

# QUASAR R93i



## Tri-freq Algorithm

Picking 3 optimal Beidou signals for speedy calculation.

## 5 constellations

GPS, GLONASS, BEIDOU, GALILEO, QZSS

“Fixed!”

fast and easily

1598

channels



System-on-Chip technology

40 nanometer process

16

frequencies

Industry-leading small power consumption

Adopting SoC board Mk-803, the New QUASAR R93i now delivers an incomparable performance not only on fixing speed, accuracy, flexibility, but also reliability in touch condition with even smaller power consumption.



Immune to magnetic interference and calibration-free, Rimu 2.0 improves the fixing speed and accuracy by 30%,



The new internal UHF radio X-link now offers an optimal solution to this palm-size receive, delivering a futher and move stable differential data link, and extending the working range to 10-15km.

## POSITIONING

Board Model	Mk-803
Channels	1,598
GPS	L1 C/A, L2C, L2P, L5
GLONASS	L1 C/A, L1P, L2C/A, L2P
BEIDOU	B1, B2, B3
GALILEO	E1, E5A, E5B, E6, E5 AltBOC
QZSS	L1, L2C
L-band	Yes
Positioning Rate	1-20Hz

## ACCURACY

Code Differential	H: 0.25m ± 1ppm (rms) V: 0.50m ± 1ppm (rms)
Static	H: 2.5mm ± 0.5ppm (rms) V: 5mm ± 0.5ppm (rms)
Real-time Kinematic	H: 8mm ± 1ppm (rms) V: 15mm ± 1ppm (rms)
Network RTK	H: 8mm ± 0.5ppm (rms) V: 15mm ± 0.5ppm (rms)

## IMU MEASUREMENT

Tilt Angle	Maximum 60°
Accuracy	10mm + 0.7mm/°

## DATA STORAGE

Type & Storage	SSD 8GB External USB Pen drive
Data Transfer	USB Transfer Supports FTP/HTTP download
GPS Output Format	CMR+, sCRMx, RTCM 2.x, RTCM 3.x, NMEA 0183, PJK plane coordinates, binary code
Network Model	VRS, FKP, MAC Ntrip fully supportable

## COMMUNICATION

I/O	5pin LEMO external power + RS232 Type-C (OTG+Fast Charge+Ethernet) Radio antenna TNC interface
UHF Radio Module	X-link 2W 410-470MHz
Protocol	TrimTalk 450s, TrimMark 3, PCC, EOT, SOUTH Farlink
Cellular	Optional
WiFi	802.11b/g/n Hotspot/Data Link
Bluetooth	Bluetooth 2.1 + EDR and 4.0
NFC	<10cm

## INTERFACES

Button	1
LED Indicator	Bluetooth, Data Link, Satellite, Power

## POWER SUPPLY

Battery	Internal Li-on Battery 7.4V, 6,800mAh
Operating Time	Rover Mode 15h

## PHYSICAL

Dimension	85mm(H), 135mm (W)
Weight	970g
Operating Temp.	-45-75°C
Proof	IP68 2m drop on hard surface 40G 10ms sawtooth wave

### ITEM LIST (ROVER)

Receiver  
Carrying Case  
Charger  
Type-C Cable  
Radio Antenna  
Carbon Fiber Pole  
HI Measuring Plate  
Connector

### ITEM LIST (BASE)

Receiver  
Carrying Case  
Charger  
Type-C Cable  
Radio Antenna  
30cm Pole  
HI Measuring Plate  
Connector



## Data Collector H6

Android 8.1  
5" HD screen  
6GB RAM/64GB ROM  
Full Keyboard  
IP67