SL800 GNSS Receiver

Data Specifications

GNSS

Signal Tracking	GPS (L1C/A, L1C, L2C, L2P, L5) GLONASS[1] (L1C/A, L2C/A, L2P, L3, L5) BeiDou[2] (B1, B2, B3) Galileo[3] (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

Real-time Kinematic	H: 8mm + 1ppm RMS / V: 15mm + 1ppm 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	<10s
Initializing Reliability	99.9%

COMMUNICATIONS

Communication Ports	USB and RS232 serial port Bluetooth 4.0, NFC DC External power input LED indicator panels

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 Hz[4])
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)

Note

[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] E1bc support only. Hardware ready for E6bc
[4] Optional

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SL800

GNSS Receiver

Made by Sweden

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.

Swedish Quality

Multi-Constellation Tracking

Bluetooth

Long Battery Life (> 8 hours)

Windows Compatibility

Android Compatibility

iOS Compatibility

NFC Module

Internet RTK Technology

Lightweight

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
- 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.

TECHNICAL SUPPORT

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

Multi-Constellation Tracking

NFC Technology

Data Collector

Long Battery Life

Professional Support Network