PERFORMANCE SPECIFICATIONS

Satellite Signals Tracked Simultaneously

<table>
<thead>
<tr>
<th>Channels</th>
<th>GLONASS</th>
<th>Beidou</th>
<th>GPS</th>
<th>Galileo</th>
<th>IRNSS</th>
<th>SBAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>L1/C/A, L1E/L2C/L5</td>
<td>E1, E5A, E5b, E1b, E1b, E5I, E5I</td>
<td>L1C/A, L2E, L5, L1C/A, L2C/L5</td>
<td>L1/C/A/L2S, WAAS, MSAS, GAGAN, EGNOS</td>
<td>L1C/A/L5, WAAS, MSAS, GAGAN, EGNOS</td>
<td></td>
</tr>
</tbody>
</table>

Global correction service: Hi-RTK (optional)

POSITIONING PERFORMANCE

High-Precision Static

- Horizontal: 2.5 mm + 0.1 ppm RMS
- Vertical: 3.5 mm + 0.4 ppm RMS

Static and Fast Static:

- Horizontal: 2.5 mm + 0.5 ppm RMS
- Vertical: 5 mm + 0.5 ppm RMS

Post Processing Kinematic (PPK / Stop & Go)

- Horizontal: 8 mm + 1 ppm RMS
- Vertical: 15 mm + 1 ppm RMS

Initialization time: Typically 10 min for base and 5 min for rover

Initialization reliability: Typically > 99.9%

Code Differential GNSS Positioning

- Horizontal: 25 cm + 1 ppm RMS
- Vertical: 50 cm + 1 ppm RMS
- SBAS: < 15 mm + 0.5 ppm RMS

Real Time Kinematic (RTK)

Single Baseline

- Horizontal: 8 mm + 1 ppm RMS
- Vertical: 15 mm + 1 ppm RMS

Network RTK (E50, E50 MAC)

- Horizontal: 8 mm + 0.5 ppm RMS
- Vertical: 15 mm + 0.5 ppm RMS

Initialization time: Typically 2-10 s

Initialization reliability: Typically > 99.9%

Tilt Survey Performance

- 2 cm accuracy in the inclination of 30 degree

HARDWARE

Physical

- Dimensions (W x H x D): 158 mm x 98 mm x 46 mm
- Weight: 1.3 kg (2.65 lb)
- Compatibility: Beidou B3 compatibility (trial version)

Temperature control: Auto-adjust the working power to maintain the temperature

Storage temperature: -50℃~+85℃ (-58℉~+185℉)

Operation temperature: -40℃~+75℃ (-40℉~+167℉)

Humidity: 90% non-condensing

Water/dustproof: IP67 dustproof, protected from temporary immersion to depth of 1 m (3.28ft)

Shock and vibration: MIL-STD-810G, 514.5

Anti-salt spray: MIL-STD-810G, 516.4, 596.6

Free fall: MIL-STD-810G, 516.6, designed to survive a 2m (6.5ft) natural fall onto concrete

Electrical

- 6V to 28V DC external power input (5-pin port), with over-discharge protection power consumption: 4-4.4W Automatic switching between internal power and external power

Control Panel

- Physical button: Display: 240 x 240 pixel, 261ppi
- Touchscreen: Support glove mode and wet-finger mode

Internal Battery

7.4V, 6800mAh lithium-ion rechargeable and removable battery.

RTK power: For Cellular: 10 hours.

Power indicator: Quick charge within 3.5 hours.

I/O Interface

- Bluetooth 4.0/2.1+EDR, 2.4GHz USB 2.0 port with OTG function
- 1 SMA antenna connector: 1 DC power input(5-pin)
- 1 SIM card slot
- Near Field Communication (NFC)

Communication

Network Communication

Full band capability for cellular mobile network (LTE, WCDMA, EDGE, GPRS, GSM)

2.4GHz Wi-Fi: supports the standard protocol 802.11 b/g/n Network RTK (E50) range is 20-50km.

Internal UHF Transceiver Radio

Frequency: 403~470MHz

Transmitting power: 1~4W Hi-Target Advanced Radio

Supports protocols: Hi-TARGET, TRIMTALK30S, TRIMMARK II, SATEL-3AS, TRANSEOT, etc.

Working range: Typically 5-10km, optimal 5-50km

External UHF Radio

Frequency: 141~147.95MHz

Transmitting power: 5W / 25W

Compatible with third-party radio

Working range: Typically 8-10km, optimal 10-20km

SYSTEM CONFIGURATION

System

- Data storage: Circulating 16GB Internal storage
- Record GNS and RINEX format simultaneously

Data Formats

- 4 Hz positioning output, up to 50Hz: CMR, RTCM2.2, RTCM3.0, RTCM3.1, RTCM3.2
- Navigation outputs ASCII: NMEA-0183 GSV, AVP, RMC, HDT, VDG, VDG, VTG, GST, RST, PPK, BPC, GLL, GPG, GBR, GGS, GSA, GCA, ZDA, VBG, GST, RST, PPK, BPC, GLL, GPG, GBR, GGS, GSA, GCA, ZDA, VBG, GST, RST, PPK, BPC, GLL, GPG, GBR, GGS

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Surveying the World, Mapping the Future

1. The hardware of this product is designed for Beidou B3 compatibility (trial version) and its firmware will be enhanced to fully support such new signals as soon as the officially published interface control documentation (ICD) becomes available.

2. There is no public GLONASS L3 CDMA or Galileo E6 ICD. The current capability in the receivers is based on publicly available information. As such, Trimble cannot guarantee that these receivers will be fully compatible.

3. Developed under a License of the European Union and the European Space Agency.

4. The hardware and firmware of this product is designed for Beidou B3 compatibility (trial version) and its firmware will be enhanced to fully support such new signals as soon as the officially published interface control documentation (ICD) becomes available.

Descriptions and Specifications are subject to change without notice.

Hi-TARGET ARSESS DISTRIBUTION PARTNER

CE IP67

195120
iRTK 5 GNSS RTK SYSTEM

Benefiting from the next-generation GNSS engine, unlimited communication technology and innovative designs, iRTK5, the high quality scalable GNSS receiver, provides an industry-leading GNSS RTK surveying solution.

Hi-RTP™ Global PPP Service

The correction source has been extended by Hi-RTP™ global correction service provided by Hi-Target. Enabling users to work without a base-station in rural or remote areas anywhere in the world.

- Provide centimeter-level global precision
- Harness all constellation signals from BDS, GLONASS, GPS, GALILEO
- More than 220 reference stations
- L band satellite radio/ internet broadcast

Unlimited Communication

360° Omni-directional Antenna and Multi-protocol Radio

The top-mounted radio antenna extends the radio working range and enables full omni-directional communication, making the transmitting and receiving distance more than 20% longer. Multi-protocol radio, support Hi-Target, TRIMTALK450S, TRIMMARK III, TRANSEOT, SATEL-3AS, etc.

Revolutionary Tilt Survey with Built-in IMU

Customer benefit from calibration free for tilt survey without centering. Once you reach the surveying points, immediately start the operation. Compared with bubble leveling, boost working efficiency by 20%.

Error less than 2 cm within 30° inclination
Resistance to the interference of magnetic disturbances, ensure high accuracy.

Hi-Survey Software

Brand new UI, easier to understand and use
Professional programs in road application such as side slop settingout, DTM stakingout etc
Basemap from online maps, DXF and SHP data

iHand30

- Android 6.0
- Type C USB port
- 1.5GHz 64-bit CPU, 2G RAM, 16G Internal Storage
- WIFI & Cellular simultaneous working
- IP 67

Hardware Configuration

OS: Android 6.0
Processor: MTK6737, 1.5GHz, 4 core
RAM: 2G
Storage: 16GB(up to 128GB external storage)
Display: 3.7”, 640 x 480, sunlight readable
Camera: 8MP, tag available
Sensors: G-sensor, E-compass, barometer, light-field sensor, gyro

Communication Interface

Cellular mode: Dual SIM card, dual stand-by
Cellular network: 4G TDD-LTE, FDD-LTE, WCDMA, GPRS
Wi-Fi: IEEE 802.11b/g/n, 2.4GHz/5GHz
Bluetooth: V2.0/4.0
USB: Type-C, supports OTG
NFC

Physical Features

Weight: 440g(within battery)
Size: 208mm*83mm*24mm
Operating temperature: -20℃ ~ +60℃
Storage temperature: -30℃ ~ +70℃
Free fall: 1.2m
IP67