

RSAT-Lite GNSS Receiver



RSAT-Lite is a mini portable multifunctional GNSS receiver, a new generation of measurement engine supporting tilt measurement, built-in 4G Modem, Bluetooth and WIFI. It adopts a new appearance design, magnesium alloy structure and Linux operating system. It is an economical and portable geodesic GNSS receiver.

Characteristic

Linux intelligent system

ARM Cortex-A7 + Linux, the intelligent system platform, brings efficient computing and unlimited expansion of product functions to users.

Multi constellation

RSAT-Lite with its 1408 channels, RSat Lite provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BDS, GALILEO, QZSS, SBAS and IRNSS) are included.

Tilt measurement

RSAT-Lite has the IMU module. Fast initialization and up to 60° inclination.

Combined antenna

The new four in one antenna integrates GNSS, WIFI, Bluetooth and 4G, with smaller volume and better signal.

4G Modem

RSAT-Lite has an internal 4G Modem that operates with more cellular network signals, a fast internet connection is guaranteed.

Long endurance

Built in high-capacity lithium battery ensures continuous working time of more than 16 hours under normal operation.

IP67 Design

Industrial design, solid magnesium alloy shell, in line with IP67 design requirements, safe and reliable.



Advanced Surveying Instruments (India) Pvt. Ltd.

H-10/103, 1st Floor, Express Arcade, Near P. P. Trade Center, Netaji Subhash Place, Pitampura, New Delhi - 110034, INDIA

Contact No. +91 – 9910697973, +91 – 11- 47014143

Email ID: balinder2kumar@yahoo.com, mail@asisurveyinginstruments.com

<https://www.asisurveyinginstruments.com> , <https://www.robustsurveying.com>

ITEM		SPECIFICATION	REMARKS
HARDWARE SYSTEM		ARM Cortex-A7 1.8GHz	
OS		Linux	
GNSS	GPS	L1C/A, L1C, L2P(Y), L2C, L5	PPP-B2b, PPP-E6, SBAS supported
	GLONASS	L1, L2, L3	
	BDS	B1I, B2I, B3I, B1C, B2a, B2b	
	GALILEO	E1, E5a, E5b, E6	
	QZSS	L1, L2, L5	
	SBAS	L1	
	NavIC (IRNSS)	L5	
	Channel	1408	
	Data format	NMEA-0183	
	Correction I / O Protocol	RTCM3.X	
	Data update frequency	5Hz (max)	
	Recapture Time	<1s	
	Cold Boot	<40s	
POSITIONING ACCURACY	Single (RMS)	Horizontal: 1.5m Vertical: 2.5m	
	DGPS (RMS)	Horizontal: 0.4m Vertical: 0.8m	
	RTK (RMS)	Horizontal: $\pm(8\text{mm}+1\text{ppm})$ Vertical: $\pm(15\text{mm}+1\text{ppm})$	
	Time Accuracy (RMS)	20ns	
	Static Accuracy (RMS)	Horizontal: $\pm(2.5\text{mm}+0.5\text{ppm})$ Vertical: $\pm(5\text{mm}+0.5\text{ppm})$	
	Speed Accuracy (RMS)	0.03m/s	
	Tilt compensation Accuracy (within 60°)	<2cm	
SYSTEM	Bluetooth	BR+EDR+BLE	
	WIFI	802.11 b/g/n	
	Network	LTE FDD: B1/2/3/5/8, LTE TDD: B38/39/40/41, GSM: 900/1800MHz	
	Storage	32GB Storage	
INDICATOR	Bluetooth Indicator	Show Bluetooth status	
	Satellite Indicator	Show position status	
	Data link Indicator	Show differential signal status	
	Power Indicator	Show power status	
BATTERY	Battery	3.7V, 9600mAh	
	Work time	More than 16 hours (Typical, Rover, GSM)	The static working mode 24 hours under full power
	Charge	MTK PE+1.1/2.0 9V/2A USB PD 12V/1.25A, 5V/3A	Fast charging adapter & dynamically adjust charging current
ENVIRONMENTAL	Work Temperature	-20℃~+60℃	
	Storage Temperature	-40℃~+85℃	
	Shock	Withstand 1.5M pole drop	
	Protection	IP67	
PHYSICAL	Material	Magnesium alloy main body, ABS/PC top cover	
	Dimension	100.5mm*100.5mm*69mm	Weight: 600g