

SL900 GNSS Receiver

Data Specifications

GNSS

Signal Tracking

GPS: L1C/A, L1C, L1P, L2C, L2P, L5
 BDS: B1I, B2I, B3I, B1C, B2a, B2b,
 GLONASS: G1, G2, G3
 Galileo: E1, E5a, E5b, ALTBOC, E6
 QZSS: L1C/A, L1C, L2C, L5, LEX
 NavIC (IRNSS) :L5
 SBAS: Egnos, WAAS, GAGAN, MSAS,
 SDCM (L1, L5)
 L-band

No. of Channels

800

MEASUREMENT PERFORMANCE

Real-time Kinematic

H:8 mm + 1 ppm RMS / V:15 mm + 2 ppm RMS

Network RTK

H: 8 mm + 0.5 ppm RMS / V: 15 mm + 0.5 ppm RMS

Post Processing Kinematic

H:8 mm + 1 ppm RMS / V:15 mm + 1 ppm RMS

High-precision Static

H: 2.5 mm + 0.1 ppm RMS / V: 3.5 mm + 0.4 ppm RMS

Static and Fast Static

H:2.5mm+0.5ppm RMS / V:5 mm + 0.5 ppm RMS

DGPS Position Accuracy

H: 25 cm RMS / V: 50 cm RMS

SBAS Position Accuracy

H:30 cm RMS / V:60 cm RMS

Code Differential

DGPS/RTCM

Initializing Time

2-10 s

Initializing Reliability

99.9%

Time to first Fix

Cold start:< 45 s Hot start:< 30 s Signal re-acquisition:< 2 s

Tilt Compensation

4cm accuracy in the inclination of 30° (optional)

*Accuracy maybe subject to abnormality such as, magnetic field, multipath, obstruction, interference, satellite geometry and atmospheric conditions.

COMMUNICATIONS

Communication Ports

Internal 4 G Mobile Network
 TDD-LTE/FDD-LTE/WCDMA/GPRS/GSM
 NTrip Enabled
 Bluetooth: V2.1 + EDR, NFC
 Wi-Fi: 2.4 G , 802.11 b/g/n

SYSTEM

Operation System

Linux

Start-up Time

3 s

Data Storage

Circulating 8 GB Internal Storage;
 Supports 16 GB SD card

DATA MANAGEMENT

1 Hz Update (up to 20 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 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

Physical Properties

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)

Note

Hardware is ready



Headquarters:
 GEOSOLUTION I
 GÖTEBORG AB
 Järnbrotts Prästväg, 2
 421 47 Vastra Frolunda
 Goteborg, Sweden
 info@satlab.com.se

Regional Offices:
 Warsaw, Poland
 Jičín, Czech Republic
 Ankara, Turkey
 Scottsdale, USA
 Singapore
 Hong Kong, China
 Dubai, UAE

www.satlab.com.se



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 tilt survey technology, 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

Efficient and dependable

Powered by advanced engine, this receiver offers precise positioning and advanced interference mitigation which performs even in the most remote or challenging environments. Using its excellent 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 L-Band 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 L-Band 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.

TECHNICAL SUPPORT

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

