# SLX-1Multi-application GNSS Receiver

## **Data Specifications**

GNSS

GPS (L1 C/A, L2E, L2C, L5) **Signal Tracking** 

GLONASS (L1 C/A, L2 C/A, L3 CDMA14)

BeiDou (B1, B2, B313)

Galileo (E1, E5A, E5B, E5 AltBOC, E614)

IRNSS (L5)

QZSS (L1 C/A, L1 SAIF, L2C, L5)

SBAS (L1 C/A, L5)

MSS L-Band (OmniSTAR, Trimble RTX)

**Additional Technologies** 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

768 No. of Channels

#### **MEASUREMENT PERFORMANCE**

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

**SBAS Position Accuracy** H: 50 cm RMS / V: 85 cm RMS **Code Differential** DGPS/RTCM **Initializing Time** < 10s**Initializing Reliability** 99.9%

**EXTERNAL RADIO**(opti

403MHz~473MHz

Frequency | Working Range 1-4 W, Support HI-TARGET, TRIMTALK450S, **Transmitting Power** TRIMMARK III, TRANSEOT, SATEL-3AS, etc..

**COMMUNICATIONS** 

Internal 4 G Mobile Network TDD-LTE/FDD-LTE/WCDMA/GPRS/GSM

NTRIP, HTTP, HTIP, FTP Enabled /CDMA

**Communication Ports** Bluetooth: V2.1 + EDR, NFC

Operation Web-client management via Ethernet, Wi-FI

**SYSTEM** 

I/O Interface

Jarnbrotts Prastvag 2,

421 47 Västra Frölunda,

Göteborg, Sweden

info@satlab.com.se

Warsaw, Poland Jičín, Czech Republic

Ankara, Turkey

Scottsdale, USA Singapore

Dubai, UAE

Hong Kong, China

ww w. satlab. com. se

3 X RS232 serial port, 2 X USB port, 1 X 485 port 1 X Ethernet port(RJ-45), 1 X WiFi Host(802.11b/g/n) 2 X SMA port(1 for PPS and 1 for 3G modem antenna)

2 X TNC port

Data Storage Internal Memory 64GB + TF card/USB extension External Memory 1TB

User Interface

4 X physical buttons 4 X LED lamps, OLED display, 128 X 64 pixels

**DATA MANAGEMENT** 

20 Hz Update (up to 50 Hz) CMR, CMR+,CRMx, RTCM2.X, RTCM3.0, RTCM3.2,NovAtelx GNS, Rinex 2.11, Rinex 3.02, Rinex 3.04, RTCM3.1, NMEA Output Binex, Rinex 4, Hatanaka (Optional) Support FTP protocol, HTTP HTTPS and SFTP (Optional)

Support simultaneous recording

Support TLS secure connection in RTCM3.X, between the receiver

and ntripcaster

**GENERAL** 

IP67 environmental protection

Environmental Waterproof to 1m (3.28ft) dept Temporary Submersion

Humidity: 100%

Shock resistant body to 2 m (6.5ft) pole drop -40°C to 75°C Operating Temperature -40°C to 80°C Storage

**Physical Properties** 

Shock and vibration: MIL-STD-810G -Method510.5 -Procedure I Vibration:MIL-STD-810G-Method Figure 514.6C-1 and Table 514.6C-II

Immersion:MIL-STD-810G,Method 512.5-Procedurel

Size: 225mm x 138mm x 70mm

Weight: 2.48kg

Battery: Internal 12500mAh lithium battery(Solar and Electric Main) Battery Life: 24h continuous operation(depends on configuration



Multi-application GNSS Receiver 





The SLX-1 multi-application GNSS receiver has a military grade environmental housing that features a built-in firewall and data encryption designed primarily for CORS applications. Using the world's latest multi-frequency technology, powered by NovAtel OEM729 GNSS engine, this receiver is capable of superior tracking of all constellations and signals as a reference station solution for accurate satellite readings.







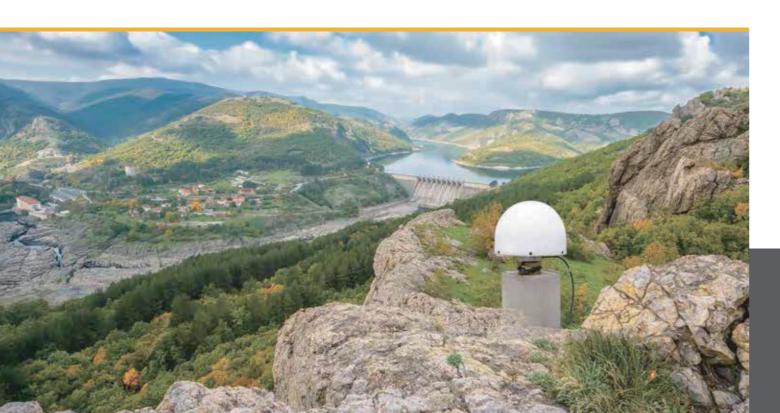






Delivering highly accurate and reliable data

Designed with simplicity, the SLX1-NG performs multiple tasks simultaneously to make your field work easier and more efficient. This receiver can continuously track and record all satellite data while allowing you to download recorded data, stream or transmit different forms of correction data.







### **Applications**

- Land Surveying
- Topography and As-built
- Utilities
- Infrastructure
- Deformation Monitoring Solutions
- Seismic Monitoring
- Hydrographic Application
- Reference Station

TECHNICAL SUPPORT

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

## 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 SLX-1 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 SLX-1 receivers. Get your corrections transmitted in real-time, with minimal latency via satellites and cellular networks worldwide.











