

S500 GNSS Receiver

GNSS Receiver for
GIS & RTK Applications



S500

Small and lightweight GNSS Receiver

Compared to traditional GIS products, the S500 is an intelligent, high precision data acquisition receiver that can be used without the need to hold it in your hand and therefore offers greater freedom of movement and flexibility.

Thanks to the internal web interface, the receiver can be configured and prepared to receive RTK differential corrections and ready to be connected to any software for Survey or GIS.

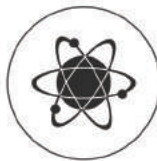
The S500 offers high-precision positioning and is equipped with a high speed 4G module. The positioning is so fast and reliable that it can also be used by vehicles moving at high speed. S500 works with all 4 satellite system (GPS, Glonass, BeiDou, Galileo), support access to external differential RTK signal to get centimeter level positioning results.

Rubber protective cover, increase the protection of the device, non-slip and no damage, the whole device protective class reaches IP67, and it resists 1.2m hard ground drop.



ANDROID SYSTEM

Android system on board



4 CONSTELLATION SYSTEM

GPS, Glonass, BeiDou, Galileo



HIGH PRECISION

High precision positioning, centimetric accuracy



WEB UI

Web interface for controlling and managing settings



DATA TRANSMISSION

Wi-fi, Bluetooth and 4G





S500 GNSS Receiver

From GIS to Topography

S500 is a versatile and flexible instrument, capable to offer high accuracies for the demanding users, switching from GIS to topographic Survey.

Precision Farming, Mapping, GIS data collection, environmental agencies, forestry are just a short list of the fields where Stonex S500 will give a decisive impulse to the productivity and to the quality of the positioning data: and using the already existent devices, as Smartphones and Tablet with Android, iOS, Windows operating system.



High precision positioning



Hands free design



Belt case



Arm support



S500 TECHNICAL FEATURES

Small and lightweight GNSS Receiver for GIS & RTK Applications

With its innovative design and contained dimensions and weight, Stonex S500 is the ideal GNSS receiver for GIS applications that require accurate precision. The GNSS receiver S500, single frequency, tracks the constellations GPS, GLONASS, BEIDOU, GALILEO, SBAS.

Equipped with sim slot and 4G support, the S500 uses real-time RTK differential corrections to achieve centimeter accuracy.

RECEIVER

Satellite Tracked	GPS: L1
	GLONASS: L1
	BEIDOU: B1
	GALILEO: E1
	SBAS: L1
Channels	432
Position Rate	Up to 20 Hz
Signal Reacquisition	< 1 sec
RTK Initialization	Typically > 120 sec
Hot Start	Typically < 15 sec
Initialization Reliability	> 99.9 %

POSITIONING¹

POST PROCESSING	1 cm
DGPS	<50 cm
RTK ²	3 cm

INTEGRATED GNSS ANTENNA

Four constellation antenna

HARDWARE

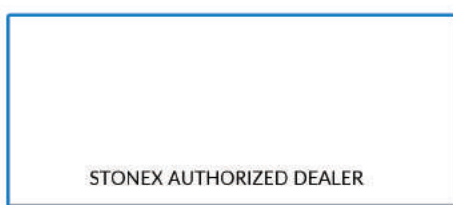
Processor	SC20
RAM	512 MB
Flash Memory	8 GB
Operating System	Android

INTERNAL MODEM

Band	GSM/GPRS/EDGE WCDMA/LTE
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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.

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



COMMUNICATION

I/O Connectors	TYP C connector support USB 2.0
Bluetooth	4.0, 2.4 GHz
Wi-Fi	802.11 g
Differential	RTCM 2.x, 3.x CMR

POWER SUPPLY

Battery	Rechargeable 3.8 V – 6.000 mAh
Working Time	Up to 10 hours (Post Processing) Up to 8 hours (RTK with GSM)
Charge Time	Typically 6 hours

PHYSICAL SPECIFICATION

Dimensions	136 mm x 78 mm x 31 mm
Weight	350 gr
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 1.2 m pole drop on concrete floor with no damage

STANDARD ACCESSORIES

USB cable, Belt Case

OPTIONAL ACCESSORIES

Carbon fiber pole, Telescopic pole, Bracket 5/8", Soft Case

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