STONEX

SC2200 GNSS Receiver

GNSS Receiver
for Reference Station



suite cube

SC2200 TECHNICAL FEATURES

RECEIVER

Satellite signals tracked	GPS: L1 C/A, L1C, L2, L2C, L2P, L5 GLONASS: L1, L2, L2C, L3 BEIDOU: B1, B2, B3, ACEBOC GALILEO: E1, E5ALTBOC, E5a, E5b, E6 QZSS: L1 C/A, L1C, L2C, L5, L6 IRNSS: L5 SBAS: L1 C/A (EGNOS/MSAS GAGAN/SDCM), L1 C/A and L5 (WAAS)
Support L-Band	Yes
Channels	Up to 800 ch
Position Rate	Up to 100 Hz
Signal Reacquisition	< 1 s
Cold Start	Typically 60 s
Hot Start	Typically 10 s
Internal Memory	32 GB Multi storage sessions
External Memory	TF card / USB Flash Drive / SSD (Unlimited Bytes)
Carrier Phase noise measurement	< 0.5 mm RMS
Multipath, jamming and interference mitigation technology	Yes
Number of parallel recording session	Up to 12
Spectrum analyzer	Yes
SNMP protocols support	Yes

POSITIONING[1]

HIGH PRECISION STATIC SURVEYING	
Horizontal	2.5 mm + 0.1 ppm RMS
Vertical	3.5 mm + 0.4 ppm RMS
CODE DIFFERENTIAL POSITIONING	
Horizontal	0.25 m RMS
Vertical	0.45 m RMS
SBAS POSITIONING[2]	
Horizontal	0.50 m RMS
Vertical	0.85 m RMS
REAL TIME KINEMATIC (< 30 Km) – NETWORK SURVEYING[3]	
Fixed RTK Horizontal	8 mm + 1 ppm RMS
Fixed RTK Vertical	15 mm + 1 ppm RMS

INTERNAL MODEM

Band	GSM/GPRS/EDGE WCDMA/LTE

USER INTERFACE

Buttons	4 keys, function keys + power key
LEDs	Power, data record, Bluetooth, differential transmission
OLED display	64 x 256 pixels, mono color display

SYSTEM CONFIGURATION

Operating System	Linux
Processor	AM3354

1. 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.
2. Depends on SBAS system performance.
3. Network RTK precision depends on the network performances and are referenced to the closest physical base station.

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

STONEX AUTHORIZED DEALER

COMMUNICATION

I/O Connectors	Power, Lemo connector Power Over Ethernet (POE) 2 Serial port, Lemo connector 1 Serial port, DB9 (possible RTK via external UHF radio) USB port, Lemo connector Ethernet port, RJ45 100/1000 Mbit 1PPS, SMA female Event, SMA female OSC, TNC female GNSS antenna, TNC female LTE, SMA female Nano SIM card, push-pop type TF card
Bluetooth	2.1 + EDR, V4.1
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.x, 3.x CMR, CMR+, 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
NTP server	Support
Firewall	Blocking sources of IP addresses
Http/Https	Secure access to the web UI
Met sensor	Vaisala connection supported
Others	DDNS, VPN Client, SNMPD, FTP/FTPS (client) Push, TCP/IP

POWER SUPPLY

Battery	Rechargeable lithium battery 7.2 V – 13.600mAh
Voltage	9 to 28 V DC external power input
Working Time	Up to 24 hours
Charge Time	Typically 15 hours

PHYSICAL SPECIFICATION

Dimensions	222 mm x 164 mm x 79 mm
Weight	2 Kg
Operating Temperature	-55°C to 65°C (-67°F to 149°F)
Storage Temperature	-55°C to 80°C (-67°F to 176°F)
Waterproof/Dustproof	IP67 IP68 (Optional)
Humidity protection	100%
Shock Resistance	Designed to endure to a 1.2 m pole drop on concrete floor with no damage
Vibration	Vibration resistant



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