

SC600+ GNSS Receiver

CORS and RTK
Rover Receiver



SC600+ TECHNICAL FEATURES

RECEIVER

Satellite signals tracked	GPS: L1C/A, L2P, L2C, L5
	BEIDOU: B1I, B2I, B3I, B1C, B2a, B2b ¹
	GLONASS: L1, L2
	GALILEO: E1, E5a, E5b
	QZSS: L1, L2, L5
	SBAS
Channels	1408
Position Rate	20 Hz
Signal Reacquisition	< 1 s
Cold Start	< 30 s
Hot Start	Typically 10 s
Internal Memory	8 GB storage
External Memory	Up to 32 GB

POSITIONING²

HIGH PRECISION STATIC SURVEYING	
Horizontal	3 mm + 0.1 ppm RMS
Vertical	5 mm + 0.4 ppm RMS
CODE DIFFERENTIAL POSITIONING	
Horizontal	0.4 m RMS
Vertical	0.8 m RMS
SBAS POSITIONING ³	
RMS	< 1 m
REAL TIME KINEMATIC (< 30 Km) – NETWORK SURVEYING ⁴	
Fixed RTK Horizontal	8 mm + 1 ppm RMS
Fixed RTK Vertical	15 mm + 1 ppm RMS
Speed Accuracy	<0.03m/s RMS
Heading Accuracy	1 m baseline: 0.2 degrees

INTERNAL MODEM

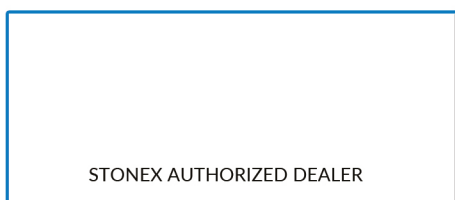
Band	LTE FDD: B1/B2/B3/B4/B5/B7/B8/B12/ B13/B18/B19/B20/B25/B26/B28
	LTE TDD: B38/B39/B40/B41
	UMTS: B1/B2/B4/B5/B6/B8/B19
	GSM: B2/B3/B5/B8
	Nano SIM card

INTERNAL RADIO

Type	Tx – Rx
Frequency Range	410 - 470 MHz 902.4 – 928 MHz
Channel Spacing	12.5 KHz / 25 KHz
Maximum Range	3-4 Km in urban environment Up to 10 Km with optimal conditions ⁵

1. It is possible to trace the signal with 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. Depends on SBAS system performance.
4. Network RTK precision depends on the network performances and are referenced to the closest physical base station.
5. Varies with the operating environment and with electromagnetic pollution.

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



USER INTERFACE

LEDs	Power, Bluetooth, Wi-Fi, GSM, Radio, Satellites
------	---

SYSTEM CONFIGURATION

Operating System	Linux
Processor	AM335X Sitara ARM Cortex – A8

COMMUNICATION

I/O Connectors	Power port, Lemo connector
	D-SUB 26 interfaces: <ul style="list-style-type: none"> ➤ 2 x RS485 serial port ➤ RS232 serial port ➤ USB 2.0 interface (OTG) ➤ Ethernet port 100 Mbit ➤ 1PPS output interface ➤ EVENT interface ➤ CAN interface
	2 GNSS antenna, TNC female
	Radio UHF antenna, SMA female
	LTE antenna, SMA female
Bluetooth	2.1 + EDR, V5.0
Wi-Fi	IEEE 802.11 a/ac/b/g/n
Web UI	To upgrade the software, manage the status and settings, data download, etc. via smart phone, tablet or other internet enabled electronic device
Reference outputs	Raw data, RTCM 3.x
Navigation outputs	NMEA 0183

NETWORKING SERVICES

NTRIP	Caster/Server/Client
Remote Management	By Stonex Software
FTP server	For data download
Email alerts	For low storage and other warning messages
NTP server	Support
Others	DDNS, VPN, SNMPD, Firewall

POWER SUPPLY

Voltage	12 to 28 V DC external power input
---------	------------------------------------

PHYSICAL SPECIFICATION

Dimensions	150 mm x 105 mm x 34 mm
Weight	550g
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 1.5 m drop on concrete floor with no damage
Vibration	Vibration resistant



STONEX®
Part of UniStrong

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