STONEX

S80G Tablet RTK GNSS

Receiver for GIS
and survey applications



suite cube

S80G

Tablet GNSS RTK

The S80G is a GNSS system that offers a range of features and capabilities for efficient data and photo collection in the field. It is a multi-constellation system, meaning it can utilize signals from multiple satellite networks, including GPS, GLONASS, Galileo, and BeiDou. Furthermore, the S80G is a triple-frequency GNSS system, which means it can receive and process signals from L1, L2, and L3/L5 frequency bands. This triple-frequency capability enhances the system's precision and robustness, particularly in areas with potential signal interference or obstructions.

The GNSS board of the S80G is equipped with 1408 channels, allowing it to track multiple satellites simultaneously. The S80G offers RTK (Real-Time Kinematic) and raw data recording capabilities, enabling users to capture high-resolution data and imagery. The S80G system comes with an antenna that is directly connected to the tablet, providing an RTK precision of 2 cm. However, the system also supports the use of an external antenna SA85, which can further enhance the precision of the collected data, allowing users to achieve even greater accuracy in their field work, approximately < 1 cm.



MULTI-CONSTELLATION SYSTEM

Stonex S80G has integrated a triple-frequency GNSS chip with 1408 channels and can support multiple satellite constellations: GPS, GLONASS, BEIDOU, GALILEO, QZSS, IRNSS.

ANDROID SYSTEM

The receiver is managed by the Android 13 operating system with a simple and intuitive interface.

HIGH QUALITY DISPLAY

The high quality 8" display has a resolution of 1280 x 800 pixels with 800 Nits brightness.

RTK AND POST-PROCESSING

S80G can work in real time with RTK corrections and simultaneously record the raw data for post-processing.

RUGGED

Thanks to its IP67 rating, the Stonex S80G can withstand dust, dirt, sand, and water immersions.



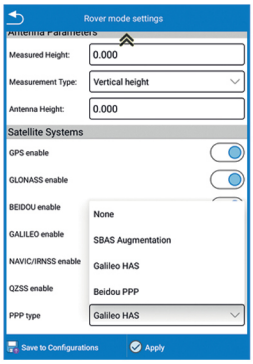


STONEX SURVEYING SYSTEMS

Handheld GIS and pole-mounted RTK receiver

FREE PPP CORRECTION SERVICES

The S80G can operate even without local RTK corrections, utilizing free PPP correction services based on Galileo (HAS) or BeiDou (B2b) that ensure decimetric precision.





FULL OPERATING FUNCTIONALITY

The S80G can operate in real-time mode, utilizing RTK corrections transmitted by a network of GNSS Permanent Stations. The S80G, through the SR02 external radio, can also work in RTK by receiving corrections from a GNSS base receiver via the UHF radio. Additionally, the S80G can record raw data received from satellites, allowing for post-processing in the office.

cube·a cube·connector

Cube-a is Stonex' solution for professional surveying and GIS, designed and developed for the Android platform. The software offers several features that make it a popular choice for surveyors, including a simple and intuitive user interface, full support for touch gestures, and multilanguage support. Cube-a is a modular application that can be customized as needed; GNSS, Robotic and Classic Total Stations, GIS, and 3D Modelling modules can be enabled to fulfill any customer need.



The Cube-connector is an Android app developed to connect Android devices to Stonex GNSS receivers. To connect to the GNSS, the Android device must be paired with the GNSS by Bluetooth. Once the Bluetooth connection has been established, Cube-connector will replace the GNSS readings from the internal device with the ones from the Stonex GNSS receiver. With the Stonex S80G, any customer can easily use their software for GIS/Survey in the Android operating system through Cube-connector. The application manages all settings and configurations with integrated precision GNSS and makes the correct coordinates available for third-party software.

S80G TECHNICAL FEATURES

RECEIVER

Satellite signals tracked	GPS: L1 C/A, L1C, L2P, L2C, L5
	GLONASS: L1, L2
	BEIDOU: B1I, B2I, B3I, B1C, B2a, B2b
	GALILEO: E1, E5a, E5b, E6
	QZSS: L1, L2, L5
	IRNSS: L5
	SBAS
PPP	HAS, B2b PPP
Channels	1408
Position Rate	5Hz
Signal Reacquisition	< 1 s
RTK Signal Initialization	Typically < 10 s
Hot Start	Typically < 15 s
Initialization Reliability	> 99.9 %

POSITIONING[1]

Static Survey with external Antenna SA85	H: 5 mm + 1 ppm RMS V: 10 mm + 1 ppm RMS
RTK Network[2] with external Antenna SA85	H: 5 mm + 1 ppm RMS V: 10 mm + 1 ppm RMS
RTK Network[2] with standard Antenna	2 cm
PPP accuracy	< 20 cm
SBAS accuracy	< 60 cm

SYSTEM

CPU	Qualcomm QCM4290 Octa-core 2.0GHz
Operating System	Android 13.0
RAM	6GB
Flash Memory	128GB
External Storage	Supported, Micro SD

DISPLAY

Screen Size	8.0" HD
Resolution	1280 x 800 pixels
Brightness	800 nits
Touch Panel	Multi-touch, wet hands, gloves operable

CAMERA

Rear	16 MP
Front	8 MP

INTERNAL MODEM

GSM	WCDMA: B1/B2/B5/B8 TDD-LTE: B38/B39/B40/B41 FDD-LTE: B1/B2/B3/B4/B5/B7/B8/B12/B13/B17 /B20/B25/B28(b)/B66 Nano SIM card

INTERNAL SENSOR

Gyroscope	Yes
e-Compass	Yes
Accelerometer	Yes
Ambient light sensor	Yes

COMMUNICATION

I/O Connectors	Type C (Charging, Data, USB2.0 OTG)
Bluetooth	Bluetooth 5.1 BLE
Wi-Fi	Wi-Fi 2.4 GHz + 5 GHz
NFC	Yes

POWER SUPPLY

Battery	Lithium-ion 3.8V 8200mAh (removable)
Working Time[3]	Up to 8 hours in operating mode
Charge Time[3]	Typically 5 hours

PHYSICAL SPECIFICATION

Dimensions	249 mm x 146 mm x 28 mm
Weight	700 g (with battery)
Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	-40°C to 70°C (-40°F to 158°F)
Waterproof/Dustproof	IP67
Shock Resistance	1.2 m drop resistant
MIL-STD	MIL-STD-810H

STANDARD ACCESSORIES

GNSS RTK Module, GNSS Antenna, Hand strap, Soft bag, Charger & 4 adapters, Battery, Screen sticker

OPTIONAL ACCESSORIES

Pole, Pole bracket, SA85 GNSS Antenna, External Antenna cable

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. Battery life and charging time depend on the user's scenario. Time may vary based on factors such as screen brightness, apps, software, power management, battery condition, etc.



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

STONEX AUTHORIZED DEALER

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

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