SPECIFICATIONS

GNSS

Channels ----------1408
GPS---------- L1C/A/L2P(Y)/L2C/L5
GLONASS ----------L1/L2
BDS ----------B1I/B2I/B3I/BIC/B2a/B2b
Galileo ----------EI/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
IMU Accuracy ----------within 60°less then 2cm
IMU angle----------0°～120°
Laser Accuracy--------8mm+5mm*D (tilt in laser mode ≤30°)

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
Camera- - - - - - 5MP camera support dual visual stake out

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℃～+75℃
Storage -55℃～+85℃
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

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KanQ

KQ M12
GNSS RECEIVER

M12LA

- 5MP HD CAMERA (AR)
- IMU TILT 120 DEGREE
- 1408 CHANNELS
- LORA LONG DISTANCE TRANSMITTING
- LASER TECHNOLOGY
- WEB UI CONFIGURE
- UPDATE RATE 50HZ
- TYPE C FAST CHARGE

M12LA is an innovative GNSS receiver that integrates the latest GNSS IMU and laser technology, combine with front camera for viewing, in hard to reach , signal obstructed and dangerous fields , the millimeter level laser can easy to reach the point for surveying and stakeout. 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. Up to 50HZ update rating give a quick speed tool for surveyors for complete field project.

Supper tracking capacity

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

Laser Technology

The combination of the Laser +camera function, reduces the difficulty of working in special conditions, and fit the usage habits for surveyors. Camera can provide good viewing for sunlight and dark.

AR stakeout

Immersive AR visual stakeout to vividly display ground stakeout points in the software, obviously improve the working efficiency

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.

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