

GNSS Receiver





Building the Future with

Accuracy & Precision



Designed and Engineered in Sweden

Satlab SL700 is an easy-to-use device that is designed to be compact and rugged for your everyday surveying usage. Made to withstand the harshest weather conditions, the SL700 performs with great mobility and flexibility. This innovative receiver delivers the most accurate results in the most efficient way for your fieldwork.





















Swedish Quality

Multi-Constellation Tracking

Bluetooth

Long Battery Life (> 8 hours)

ery Life Compatibility

Compatibility

iOS Compatibility

Interno e RTK

PPK Mode

RTK Technology

New and improved innovation technology

Powered by multi-constellation tracking, SL700 offers accurate and precise results with improved performance. Armed with a NovAtel OEM729 GNSS engine, this GNSS receiver features a multi-device interface depending on your application which boosts your productivity and efficiency.





Applications

- Mapping
- Land Survey
- Topography and As-built
- Landfill
- Hydrographic
- Agriculture
- Sensor
- UAV Base 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 can track all current and upcoming signals, offering sub-metre to centimetre precise positioning with different modes (RTK, PPK, Static).

Satellite correction service

The SL700 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 SL700 receivers. Get your corrections transmitted in real-time, with minimal latency via satellites and cellular networks worldwide.













SL700 GNSS Receiver

Data Specifications

GNSS

GPS (L1C/A, L1C, L2C, L2P, L5) **Signal Tracking**

GLONASS¹ (L1C/A, L2C, L2P, L3, L5)

BeiDou² (B1, B2, B3)

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

IRNSS (L5)

555

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

SBAS (L1, L5)

L-Band (Up to 5 Channels) TerraStar®

No. of Channels

MEASUREMENT PERFORMANCE

Real-time Kinematic H: 8mm + 1ppm RMS / V: 15mm + 1ppm RMS **Network RTK** H: 8mm + 0.5ppm RMS / V: 15mm + 0.5ppm 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

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

COMMUNICATIONS

Communication Ports UTMS/WCDMA/GPRS/GSM

Internal 3G Mobile Network Bluetooth V2.1 + EDR, NFC

Internal Radio: Satel Radio for Tx/Rx

SYSTEM

Operation System Linux **Start-up Time**

Data Storage 8GB internal storage

DATA MANAGEMENT

5 Hz Update (up to 100 Hz⁴)

CMR, RTCM2.X, RTCM3.0, RTCM3.2

GNS, Rinex

TerraStar® and RTK Assist Service

info@satlabgps.com **Regional Offices:**

SE-436 32 Askim, Sweden

Headquarters:

Datavägen 21B

Warsaw, Poland Jičín, Czech Republic Ankara, Turkey Scottsdale, USA Singapore Hong Kong Dubai, UAE

www.satlab.com.se



GENERAL

Environmental IP67 environmental protection Waterproof to 1m (3.28ft) depth

Temporary Submersion

Shock resistant body to 2m (6.5ft) pole drop -40°C to 65°C Operating Temperature -40°C to 85°C Storage

Physical Properties Size: 164mm x 83.5mm

> Weight: 1.4kg including battery Battery: 5,000mAh Lithium-Ion Battery

Battery Life: 10 hours

(Static Measurement / RTK Rover)

Hardware ready for L3 and L5
Designed for BeiDou phase 2 and 3, B1 and B2 compatibility. B3 conditionally supported and subject to change.
E1bc support only. Hardware ready for E6bc