SL800 GNSS Receiver

Data Specifications

GNSS

Signal Tracking

GPS (L1C/A, L1C, L2C, L2P, L5) GLONASS¹ (L1C/A, L2C/A, L2P, L3, L5)

BeiDou² (B1, B2, B3)

Galileo³ (E1, E5 AltBOC, E5a, E5b, E6)

IRNSS (L5)

QZSS (L1C/A, L1C, L2C, L5, L6)

SBAS L1, L5, (WAAS, EGNOS, MSAS, GAGAN)

L-Band (Up to 5 Channels) TerraStar®

No. of Channels

555

MEASUREMENT PERFORMANCE

H: 8mm + 1ppm RMS / V: 15mm + 1ppm RMS Real-time Kinematic **High-Precision Static** H: 2.5mm + 0.1ppm RMS / V: 3.5mm + 0.4ppm RMS H: 2.5mm + 0.5ppm RMS / V: 5mm + 0.5ppm RMS **Static and Fast Static** H: 25cm RMS / V: 50cm RMS

DGPS Position Accuracy SBAS Position Accuracy

DGPS/RTCM **Code Differential Initializing Time** <10s **Initializing Reliability** 99.9%

COMMUNICATIONS

Communication Ports USB and RS232 serial port

Bluetooth 4.0, NFC DC External power input LED indicator panels

H: 50cm RMS / V: 85cm RMS

SYSTEM

Operation System Linux Start-up Time 3s

Data Storage 8GB internal storage

DATA MANAGEMENT

VRS, FKP, MAC, intRTK Support

NMEA and NovAtel ASCII Navigation Output

5 Hz Update (up to 100 Hz⁴) RTCM 2.1, 2.3, 3.0, 3.1, 3.2 CMR, RTCA and NOVATELX

GENERAL

Environmental IP67 environmental protection

Waterproof to 2m (6.5ft) depth

Temporary Submersion

Shock resistant body to 2m (6.5ft) pole drop Temperature -40°C to 65°C Operating -40°C to 75°C Storage

Physical Properties Size: 127.5mm x 57mm

Weight: 700g including battery Power: 6 - 28V DC Input Battery: 6300 mAh Li-Ion Battery

Battery Life: 9 hours (Static Measurement /

RTK Rover)

¹ Hardware ready for L3 and L5
² Designed for BeiDou phase 2 and 3, B1 and B2 compatibility. B3 conditionally supported and subject to change.
³ E1be. support only. Hardware ready for E6bc



GNSS Receiver





Building the Future with

Accuracy & Precision





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Satlab SL800 offers the flexibility to choose between either NFC or Bluetooth devices to best meet your surveying needs. Powered by the multi-constellation, triple frequency, long-range Bluetooth and Satlab Cloud Services support, this is the most convenient and efficient receiver for today's network age.





Tracking















iOS

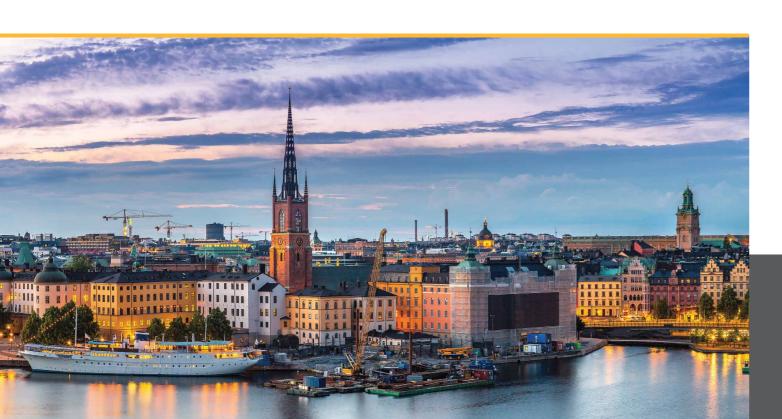






The world's smallest GNSS receiver

The SL800 provides an easy solution for survey professionals who require a portable instrument to collect highly accurate data for various geospatial usage. Its portability feature allows user flexibility to easily collect data with just one receiver in the field connecting to CORS via any preferred devices to keep you focused and productive.





Applications

- Mapping
- Land Survey
- Topography and As-built

TECHNICAL SUPPORT

Satlab offers online resources

and a professional support

network available worldwide.

- Landfill
- Hydrographic
- Agriculture
- Sensor
- UAV Base Station

Efficient and dependable

Powered by NovAtel OEM729 GNSS engine, this receiver offers precise positioning and advanced interference mitigation which performs even in the most remote or challenging environments. Using its 555 channel tracking capabilities, it is able to track all current and upcoming signals, offering sub-metre to centimetre precise positioning.

Satellite correction service

The SL800 has TerraStar 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 TerraStar to provide correction services with sub-metre or centimetre-level positioning accuracy to SL800 receivers. Get your corrections transmitted in real-time, with minimal latency via satellites and cellular networks worldwide.











