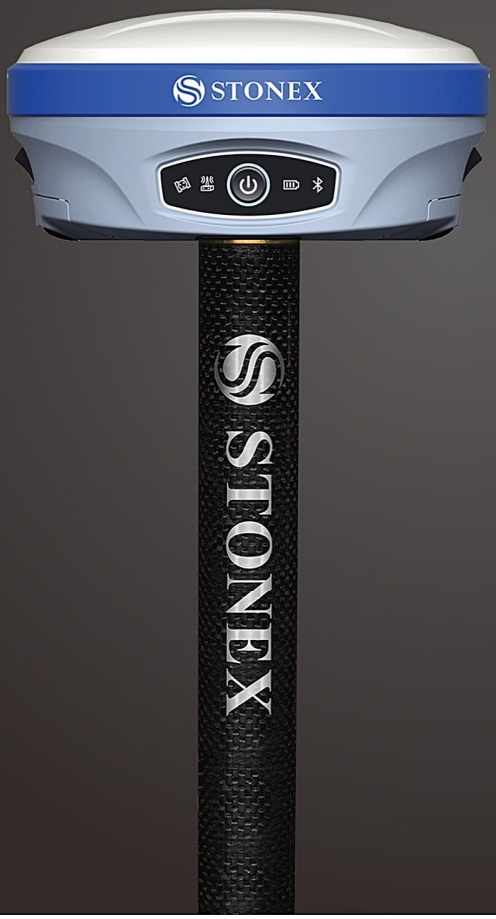
STONEX

S900+ GNSS Receiver

Powerful Precision
Performance



suite cube

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 (Optional)

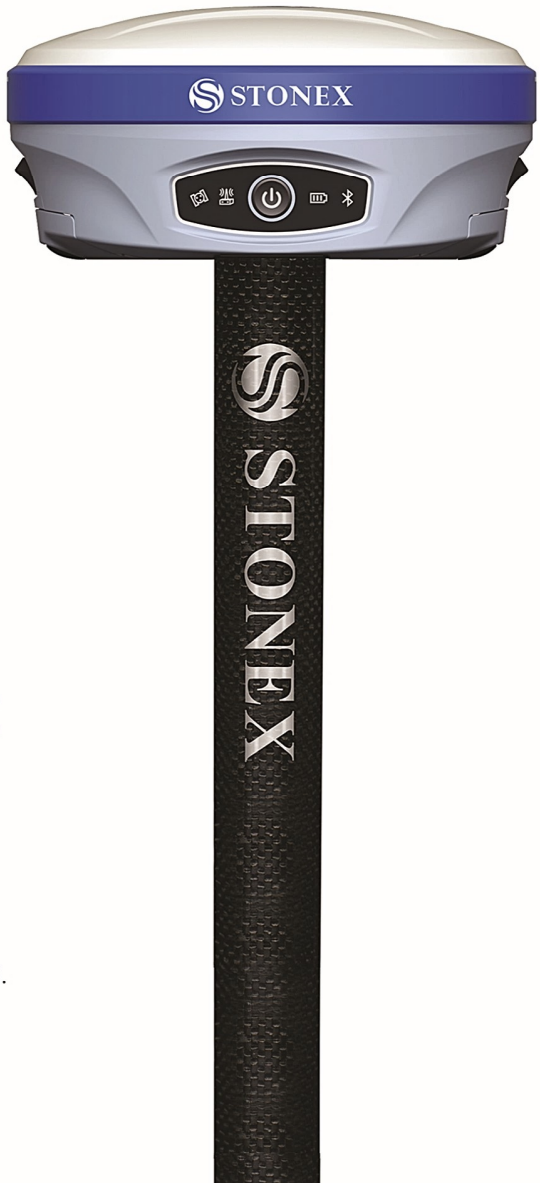
IMU technology is available for this model, with quick initialization the operator can take advantage of all the precision and efficiency of this system.

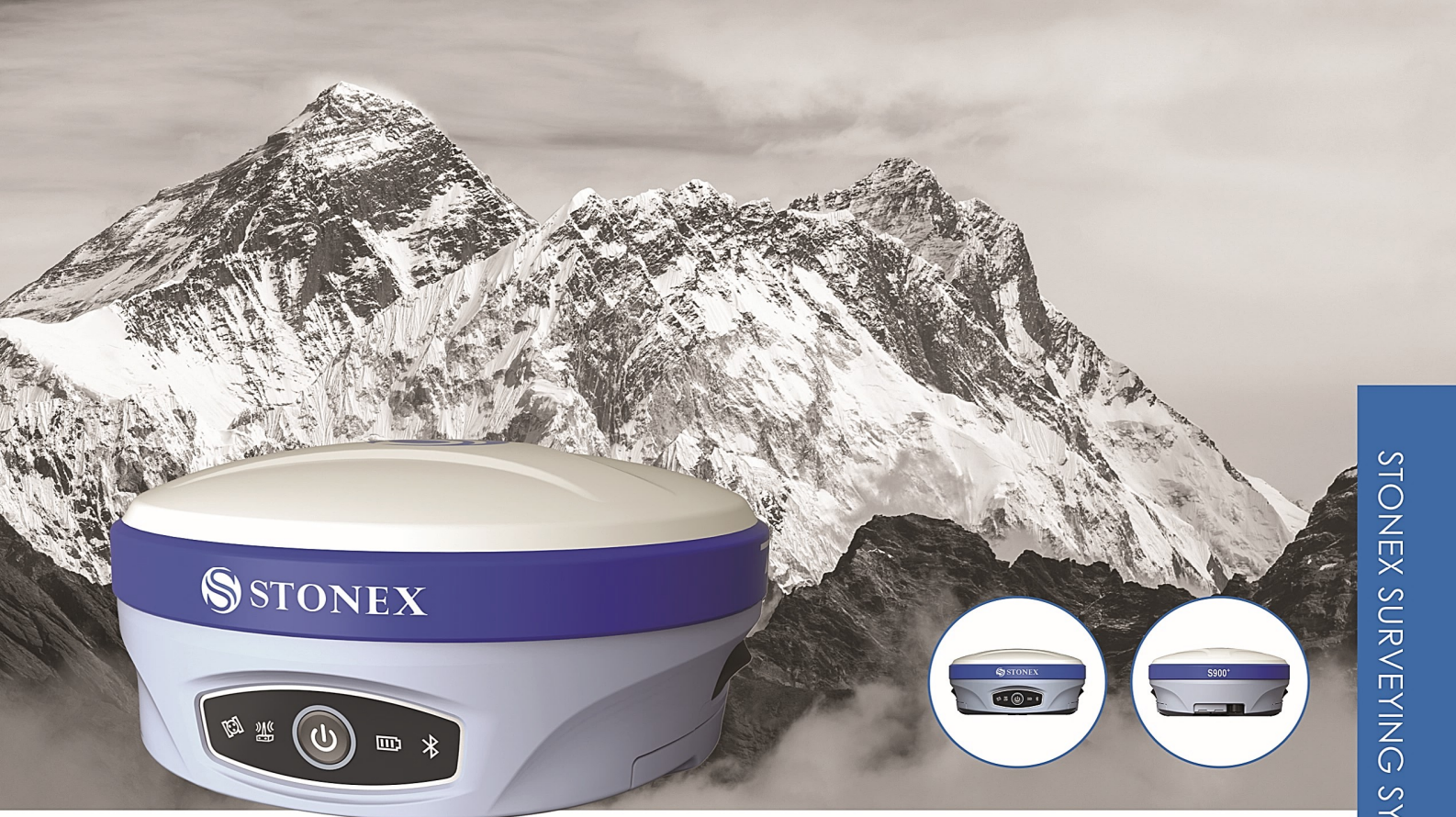
SMART BATTERIES

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)

S900+ has integrated UHF, double frequency 410-470MHz and 902.4-928MHz on request. The needs of each country are supported.





STONEX SURVEYING SYSTEMS

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.

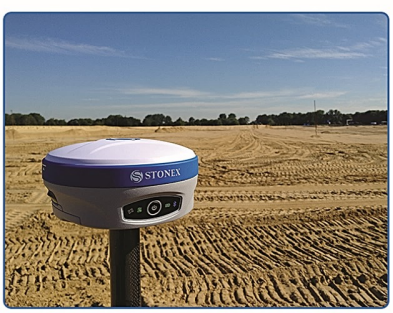
What are the performances of the S900+ with IMU?

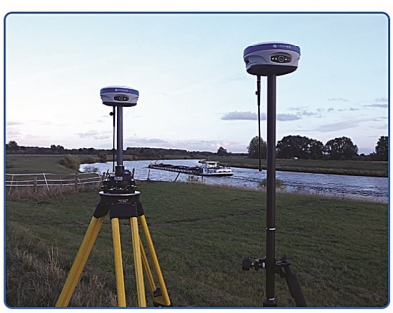
- Fast initialization
- Up to 60° inclination
- 2cm accuracy 30°
- 5cm accuracy 60°
- Fast and precise survey
- No problem of electromagnetic disturbances

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 charge can be up to 12 hours.
In addition, this GNSS comes to meet professionals in different countries because it provides the option of having a built-it radio with frequencies of your choice.





S900+ TECHNICAL FEATURES

RECEIVER

Satellite signals tracked	GPS: L1 C/A, L1C, L2P, L2C, L5
	GLONASS: L1, L2, L3[1]
	BEIDOU: B1I, B2I, B3I, B1C, B2a, B2b
	GALILEO: E1, E5a, E5b, E6
	QZSS: L1, L2, L5
	IRNSS: L5[1]
	SBAS
PPP	B2b PPP[1], HAS[1]
Channels	1408
Position Rate	Up to 20Hz
Signal Reacquisition	< 1 s
RTK Signal Initialization[2]	2 to 4 seconds
Hot Start	Typically < 15 s
Initialization Reliability	> 99.9 %
Internal Memory	8 GB
OS	Linux
Micro SD Card	Expansion slot up to 32 GB
Tilt sensor	IMU and E-bubble (optional)[3]

POSITIONING[4]

STATIC GNSS SURVEYING	
High Precision Static Horizontal	2.5 mm + 0.1 ppm RMS
High Precision Static Vertical	3.5 mm + 0.4 ppm RMS
Static and Fast Static Horizontal	3 mm + 0.5 ppm RMS
Static and Fast Static Vertical	5 mm + 0.5 ppm RMS
CODE DIFFERENTIAL POSITIONING	
Accuracy	0.40 m RMS
SBAS POSITIONING[5]	
Accuracy	0.60 m RMS
REAL TIME KINEMATIC (< 30 Km) – NETWORK RTK[6]	
Fixed RTK Horizontal	5 mm + 0.5 ppm RMS
Fixed RTK Vertical	10 mm + 0.5 ppm RMS

INTEGRATED GNSS ANTENNA

High accuracy multi-constellation antenna, zero phase center, with internal multipath suppressive board

INTERNAL RADIO (optional)[3]

Type	Tx – Rx
Frequency Range	410 - 470 MHz 902.4 – 928 MHz[7]
Channel Spacing	12.5 KHz / 25 KHz
Range	3-4 Km in urban environment Up to 10 Km with optimal conditions[2]

INTERNAL MODEM

Band	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/ B13/B18/B19/B20/B25/B26/B28 LTE TDD: B38/B39/B40/B41 UMTS: B1/B2/B4/B5/B6/B8/B19 GSM: B2/B3/B5/B8 Nano SIM card

COMMUNICATION

I/O Connectors	7-pin Lemo and 5-pin Lemo interfaces. Multifunction cable with USB interface for PC connection
Bluetooth	2.1 + EDR, V5.0
Wi-Fi	802.11 b/g/n
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
Reference outputs	RTCM2.3, RTCM3.0, RTCM3 MSM, CMR, CMR+, DGPS
Navigation outputs	NMEA 0183

POWER SUPPLY

Battery	2 rechargeable and replaceable 7.2 V – 3.400 mAh Intelligent lithium batteries
Voltage	9 to 28 V DC external power input with over-voltage protection (5-pin Lemo)
Working Time	Up to 12 hours (2 batteries hot swap)
Charge Time	Typically 4 hours

PHYSICAL SPECIFICATION

Dimensions	Ø 157 mm x 76 mm
Weight	1.19 Kg (with one battery) 1.30 Kg (with two batteries)
Operating Temperature	-30°C to 65°C (-22°F to 149°F)
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Waterproof/Dustproof	IP67
Shock Resistance	Designed to endure to a 2 m pole drop on hardwood floor with no damage
Vibration	Vibration resistant

1. Available with future firmware update.
2. Varies with the operating environment and with electromagnetic pollution.
3. Optional, can be activated via activation code.
4. 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.
5. Depends on SBAS system performance.
6. Network RTK precision depends on the network performances and are referenced to the closest physical base station.
7. On request when ordering.

MADE IN ITALY

If you are looking for a "Made in Italy" 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

STONEX AUTHORIZED DEALER

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UNI EN ISO 9001:2015 - S900+ - JANUARY 2023 - VER01 - REV-01