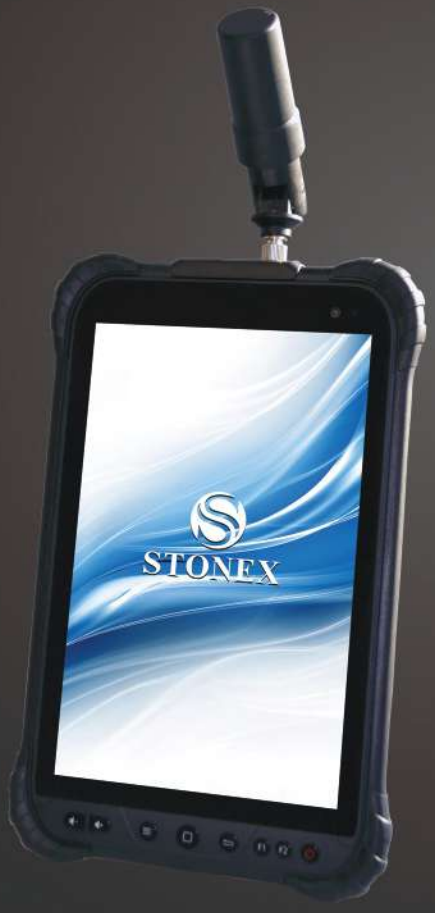
STONEX

S70G Handheld GNSS RTK

Rugged Android
GNSS RTK



S70G

Android Handheld GNSS RTK

S70G is a 4-constellation dual frequency GNSS system (GPS, GLONASS, GALILEO and BEIDOU) that allows to collect data and photos in the field, in an easy and fast way.
It is supplied with an antenna connected directly to the tablet which guarantees 2cm accuracy, but if required, connecting an external antenna it gains even more precise data.

S70G is equipped with Android 10 operating system and has a highly detailed WUXGA resolution (1920x1200) display for greater detail quality. The 8000mAh battery allows the instrument to work over 8 hours and the IP67 protection makes the device suitable for any environment. S70G is able to work in real time through the reception of RTK corrections, transmitted by a network of GNSS Permanent Stations.

Besides working in real time, it can also record raw data received from satellites for post-processing in the office. This allows the operator to achieve greater precision, enabling to work even in areas where there is not a good coverage of the GSM signal.

4-CONSTELLATION SYSTEM

Stonex S70G has a dual frequency GNSS chip integrated that uses all 4 Constellations: GPS, GLONASS, GALILEO, BEIDOU; all included, no additional cost.

ANDROID SYSTEM

The receiver is managed by the Android 10 operating system with a simple and intuitive interface.

HIGH QUALITY DISPLAY

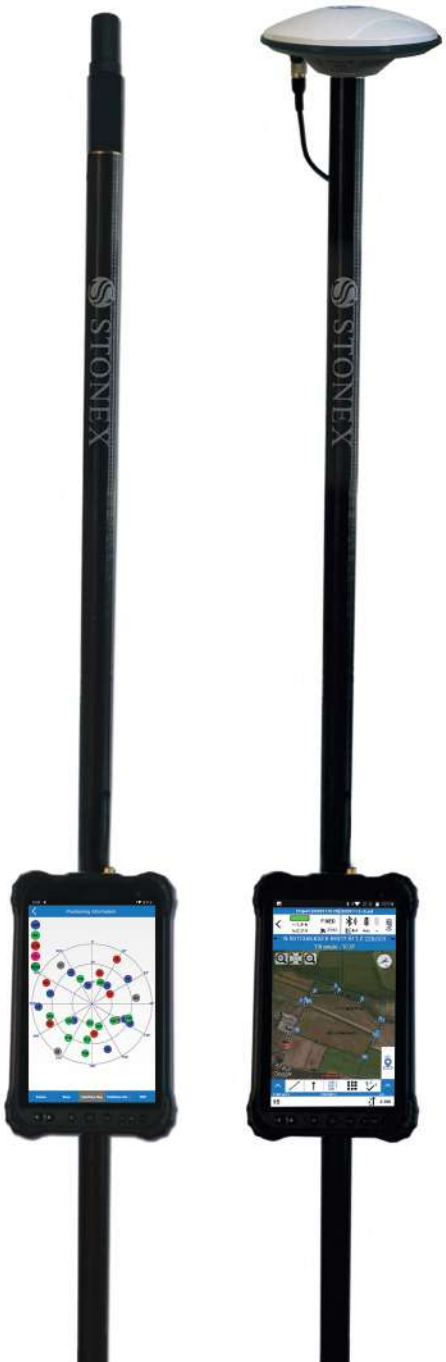
The high quality 8" display has a WUXGA resolution (1920x1200) with 500 Nits brightness.

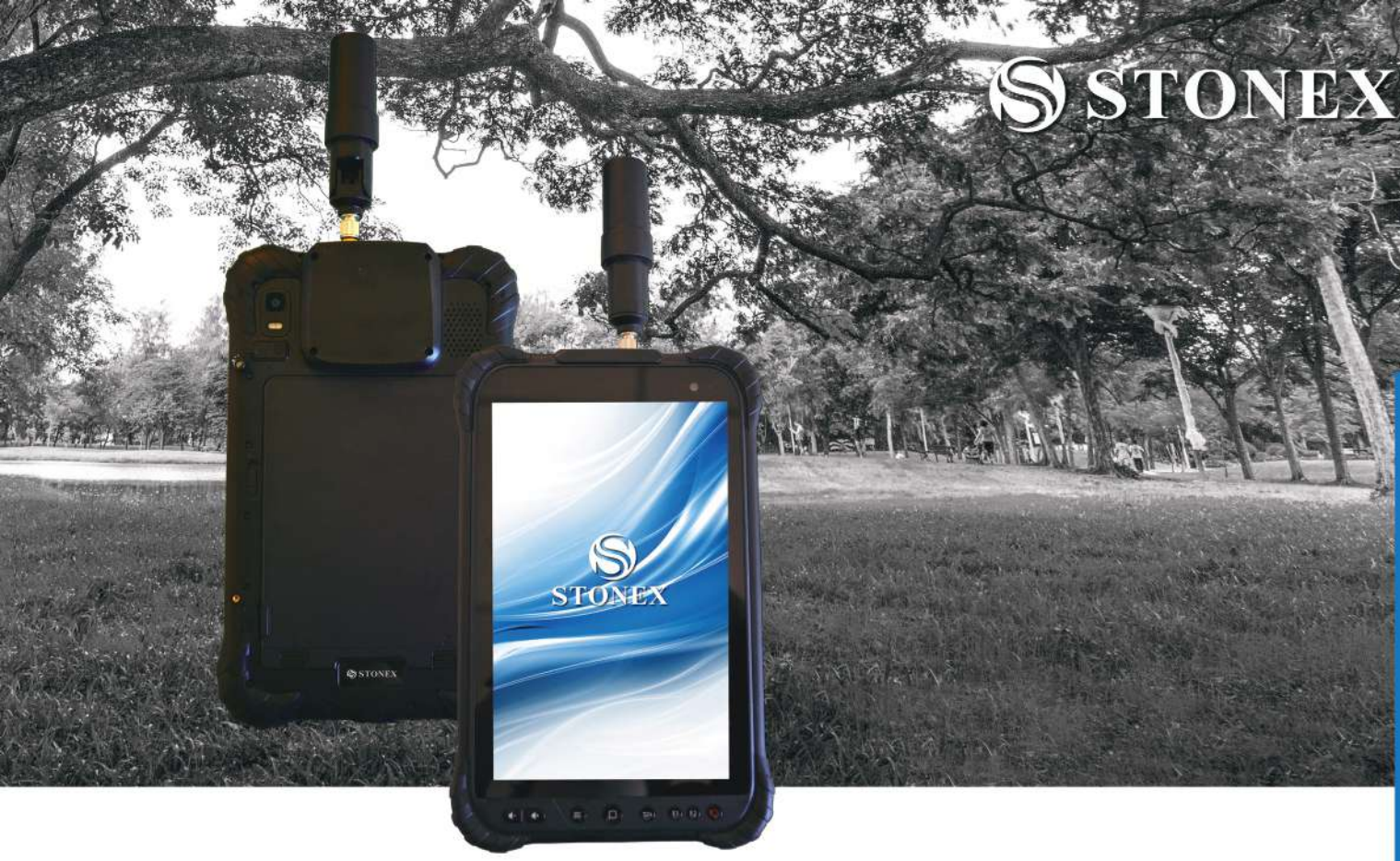
RTK AND POST-PROCESSING

S70G can work in real time with RTK corrections and simultaneously record the raw data for post-processing.

RUGGED

With IP67 Certification Stonex S70G will ensure operations in extremely tough environments.





STONEX SURVEYING SYSTEMS

S70G GNSS RTK

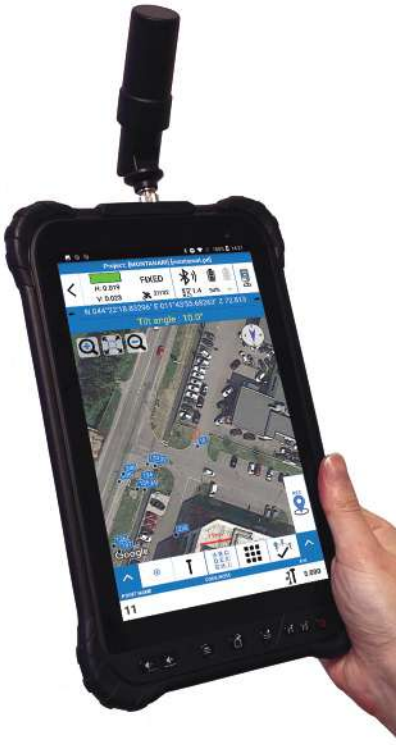
Compact and portable for GIS and Survey applications

cube·a

Cube-a is the Stonex surveying and mapping software designed and developed for Android platform.
Thanks to the flexibility of the Android environment, we have been able to create a simple and intuitive user interface that makes surveyors ready for any work, saving time and increasing productivity.
Full support for touch gestures and the possibility to install it on Smartphones and Tablets are the keys to the success of Cube-a. It also includes support for many languages and adjusts its interface as from the current system language setting.
Cube-a is a modular application which can be customized as needed: GNSS, Robotic and Classic Total Stations, GIS and 3D Modelling modules can be enabled to fulfill any customer need.

Cube-a is available in three versions:

- Cube-a for GNSS
- Cube-a for GNSS+GIS
- Cube-a for Mechanical and Robotic Total Stations.



cube·connector

This is an Android APP and it has been developed to connect Android devices to Stonex GNSS receivers.
In order to be connected to the GNSS, the Android Smartphone / Tablet 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 S70G, through Cube-connector, any customer can easily use his software for GIS / Survey in the Android operating system. Our application will manage all settings and configurations with integrated precision GNSS and will make the correct coordinates available for third-party software.

S70G TECHNICAL FEATURES

RECEIVER

Satellite signals tracked	GPS: L1 C/A, L2C
	GLONASS: L1, L2
	BEIDOU: B1, B2
	GALILEO: E1, E5b
	SBAS: L1
Channels	184
Position Rate	Up to 10 Hz
Protocol	RTCM 3.3
Signal Reacquisition	< 1 s
RTK Signal Initialization	Typically < 10 s
Hot Start	Typically < 15 s
Initialization Reliability	> 99.9 %

POSITIONING[1]

STATIC SURVEYING	
Horizontal	5 mm + 1 ppm RMS
Vertical	10 mm + 1 ppm RMS
REAL TIME KINEMATIC[2] – SA65 ANTENNA	
Fixed RTK Horizontal	10 mm + 1 ppm RMS
Fixed RTK Vertical	20 mm + 1 ppm RMS
REAL TIME KINEMATIC[2] – SA15 ANTENNA	
Fixed RTK Horizontal	20 mm + 1 ppm RMS
Fixed RTK Vertical	30 mm + 1 ppm RMS
SBAS accuracy	< 60 cm

SYSTEM

Processor	SDM632
Operating System	Android 10
RAM	4GB
Flash Memory	64GB
External Storage	SDHC supported Micro SD

DISPLAY

Display	8" TFT color, Capacitive
Resolution	1920 × 1200 WUXGA
Brightness	500 Nits

CAMERA

Rear	13 MP
Front	5 MP

INTERNAL MODEM

Network	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B17/ B20/B28 LTE TDD: B38/B39/B40/B41 WCDMA: B1/B2/B5/B8 GSM: B2/B3/B5/B8 Dual SIM card

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.

INTERNAL SENSOR

G-Sensor	Yes
E-Compass	Yes
Gyroscope	Yes
Light Sensor	Yes

COMMUNICATION

I/O Connectors	High speed USB Type-C OTG port Connector for external antenna
Bluetooth	4.1
Wi-Fi	802.11 a/b/g/n/ac
NFC	Yes

POWER SUPPLY

Battery	Rechargeable and replaceable 3.8 V – 8000 mAh
Working Time[3]	Up to 8 hours in operating mode Up to 12 hours in energy saving mode
Charge Time[3]	Typically < 5 hours

PHYSICAL SPECIFICATION

Dimensions	235 mm x 146 mm x 13 mm
Weight	690 g (with battery)
Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	-30°C to 70°C (-22°F to 158°F)
Waterproof/Dustproof	IP67
Shock Resistance	1.2 m drop resistant

STANDARD ACCESSORIES

Antenna GNSS SA15, Battery, Charger, Strap, Softbag

OPTIONAL ACCESSORIES

2m Carbon fiber pole, Antenna GNSS SA65, Antenna cable, Bracket for pole, Battery, Battery charger, Car charger adaptor

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