SL700 GNSS Receiver

Data Specifications

GNSS

Signal Tracking	GPS (L1C/A, L1C, L2C, L2P, L5)
	GLONASS[1] (L1C/A, L2C, 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)
	L-Band (Up to 5 Channels) TerraStar®

No. of Channels	555

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

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	3s
Data Storage	8GB internal storage

DATA MANAGEMENT

	5 Hz Update (up to 100 Hz[4])
	CMR, RTCM2.X, RTCM3.0, RTCM3.2
	GNS, Rinex
	TerraStar® and RTK Assist Service

GENERAL

Environmental	IP67 environmental protection
	Waterproof to 1m (3.28ft) depth
	Temporary Submersion
	Shock resistant body to 2m (6.5ft) pole drop
	Temperature -40°C to 65°C Operating
	-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)

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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SatLab GEOSOLUTIONS

SL700
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)	Windows Compatibility	Android Compatibility	iOS Compatibility	NFC Module	Internet 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.

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.

Multi-Constellation Tracking	NFC Technology	Data Collector	Cloud Services	Long Battery Life	Professional Support Network