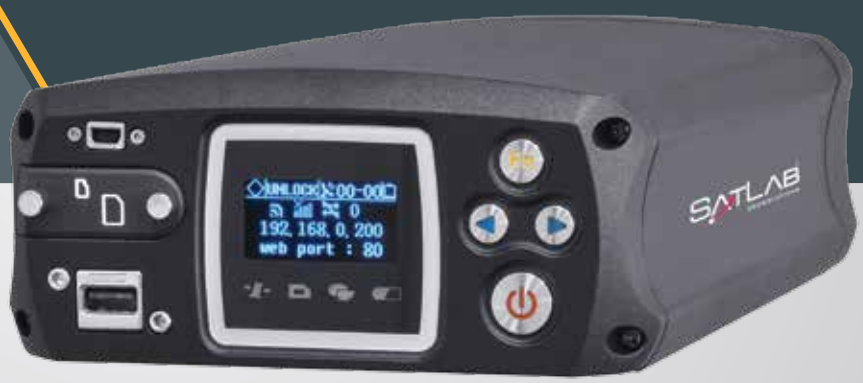
SATLAB®
GEOSOLUTIONS

SLX-1
Multi-Application
GNSS Receiver



www.satlabgps.com

SLX-1
Multi-Application GNSS Receiver

Designed for CORS Ready for Anything

European Standards

GPS
GLONASS
BEIDOU
GALILEO
SBAS
QZSS

Long Life Battery

Linux OS On Board

2G-3G modem

64 GB Internal Storage

SatLab SLX-1 GNSS multi-application GNSS receiver is primarily designed for CORS applications but is equally capable for use as a rugged mobile sensor where high precision real-time positioning is essential. Using the world's latest multi-frequency technology for tracking multiple satellite systems; it is built with high-performance microprocessors, flash memory and high-speed large-capacity battery, multiple communication ports, military grade environmental housing, built-in firewall and data encryption.

Based on Linux Operating System

Embedded Linux operating system, provides a true multi-user, multi-tasking, multi-platform operating system. Strong system stability, management capabilities, powerful network operations. Using the embedded microprocessor design; with small size, low power consumption and less heat, the receiver is ideal for long unattended and continuous operation.

Supports All Available GNSS Signal Reception

With 220 parallel receiving channels (upgradeable to 440 channels), SLX-1 tracks GPS, GLONASS, BDS, GALILEO, QZSS and SBAS positioning systems and can maximize the tracking to observe all visible GNSS satellite signals, thereby providing maximum performance for accuracy and real-time measurements.

Standard 20hz Data Update Rate

Supports high data update frequency with data update rate up to 20Hz (optional 50Hz upgrade)

Multitasking Capability

SatLab SLX-1 has the ability to simultaneously perform multiple tasks. The GNSS receiver can continuously track and record all satellite data while at the same time enable the operator to download the recorded data files, as well as stream or transmit different forms of correction data.

Multiple Modes of Data Transfer

By UHF radio, Ethernet, WiFi or the built-in 3G / 2G wireless modem, you can use a variety of means of communication with the Internet and wireless networks for data transmission and broadcast differential correction data.

Mass Data Storage, Data Download, and Data Streaming

64GB built-in, high-performance storage and can also support up to 1TB of industrial-grade U-disk storage or an external USB storage device. With 64GB the memory the SatLab SLX-1 can record around one year of one second sampling rate data which is available for U disk download, FTP download or remote web page download; and the receiver also has cycle storage ability.

Data Storage
Data Download
Data Streaming

High Performance

High-Precision Measurement Technology

With high precision GNSS measurement techniques and algorithms, direct-millimetre accuracy with the highest levels of quality assurance is obtained.

Excellent Compatibility

Real-time compatibility is easily achieved with available output CMR, CMR+, sCMRx, RTCM, RTCMV3, RTCM32, Binex and other formats of differential data. The receiver is easily integrated into existing CORS networks, but can also output high precision GNSS data in real time for simple single base operation.

High-Precision
GNSS Data

Network
Remote Access

Network Remote Access

Remote control of the receiver is easily achieved by logging into the internal web server with any mobile device. NTRIP and intRTK server is supported by SatLab's triple redundant Global caster service

Military Grade Environmental Design

Anodized aluminium alloy metal case, built-in firewall, data encryption; gives the receiver protection for both operation and data integrity.

Aluminium
Alloy Metal Case

Multiple
Interface Options

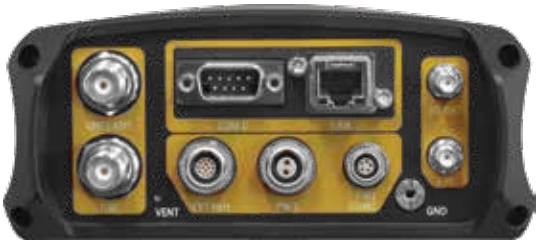
Multiple Interface Options

Equipped with RS232 ports, two USB ports, a Wi-Fi, Bluetooth interface, 3G / 2G communications interface, an Ethernet (power over ethernet) interface, an RS485 interface, an external clock interface, a PPS output interface; the receiver will fully satisfy reference station or peripheral data input and output requirements.

Wide Voltage Multi-Mode Power Supply

The built-in large capacity lithium battery, can work for up to 24 hours; two lane external voltage supply: 7VDC ~ 36VDC; support batteries, solar and wind power and other power supply giving guaranteed 24 hours of continuous operation. If power, for whatever reason is lost, once restored the receiver will re-boot using the last settings and continue working normally.

Power
Supply



Tracking

- GNSS channels: 220
  (Upgradeable to 440 channels)
- GPS: L1, L2, L5
- GLONASS: L1, L2
- BDS: B1, B2
- GALILEO: L1BOC, E5A, E5B, E5AltBOC
- SBAS: L1C/A, L5

Accuracy

- RTK horizontal positioning accuracy: ± (8mm + 0.5 ppm)
- RTK vertical accuracy: ± (15mm + 0.5 ppm)
- Static horizontal accuracy: ± (2.5mm + 0.5 ppm)
- Static vertical accuracy: ± (5.0mm + 0.5 ppm)
- Initialization time is typically <10 seconds
- Initialization reliability> 99.9%

I/O Interfaces

- 3 RS232 interface (1 x DB9 Serial output, 2 x Limo for configuration and debugging)
- USB interface
- Bluetooth interface
- WiFi communication interface
- 3G / 2G communication interface
- RS485 / RS422 interface (optional)
- Ethernet (Power over Ethernet) interface
- External clock interface
- 1 PPS output interface

Data Management

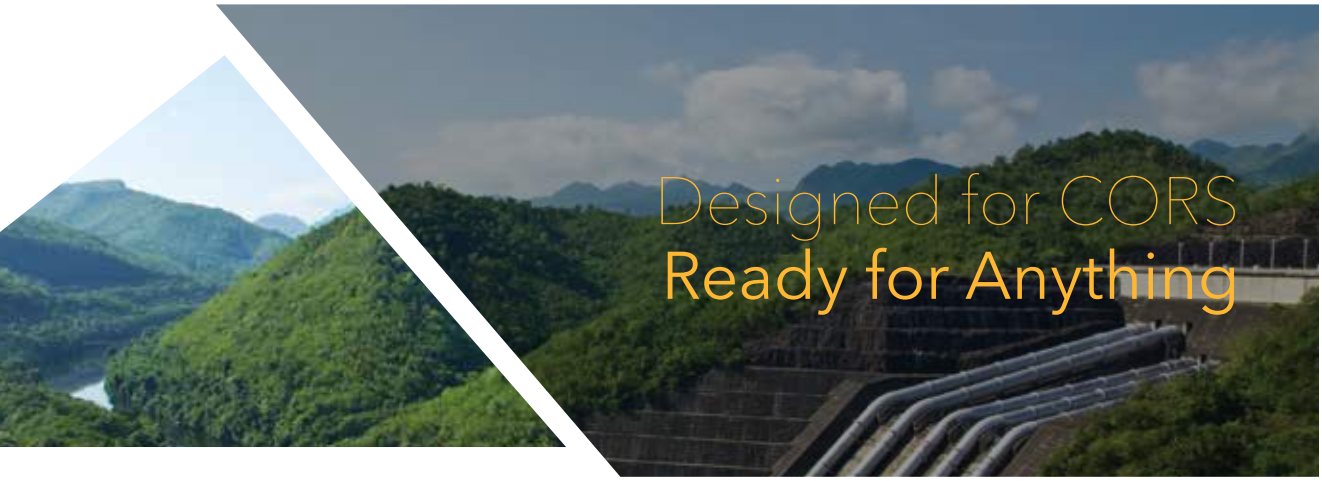
- 64GB of internal storage
- External memory support 1TB
- Difference Scheme CMR, CMR+, sCMRx, RTCM2.x, RTCM3.0, RTCM3.2
- Interactive Web Content Management System
- LCD, LED, key operating system

Power

- External power supply: 7VDC ~ 36VDC (2-way)
- Built-in Battery: 24h continuous operation (configuration dependent)
- Power consumption: ≤ 4W

Environmental

- Dimensions (LxWxH) 22.50cm x 13.80cm x 7.00cm (8.86in x 5.43in x 2.76in)
- Weight 2.480 Kg (5lb 7oz.)
- Operating temperature -40 °C to +75 °C
- Storage temperature -40 °C to +80 °C
- 100% relative humidity
- Protection class IP67
- Corrosion GJB150.11
- Vibration GJB_1032
- Shock JB / T 9329 30g 3 times / axis
- Collision JB / T 9329 10g 1000 times
- DROP GB-T2423.8 anti 1 meter drop



SLX-1
LATEST
GNSS
TECHNOLOGY

64GB Internal Storage

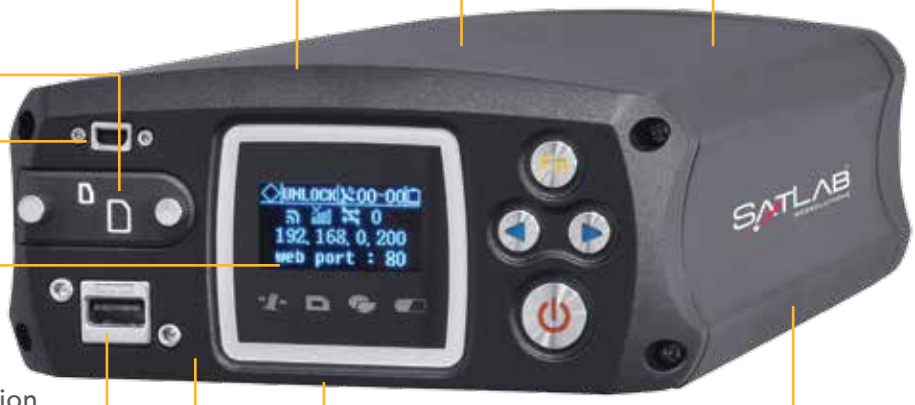
Internal 24 Hours Li-Ion Battery

220 Channels
Upgradeable to 440 Channels

2G/3G Modem

USB Interface
WiFi, Ethernet and Serial

LCD, LED,
Key Operating System
for Status Display and Configuration



On Board Web Server for
Monitoring and Configuration
On Board FTP Server and FTP Push

Up to 15 Simultaneous and
Independent Recording Files
with Auto Delete Cyclic Memory

Supports TCP/IP, NTRIP and
SatLab intRTK Protocols

Up to 99 Simultaneous and
Real-Time Data Streams

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