NovAtel's FlexPak-V1 provides the extra precision needed for L1 applications. It supports OmniSTAR VBS corrections (subscription required) and the Canadian Differential GPS service (no subscription required). NovAtel's RT-20™ model is available for L1 carrier-phase positioning up to 20 Hz.

FlexPak-V1G: L1 GPS plus GLONASS

NovAtel's FlexPak-V1G receiver provides the benefits of L1-only GPS+GLONASS code or carrier-phase positioning. The addition of GLONASS satellites to the solution increases the availability of a position in obstructed sky conditions.

FlexPak-SSII: entry-level GPS receiver with carrier-phase positioning

NovAtel's FlexPak-SSII receiver delivers the benefits of the SUPERSTAR II card, supporting GPS L1 code or carrier-phase positioning up to 5 Hz while maintaining centimeter-level accuracy.

Base Station or rover

All FlexPak models are capable of base station or rover operation. With two communication ports, one port to be dedicated to a radio and another to your host application. A base station model featuring RTCM SC-104 correction outputs is available. The USB cable and 12 VDC adaptor allow the FlexPak to be connected directly to your laptop for field operation. DB-9 serial port cables are also included.



Precise thinking

FlexPak™

FlexPak-V1

Weight	307 g	
Power Consumption	1.4 W typical GPS	
Number of Channels	14 L1 GPS 2 SBAS 1 L-band	
Communication Ports	1 port capable of RS-232 (921,000 bps) or USB 1.1 1 port capable of RS-422 (230,400 bps) or USB 1.1	
Real Time Performance (RMS)¹	Single Point L1	1.8 m
	SBAS	0.6 m
	CDGPS	0.6 m
	OmniSTAR VBS	0.7 m
	DGPS	0.45 m
	RT-20™ ²	0.2 m
Vibration³	4 g	
Altitude³	18,288 m	
Operating Temperature	-40°C to +85°C	
Humidity	95% non-condensing	
Immersion	To IEC65029 IPX7	

FlexPak-V2

Weight	350 g	
Power Consumption	1.9 W typical GPS	
Number of Channels	14 L1, 14 L2 GPS 12 L1, 12 L2 GLONASS 2 SBAS	
Communication Ports	1 port capable of RS-232 (921,000 bps) or USB 1.1 1 port capable of RS-232, RS-422 (230,400 bps) or USB 1.1	
Real Time Performance (RMS)¹	Single Point L1	1.8 m
	Single Point L1/L2	1.5 m
	SBAS ⁴	0.6 m
	DGPS	0.45 m
	RT-20 ²	0.2 m
	RT-2 [®]	1 cm+1ppm
Vibration³	4 g	
Altitude³	18,288 m	
Operating Temperature	-40°C to +85°C	
Humidity	95% non-condensing	
Immersion	To IEC65029 IPX7	

FlexPak-V1G

Weight	307 g	
Power Consumption	1.4 W typical GPS	
Number of Channels	14 L1 GPS 12 L1 GLONASS 2 SBAS	
Communication Ports	1 port capable of RS-232 (921,000 bps) or USB 1.1 1 port capable of RS-422 (230,400 bps) or USB 1.1	
Real Time Performance (RMS)¹	Single Point L1	1.8 m
	SBAS ⁴	0.6 m
	DGPS	0.45 m
	RT-20™ ²	0.2 m
Vibration³	4 g	
Altitude³	18,288 m	
Operating Temperature	-40°C to +85°C	
Humidity	95% non-condensing	
Immersion	To IEC65029 IPX7	

FlexPak-SSII⁵

Weight	307 g	
Power Consumption	0.9 W typical GPS	
Number of Channels	12 L1 (2 can be configured for SBAS)	
Communication Ports	1 port capable of RS-232 (19,200 bps) 1 port capable of RS-232 or RS-422 (19,200 bps)	
Real Time Performance (RMS)¹	Single Point L1	5 m
	WAAS	1.5 m
	DGPS	1 m
Vibration³	2 g	
Altitude³	18,288 m	
Operating Temperature	-30°C to +75°C	
Humidity	95% non-condensing	
Immersion	To IEC65029 IPX7	

Optional Accessories

- GPS-700 series antennas
- ANT-500 series antennas

Additional Features

- Common, field-upgradeable software for all OEMV family receivers with OEM4 compatible commands and logs
- Auxiliary strobe signals, including a configurable PPS output for time synchronization and event inputs

1 Typical values. Performance specifications subject to GPS system characteristics, US DOD operational degradation, ionospheric and tropospheric conditions, satellite geometry, baseline length, multipath effects and the presence of intentional or unintentional interference sources.

2 Expected accuracy after static convergence.

3 Export licensing restricts operation to a maximum of 18,288 m and 514 m/s.

4 GPS-only.

5 The FlexPak-SSII is not RoHS compliant.



Precise thinking

Version 8 - Specifications subject to change without notice. Refer to www.novatel.com for specification revisions.

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