# SL900 GNSS Receiver

**Data Specifications** 

No. of Channels	1408
Additonal Technologies	Galileo: E1, E5A, E5B, E6,E5AltBOC QZSS: L1, L2, L5, L6* IRNSS: L5 SBAS: L1C/A, L5(QZSS, WAAS, MSAS, GAGAN) SDCM (L1, L5) On module L-band B2B AIM+ unique anti-jamming and monitoring system against narrow and wideband interference IONO+ advanced scintillation mitigation APME+ a posteriori multipath estimator for code and phase multipath mitigation LOCK+ superior tracking robustness under heavy mechanical shocks or vibrations
Signal Tracking	GPS: L1C/A, L1C, L2P(Y), L2C, L5 GLONASS: L1, L2 ,L3 Beidou: B1l, B2l, B3l, B1C, B2a, B2b*

### **MEASUREMENT PERFORMANCE**

H: 6 mm + 0.5 ppm RMS / V: 10 mm + 1 ppm RMS Real-time Kinematic H: 8 mm + 0.5 ppm RMS / V: 15 mm + 0.5 ppm RMS Network RTK H:8 mm + 1 ppm RMS / V:15 mm + 1 ppm RMS Post Processing Kinematic H: 2.5 mm + 0.1 ppm RMS / V: 3.5 mm + 0.4 ppm RMS High-precision Static Static and Fast Static H: 2.5 mm + 0.5 ppm RMS / V: 5 mm + 0.5 ppm RMS DGPS Position Accuracy H: 25 cm RMS / V: 50 cm RMS **SBAS Position Accuracy** H: 50 cm RMS / V: 85 cm RMS PPP Accuracy(L Band) H: 16 cm RMS / V: 20 cm RMS **Code Differential** DGPS/RTCM Initializing Time 2 - 8 s Initializing Reliability 99.9% Time to frist Fix Tilt Cold start:< 45 s Hot start:< 30 s Signal re-acquisition:< 2 s Survey (optional) Additional horizontal pole-tilt uncertainty typically less than 8mm +0.7 mm/°tilt (2.5cm accuracy in the inclination of 60°) **INTERNAL RADIO** 403MHz~473MHz | Typically 5km, optimally 8-10km Frequency | Working Range 1-4 W, Support HI-TARGET, TRIMTALK450S, **Transmitting Power** TRIMMARK III, TRANSEOT, SATEL-3AS, etc.. COMMUNICATIONS **Communication Ports** Internal 4 G Mobile Network TDD-LTE/FDD-LTE/WCDMA/GPRS/GSM NTrip Enabled Bluetooth: V2.1 + EDR, NFC, Mini USB Wi-Fi: 2.4 G , 802.11 b/g/n Linux **Operation System** 3 s Start-up Time Circulating 8 GB Internal Storage; Supports 32 G SD card Data Storage

### DATA MANAGEMENT

20 Hz Update (up to 100 Hz) CMR, CMR+, RTCM2.X, RTCM3.0, RTCM3.2 GNS, Rinex

#### GENERAL Environmental

**Physical Properties** 

**SYSTEM** 

IP67 environmental protection Waterproof to 1m (3.28ft) depth Temporary Submersion Shock resistant body to 2 m (6.5ft) pole drop Temperature -40°C to 65°C Operating -40°C to 85°C Storage Shock and vibration: MIL-STD-810 G, 514.6 Size: 170 mm x 95 mm Weight: 1.2 kg including battery Battery: 5,000 mAh Lithium-Ion Battery Battery Life: 10 hours (RTK Rover)

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-1-



The SL900 is a high-precision GNSS receiver that performs even under the most demanding conditions. With its features, the SL900 is capable of delivering highly accurate data in real-time to any devices via a Bluetooth connection. Compact and lightweight, this GNSS receiver is one of the most flexible solutions that promises positioning reliability.

## Adaptability and Stability

Equipped with the latest tilt compensation algorithm and built-in high-performance 9-axis Inertial Measurement Unit (IMU), the measurement for hard-to-reach points is simple but precise with the high-performance tilt survey. Quality results are guaranteed even if you lose the signal while under extreme circumstances with great anti-interference ability.

























- Monitoring
- Mapping
- Land Survey
- Topography and As-built
- Landfill
- Hydrographic
- Agriculture
- Sensor
- UAV Base Station

## **TECHNICAL SUPPORT**

Satlab offers online resources and a professional support network available worldwide.

# Efficient and dependable

Powered by advaned GNSS engine, this receiver offers precise positioning and advanced interference mitigation which performs even in the most remote or challenging environments. Using its 1408 channel tracking capabilities, it can track all current and upcoming signals, offering sub-metre to centimetre precise positioning with different modes (RTK, PPK, Static).

## Advanced Technologies Inside

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