STONEX

SC200

MULTIFUNCTIONAL GNSS RECEIVER
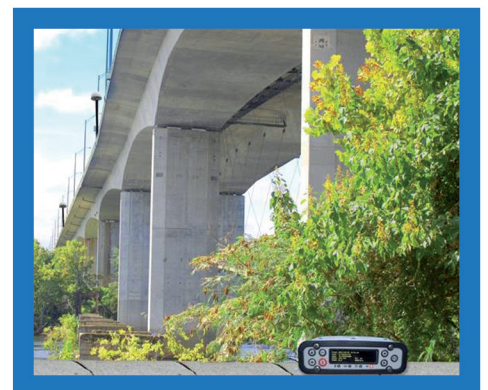## RECOMMENDED AS A REFERENCE STATION

The STONEX SC200 C.O.R.S. stations (Continuously Operating Reference Station) are GNSS multi-frequency receivers designed to be used either as stand-alone reference stations or as part of a GNSS stations' infrastructure.

STONEX SC200 is typically used as NTRIP server and is the ultimate equipment for all those jobs that are based on GNSS correction data acquisition, processing, distribution and management; moreover the SC200 supports also the recording of raw data with a maximum frequency of acquisition of 50Hz.

SC200 stations are sturdy and lightweight and can be powered either by DC battery or through AC for a GPS networks field use (ex. construction sites), managing many NTRIP rovers connected simultaneously; in addition, they are equipped with a 5000 mAh battery for 16 hours of uninterrupted use. The SC200 stations can be easily configured over an Internet user interface and are equipped with a large OLED display that makes configuration easy for any user since a software interface is not needed.

The 32 GB internal memory allows collecting and storing of a huge amounts of data. The available communication devices are: Wi-Fi, Bluetooth and 3G WCDMA modem.

SC200 C.O.R.S. stations can be used either for the start of a new infrastructure network or for an integration into existing networks. It is possible to use SC200 as a Rover for special applications (agriculture, machine control, bathimetry, structure monitoring, etc...) and with several software solutions according to the customer request.

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GNSS BOARD SPECIFICATIONS

GPS	Simultaneously L1 C/A, L2E, L2C, L5
GLONASS	Simultaneously L1 C/A, L1 P, L2 C/A (GLONASS M only), L2 P
SBAS	Simultaneously L1 C/A, L5
GIOVE-A[1]	Simultaneously or L1 BOC, E5A, E5B, E5AltBOC
GIOVE-B[1]	Simultaneously L1 CBOC, E5A, E5B, E5AltBOC
GALILEO[2]	Compliant
COMPASS	B1 (QPSK), B1- MBOC (6,1, 1/11), B1-2 (QPSK), B2 (QPSK), B2-BOC (10,5)
GNSS carrier phase measurements with very low noise with <1 mm precision in 1 Hz bandwidth	
Channels	220
Initialization time[3]	Typically , less then10 seconds
Initialization reliability [3]	Typically > 99.9%

PRECISION

Static Horizontal accuracy	2mm + 0.3ppm RMS
Static Vertical accuracy	3mm + 0.5ppm RMS

ENVIRONMENTAL REQUIREMENTS

Operational Temperature	-30°C to +65°C
Storage Temperature	-40°C to +75°C
Humidity	0% – 100%
Water and dust protection	IP65

INTERFACE

4 LED Indicators

256x64 OLED high brightness display

OUTPUT

1 USB OTG port

1 LAN Ethernet port

Network supported protocols: HTTP (web GUI), NMEA, GSOF, CMR... on TCP/IP or UDP, NTripServer

2 RS232 ports (one complete functions, one 3 poles)

1 Hz, 2 Hz, 5 Hz, 10 Hz, 20 & 50 Hz positioning outputs

Up to 50 Hz raw measurement and positioning outputs

Reference output: CMR, CMR+™, RTCM 2.x, RTCM 3.x, SCMRX

Navigation output: ASCII: NMEA-0183 GSV, AVR, RMC, HDT, VGK, VHD, ROT, GGK, GGA, GSA, ZDA, VTG, GST, PJT, PJK e
Binary: Trimble GSOF

1 pulse per second output

Event Marker input support

COMMUNICATION

100 Mb Ethernet Interface

802.11g WIFI

Bluetooth Connection

Wireless network WCDMA 3G

ELECTRICAL DATA

9 V- 18 V DC voltage Input

Power: minimum 2.3 W (with Ethernet) - maximum <9 W

Battery: 5000 mAH (16 hours estimated working time without external power)

MEMORY

32 GB memory

512 MB System memory + 512 MB RAM

Figures, specifications and descriptions subjected to modifications without notice

GIOVE-A and GIOVE-B test satellites receivers'technology uses the not limited information available on the public domain for testing purposes signal evaluation.
Complies with Galileo's directive OS SIS ICD, Issue 1, Rev 1 Sep 2010. The use of the Galileo's technology requires the purchase of a European Union business license.
It can be affected by weather conditions, interferences and satellites' geometry. Initialization's reliability is continuously monitored to ensure the highest quality.

IP65 Wi-fi CE RoHS2 2011/65/EU

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