COMPACT, MULTI-FREQUENCY GNSS RECEIVER DELIVERS ROBUST POSITIONING

**HIGH PRECISION GNSS, COMPACT SIZE**
The multi-frequency OEM7600 offers future ready precise positioning for space constrained applications with an extremely small form factor. Advanced interference mitigation features maintain high performance in challenging environments. With a variety of interface options to facilitate system integration, the OEM7600 provides the most efficient way to bring powerful Global Navigation Satellite System (GNSS) capable products to market quickly. With centimetre level positioning utilizing TerraStar satellite-delivered correction services, the OEM7600 ensures globally available, high performance positioning without the need for expensive network infrastructure. Anywhere. Anytime.

**BUILT-IN FLEXIBILITY**
NovAtel’s OEM7® firmware gives users the flexibility to configure the OEM7600 for their unique application needs. The OEM7600 is scalable to offer sub-metre to centimetre level positioning, and is field upgradable to all OEM7 family software options. These options include ALIGN® for precise heading and relative positioning, GLIDE® for decimetre level pass-to-pass accuracy and SPAN® GNSS+INS for continuous 3D position, velocity and attitude. NovAtel CORRECT® with RTK delivers centimetre level real-time positioning, or go base-free for centimetre and decimetre PPP solutions using TerraStar corrections.

To learn more about how our firmware solutions can enhance your positioning, please visit novatel.com/products/firmware-options.

**DESIGNED WITH THE FUTURE IN MIND**
The OEM7600 features configurable channels to optimize satellite availability in any condition, no matter how challenging. It tracks current and upcoming GNSS constellations and satellite signals including GPS, GLONASS, Galileo, BeiDou, NavIC and QZSS. The OEM7600 is software upgradable to track future signals as they become available.

**FEATURES**
+ 555 channel all-constellation, multi-frequency positioning solution
+ Multi-channel L-Band supports TerraStar correction services
+ Serial, USB, CAN and Ethernet connectivity with Web interface
+ Advanced interference detection and mitigation features
+ RTK, GLIDE and STEADYLINE® firmware options
+ Simple to integrate, compact form factor with 20 g vibration performance rating
+ SPAN GNSS+INS functionality

If you require more information about our receivers, visit novatel.com/oem7
### PERFORMANCE

<table>
<thead>
<tr>
<th>Channel Count</th>
<th>555 Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Tracking</td>
<td></td>
</tr>
<tr>
<td><strong>GPS</strong></td>
<td>L1 C/A, L1C, L2C, L2P, L5</td>
</tr>
<tr>
<td><strong>GLONASS</strong></td>
<td>L1 C/A, L2 C/A, L2P, L3, L5</td>
</tr>
<tr>
<td><strong>BeiDou</strong></td>
<td>B1I, B1C, B2I, B2a</td>
</tr>
<tr>
<td><strong>Galileo</strong></td>
<td>E1, E5 AltBOC, E5a, E5b</td>
</tr>
<tr>
<td><strong>QZSS</strong></td>
<td>L1 C/A, L2 C/A, L2P, L5</td>
</tr>
<tr>
<td><strong>NavIC (IRNSS)</strong></td>
<td>L5</td>
</tr>
<tr>
<td><strong>SBAS</strong></td>
<td>L1, L5</td>
</tr>
<tr>
<td><strong>L-Band</strong></td>
<td>up to 5 channels</td>
</tr>
</tbody>
</table>

### PHYSICAL AND ELECTRICAL

| Dimensions | 35 x 55 x 13 mm |
| Weight | 31 g |

#### Power
- Input voltage: +3.3 VDC ±5%

#### Power Consumption
- GPS L1: 0.9 W (typical)
- GPS/GLONASS L1/L2: 1.3 W (typical)
- All frequencies/All constellations: 1.8 W (typical)

#### Antenna Port Power Output
- Output voltage: 3.3 VDC ±5%
- Maximum current: 100 mA
- RA MMCX female

### COMMUNICATION PORTS
- 5 LVCMOS up to 460,800 bps
- 2 CAN Bus: 1 Mbps
- 1 USB 2.0 (device): 500 Mbps
- 1 USB 2.0 (host): 500 Mbps
- 1 Ethernet: 10/100 Mbps

### ENVIRONMENTAL

#### Temperature
- Operating: -40°C to +85°C
- Storage: -55°C to +95°C

#### Humidity
- 95% non-condensing

#### Vibration
- Random: MIL-STD 810G (CH1)
- Sinusoidal: IEC 60068-2-6

#### Bump
- ISO 9022-31-06 (25 g)

#### Shock
- Operating: MIL-STD-810G (CH1), Method 516.7 (40 g)
- Non-operating: MIL-STD-810G (CH1), Method 516.7 (75 g)

### FEATURES

- Field upgradeable software
- Differential GNSS positioning
- Differential correction support for RTCM 2.1, 2.3, 3.0, 3.1, 3.2, 3.3, 3.4, CMR, CMR+, RTCA and NOVATELX
- Navigation output support for NMEA 0183 and detailed NovAtel ASCII and binary logs
- Receiver Autonomous Integrity Monitoring (RAIM)
- GLIDE and STEADYLINE smoothing algorithms
- Interference Toolkit
- Web GUI
- Outputs to drive external LEDs
- 4 Event inputs
- 4 Event outputs
- Pulse Per Second (PPS) output

### OPTIONAL ACCESSORIES

- VEXXIS® GNSS-500 and GNSS-800 series antennas
- Compact GNSS antennas
- OEM7 Development Kit

For the most recent details of this product: novatel.com/oem7

novatel.com

sales@novatel.com

1-800–NOVATEL (U.S. and Canada) or 403-295-4900

China: 0086-21-68882300

Europe: 44-1993-848-736

SE Asia and Australia: 61-400-883-601

Version 5: Specifications subject to change without notice

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Printed in Canada.

D21051 July 2019

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1 Typical values. Performance specifications subject to GNSS system characteristics, Signal-In-Space (SIS) operational degradation, ionospheric and tropospheric conditions, satellite geometry, baseline length, multipath effects and the presence of intentional or unintentional interference sources.

2 Model-configurable to track L5/E5a (all / Galileo) through L2 (GPS) or L3/E5b/B2 (GLONASS / Galileo / BeiDou) through L2 (GLONASS). See manual for details.

3 Hardware ready for L3 and L5.

4 E1bc support only.

5 GPS only.

6 Requires subscription to TerraStar data service. Subscriptions available from NovAtel.

7 Typical value. No almanac or ephemerides and no approximate position or time.

8 Typical value. Almanac and recent ephemerides saved and approximate position and time entered.

9 Time accuracy does not include biases due to RF or antenna delay.

10 Export licensing restricts operation to a maximum of 515 metres per second, message output impacted above 500 m/s.

11 Typical values using serial port communication without interference mitigation and Ethernet disabled. Consult the OEM7 User Documentation for power supply considerations.