

SPECIFICATIONS

GNSS

Channels	1408
GPS	L1c/a/l2p(y)/l2c/l5
Glionass	L1/l2
BDS	B1i/b2i/b3i/bic/b2a/b2b
Galileo	E1/e5a/e5b/e6
Qzss	L1/l2/l5/l6
SBAS	L1
Navic	L5
L Band	B2b Ppp & Has (galileo)
Data Format	RTCM2.x:RTCM3.x
Gps Data Output	Nmea 0183
Data Updating Rate	50hz (max)
Initialization Time	<5s (typically)
Initialization Reliability	99.99%

Positioning Accuracy

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(RMS)	Horizontal: ±(2.5mm+1ppm) Vertical : ±(5mm+1ppm)
Speed Accuracy (RMS)	0.03m/s
IMUAccuracy	Within 60°less Than 2cm
IMUAngle	0° ~ 120°

Communication

Bluetooth	SPP3.0 +BLE 5.0
WIFI	802.11 B/g/n
Network	LTE-TDD B38/b40/b41 LTE-FDD B1/b3/b5/b7/b8/b20 UMTS/HSPA+ B1/b8 Gsm/gprs/edge 900/1800 Mhz
Radio	Power : 2w Frequency: 410-470MHZ
Protocol	Trimtalk450s, trimmarkIII, South9600, south19200, Lora
Communication Range	Typically 5km. Lora Function Reach To 10--12km
Inner Memory	32g

Indicator

Power	Power on/ off
LED	Satellite / corrections / Power/ Bluetooth

Power

Battery	7.4V、7000mAh
Working time	24--26 hours working time (Rover/ static)
Charging	Support USB 15V/ 2A (Quick charge function)

Environment

Working	-45°C ~ +75°C
Storage	-55°C ~ +85°C
Protection	1.8 meter normal fall down/ 1 meter water immerse
Level	Ip68

Physical

I/O port	1* USBTypeC charge (support Power bank) 1* SMA UHF radio antenna 1* 5 pin LEMO (9V-14V)
Size	129*129*77MM
Weight	≤ 850g

Remark

- *M12 has 3 options in provide. M12 Basic , M12 LA, M12 IS.
 - * M12 is basic version with amazing dealer offer, M12 LA is Laser +dual camera version
 - *M12 IS is imaging sensor and 3D modeling version.
- Please make the choice base on your needs

KanQ

KQ M12



► Imu Tilt 120 Degree

► Web Ui Configure

► 1408 Channels

► Update Rate 50hz

► Lora Long Distance Transmitting ► Type C Fast Charge





M12 GNSS is specially design for Base station or the needs for good cost GNSS system, it equipped with 4G/ 2W radio/ Bluetooth / WIFI for communication, WEB UI and IMU tilt 120 degree support. High specifications , stable performance but with very good budget. Lora function make the working distance reach to 12KM without external radio. Combine with M12 LA/ M12 IS as rover to experience the high technology surveying method.

▶ **Supper tracking capacity**

1408 channels and full -frequency RTK engine and full star RTK technology.
Can against most of the complex conditions

▶ **Robustness & Durability**

IP68 protection level, with over 30 times 2 meter fall down testing and water immerse inspection, it's Seamless design to protect in cruel field working.

▶ **4th generation IMU sensor**

The newest IMU sensor makes the Tilt working more convenient, it eliminates the loss of Inertial-Measurement-Usable Status in most scenarios, no need frequency to shake the carbon pole and 120 degree tilt

▶ **Powerful battery and charger**

With 7.4V 7000mAh capacity and quick charge technology, also power bank support , help you in full day working and continuous field working to improve your efficiency.

▶ **Advanced but lower cost**

M12 is high specifications with full function of GNSS system , but to obviously lower the cost for surveyor to get the suitable products. This the best to meet all of your desires

▶ **Reliable Precision**

Support the full-frequency film RTK positioning solution
The embedded multi-frequency point anti-interference technology. Significantly improved the initialization speed, measurement accuracy and reliability in complex environment