

## PERFORMANCE SPECIFICATIONS

### Satellite Signals Tracked Simultaneously<sup>1</sup>

Channels.....	800+
GPS.....	L1/L2/L5/L2C
GLONASS.....	L1/L2/L3
BDS.....	B1/B2/B3/B1C/B2a
Galileo.....	E1/E5 AltBOC/E5a/E5b/E6
SBAS.....	L1/L5
QZSS.....	L1/L2/L5/L6
NavIC (IRNSS).....	L5
Global correction service.....	Hi-RTP (optional)
Base and Rover.....	Interchangeable

### Positioning Performance

#### High-precision static GNSS Surveying

Horizontal.....	2.5mm + 0.1ppm RMS
Vertical.....	3.5mm + 0.4ppm 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.....	8mm+1ppm RMS
Vertical.....	15mm+1ppm RMS
Initialization time.....	Typically 10 min for base and 5 min for rover
Initialization reliability.....	Typically > 99.9%

#### Code Differential GNSS Positioning

Horizontal.....	25cm+1ppm RMS
Vertical.....	50cm+1ppm RMS
SBAS.....	0.5m(H), 0.85m(V)

#### Network RTK

Horizontal.....	8mm+0.5ppm RMS
Vertical.....	15mm+0.5ppm RMS
Initialization time.....	Typically 2-10s
Initialization reliability.....	Typically > 99.9%

#### Real Time Kinematic (RTK)

Horizontal.....	8mm+1ppm RMS
Vertical.....	15mm+1ppm RMS

#### Hi-Fix<sup>2</sup>

Horizontal.....	RTK + 10 mm/minute RMS
Vertical.....	RTK + 20 mm/minute RMS

#### Tilt Survey

##### Electronic Bubble / tilt survey 2.0

##### Tilt Survey Performance

5cm accuracy in the inclination of 30°

### Communication

#### Internal UHF Radio

Frequency.....	403-473MHz
Channels.....	116 (16 adjustable)

Transmitting power..... 1W/2W/4W adjustable  
 Supports multiple protocols: HI-TARGET, TRIMTALK450S, TRIMMARK III, TRANSEOT, SATEL-3AS, etc.  
 Working range..... 3-5km typical, 5-8km optimal

#### External UHF Radio

Frequency.....410-470MHz  
 Channels..... 8  
 Transmitting power.....5W/25W adjustable  
 Supports multiple protocols: TRIMTALK450S, TRIMMARK III, TRANSEOT

#### Network Communication

Bluetooth..... 4.0/2.1+EDR, 2.4GHz  
 4G Network..... TDD-LTE, FDD-LTE, WCDMA, EDGE, GPRS, GSM  
 Wi-Fi frequency..... 2.4GHz  
 Wi-Fi protocol..... 802.11b/g/n

#### Power Supply

##### Internal Battery

5000mAh lithium-ion rechargeable and removable battery  
 RTK Rover (UHF/Cellular) for 10 hours

##### External Power

6-28V DC external power input (5-pin port) with over-charge protection  
 Power consumption..... 4.2W

#### Physical

Dimensions(W×H)..... 164mm×83.5mm  
 Weight..... ≤1.4kg (includes battery)  
 Data storage..... 8G internal storage

#### I/O Interface

1 × Mini USB port  
 1 × TNC antenna connector  
 1 × DC power input (5-pin)  
 1 × SIM card slot

#### Control Panel

Physical button..... 1  
 LED lamp..... Satellite, Signal, Power

#### Environment

Water/Dustproof..... IP67  
 Shock and vibration..... Survive from 2m natural fall on to ground  
 Humidity..... 100% condensing  
 Operation temperature..... -45°C~+75°C  
 Storage temperature..... -55°C~+85°C

#### Data Formats

Output rate..... 1-20Hz  
 Static data format..... GNS, Rinex  
 Network model..... VRS, supports NTRIP protocol  
 Message type..... CMR, RTCM 2.x, RTCM 3.0, RTCM 3.2  
 Navigation outputs ASCII..... NMEA-0183

\*Description and Specifications are subject to change without notice.

1. Compliant, but subject to availability of IRNSS and Galileo commercial service definition. IRNSS L5 and Galileo E6 will be provided through future product upgrade.

2. Accuracies are dependent on GNSS satellite availability. Hi-Fix positioning ends after 5 minutes of radio downtime. Hi-Fix is not available in all regions, check with your local sales representative for more information.



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CE IP67

# V30 PLUS

GNSS RTK SYSTEM



# V30 PLUS

## GNSS RTK SYSTEM

With its built-in multi-constellation GNSS engine, smaller dimension, and industrial-grade compact design, V30Plus provides a flexible GNSS work solution. It also integrates with the WebUI, WIFI, Bluetooth and 4G module to make data management and transmission more convenient and faster. Accompanied by Hi-Target professional field surveying software and its up-to-10-hours working time, V30Plus meets users' needs of efficient and convenient surveying experience.



83.5mm HEIGHT / 164mm DIAMETER / 1200g WEIGHT



### Multi-Constellation GNSS Engine

- Tracking full-constellation satellites to achieve accurate and stable positioning accuracy.
- Provides reliable results in harsh environments with its unique GNSS positioning algorithm.



### Tilt Survey and Electronic Bubble

- The optimized tilt survey algorithm and procedure electronic bubble can achieve conner points measurement by shaking the receiver.

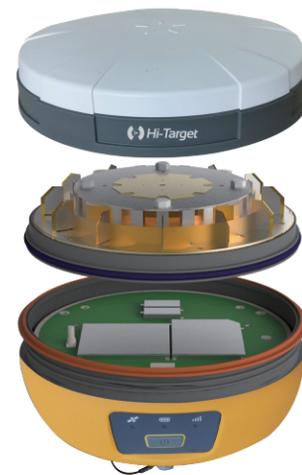


### Hi-Fix Technology

- Reduce downtime in the field with continuous RTK coverage during correction outages from an RTK base station or VRS network.

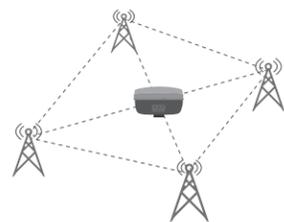
### Full-frequency air antenna

- Stable and better noise resistance full-wave GNSS antenna.
- Supports a wide range of satellite tracking signals.
- Reduce the multipath effect influence.



### Smart application

- Built-in Linux system and 8G storage.
- Intelligent management of the static data.
- Intelligent voice assistant to guide field operations.
- Standard Rinex data and Hi-Target raw data recorded simultaneously.



### Data communication

- Compatible with other vendors' communication protocols.
- Long transmission distance, and good electromagnetic compatibility.
- Perfectly compatible with a variety of CORS systems.

# iHand30

## Professional Field Controller

The iHand30 is a rugged field controller that is designed for data collection and GNSS device control. Based on the Android operating system, it is compatible with Hi-Target professional software and third-party Android software. Combining the physical keyboard with a touchscreen, it can boost efficient fieldwork and provide reliable solutions for users.

### KEY FEATURES



Ergonomically designed, lighter and easy to hold.



Industrial-grade protection that can withstand tough environments.



Convenient wireless data transmission via Bluetooth, Wi-Fi and 4G.



Quick charge, with a large capacity lithium battery to ensure a whole day work.

<b>Hardware Configuration</b>	OS: Android 10 Processor: MTK6762; CPU: 8 core; 4*A53 2.0GHZ, 4*A53 1.5GHZ; 2GBRAM+16GB ROM Display: 3.7", 640 x 480, sunlight readable Camera: 8MP, tag available Sensors: G-sensor, E-compass, barometer, light-field sensor, gyro
<b>Communication</b>	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 Bluetooth: V2.0/4.0 USB: Type-C, supports OTG NFC
<b>Physical</b>	Weight: 440g (within battery) Size: 208mm*83mm*24mm Temperature: -20°C ~ +60°C(Operating); -30°C ~ +70°C(Storage) Free-fall: 1.2m Water/Dustproof: IP67
<b>GNSS Features</b>	Channels: 20 GNSS: GPS, GLONASS, AGPS, Update rate: 1Hz
<b>Power Supply</b>	Battery: Removable 3.7V lithium battery, 5200mAh Duration: 15 hours Quick charge within 3 hours

# Hi-Survey Road

## Survey Data Collection Software

Hi-Survey Road is an Android software that is designed for all types of land survey and road engineering projects in the field. It is compatible with Hi-Target professional controllers, Android phones, tablets and other third-party Android devices. It is a sleek and easy-to-use software that supports the operating of big data with built-in tools. With customized industrial application solutions, more possibilities are created for users.



### KEY FEATURES



High accuracy and good reliability with various algorithms even in tough environments.

Supporting tilt survey, quasi-dynamic technology, electronic bubble, detail survey, time mode static survey, etc..



Integrated professional measurement functions for engineering application.

Providing road functions, DTM surface operations, Cross-projects points selection, DXF and DWG format, Google map, OGC map service of WMS, WMTS, and third-party rangefinders, etc..



Strong interaction function to empower every surveyor.

AR stakeout, QR code scanning, COGO, FTP transmission, multi-format support, etc..