# SL700 GNSS Receiver

### **GNSS PARAMETERS**

No. of Channels

GPS (L1, L2, L5,L2C) Signal Tracking GLONASS (L1, L2, L3) BeiDou (B1, B2, B3, B1C, B2a)

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

QZSS (L1, L2, L5, L6) SBAS (L1, L5) IRNSS(L5)

#### 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 H: 0.25m + 1ppm RMS / V: 0.5m + 1ppm RMS

Initialization time <10s 99.9% Initialization Reliability

H: RTK5+10mm/minute RMS / Hi-Fix⁴ V: RTK<sup>5</sup>+ 20mm RMS

#### COMMUNICATIONS

Internal 4G mobile network, including TDD-LTE/FDD-LTE/ Network

WCDMA/EDGE/GPRS/GSM modes.

USB, TNC antenna port, SIM card slot, DC power input (5-pin)

V4.0/2.1+EDR 2.4GHz, 802.11b/g/n

Bluetooth Yes

Wi-Fi Yes NFC

I/O Interface INTERNAL RADIO

403MHz~473MHz Frequency 1W/2W/4W adjustable Power TRIMTALK450S, TRIMMARK III, **Protocols** TRANSEOT, SATEL-3AS, etc.. **Transmitting Speed** 19200 bps/9600 bps

Working Range Typically 5km, optimally 8-10km

#### INTERNAL RADIO(OPTIONAL)

Frequency

865MHz~867MHz 10, 20, 50, 100, 200, 500, 1000 mW adjustable SATEL 3AS

Protocols. Transmitting Speed 9600 – 115200 bps

Distances ranging from tens or hundreds of **Working Range** metres up to around 80 kilometres.

1Hz~20Hz

#### **DATA MANAGEMENT**

Positioning Output Frequency TerraStar and RTK

Assist service

ASCII: NMEA-0183, binary data CMR, RTCM2.X, RTCM3.0, RTCM3.2 **Output Format** Message Type

GNS, Rinex Static Data Format

### SYSTEM

Datavägen 21B

**Regional Offices:** 

Ankara, Turkey

Dubai, UAE

Scottsdale, USA Singapore Hong Kong, China

Warsaw, Poland

info@satlab.com.se

Jičín, Czech Republic

www.satlab.com.se

SE-436 32 Askim, Sweden

**Operation System** Data Storage 8GB internal storage

IP67 environmental protection Waterproof to 1m (3.28ft) depth Temporary Submersion Water/dustproof

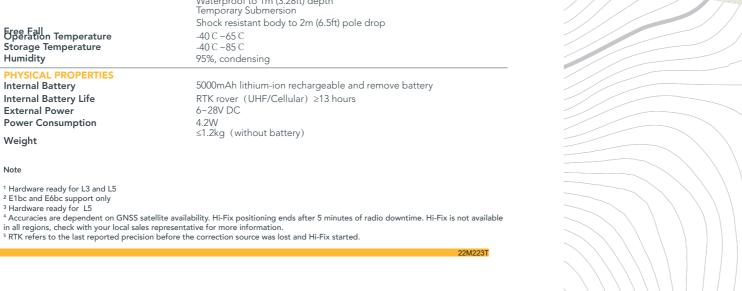
Storage Temperature -40°C ~85°C Humidity

## PHYSICAL PROPERTIES

Internal Battery Life

Weight

### Note





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.























**Battery Life** (> 13 hours)

# **Applications**

Mapping

Sensor

Landfill

- Land Survey
- Hydrographic
- UAV Base Station

- Topography and As-built
- Agriculture





## Efficient and dependable

Powered by the professional GNSS engine, this receiver offers precise positioning and advanced interference mitigation which performs even in the most remote or challenging environments. Using its excellent tracking capabilities, it can track all current and upcoming signals, offering sub-meter to centimeter precise positioning with different modes (RTK, PPK, Static).

## Hi-Fix Technology (optional)

It can reduce downtime in the field with continuous RTK coverage during correction outages from an RTK base station or VRS network.

# Innovation technology

Beneficial from the innovative measuring algorithm, SL700 offers stable and reliable positioning accuracy in the challenging environment.

# High-performance UHF radio

SL700 supports the optional internal radio module to meet users' needs for radio transmission frequency in the special area.





