STONEX

S9III

S9 THIRD GENERATION GNSS RECEIVER FOR PROFESSIONAL SURVEYORS

The internal radiomodem allows to reach up to 4 Km in the urban area with selectable output power 0.5/1 W

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

TThe new STONEX® S9 III is the updated version of the worldwide known STONEX S9 II.

With its new firmware design S9 III improves performances on the field for professional survey.

S9III combines a compact and light body with an embedded 220 channels GNSS board, accurate and fast in satellite fixing, an internal UHF transmitting and receiving radio, GSM/GPRS module for network connection and direct call, and a Bluetooth device for wireless purposes.

A new Italian design with an aluminum bottom cover allows a better heat dissipation for internal radiomodem.

IP67 certification ensures an optimal watertight for mechanical parts, a high shock resistance and completely sealed against dust.

S9III receiver ensures a quick setup for all required working mode.

KEY FEATURES

CONFIGURABLE
Internal UHF TX/RX radiomodem and GPRS, GPS Network ready rover

CERTIFICATED
More international certifications (even on the accessories, as batteries and battery charger) - IP67 waterproof degree

POWERFUL
Internal radiomodem allows to reach up to 4 Km in the urban area with selectable output power 0.5/1 W

NEW DESIGN
Aluminium bottom cover for a berrer elimination of heat, increased EMC behavior of the instrument, new front panel with led's indicator

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

TECHNICAL FEATURES S9 III

STONEX

Receiver	
Channels	220
Satellite tracked	GPS: Simultaneous L1 C/A, L2E, L2C,L5
	GLONASS: Simultaneous L1 C/A, L1P, L2 C/A (GLONASS M Only), L2P
	SBAS: Simultaneous L1 C/A, L5
	GIOVE-A[1] /GIOVE –B[1]:Simultaneous L1 BOC, E5A, E5B, E5AltBOC1
	GALILEO[2]: Compliant
	COMPASS: B1 (QPSK), B1- MBOC (6,1, 1/11), B1-2 (QPSK), B2 (QPSK), B2-BOC (10,5)
Position rate	Up to 20 Hz
Signal recapture	< 1 sec
RTK signal initialization	typically < 10 sec
Initial capture time	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	3 mm ± 0.5 ppm (RMS)
Static vertical	5 mm ± 0.8 ppm (RMS)
Fixed RTK horizontal	1 cm ± 1 ppm (RMS)
Fixed RTK vertical	2 cm ± 1 ppm (RMS)
Code differential posit.	0.45 m (CEP)
Stand Alone RTK posit.	1.5 m (CEP)
SBAS positioning[4]	typically < 5 m (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 is 50 m
Reference outputs	CMR, CMR+, RTCM 2.3, RTCM 3.0, RTCM 3.1
Navigation outputs	ASCII (NMEA-0183) GSV, AVR, RMC, HDT, VGK, VHD, ROT, GGK, GSA, ZDA, VTG, GST, PJT, PJK, BPQ, GLL, GRS, GBS.
Internal radio modem (Optional on S9III N)	
Frequency range	410 - 470 MHz
Channel spacing	25 Khz
Emitting 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)

Bluetooth FC CE RoHS 2002/95/EC

Specifications subject to change without notice

[1] Galileo GIOVE-A and GIOVE-B test satellite support uses information that is unrestricted in the public domain and is intended for signal evaluation and test purposes.

[2] Developed under a License of the European Union and the European Space Agency.

[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.

STONEX AUTHORIZED DEALER

STONEX® EUROPE srl

Via Cimabue 39 - 20851 Lissone (MB) Italy
Phone +39 039 2783008 Fax +39 039 2789576
www.stonexpositioning.com
info@stonexpositioning.com

UNI EN ISO 9001:2008 MARCH 2014 REV-03