

SC600 GNSS Receiver

GNSS Receiver
Multipurpose



SC600 TECHNICAL FEATURES

RECEIVER

Satellite Tracked	GPS: L1C/A, L2P
	GLONASS: L1C/A, L2P
	BEIDOU: B1, B2
	GALILEO: E1, E5b
	QZSS: L1 C/A, L2C
	SBAS: L1
Channels	555
Position Rate	5 Hz or 20Hz
Signal Reacquisition	< 1 sec
RTK Signal Initialization	Typically < 10 sec
Hot Start	Typically < 15 sec
Initialization Reliability	> 99.9 %
Internal Memory	8 GB
External Memory	Up to 32 GB

POSITIONING¹

HIGH PRECISION STATIC SURVEYING	
Horizontal	3 mm + 0.5 ppm RMS
Vertical	5 mm + 0.5 ppm RMS
CODE DIFFERENTIAL POSITIONING	
Horizontal	0.25 m RMS
Vertical	0.45 m RMS
SBAS POSITIONING²	
Horizontal	0.50 m RMS
Vertical	0.85 m RMS
REAL TIME KINEMATIC (< 30 Km) - NETWORK SURVEYING³	
Fixed RTK Horizontal	8 mm + 1 ppm RMS
Fixed RTK Vertical	15 mm + 1 ppm RMS
Speed Accuracy	<0.03m/s RMS
Heading Accuracy ⁵	2m baseline: 0.08 degrees
	4m baseline: 0.05 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 ⁴

- 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.
- Depends on SBAS system performance.
- Network RTK precision depends on the network performances and are referenced to the closest physical base station.
- Varies with the operating environment and with electromagnetic pollution.
- Only with 20Hz version.

USER INTERFACE

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

Operating System	Linux
Processor	AM335 Sitara Cortex - A8

COMMUNICATION

I/O Connectors	Power port, Lemo connector
	D-BUB 26 interfaces:
	➤ 2 RS485 serial port
	➤ RS232 serial port
	➤ USB 2.0 interface
	➤ Ethernet port 100 Mbit
	➤ 1PPS output interface
	➤ Event interface
	2 GNSS antenna, TNC female
	Radio UHF antenna, SMA female
	LTE antenna, SMA female
Bluetooth	2.1 + EDR, V4.1
Wi-Fi	802.11 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 2.x, 3.x CMR, CMR+
Navigation outputs	NMEA 0183

NETWORKING SERVICES

Remote Management	By Stonex Software
FTP push	For data download

POWER SUPPLY

Voltage	12 to 28 V DC external power input
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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

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



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