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
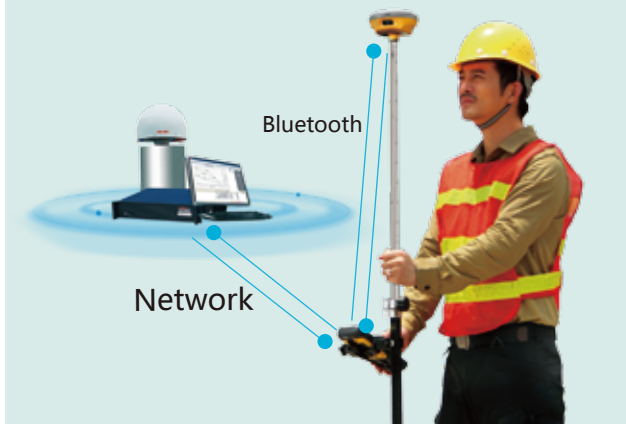
Powerful Battery

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

Cloud Service

Remote Upgrade	Remote Register	Remote Control	Remote Download	Cloud Backup

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.

Bluetooth

Network

[i] Developed under a License of the European Union and the European Space Agency.
[ii] Precision and reliability may be subject to anomalies due to multipath, obstructions, satellite geometry, and atmospheric conditions.
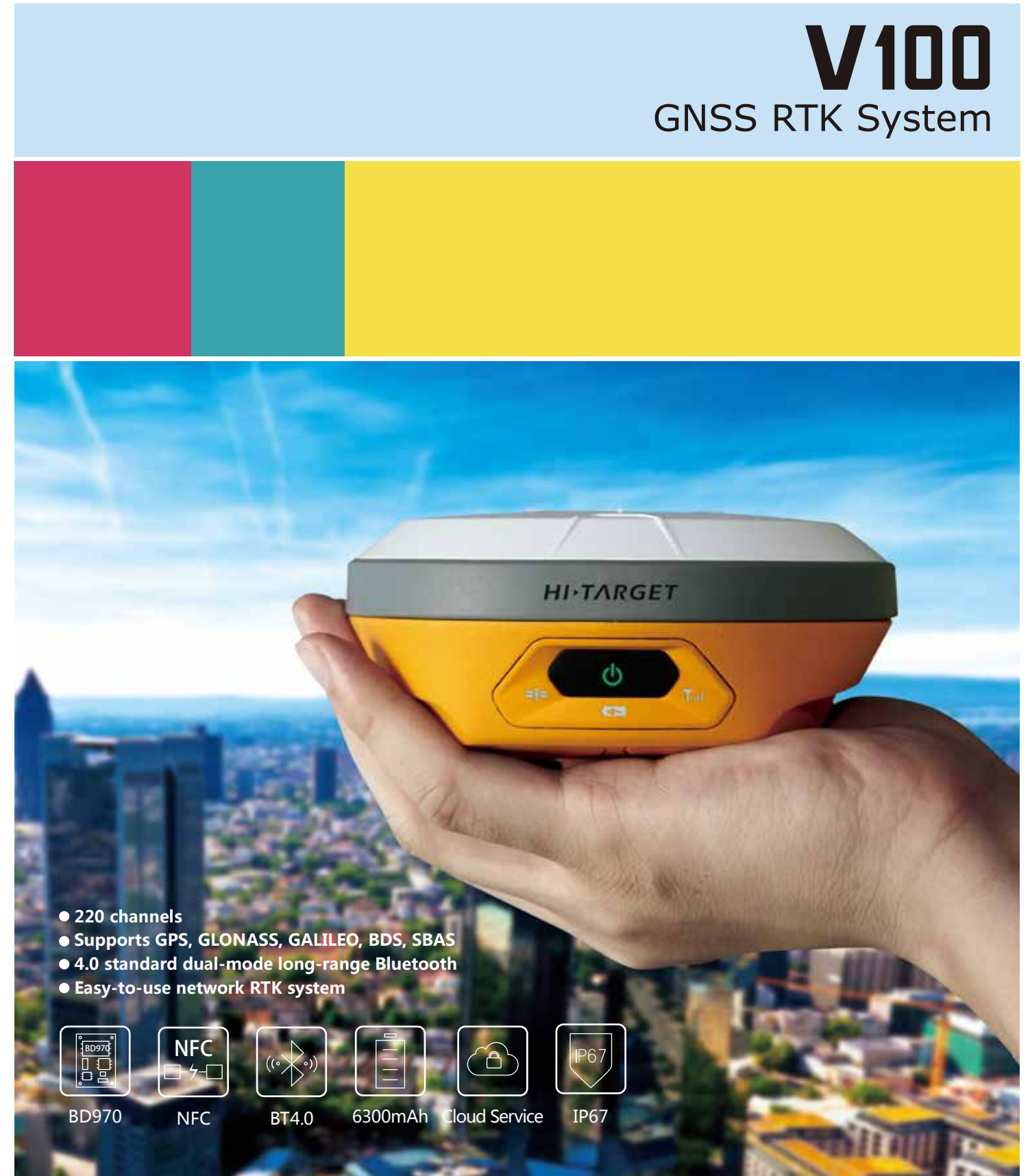[iii] GPS only and depends on SBAS system performance. FAA WAAS accuracy specifications are <5m 3DRMS.
Descriptions and Specifications are subject to change without notice.

HI-TARGET

Hi-Target Surveying Instrument Co., Ltd

ADD: Building 13, Tian'An Technology Zone HQ Center, No. 555, the North of Panyu RD, Panyu District, 511400 Guangzhou, China.
TEL: +86-20-28688296   E-mail: info@hi-target.com.cn
www.hi-target.com.cn

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[i] (Reserved)
BDS	B1, B2
QZSS	L1 C/A, L1 SAIF, L2C, L5

Positioning Performance[ii]

Real Time Kinematic(RTK) Surveying Network RTK

Horizontal	8mm+1ppm RMS
Vertical	15mm+1ppm RMS
Initialization time	Typically < 8 seconds
Initialization reliability	Typically > 99.9%

Code Differential GNSS Positioning

Horizontal	25cm+1ppm RMS
Vertical	50cm+1ppm RMS
SBAS[iii]	0.50m Horizontal, 0.85m Vertical

Static and Fast Static GNSS Surveying

Horizontal	2.5mm+1ppm RMS
Vertical	5mm+1ppm 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℃ to +65℃ (-40℉ to +149℉)
Storage temperature	-40℃ to +75℃ (-40℉ to +167℉)
Humidity	100%, considering
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, GGK, GGA, GSA, ZDA, VTG, GST, PJT, PJK, BPQ, GLL,GRS, GBS
Navigation outputs binary	GSOF

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	Cloud Service	IP67

FC CE KC IP67