

S900+ GNSS Receiver

Powerful Precision
Performance

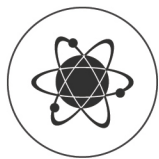


S900⁺ Powerful Precision Performance

Stonex S900⁺ is equipped with a high-performance GNSS board with 1408 channels and can support multiple satellite constellations: GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS.

Through the 4G GSM modem, a fast Internet connection is guaranteed for receiving correction data and carry out precise and accurate surveys. In the incredibly compact design, Bluetooth and Wi-Fi modules allow for always reliable data flow to the controller, while the integrated UHF TX/RX radio makes the S900⁺ the perfect system for a GNSS Base + Rover.

The S900⁺ is also equipped with optional IMU technology. Quick initialization, tilt up to 60° and corrected coordinates of a point with a single click.



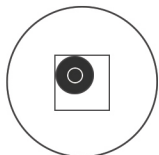
MULTIPLE CONSTELLATIONS

Stonex S900⁺ with its 1408 channels, provides an excellent on-board real-time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS and IRNSS) are included, no additional cost.



4G MODEM

S900⁺ has an internal 4G modem that operates with all world signals, a fast internet connection is guaranteed.



IMU

IMU technology is available for this model, with quick initialization the operator can take advantage of all the precision and efficiency of this system.



SMART BATTERIES

The dual slot for two smart hot swappable batteries gives you up to 12 hours of battery life. The power level can be checked and seen on the controller or directly on a led bar on the battery.



RADIO (Optional)

An activation code can enable the integrated UHF on the S900⁺, with a range of up to 10 km under optimal conditions.





S900⁺ IMU Technology

S900⁺ GNSS receivers have the IMU System that allows tilted measurement (TILT). Thanks to the IMU technology, the difficult and inaccessible points as the edges of the buildings, are no longer a problem.

What are the performances of the S900⁺ with IMU?

- Fast initialization
- Up to 60° inclination
- 2cm accuracy 30°
- 5cm accuracy 60°
- Fast and precise survey
- No problem of electromagnetic disturbances



Stonex S900⁺ with IMU system makes every measurement reliable, in both survey and stakeout jobs, and makes the acquisition of points extremely faster: up to 40% of the field work time can be saved!

Why to choose S900⁺ ?

If long-lasting in field is what is needed, this GNSS is the right choice. Not only are the batteries extremely capacious but they are also hot-swappable. The batteries available in this model are lithium batteries, and their total operating time can be up to 12 hours.



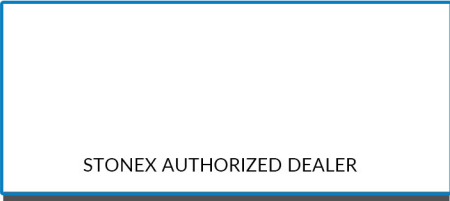
S900+ TECHNICAL FEATURES

RECEIVER		INTERNAL MODEM	
Satellite signals tracked	GPS: L1 C/A, L1C, L2P, L2C, L5	Band	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/ B13/B18/B19/B20/B25/B26/B28
	GLONASS: L1, L2, L3		LTE TDD: B38/B39/B40/B41
	BEIDOU: B1, B2, B3 (B1I, B2I, B3I, B1C, B2a, B2b)		UMTS: B1/B2/B4/B5/B6/B8/B19
	GALILEO: E1, E5a, E5b, E6		GSM: B2/B3/B5/B8
	QZSS: L1, L2, L5		Nano SIM card
	IRNSS: L5		
PPP	SBAS	COMMUNICATION	
Channels	B2b PPP, HAS	I/O Connectors	7-pin Lemo (RS232) and 5-pin Lemo interfaces. Multifunction cable with USB interface for PC connection
Position Rate	1408	Bluetooth	2.1 + EDR, V5.0
Signal Reacquisition	Up to 20Hz	Wi-Fi	802.11 a/b/g/n/ac
RTK Signal Initialization	< 1 s	Web UI	To upgrade the software, manage the status and settings, data download, etc. via smartphone, tablet or other electronic device with Wi-Fi capability
Hot Start	2 to 4 seconds		RTCM2.3, RTCM3.0, RTCM3.2 MSM, CMR, CMR+, DGPS
Initialization Reliability	Typically < 15 s	Reference outputs	
Internal Memory	> 99.9 %	Navigation outputs	NMEA 0183
OS	8 GB	POWER SUPPLY	
Micro SD Card	Linux	Battery	2 rechargeable and replaceable 7.2 V – 3.400 mAh Intelligent lithium batteries
Tilt sensor	Expansion slot up to 32 GB	Voltage	9 to 28 V DC external power input with over-voltage protection (5-pin Lemo)
POSITIONING ¹		Working Time	Up to 12 hours (2 batteries hot swap)
HIGH PRECISION STATIC SURVEYING		Charge Time	Typically 4 hours
Horizontal	2.5 mm + 0.1 ppm RMS	PHYSICAL SPECIFICATION	
Vertical	3.5 mm + 0.4 ppm RMS	Dimensions	Ø 157 mm x 76 mm
REAL TIME KINEMATIC (< 30 Km) WITH RADIO MODEM AND NETWORK RTK ²		Weight	1.19 Kg (with one battery) 1.30 Kg (with two batteries)
Fixed RTK Horizontal	5 mm + 0.5 ppm RMS	Operating Temperature	-40°C to 65°C (-40°F to 149°F)
Fixed RTK Vertical	10 mm + 0.5 ppm RMS	Storage Temperature	-40°C to 80°C (-40°F to 176°F)
PPP Accuracy	< 20 cm RMS	Waterproof/Dustproof	IP67 IP68 ⁵
SBAS Accuracy ³	< 60 cm RMS	MIL-STD	MIL-STD-810 F/H
INTEGRATED GNSS ANTENNA ⁷		Shock Resistance	Designed to endure to a 2 m pole drop on hardwood floor with no damage
High accuracy multi-constellation antenna, zero phase center, with internal multipath suppressive board		Vibration	Vibration resistant
INTERNAL RADIO (optional) ⁴			
Type	Tx – Rx 1W		
Frequency Range	410 - 470 MHz		
Channel Spacing	902.4 – 928 MHz ⁵ (optional)		
Range	12.5 KHz / 25 KHz		
	3-4 Km in urban environment		
	Up to 10 Km with optimal conditions ⁶		

1. Accuracy and reliability are generally subject to satellite geometry (DOPs), multipath, atmospheric conditions and obstructions. In static mode they are subject even to occupation times: the longer is the Baseline, the longer must be the occupation time.
2. Network RTK precision depends on the network performances and are referenced to the closest physical base station.
3. Depends on SBAS system performance.
4. Optional, can be activated via activation code.
5. On request when ordering.
6. Varies with the operating environment and with electromagnetic pollution.
7. The NOAA registered antenna code for this model is named STXS900A

 If you are looking for an italian instrument with a 3 years warranty, you can purchase the italian version of our S900+ GNSS Receiver.

Illustrations, descriptions and technical specifications are not binding and may change



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