

Measuring GNSS Receiver G970 II



G970II is a newly designed (more compact) internal structure by adopting a new combined antenna and integrating GNSS, WIFI, Bluetooth and 4G. The system-level optimization of the whole machine brings a purer internal electromagnetic environment and better signal performance. The main body is made of pure magnesium alloy and has better electromagnetic shielding performance and a lighter and stronger body, which ensures stable and reliable operation and use of the equipment.

Both the host and the handbook have built-in 4G full Netcom network modules, which can be connected to different operators' mobile networks. In the case of different signal strengths in the work area network, a better network can be selected for access and the data transmission is more secure. The host comes standard with two large-capacity smart lithium batteries which are universal with the handbook battery. It comes with a power detection chip and knows the remaining power with one button. Dual battery and hot switching give you a never-ending measurement experience.

Product Feature

- Support 4 star full-band satellite signal reception
- Athena RTK Engine
- Support aRTK stellar chain endurance technology
- Support China precision L-band satellite signal reception, enabling global single-machine centimeter-level positioning
- Support China Mobile/China Unicom/Telecom, 2/3/4G network

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GNSS Performance

Number of channels: 555

Satellite reception:

BDS B1, B2, B3

GPS L1CA, L1P, L1C, L2P, L2C, L5

GLOASS G1, G2, P1, P2

GALILEO E1BC, E5a, E5b

QZSS L1CA, L2C, L5, L1C

SBAS L1 CA, L5

L-Band

Precision Index

Static: Plane 2.5mm±1ppm, elevation 5mm±1ppm

RTK: Plane 8mm±1ppm, elevation 15mm±1ppm

DGNSS: <0.5m

China precision H10: 8cm

Initialization time: 8 seconds

Initialization reliability: 99.9%

System Configuration

Operating system: Linux

Built-in storage: 8GB, supports for MicroSD storage expansion

WiFi: 802.11 b/g/n

Bluetooth: V2.1+EDR/V4.1 dual mode, Class2

Electronic bubble: support

Tilt measurement: support

Voice: Support TTS voice broadcast

Data Link

UHF radio: built-in transceiver integrated radio, 1W/2W adjustable

Radio protocol: support GeoTalk, SATEL, PCC-GMSK, TrimTalk, TrimMark, SOUTH

Network: Full Netcom 4G, supporting China Mobile/Telecom/Unicom, 2/3/4G network

Physical Characteristic

Interface: one TNC radio antenna, one 5PIN (power + RS232), one 7PIN (USB + RS232)

Button: one power button

Indicator light: four LED indicators

Size: $\Phi 156\text{mm} \times \text{H}76\text{mm}$

Weight: 1.2kg

Power Supply Characteristic

Battery capacity: 7.2, 24.5Wh (two pieces as standard)

Use time: Static: 15h Rover: 12h

External power supply: DC 9-18V with over-voltage protection

Environmental Index

Working temperature: $-30^{\circ}\text{C} \sim +65^{\circ}\text{C}$

Storage temperature: $-40^{\circ}\text{C} \sim +80^{\circ}\text{C}$

Waterproof and dustproof: IP67

Humidity: resistant to 100% condensation