SMART SMART6-L™

DUAL-FREQUENCY GNSS SMART ANTENNA FEATURING NOVATEL’S POWERFUL OEM6® TECHNOLOGY

SCALABLE PERFORMANCE
From single-frequency GLIDE™ autonomous tracking to dual-frequency Real Time Kinematic (RTK), the SMART6-L positions you for success. The SMART6-L integrates NovAtel’s OEM6 receiver and Pinwheel® antenna technologies in a single, rugged housing. Software upgradable, the SMART6-L eliminates the need for costly hardware replacement as requirements change, while delivering scalable accuracy and performance.

MULTI-CONSTELLATION FOR ENHANCED POSITIONING
Capable of tracking L1, L2 GPS+GLONASS and receiving TerraStar services using L-Band, the SMART6-L improves position availability in obstructed sky conditions. Dual-frequency tracking minimizes the impact of ionospheric disturbances, further enhancing field productivity. Optional TerraStar services improve positioning accuracy outside of L1 SBAS coverage areas.

SMOOTH PASS-TO-PASS ACCURACY USING GLIDE
SMART6-L features NovAtel’s GLIDE technology to provide ultra-smooth positioning and exceptional pass-to-pass accuracy. GLIDE’s steady, smooth output is especially suited for manual guidance and auto-steer applications and will bridge through short periods of poor satellite availability. Dual-frequency GLIDE further improves the absolute accuracy of the GLIDE position and creates a robust solution, resistant to the effects of high ionospheric activity.

MULTIPLE INTERFACES FOR MAXIMUM FLEXIBILITY
NMEA 0183 compatible RS-232 serial ports and a NMEA 2000 compatible CAN port provide maximum flexibility. The SMART6-L also provides 1 PPS output, an event mark input, simulated radar ground speed output and three daylight readable status LEDs. Built-in magnets simplify mounting although fixed mounting options are also available.

BENEFITS
+ Dual-frequency tracking increases position reliability and mitigates ionospheric effects
+ NovAtel CORRECT™ RTK and PPP provide centimetre-level and decimetre-level positioning accuracy
+ Increased position availability with GLONASS tracking
+ Smooth, consistent positions for pass-to-pass applications with GLIDE technology

FEATURES
+ 120 channels
+ Multi-constellation tracking
+ Simulated radar ground speed output
+ Rugged, integrated design
+ Proven NovAtel Pinwheel antenna technology inside

For more information about our SMART antenna products, visit www.novatel.com/smart-antennas
**SMART6-L™**

**PERFORMANCE**

Channel Configuration
- 120 channels

Signal Tracking
- GPS L1, L2, L2C
- GLONASS L1, L2
- Galileo E1
- BeiDou B1
- SBAS (L-Band)

Horizontal Position Accuracy (RMS)
- Single point L1: 1.5 m
- Single point L1/L2: 1.2 m

Power
- Input voltage range: +8 to +36 VDC
- Power consumption: 2.9 W (typical)

Status LEDs
- Power
- Error
- Position valid

**PHYSICAL AND ELECTRICAL**

Dimensions
- 155 mm diameter x 81 mm height

Weight
- <570 g

Connector
- 14-pin Tyco Ampseal

Mounting
- 2 x magnetic mount
- 4 x M4 screw inserts
- Optional mounting plate

**Solar Radiation**
- EN60950-22 8.2
- MIL-STD-810G Method 505.5

**Salt Fog**
- MIL-STD-810G Method 509.5

**Sand and Dust**
- MIL-STD-810G Method 510.5

**Vibration**
- Random: MIL-STD-810G, Method 514.6
- Sinusoidal: ASAE EP455, 5.15.2 Level 1 & 2

**Ingress Protection Rating**
- IP67

**COMPLIANCE**
- FCC, IC, CE marking, E-mark

**STANDARD FEATURES**
- GPS L1 position, velocity and time with SBAS support
- 20 Hz data rates
- Field upgradable software using RS-232 serial ports
- PAC multipath mitigating technology
- Differential correction support for RTCM 2.1, 2.3, 3.1, CMR, CMR+ and RTCA
- Navigation output support for NMEA 0183 and detailed NovAtel ASCII and binary logs
- Single-frequency GLIDE smoothing algorithm
- 1 PPS output
- Event mark input
- Ground speed output

**OPTIONAL ACCESSORIES**
- Mounting plate
- Interface cable
- Relay RTK radio module

For the most recent details of this product: www.novatel.com/products/smart-antennas/smart6-l/

**FIRMWARE SOLUTIONS**
- Dual-frequency GLIDE
- GLONASS tracking
- Galileo tracking
- BeiDou tracking
- L-Band tracking
- ALIGN®
- RAIM
- RTK
- 50 Hz data rates

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- 14-pin Tyco Ampseal

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- 2 x magnetic mount
- 4 x M4 screw inserts
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Power Input and I/O
- Power
- Error
- Position valid
- CAN Bus
- 1 PPS
- Event mark input
- Ground speed output

**ENVIRONMENTAL**

Temperature
- Operating: -40°C to +75°C
- Storage: -55°C to +90°C

Humidity
- MIL-STD-810G Method 507.5

**ENTRANCE SERVICES**
- TerraStar-L
- TerraStar-C
- RTK ASSIST™

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