

S580 GNSS Receiver

GNSS Receiver for
GIS & RTK Applications



S580

Small and lightweight GNSS Receiver

S580 is a compact and light GNSS receiver but at the same time performing and with centimeter accuracy. S580 track double frequency signals and works with all satellite systems (GPS, Glonass, BeiDou, Galileo, QZSS).

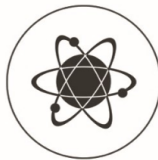
Compared to traditional GIS products, the S580 is an intelligent, high precision data acquisition receiver that can be worn or mounted on a pole, offering greater freedom of movement and flexibility.

The S580 can communicate with an external device like a tablet, a smartphone or a PC through Bluetooth and Wi-Fi. Thanks to the internal web interface, or through the Cube-connector APP, the receiver can be configured and prepared to receive RTK differential corrections and connected to any software for Survey or GIS. 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



FULL CONSTELLATION SYSTEM

GPS, Glonass, BeiDou, Galileo, QZSS



HIGH PRECISION

High precision positioning, centimetric accuracy



WEB UI

Web interface for controlling and managing settings



DATA TRANSMISSION

Wi-fi, Bluetooth and external radio



RTK AND POST-PROCESSING

S580 can work in real time with RTK corrections and simultaneously record the raw data for post-processing.





S580 GNSS Receiver

From GIS to Topography

S580 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, fotogrammetry by UAV, forestry are just a short list of the fields where Stonex S580 will give a decisive impulse to the productivity and to the quality of the positioning data; with the ability to use the already existing devices, as Smartphones and Tablet with Android and Windows operating system.



High precision positioning in a small space



Hands free design



Belt case



Arm support



S580 TECHNICAL FEATURES

RECEIVER

Satellite signals tracked	GPS: L1C/A, L2C
	GLONASS: L1OF, L2OF
	BEIDOU: B1, B2
	GALILEO: E1, E5b
	QZSS: L1C/A, L2C
	SBAS: L1 ¹
Channels	184
Position Rate	Up to 10 Hz
Signal Reacquisition	< 2 sec
RTK Initialization	Typically > 10 sec
Hot Start	Typically < 15 sec
Initialization Reliability	> 99.9 %

POSITIONING²

STATIC POST PROCESSING	
Horizontal	< 2 cm + 1 ppm RMS
Vertical	< 3 cm + 1 ppm RMS
CODE DIFFERENTIAL POSITIONING	
Horizontal	< 0.5 m RMS
Vertical	< 1.0 m RMS
REAL TIME KINEMATIC	
Fixed RTK Horizontal	< 2 cm + 1 ppm RMS
Fixed RTK Vertical	< 3 cm + 1 ppm RMS

INTEGRATED GNSS ANTENNA

Full constellation GNSS antenna

HARDWARE

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

EXTERNAL RADIO (optional)

Model	SR02
Type	Tx - Rx - Transceiver (2 watt)
Frequency Range	410 - 470 MHz
Channel Spacing	12.5 KHz / 25 KHz
Maximum Range	3-4 Km in urban environment Up to 10 Km with optimal conditions ³

COMMUNICATION

I/O Connectors	TYPE-C connector support USB 2.0
Bluetooth	2.1+EDR / 3.0 / 4.1 LE
Wi-Fi	802.11 b/g/n
Real time protocols	RTCM 3.x

POWER SUPPLY

Battery	Rechargeable 3.8 V - 6.120 mAh
Working Time	> 10 hours
Charge Time	Typically 4 hours

PHYSICAL SPECIFICATION

Dimensions	136 mm x 78 mm x 31 mm
Weight	313g
Operating Temperature	-40°C to 65°C (-40°F to 149°F)
Storage Temperature	-40°C to 80°C (-40°F to 176°F)
Waterproof/Dustproof	IP67
Shock Resistance	Designed to endure a 1.2 m drop on concrete floor with no damage

STANDARD ACCESSORIES

Power adapter, USB cable, Belt case, Pole mount

OPTIONAL ACCESSORIES

Carbon fiber pole, Telescopic pole, Soft case

1. Enabled through future firmware update.
2. 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.
3. Varies with the operating environment and with electromagnetic pollution.

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



STONEX®
Part of **UniStrong**

Viale dell'Industria 53 - 20037 Paderno Dugnano (MI) - Italy
Phone +39 02 78619201
www.stonex.it | info@stonex.it