

SC2000 GNSS Receiver GNSS Reference Station



TECHNICAL FEATURES

DECEIVED.

RECEIVER	
	GPS: L1 C/A, L1C, L2C, L2P, L5
	GLONASS: L1 C/A, L2C, L2P, L3, L5
	BEIDOU: B1, B2, B3
Satellite Tracked	GALILEO: E1, E5 AltBOC, E5a, E5b, E6
	QZSS: L1 C/A, L1C, L2C, L5, L6
	IRNSS: L5
	SBAS: L1, L5
L-Band	Yes
Channels	555
Position Rate	5 Hz, optional up to 50 Hz
Signal Reacquisition	< 1 sec
RTK Signal Initialization	Typically < 10 sec
Hot Start	Typically < 15 sec
Initialization Reliability	> 99.9 %
Internal Memory	32 GB
internal Memory	Multi storage sessions
External Memory	Up to 32 GB
POSITIONING ¹ HIGH PRECISION STATION	^ SURVEYING
Horizontal	3 mm + 0.1 ppm RMS
Vertical	3.5 mm + 0.4 ppm RMS
CODE DIFFERENTIAL PO	
Horizontal	0.25 m RMS
Vertical	0.45 m RMS
SBAS POSITIONING ²	more in ancie
Horizontal	0.50 m RMS
Vertical	0.85 m RMS
	(< 30 Km) – NETWORK SURVEYING ³
Fixed RTK Horizontal	8 mm + 1 ppm RMS
Fixed RTK Vertical	15 mm + 1 ppm RMS
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INTERNAL RADIO ⁶	
Туре	Tx - Rx
Frequency Range	410 - 470 MHz

Туре	Tx - Rx
Frequency Range	410 - 470 MHz
Channel Spacing	12.5 KHz / 25 KHz
Maximum Range	3-4 Km in urban environment Up to 10 Km with optimal conditions⁴

INTERNAL MODEM

	GSM/GPRS/EDGE: 900/1800 MHz
Band	WCDMA: 900/2100 MHz
	LTE: 800/2600 MHz

USER INTERFACE

Buttons	7 keys, function keys + power key
LEDs	4 LEDs, which show the Bluetooth, differential transmission, static record, and power state respectively.
OLED display	64 x 256 pixels, mono color display

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

- 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 model w/o radio.
- 6. Only model with radio.

SYSTEM CONFIGURATION

Operating System	Linux
COMMUNICATION	
I/O Connectors	Power port, Lemo connector 3 Serial port, Lemo connector USB port, Lemo connector Ethernet port, RJ45 10/100 Mbit 1PPS, SMA female Event, SMA female OSC, MMCX female ⁵ GNSS antenna, TNC female LTE, SMA female UHF, TNC female ⁶ SIM, Mini card push-pop type
Bluetooth	2.1 GHz + EDR
Wi-Fi	802.11 b/g/n hotspot/client mode
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	RTCM 2.3, 3.0, 3.2, CMR, CMR+, RTCA, RINEX, BINEX
Navigation outputs	GGA, ZDA, GSA, GSV, GST, VTG, RMC, GLL

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

POWER SUPPLY

Battery	Rechargeable lithium battery 7.2 V – 13600 mAh
Voltage	9 to 28 V DC external power input
Working Time	Up to 20 hours
Charge Time	Typically 15 hours

PHYSICAL SPECIFICATION

TITISICAL SI ECII ICATI	CIV
Dimensions	222 mm x 164 mm x 79 mm
Weight	2.00 Kg
Operating Temperature	-40°C to 65°C (-40°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 1.2 m pole drop on concrete floor with no damage
Vibration	Vibration resistant









