

# ROBUST GNSS

# RTK

# RSat 2

## Characteristic

- 1408 channels
- Centimeter level
- 4G+WIFI+Bluetooth
- Adjustable power
- Combined antenna
- Linux intelligent system
- 32GB, user storage space 24GB
- 5W Radio, transmission distance maximum 16KM

**Size**(mm)



 [balinder2kumar@yahoo.com](mailto:balinder2kumar@yahoo.com)

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



# RSat 2 GNSS Receiver

RSat 2 is a high-performance GNSS receiver that provides an easy-to-use solution for users. You can forget the bubble when you use Robust RSat 2, which support the original tilt compensating GNSS solution. Multi constellation and frequency tracking always gives a Fixed solution for your job. The durable IP68 design makes it possible to work in extreme environments.



---

## Linux intelligent system

Qualcomm MDM9607Cortex-A7+Linux, the intelligent system platform, brings efficient computing and unlimited expansion of product functions to users.

---

## Multi constellation

With its 1408 channels, RSat 2 provides an excellent on board real time navigation solution with high accuracy. All GNSS signals (GPS, GLONASS, BDS, GALILEO, QZSS) are included.

---

## Tilt measurement

RSat 2 has the IMU technology. Fast initialization and up to 60° inclination.

---

## 4G Modem

RSat 2 has an internal 4G modem that operates with more Cellular network signals. A fast internet connection is guaranteed.

---

## Combined antenna

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

---

## Long endurance

Built in high-capacity lithium battery ensures continuous working time of more than 20 hours under normal operation.

---

## Characteristic

- Qualcomm MDM9607Cortex-A7 + Linux intelligent system
- BDS, GPS, GLONASS, Galileo, QZSS
- Centimeter level positioning
- Support tilt measurement and meet the positioning accuracy of less than 2cm within the tilt range of 60°
- Support 4G, Radio, Bluetooth and WiFi
- Built in high-capacity lithium battery, ultra long life
- Industrial design, solid magnesium alloy shell, in line with IP68 design requirements, safe and reliable

# RSat 2 GNSS Receiver

Item	Specification	remarks	
<b>Hardware system</b>	Qualcomm MDM9607Cortex-A7		
<b>OS</b>	Linux		
<b>Channel</b>	1408 channels		
<b>GNSS</b>	GPS	L1 C/A, L1C*,L2P(Y), L2C, L5	L1C and B2b Supported PowerfulFunction (ACTIVATED)
	GLONASS	L1, L2	
	BDS	B1I, B2I, B3I, B1C, B2a, B2b*	
	GALILEO	E1, E5a, E5b	
	QZSS	L1, L2, L5	
	Data format	NMEA-0183	
	Correction I / O Protocol	RTCM 2.X,RTCM3.X	
	Data update frequency	5Hz, 10Hz & 20Hz	
	Recapture Time	<1s	
	Cold Boot	<30s	
<b>POSITIONING ACCURACY</b>	Single(RMS)	Horizontal:1.5m vertical: 2.5m	
	DGPS(RMS)	Horizontal:0.4m vertical:0.8m	
	RTK(RMS)	Horizontal: ±(8mm+1ppm) Vertical: ±(15mm+1ppm)	
	Time Accuracy(RMS)	20ns	
	Static Accuracy(RMS)	Horizontal : ±(2.5mm+0.5ppm) Vertical:±(5mm+0.5ppm)	
	Speed Accuracy(RMS)	0.03m/s	
	Tilt compensation Accuracy(within 60°)	<2cm	
<b>SYSTEM</b>	Bluetooth	V2.1+EDR / V4.0dual mode	
	WIFI	802.11 b/g/n	
	Network	LTE FDD: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28 LTE TDD: B38/39/40/41 WCDMA: B1/2/4/5/6/8/19 GSM: B2/3/5/8	
	Data Radio	Frequency:410~470MHz Protocol :TRIMTALK,TRIMMK3,SOUTH,TRANSEOT RF transmit power: 1W/5W Air baud rate :9600 / 19200bps	
	Storage	32GB,User Storage Space 24GB	
<b>INDICATOR</b>	Power Indicator	Show power status	
	Bluetooth Indicator	Show Bluetooth status	
	Satellite Indicator	Show position status	
	Data Link Indicator	Show differential signal status	
	Network Indicator	Show network status	
Battery	7.4V, 6500mAh		

# RSat 2 GNSS Receiver

<b>BATTERY</b>	Work time	More than 20 hours (typical, Rovermode, Build-in network chain)	
	Charge	USB PD 12V/2A 5V/3A	
<b>ENVIRONMENTAL</b>	Work Temperature	-20°C~+60°C	
	Storage Temperature	-40°C~+85°C	
	Shock	Withstand 1.5M pole drop	
	Protection	IP68	
<b>PHYSICAL</b>	Material	Magnesium alloy main body, ABS/PC top cover	
	Dimension	Φ143.5mm*90.7mm	
	Weight	≤0.75kg	TBD
<b>A Full Set</b>	T20 Device	1 SET	
	Power adapter	1 PCS	
	USB A To Type-C	1 PCS	
	Radio Antenna	1PCS	

## ADVANCED SURVEYING INSTRUMENTS (INDIA) PVT. LTD.

Address: 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, balinder2kumar@gmail.com & mail@asisurveyinginstruments.com  
<http://www.asisurveyinginstruments.com>



# ROBUST GNSS (RTK DGPS)



balinder2kumar@yahoo.com



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

## RSat 2 Multi-Frequency Characteristic

- 1408 channels
- 32GB, User storage space 24GB
- Centimeter level
- 4G + Bluetooth + WiFi + Radio
- Combined antenna
- Adjustable power
- Quick positioning function
- Long endurance
- Linux intelligent system



GNSS Receiver



ADVANCED SURVEYING INSTRUMENTS (INDIA) PVT. LTD., New Delhi, INDIA