TECHNICAL SPECIFICATIONS

![Hi-Target logo] Hi-Target
Surveying the World, Mapping the Future

V200
GNSS RTK System

GNSS Feature	Specification	
GNSS Signal[①]	Channels	1408
	GPS	L1C(A) / L1C / L2P(Y) / L2C / L5
	BDS	B1I / B2I / B3I / B1C / B2a / B2b
	GLONASS	L1 / L2 / L3
	Galileo	E1 / E5a / E5b / E6
	QZSS	L1 / L2 / L5 / L6*
	NavIC	L5
	SBAS	L1 / L2 / L5
	PPP	B2b-PPP / Galileo E6-HAS
Positioning Performance[②]	High-precision static GNSS Surveying	**Horizontal**:2.5mm + 0.1ppm RMS ｜ **Vertical**:3.5mm + 0.4ppm RMS
	Static and Fast Static	**Horizontal**:2.5mm + 0.5ppm RMS ｜ **Vertical**:5mm + 0.5ppm 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%
	PPP	**Horizontal**:10cm ｜ **Vertical**:20cm
	Code Differential GNSS Positioning	**Horizontal**:±0.25m+1ppm RMS ｜ **Vertical**:±0.5m+1ppm RMS
		SBAS:0.5m(H), 0.85m(V)
	Real Time Kinematic (RTK)	**Horizontal**:8mm+1ppm RMS ｜ **Vertical**:15mm+1ppm RMS
		Initialization time:Typically <10s ｜ **Initialization reliability**:Typically > 99.9%
	Positioning rate	1 Hz, 5 Hz and 10 Hz
	Time to first Fix	**Cold start**:< 45 s ｜ **Hot start**:< 30 s ｜ **Signal re-acquisition**:< 2 s
	Hi-Fix[③]	**Horizontal**:RTK+10mm / minute RMS ｜ **Vertical**:RTK+20mm / minute RMS
	Tilt Survey Performance[④]	Additional horizontal pole-tilt uncertainty typically less than 8 mm +0.7 mm / °tilt (0° ~ 60°)
Communication	Communication	**Bluetooth**:BT 5.2, 2.4GHz
		Wi-Fi:frequency 2.4GHz, Supports 802.11 b/g/n
	Internal UHF Radio	**Frequency**:410-470MHz ｜ **Channel**:116 (16 scalable)
		Transmitting power:0.5W / 1W / 2W adjustable
		Supports multi-communication protocols:HI-TARGET, TRIMTALK450S, TRIMMARK III, TRANSEOT, SATEL-3AS, etc.
Physical	Internal battery[⑤]	Internal 7.2V / 6900mAh lithium-ion rechargeable battery
		RTK Rover (UHF/Cellular): up to 24 hours*
	External power	**Charging**:using standard smartphone chargers or external power banks.
		Weight:≤0.8kg (includes battery) ｜ **Dimensions (W×H)**:132mm×67mm
		Data storage:16GB ROM internal storage
Control Panel	LED Lamp	Satellite, Signal, Power
	Physical button	1
Environment	Water / Dustproof	IP67
	Free fall	Designed to survive a 2m natural fall onto concrete
	Humidity	100%, condensing
	Operation temperature	-45℃ to +75℃
	Storage temperature	-55℃ to +85℃
I / O Interface	1 × USB port, Type C	
	1 × SMA antenna connector	
Data Formats	Output rate	1Hz-20Hz.
	Static data format	GNS, Rinex
	Network model	VRS, FKP, MAC; supports NTRIP protocol
	Real Time Kinematic (RTK)	RTCM2.X, RTCM3.X, CMR
	Navigation outputs ASCII	NMEA-0183

*Description and Specifications are subject to change without notice.
1.QZSS L6 can be provided by firmware upgrade.
2.The measurement accuracy, precision, reliability and initialization time depend on various factors, including tilt angle, number of satellites, geometric distribution, observation time, atmospheric conditions and multi-path validation, etc. The data are derived under normal conditions.
3.Accuracies are dependent on GNSS satellite availability. Hi-Fix Positioning ends after 5 minutes without differential data.Hi-Fix is not available in all regions, check with your local sales representative for more information.
4.Irregular operations such as rapid rotation and high-intensity vibration may affect the inertial navigation accuracy.
5.The battery operating time is related to the operating environment, operating temperature and battery life.

AUTHORIZED DISTRIBUTION PARTNER   24S112

IP68

V200

## Good things come in small packages

V200 GNSS RTK Receiver brings superior performance and high efficiency to support your fieldwork with reliable solutions. Its deployment of the advanced RTK engine and new-generation IMU guarantees a 25% performance improvement even in the most demanding environments. Thus you can count on Hi-Target V200 for better productivity.

Key Features

Advanced RTK Engine

Full-Constellation Tracking

Web UI

Built-in Radio

NFC

**Compatibility with third-party software**

● More Portability

Equipped with an ultra-light EPP material instrument case of a high anti-strong impact, shock and impact resistance and a centering rod that can be contracted to 1.25 m, making it durable and portable in the fieldwork.

13.2CM

50% weight reduction
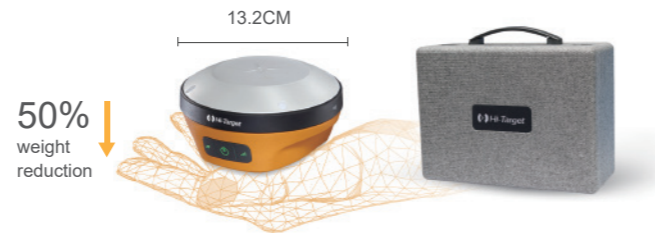
● Greater Flexibility

It can bring accurate and reliable results and boost efficient fieldwork with self-developed built-in IMU and core algorithm.

- Previous IMU
- New generation IMU
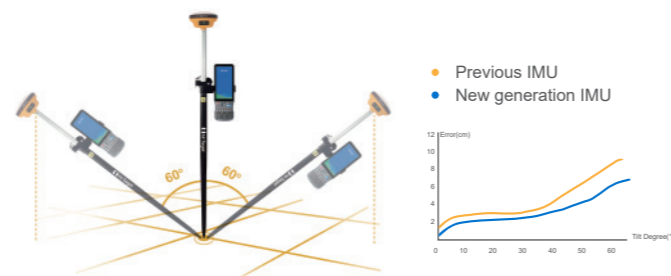
● Higher Accuracy and Precision

Equipped with the High-Performance Patch Antenna, enhances the low elevation angle tracking capabilities and keeps it maintaining a high gain for higher elevation satellites while tracking low-elevation satellites.
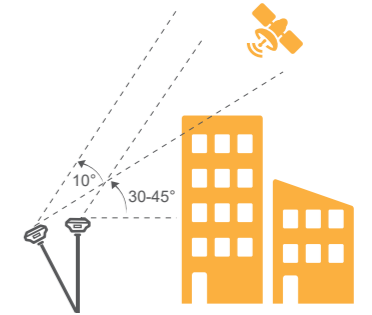
● More Stability

Hi-Target **Hi-Fix** enables continuous connectivity and quality results even if you lose the signal while using the RTK base station or VRS network under extreme circumstances.
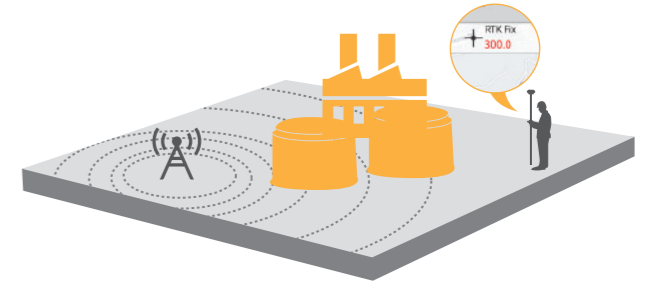
Hi-Survey

Survey Data Collection Software

A AR

AR stakeout to guide directions with the intelligent voice and compass.

B

Optimized tilt survey and able to complete the initialization by shaking the receiver for 2-5s and maintain a high-precision measurement status for a long time.

C

Users can view the number of the tracking satellites, PDOP, Elevation Mask, the current satellite constellations and other information in the sky plot interface.

D CAD

Advanced CAD data management, supporting importing files of DXF, DWG format, and achieving data stakeout by the object snap functions of INT, TAN, PER, etc..