## **PERFORMANCE SPECIFICATIONS**

<b>Satellite Signals</b>	Tracked	Simultaneously <sup>1</sup>
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Channels	1408
GPS	. L1C(A)/L1C/L2P(Y)/L2C/L5
GLONASS	L1/L2/L3
BDS	B1I/B2I/B3I/B1C/B2a/B2b
Galileo	E1/E5a/E5b/E6
SBAS	L1/L2/L5
QZSS	L1/L2/L5/L6
IRNSS	L5

## **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)**

HUHZUH di	omim+ rppm kivis
Vertical	15mm+1ppm RMS

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

HorizontalRTK	+	10 mm/minute RMS
VerticalRTK	+	20 mm/minute RMS

#### Tilt Survey Performance<sup>3</sup>

Additional horizontal pole-tilt uncertainty typically less than 8mm+0.7mm/°tilt (2.5cm accuracy in the inclination of 60°)

## Communication

Internal	UHF	Radio

Frequency	403-473MHz
Channels	116 (16 adjustable)
Working range	3-5km typical, 5-8km optimal

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Hi-Target Surveying Instrument Co., Ltd

AUTHORIZED DISTRIBUTION PARTNER

**C€** IP67

Transmitting power... . 1W/2W/4W adjustable Supports multiple protocols: HI-TARGET, TRIMTALK450S, TRIMMARK III, TRANSEOT, SATEL-3AS, etc.

#### **External UHF Radio**

Frequency	410-470MHz
Channels	
Transmitting power	
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 11h/a/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..

#### **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	I
LED lamp	Satellite, Signal, Power

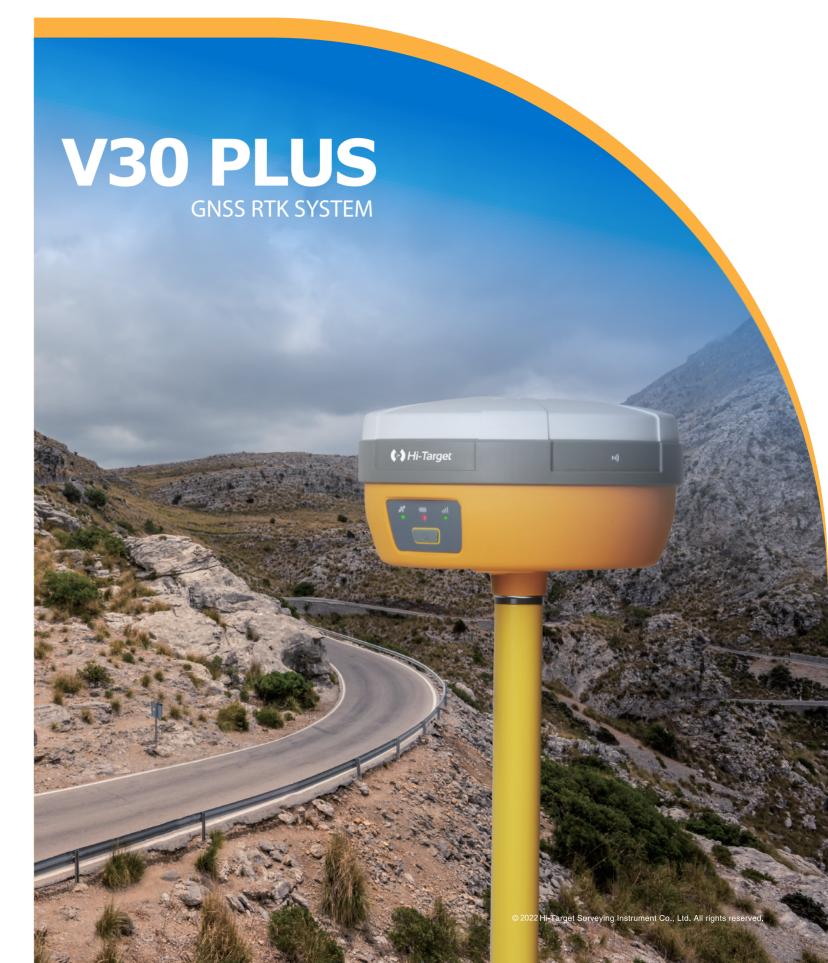
## **Environment**

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	-20H
Static data formatGNS	, Rine
Network modelVRS, supports NTRIP pr	otoco
Message type CMR, RTCM 2.x, RTCM 3.0, RTC	CM 3.2
Navigation outputs ASCIINMEA	A-018





<sup>\*</sup>Description and Specifications are subject to change without notice.

1. QZSS L6 can be provided by firmware 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.

<sup>3.</sup> Irregular operations such as rapid rotation and high-intensity vibration may affect the inertial navigation accuracy

## 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.







### **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.

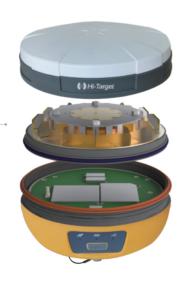


- Built-in Linux system and 8G storage.
- Intelligent management of the static data.
- Intelligent voice assistant to guide field operations.
- Standard Rinex data and Hi-Target raw data recorded simultaneously.



## **Data communication**

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



# iHand55

## **Professional Field Controller**

The iHand55 Handheld Controller is a professional field controller with a big vision. More features of the latest Hi-Survey Software contribute to achieving high intelligence. Keeping robust and reliable in fieldwork under any conditions, iHand55 is a perfect choice for your survey work.

#### **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.

Hardware Configuration	OS: Android 10 Processer: CPU: 8 core; 2.0 GHZ Storage: 2 GB RAM+16 GB ROM; T-Flash memory card, up to 128GB Display: 720*1280, 5.5", bright Outdoor Colorcapacitive touch screen (with touch pen, can be operated with gloves) Input Configuration: Physical full keyboard, number / letter separate, professional custom smart input method
Communication	Cellular mobile:4G, Dual SIM WiFi:IEEE 802.11 b/g/n, Wapi, AP Bluetooth:Built-in Bluetooth (2.1+4.0) NFC USB:USB, TypeC interface, OTG
Physical	Weight:480g(within battery) Size:236 mm*85 mm*25 mm Operating temperature:-20°C ~ +60°C Storage temperature:-30°C ~ +70°C Free fall:1.2 m Shock and vibration:MIL-STD-810H
GNSS Features	GNSS:GNSS antenna, GPS, GLONASS, BDS, AGPS, 20 channels
Power Supply	Battery: 7500 mAh internal Duration: 14 hours

# **Hi-Survey**

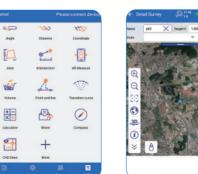
## Survey Data Collection Software

**KEY FEATURES** 



Hi-Survey 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.













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



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,



Strong interaction function to empower every surveyor.

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