

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