SL900 GNSS Receiver

Data Specifications

GNSS

Signal Tracking	GPS (L1C/A、L2E, L2C, L5) BeiDou (B1, B2, B3[1]) GLONASS (L1C/A, L1P, L2C/A, L3 CDMA[2]) Galileo[3] (E1, E5A, E5B, E5AltBOC, E6[2]) IRNSS (L5) QZSS (L1 C/A, L2C, L5) SBAS (L1C/A, L5 QZSS, WAAS, MSAS, GAGAN, EGNOS) L-Band: OmniSTAR, Trimble RTX (optional)
No. of Channels	336

MEASUREMENT PERFORMANCE

Real-time Kinematic	H: 8mm + 1ppm RMS / V: 15mm + 1ppm RMS
Network RTK	H: 8mm + 0.5ppm RMS / V: 15mm + 0.5ppm RMS
Post Processing Kinematic	H:8mm + 1ppm RMS / V:15mm + 1ppm RMS
High-precision Static	H: 2.5mm + 0.1ppm RMS / V: 3.5mm + 0.4ppm RMS
Static and Fast Static	H: 2.5mm + 0.5ppm RMS / V: 5mm + 0.5ppm RMS
DGPS Position Accuracy	H: 25cm RMS / V: 50cm RMS
SBAS Position Accuracy	H: 50cm RMS / V: 85cm RMS
Code Differential	DGPS/RTCM
Initializing Time	2-10s
Initializing Reliability	99.9%
Tilt Compensation	4cm accuracy in the inclination of 30° *Accuracy maybe subject to abnormality such as, magnetic field, multipath, obstruction, interference, satellite geometry and atmospheric conditions.

COMMUNICATIONS

Communication Ports	Internal 4G Mobile Network TDD-LTE/FDD-LTE/WCDMA/GPRS/GSM NTrip Enabled Bluetooth: V2.1 + EDR, NFC Wi-Fi: 2.4G , 802.11b/g/n Internal radio: SATLAB advance radio Satlab Integrated Antenna Power: 1W/2W/4W adjustable Frequency: 403MHz-473MHz（4FSK,GMSK） Protocol: TRIMTALK450S， TRIMMARK III，TRANSEOT，SATEL-3AS, etc.. Transmitting speed: 19.2kbps / 9.6kbps

SYSTEM

Operation System	Linux
Start-up Time	3s
Data Storage	Circulating 16GB Internal Storage; Supports 32G SD card

DATA MANAGEMENT

1 Hz Update (up to 50 Hz)
CMR, CMR+, RTCM2.X, RTCM3.0, RTCM3.2
GNS, Rinex

GENERAL

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

Note

[1] The hardware of this product is designed for Beidou B3 compatibility (trial version) and its firmware will be enhanced to fully support such new signals as soon as the officially published signal interface control documentation (ICD) becomes available.
[2] There is no public GLONASS L3 CDMA or Galileo E6 ICD. The current capability in the receivers is based on publicly available information. As such, Trimble cannot guarantee that these receivers will be fully compatible.
[3] Developed under a License of the European Union and the European Space Agency.

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SATLAB GEOSOLUTIONS

SL900

GNSS Receiver

Made by Sweden

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.

Tilt compensation solution

With surveyors in mind, Satlab designed a solution to increase efficiency in your workflow by cutting down time wasted from offsetting slanted measurements. With the tilt compensator, the SL900 can save up to 20 percent of time compared to conventional surveying practices. This solution allows you to focus on your surroundings conveniently while ensuring your safety and comfort.

Applications

- 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 Trimble BD990 GNSS engine, this receiver offers precise positioning and advanced interference mitigation which performs even in the most remote or challenging environments. Using its 336 channel tracking capabilities, it can track all current and upcoming signals, offering sub-metre to centimetre precise positioning with different modes (RTK, PPK, Static).

Satellite correction service

The SL900 has RTX capabilities that use a global network of multi-GNSS reference stations and advanced algorithms to generate highly precise GNSS satellite orbit, clock, biases, and other system parameters. These data allow RTX to provide correction services with sub-metre or centimetre-level positioning accuracy to SL900 receivers. Get your corrections transmitted in real-time, with minimal latency via satellites and cellular networks worldwide.