STONEX

S8

S8 GNSS RECEIVER, A NEW OPPORTUNITY FOR SURVEYORS

Internal radiomodem with selectable output power 0.5/1 W

New front panel with indicators led for individual functions to indicate the status of receiver

The STONEX® S8 is one among the evolution of the range of GNSS receivers designed and manufactured by STONEX.

As with the S9III and S7 Series, S8 provides new opportunities for the Surveyor's needs, featuring top performances at an exceedingly reasonable cost.
STONEX S8 hosts a complete range of features and flexibility. The standard STONEX S8 receiver features an inbuilt internal UHF transmitting and receiving radio modem, GSM/GPRS module for GPS network connection facilitating direct communication, and Bluetooth™ device for wireless communication.

Designed in Italy with an aluminum lower casing, the STONEX S8 allows a better heat dissipation generated from the internal radio modem to increase the performance and durability.

STONEX S8 receivers ensure a quick and easy setup in all working modes. The broader compatibility of STONEX S8 with S9III, S9II, and with Trim talk™ protocol, lets you to combine S8 as a TX Base / Rover unit with other STONEX and non STONEX GNSS receivers.

KEY FEATURES

CONFIGURABLE
Internal UHF TX/RX radiomodem and GPRS/GSM

CERTIFICATED
International certifications which include the accessories, batteries and battery charger with high standards; IP67 waterproof degree

POWERFUL
Internal radiomodem with selectable output power 0.5/1 W

NEW DESIGN
New, optimized Italian design structure: better elimination of heat and increased the EMC behavior of the instrument

COMPATIBILITY
Compatible with Carlson SURV CE and the most known mobile survey software

TECHNICAL FEATURES S8

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Receiver	
Channels[1]	120
Satellite tracked	GPS: Simultaneous L1, L2, L2C
	GLONASS: Simultaneous L1, L2
	COMPASS: reserved[2]
	SBAS: Simultaneous L1 C/A, L5
Position rate	Up to 5Hz(higher frequency optional)
Signal recapture	< 1 sec
Hot start	typically < 10 sec
Cold start	typically < 15 sec
Internal memory	256 Mb
Micro SD Card	4 Gb Internal Memory (Over 60 days of raw static data storage with recording sample every 1 second)
Accuracy specifications[3]	
Static horizontal	5 mm ± 0.5 ppm (RMS)
Static vertical	10 mm ± 0.5 ppm (RMS)
Fixed RTK horizontal	10 mm ± 1 ppm (RMS)
Fixed RTK vertical	20 mm ± 1 ppm (RMS)
Single Point L1 L2 positioning	1.2 m (3D RMS)
SBAS positioning[4]	typically < 5 m (3D RMS)
Code differential positioning	0.25m (3D RMS)
Communication	
Connectors I/O	7-pins Lemo and 5-pins Lemo interfaces. Multicable with USB interface for connecting with PC
Bluetooth device	2.4 Ghz class II: maximum range 50 m
Reference outputs	CMR, CMR+, RTCM 2.1, 2.3, 3.0, 3.1
Navigation outputs	Navigation output support for NMEA-0183 and detailed NovAtel ASCII and binary logs.
Internal radio modem (Optional on S8 N)	
Frequency range	410 - 470 MHz
Channel spacing	25 Khz
Output power	0.5 -1 W
Maximum range	About 3-4 Km (urban environment)

GPRS/GSM module	
Band	Quad-Band GSM 850/900/1800/1900 MHz GPRS Multislot class 12 GSM release 99 EDGE (E-GPRS) Multislot class 10
Output power	Class 4 (2W) for EGSM850 Class 4 (2W) for EGSM900 Class 1 (1W) for GSM1800 Class 1 (1W) for GSM1900
Power supply	
Battery	2500mAh high capacity Lithium battery, Voltage 7.2V
Voltage	9 to 15V DC external power input with over-voltage protection
Working time in static mode (GPS+GLONASS)	7 hours
Working time in GSM RTK with cable connection (GPS+GLONASS)	6.5 hours
Working time in GSM RTK with Bluetooth connection (GPS+GLONASS)	around 4 hours
Charge time	typically 7 hours
Power consumption	< 3.8 W
Remaining time battery light blinking	1 hour
Physical specification	
Weight	1.2 Kg with internal battery, radio standard UHF antenna
Operating temperature	-30°C to 60°C (-22°F to 140°F) (internal radio TX 50°C)
Storage temperature	-40°C to 80°C (-40°F to 176°F)
Waterproof/Dustproof	IP67. Protected from temporary. immersion to depht of 1 meter and from 100% humidity
Shock resistance	Designed to survive a 2 m pole drop on concrete
Vibration	Vibration resistance
Winter Grade Option	Operating at -40°C (-40°F)

[1]Tracks up to 60 L1/L2 satellites.[2]Designed for Compass Phase 3 B1 compatibility.[3]Typical values. Performance specifications subject to GPS system characteristics, US DOD operational degradation, ionospheric and tropospheric conditions, satellite geometry, baseline length, multipath effects and the presence of intentional or unintentional interference sources.[4]GPS only.

Bluetooth FC CE RoHS 2002/95/EC

UNI EN ISO 9001:2008 APRIL 2014 REV-01

STONEX AUTHORIZED DEALER

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