DUAL-ANTENNA, MULTI-FREQUENCY GNSS RECEIVER DELIVERS ROBUST HEADING AND POSITIONING

HIGH PRECISION GNSS HEADING AND POSITIONING
The dual-antenna, multi-frequency OEM7720 offers future ready precise heading and positioning for space constrained applications. Advanced interference mitigation features maintain high performance in challenging environments. With a variety of interface options to facilitate system integration, the OEM7720 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 OEM7720 ensures globally available, high performance positioning without the need for expensive network infrastructure. Anywhere. Anytime.

SINGLE-BOARD HEADING
The OEM7720 uses a 555 channel architecture and can be configured in multiple ways for maximum flexibility. NovAtel's OEM7® firmware provides users with the ability to configure the OEM7720 for their unique application needs. Utilizing a single antenna, the OEM7720 delivers a traditional precise positioning solution. Connecting the optional second antenna allows ALIGN® to compute a high precision heading solution. Increasing the distance between antennas maximizes the heading precision. The OEM7720's dual antennas will also quickly initialize a SPAN® GNSS+INS system for continuous 3D position, velocity and attitude. NovAtel CORRECT® with RTK delivers centimetre level real-time positioning, or go base-free with 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 OEM7720 is capable of tracking all current and upcoming GNSS constellations including GPS, GLONASS, Galileo, BeiDou, QZSS and NavIC. It is software upgradable to track upcoming signals as they become available.

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

If you require more information about our receivers, visit novatel.com/oem7
OEM7720

**PERFORMANCE**

<table>
<thead>
<tr>
<th>Channel Count</th>
<th>555 Channels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Signal Tracking</td>
<td>Primary RF</td>
</tr>
<tr>
<td>Horizontal Position Accuracy (RMS)</td>
<td>Single Point L1 1.5 m, Single Point L1/L2 1.2 m, SBAS 60 cm, DGPS 40 cm, TerraStar-L 40 cm, TerraStar-C PRO 2.5 cm</td>
</tr>
<tr>
<td>Maximum Data Rate</td>
<td>5 LVC MOS up to 460,800 bps, 2 CAN Bus 1 Mbps, 1 USB 2.0 (device) H5, 1 USB 2.0 (host) H5, 1 Ethernet 10/100 Mbps</td>
</tr>
<tr>
<td>TEMPERATURE</td>
<td>-40°C to +85°C, -55°C to +95°C</td>
</tr>
<tr>
<td>Humidity</td>
<td>95% non-condensing</td>
</tr>
<tr>
<td>Vibration</td>
<td>Random MIL-STD-810G (CH1), Method 514.7, (Cat 24, 20 g RMS)</td>
</tr>
<tr>
<td>Bump</td>
<td>ISO 9223-31-06 (25 g)</td>
</tr>
<tr>
<td>Shock</td>
<td>Operating MIL-STD-810G (CH1), Method 516.7 (40 g)</td>
</tr>
<tr>
<td>Acceleration</td>
<td>Operating MIL-STD-810G (CH1), Method 513.7 (16 g)</td>
</tr>
</tbody>
</table>

**FEATURES**

- Field upgradeable software
- Differential GNSS positioning
- Differential correction support for RTCM 2.1, 2.3, 3.0, 3.1, 3.2, 3.3, CMR, CMR+, RTCA and NOVATELX
- Receiver Autonomous Integrity Monitoring (RAIM)
- GLIDE and STEADYLINE smoothing algorithms
- RTK ASSIST™
- Web GUI
- Outputs to drive external LEDs
- 4 Event inputs
- 4 Event outputs
- Pulse Per Second (PPS) output

**FIRMWARE SOLUTIONS**

- ALIGN
- RTK ASSIST™
- SPAN
- TerraStar PPP
- RTK
- API

**OPTIONAL ACCESSORIES**

- VEXXIS® GNSS – S500 and GNSS – 800 series antennas
- ANT series antennas
- Mechanical mounting rails
- OEM7 Development Kit

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

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SE Asia and Australia 61-400-883-601

**Version 7 Specifications subject to change without notice.**

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