**Enclosures FlexPak-G2™ OEMStar**

**RUGGED, ROBUST AND ECONOMICAL L1 GPS+GLONASS RECEIVER**

**MULTI-CONSTELLATION PERFORMANCE**
The FlexPak-G2 OEMStar features up to 14 channels of L1 GPS only, GLONASS only or combined GPS and GLONASS code and carrier phase tracking for increased positioning accuracy and availability. The position, velocity and time information is available at up to 10 Hz, with a 1 PPS accuracy of 20 ns for GPS and 40 ns for GLONASS. The multi-constellation timing feature lets you select a primary and secondary constellation for the timing source.

**LIGHTWEIGHT, COMPACT AND RUGGED**
At only 147 × 113 × 45 millimetres in size, and weighing just 313 grams, the FlexPak-G2 is ideal for applications that face space and weight restraints. Furthermore, it is shock resistant, waterproof to IPX7 and comes with locking connectors and mounting system to ensure secure installation.

**ENHANCED CONNECTIVITY**
Two standard DB9 communication ports support power in and out; one port may be dedicated to powering and communicating with a radio, while the other may be dedicated to your host application. Independent input/output and USB ports may be used simultaneously for time synchronization and direct connection to your laptop for field operation.

**BENEFITS**

+ Proven NovAtel GNSS technology
+ Easy to integrate into size and/or weight constrained applications
+ Cost effective precision L1 GPS+GLONASS

**FEATURES**

+ Auxiliary strobe signals with configurable PPS output
+ Shock resistant
+ Waterproof to IPX7
+ Rugged DB9 connectors with power in/out support
+ Active antenna support

If you require more information about our enclosures, visit www.novatel.com/products/gnss-receivers/enclosures
## PERFORMANCE

### Channel Configuration
- 14 GPS L1
- 12 GPS L1 + 2 SBAS
- 10 GPS L1 + 4 GLO L1
- 8 GPS L1 + 6 GLO L1
- 8 GPS L1 + 4 GLO L1 + 2 SBAS
- 10 GPS L1 + 2 GLO L1 + 2 SBAS
- 7 GPS L1 + 7 GLO L1
- 14 GLO L1

### Signal Tracking
- GPS L1
- GLONASS L1
- SBAS

### Horizontal Position Accuracy (RMS)
- Single Point L1: 1.5 m
- SBAS: 0.7 m
- DGPS: 0.5 m

### Measurement Precision (RMS)

<table>
<thead>
<tr>
<th>GPS C/A code</th>
<th>5 cm</th>
<th>35 cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1 Carrier phase</td>
<td>0.6 mm</td>
<td>1.5 mm</td>
</tr>
</tbody>
</table>

### Maximum Data Rate
- Measurements: 10 Hz
- Position: 10 Hz

### Time to First Fix
- Cold start: 65 s
- Hot start: 35 s

### Signal Reacquisition
- L1: < 1.0 s (typical)

### Time Accuracy
- GPS: 20 ns RMS
- GLONASS: 40 ns RMS

### Velocity Accuracy
- < 0.05 m/s RMS
- Velocity: 515 m/s

## PHYSICAL AND ELECTRICAL

### Dimensions
- 147 × 113 × 45 mm

### Weight
- 313 g

### Power
- Input voltage: +6 to +18 VDC
- Power consumption: 0.6 W

### Antenna LNA Power Output
- Output voltage: 5 V nominal
- Maximum current: 100 mA

### Connectors
- Power: 4-pin LEMO
- Antenna: TNC-female
- USB: Mini-B
- Serial Port: DB9 male
- Input/Output port: DB9 female

### COMMUNICATION PORTS
- 1 RS-232: 230,400 bps
- 1 RS-232 or RS-422: 230,400 bps
- 1 USB port: 12 Mbps
- 1 I/O port (PPS, Event 1, Position Valid, VARF)

## ENVIRONMENTAL

### Temperature
- Operating: -40°C to +75°C
- Storage: -40°C to +85°C

### Humidity
- 95% non-condensing

### Immersion
- IEC 60529 IPX7

### Vibration
- MIL-STD-810F

### Compliance
- FCC, CE Industry Canada

## FEATURES

- Field upgradable software
- Auxiliary strobe signals including a configurable PPS output for time synchronization and event inputs

## INCLUDED ACCESSORIES

- Serial cable (null)
- I/O cable
- USB cable
- Automotive 12 VDC power adapter with 6 A slow-blow fuse

## OPTIONAL ACCESSORIES

- GPS-700 series antennas
- ANT series antennas
- Serial cable (straight)
- FlexPak Heading Kit

## FIRMWARE OPTIONS

- GLIDE™
- RAIM
- API

For the most recent details of this product: [www.novatel.com/products/gnss-receivers/enclosures/flexpak-g2/flexpak-g2-with-oemstar/](http://www.novatel.com/products/gnss-receivers/enclosures/flexpak-g2/flexpak-g2-with-oemstar/)

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Version 6 Specifications subject to change without notice.

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Printed in Canada.

D13879 November 2015

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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. GPS only.
3. Typical value. No almanac or ephemerides and no approximate position or time.
4. Typical value. Almanac and recent ephemerides saved and approximate position and time entered.
5. Time accuracy does not include biases due to RF or antenna delay.
6. GLONASS only. Clock aligned to GLONASS system time.
7. Export licensing restrictions limit operation to a maximum of 515 metres per second.
8. Typical GPS at 12 VDC.