MULTI-FREQUENCY GNSS RECEIVER DELIVERS ROBUST POSITIONING AND SIMPLIFIES INTEGRATION

HIGH PRECISION GNSS
The multi-frequency OEM7700 offers future ready precise 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 OEM7700 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 OEM7700 ensures globally available, high performance positioning without the need for expensive network infrastructure. Anywhere. Anytime.

BUILT-IN FLEXIBILITY
The OEM7700 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 OEM7700 for their unique application needs. The OEM7700 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 OEM7700 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.

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

- **Channel Count**: 555 Channels
- **Signal Tracking**:
  - **GPS**: L1 C/A, L1C, L2C, L2P, L5
  - **GLONASS**: L1 C/A, L1C, L2C, L2P, L5
  - **Galileo**: E1, E5 AltBOC, E5a, E5b, E6
  - **BeiDou**: B1I, B2C, B2I, B2a, B3I
  - **QZSS**: L1 C/A, L1C, L2C, L5
  - **NavIC (IRNSS)**: L5
  - **SBAS**: L1, L5
- **Horizontal Position Accuracy (RMS)**:
  - **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
- **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 with L-Band: 1.8 W (typical)
- **Antenna Port Power Output**:
  - Output voltage: 5.0 VDC ±5%
  - Maximum current: 200 mA
- **Connectors**:
  - Main: 60-pin dual row female socket
  - Antenna Input: MMBX female

PHYSICAL AND ELECTRICAL

- **Dimensions**: 46 × 71 × 8 mm
- **Weight**: 31 g
- **Power**: 12 W
  - GPS L1: 0.9 W (typical)
  - GPS/GLONASS L1/L2: 1.3 W (typical)
  - All frequencies/All constellations with L-Band: 1.8 W (typical)
- **Antenna Port Power Output**:
  - Output voltage: 5.0 VDC ±5%
  - Maximum current: 200 mA

FEATURES

- **Field upgradeable software**
- **Differential GPS positioning**
- **Differential correction support for RTCM 2.1, 2.3, 3.0, 3.1, 3.2, 3.3, CMR, CMR+, RTCA and NOVATELEX**
- **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**

FIRMWARE SOLUTIONS

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

OPTIONAL ACCESSORIES

- VEXXIS® GNSS-500 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](http://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 3 Specifications subject to change without notice

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