

## Compact, easy-to-use, network RTK

The V100 is a compact, lightweight and intelligent GNSS RTK Receiver. The built-in whole constellation BD970 OEM board, 4.0 standard dual-mode long-range Bluetooth and NFC module, data collection internet support and Hi-Target Cloud Service make this the most convenient and efficient receiver for the network age.

### Multi-constellation Tracking

220 channels  
Supports GPS, GLONASS, GALILEO, BDS, SBAS  
NGS approved GNSS antenna

### Convenient Connection

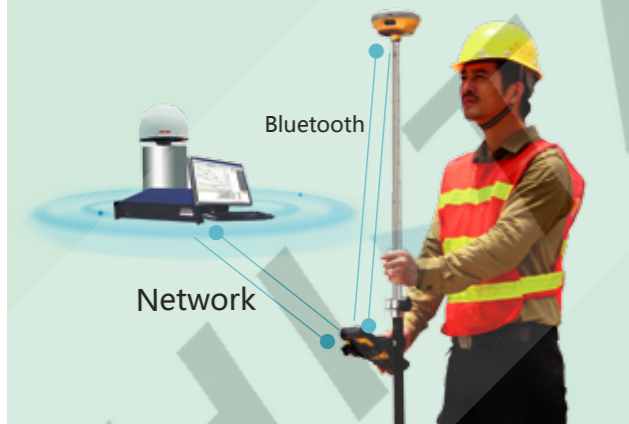
Bluetooth can be connected in seconds based on NFC technology  
4.0 standard dual-mode long-range Bluetooth, compatible with 2.1 standard Bluetooth

### Powerful Battery

Powered by high-capacity (6300mAh) Li-ion battery  
Supports power bank to charge, the battery can be used universally with iHand20 handheld battery

### Wide Range of Application

V100 can be paired with varieties of handhelds and GIS data collectors, and provide an easy-to-use solution for survey and GIS professionals who need to collect highly accurate data in a variety of applications.



<sup>i</sup> Developed under a License of the European Union and the European Space Agency.

<sup>ii</sup> Precision and reliability may be subject to anomalies due to multipath, obstructions, satellite geometry, and atmospheric conditions.

<sup>iii</sup> GPS only and depends on SBAS system performance. FAA WAAS accuracy specifications are <5m 3DRMS.

Descriptions and Specifications are subject to change without notice.

# HI-TARGET

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## V100 PERFORMANCE SPECIFICATIONS

Satellite Signals Tracked Simultaneously	
Channels	220
GPS	Simultaneous L1C/A, L2C, L2E, L5
GLONASS	Simultaneous L1C/A, L1P, L2C/A (GLONASS M only), L2P
SBAS	Simultaneous L1 C/A, L5
Galileo	Simultaneous L1 BOC, E5A, E5B, E5AltBOC <sup>i</sup> (Reserved)
BDS	B1, B2
QZSS	L1 C/A, L1 SAIF, L2C, L5

Positioning Performance <sup>ii</sup>	
Real Time Kinematic(RTK) Surveying Network RTK	
Horizontal	8mm+1ppm RMS
Vertical	15mm+1ppm RMS
Initialization time	Typically 2-10s
Initialization reliability	Typically > 99.9%

Code Differential GNSS Positioning	
Horizontal	25cm+1ppm RMS
Vertical	50cm+1ppm RMS
SBAS <sup>iii</sup>	0.50m Horizontal, 0.85m Vertical

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

Hardware	
Physical	
Dimensions (W x H)	127.5mm×57mm (5.02inch x 2.24inch)
Weight	700g (1.54lb) including internal battery
Operating temperature	-40°C to +65°C (-40°F to +149°F)
Storage temperature	-40°C to +75°C (-40°F to +167°F)
Humidity	100%, condensing
Water/dustproof	IP67 dustproof, protected from temporary immersion to depth of 2m(6.56ft)
Shock and vibration	Designed to survive a 3m(9.84ft) natural fall onto concrete

Electrical	
Power consumption	3.2W
Battery	Rechargeable, removable 3.7V/6300mAh Lithium-ion battery, supports online charging
Power input	4.5V-5.5V/ 2A DC (USB), 6V-28V/2A DC (5 pin port)
Data storage	8GB internal storage

Internal Battery Life	
Static	13 hours
RTK rover	10 hours (Data collector internet)

I/O Interface	
1 x mini USB port	For data downloading, power supply and firmware upgrading
1 x 5-pin port	For NMEA output, DC power supply and external devices

Communication	
Bluetooth	Dual-mode BT 4.0, compatible with BT 2.1, 2.4GHz
NFC	An easy tap to establish BT connection
Radio	Hi-Target/ Pacific Crest ADL Vantage pro external radio (optional)

Data Formats	
Output rate	1Hz positioning output, up to 20Hz
Message type	CMR: CMR, CMR+, sCMRx input and output RTCM: RTCM 2.1, 2.3, 3.0, 3.1, 3.2 input and output
Navigation outputs ASCII	NMEA-0183 GSV, AVR, RMC, HDT, VGK, VHD, ROT, GGG, GGA, GSA, ZDA, VTG, GST, PJT, PJK, BPQ, GLL,GRS, GBS
Navigation outputs binary	GSOE

# HI-TARGET

# V100

## GNSS RTK System



- 220 channels
- Supports GPS, GLONASS, GALILEO, BDS, SBAS
- 4.0 standard dual-mode long-range Bluetooth
- Easy-to-use network RTK system



BD970



NFC



BT4.0



6300mAh



IP67

FC CE KC IP67

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