

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
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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
Bluetooth	➤ Ethernet port 100 Mbit
	➤ 1PPS output interface
	➤ Event interface
Web UI	2 GNSS antenna, TNC female Radio UHF antenna, SMA female LTE antenna, SMA female
Reference outputs	2.1 + EDR, V4.1
Navigation outputs	802.11 b/g/n
	To upgrade the software, manage the status and settings, data download, etc. via smart phone, tablet or other internet enabled electronic device
	Raw data, RTCM 2.x, 3.x CMR, CMR+
	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



STONEX AUTHORIZED DEALER

STONEX®
Part of UniStrong

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