



# TECHNICAL SPECIFICATIONS

GNSS Feature	Specification	
<b>GNSS Signal<sup>®</sup></b>	Channels	1408
	GPS	L1 / L2 / L5 / L2C
	BDS	B1I / B2I / B3I / B1C / B2a / B2b*
	GLONASS	L1 / L2 / L3
	Galileo	E1 / E5A / E5 / AltBOC / E5B / E6
	SBAS	L1C(A) / L5(QZSS, WAAS, MSAS, GAGAN)
	QZSS	L1 / L2 / L5 / L6*
	IRNSS	L5
<b>Positioning Performance</b>	High-precision static GNSS Surveying	<b>Horizontal:</b> 2.5mm + 0.1ppm RMS   <b>Vertical:</b> 3.5mm + 0.4ppm RMS
	Static and Fast Static	<b>Horizontal:</b> 2.5mm + 0.5ppm RMS   <b>Vertical:</b> 5mm + 0.5ppm RMS
	Post Processing Kinematic (PPK / Stop & Go)	<b>Horizontal:</b> 8mm + 1ppm RMS   <b>Vertical:</b> 15mm + 1ppm RMS <b>Initialization time:</b> Typically 10 min for base and 5 min for rover <b>Initialization reliability:</b> Typically>99.9%
	Code Differential GNSS Positioning	<b>Horizontal:</b> ±0.25m+1ppmRMS   <b>Vertical:</b> +0.5m+1ppmRMS <b>SBAS:</b> 0.5m(H), 0.85m(M)   <b>PPP:</b> 20cm(H), 10cm(V)
	Real Time Kinematic (RTK)	<b>Horizontal:</b> 8mm+1ppm RMS   <b>Vertical:</b> 15mm+1ppm RMS <b>Initialization time:</b> Typically <10s   <b>Initialization reliability:</b> Typically > 99.9%
	Time to first Fix Hi-Fix <sup>®</sup>	<b>Cold start:</b> < 45 s   <b>Hot start:</b> < 30 s   <b>Signal re-acquisition:</b> < 2 s
	Tilt Survey Performance	<b>Horizontal:</b> RTK+10mm / minute RMS   <b>Vertical:</b> RTK+20mm / minute RMS Additional horizontal pole-tilt uncertainty typically less than 8 mm +0.7 mm / °tilt (2.5cm accuracy in the inclination of 60°)
<b>Communication</b>	Communication	<b>Bluetooth:</b> 4.2 / 2.1+EDR, 2.4GHz <b>Wi-Fi:</b> frequency 2.4GHz, Supports 802.11a / b / g / n <b>Frequency:</b> 410-470MHz   <b>Channel:</b> 116 (16 scalable)
	Internal UHF Radio	<b>Transmitting power:</b> 0.5W / 1W / 2W adjustable <b>Supports multi-communication protocols:</b> HI-TARGET, TRIMTALK450S, TRIMMARK III, TRANSEOT, SATEL-3AS, etc.
<b>Physical</b>	Internal battery	Internal 7.4V / 6800mAh lithium-ion rechargeable battery. RTK Rover (Network) for 12 hours.   <b>Static:</b> up to 15 hours
	External power	<b>Power consumption:</b> 4.2W   <b>Dimensions (W×H):</b> 132mm×67mm <b>Charging:</b> using standard smartphone chargers or external power banks. <b>Weight:</b> ≤0.8kg (includes battery)   <b>Data storage:</b> 8GB ROM internal storage
<b>Control Panel</b>	LED Lamp	Satellite, Signal, Power
<b>Environment</b>	Physical button	1
	Water / Dustproof	IP67
	Shock and vibration	Designed to survive a 2m natural fall onto concrete
	Humidity	100%, condensing
	Operation temperature	-30°C~+70°C
Storage temperature	-40°C~+80°C	
<b>I / O Interface</b>	1 × USB port, Type C	
	1 × SMA antenna connector	
<b>Data Formats</b>	Output rate	1Hz-20Hz.
	Static data format	GNS, Rinex
	Network model	VRS, FKP, MAC; supports NTRIP protocol
	CMR& RTCM	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. Galileo E6 and IRNSS L5 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

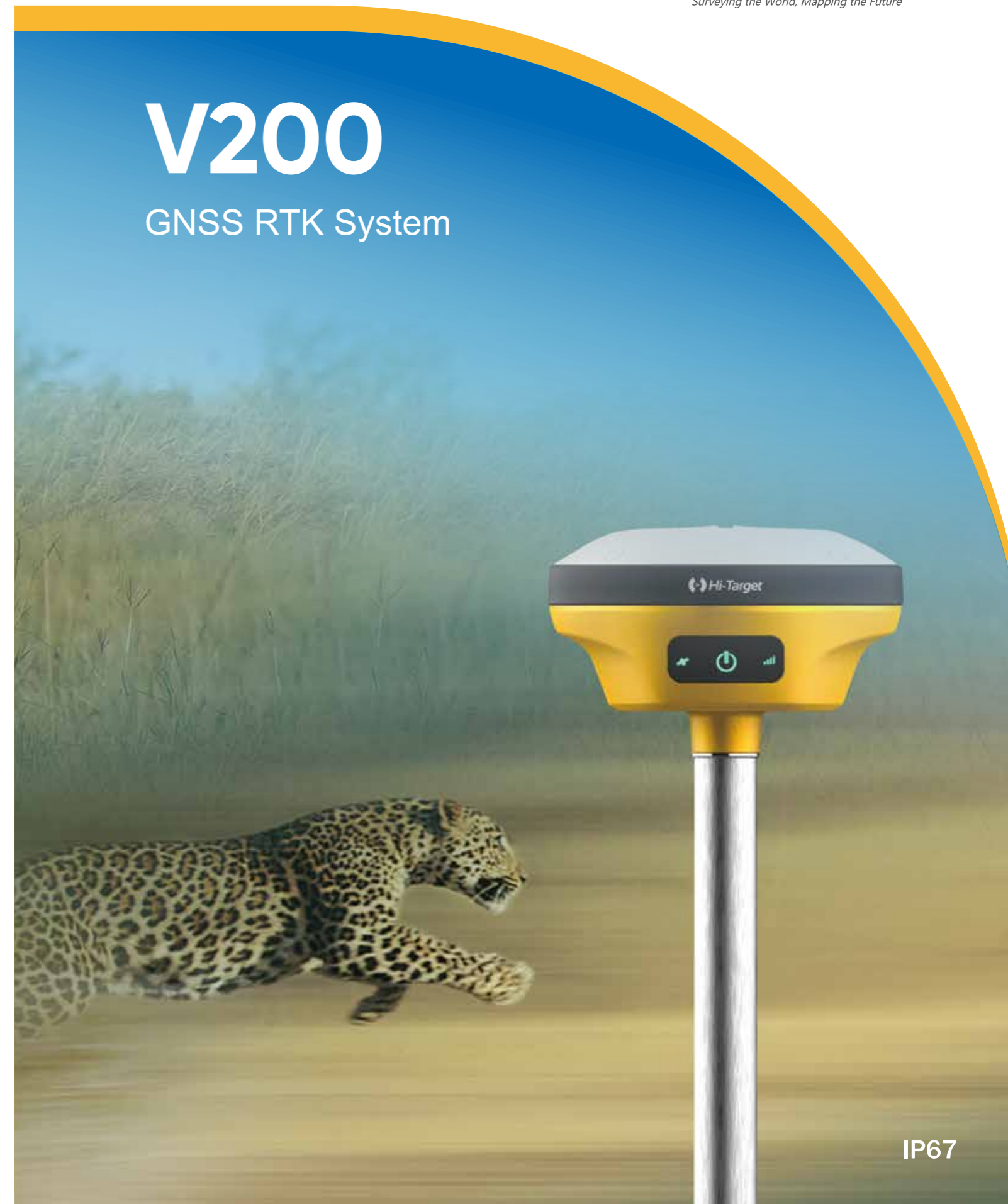



AUTHORIZED DISTRIBUTION PARTNER

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## Hi-Target Surveying Instrument Co. Ltd

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# V200

## GNSS RTK System



IP67



# 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



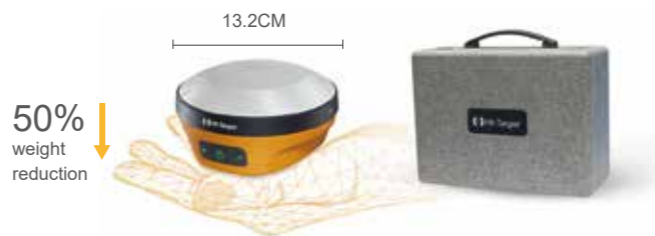
NFC



Compatibility with third-party software

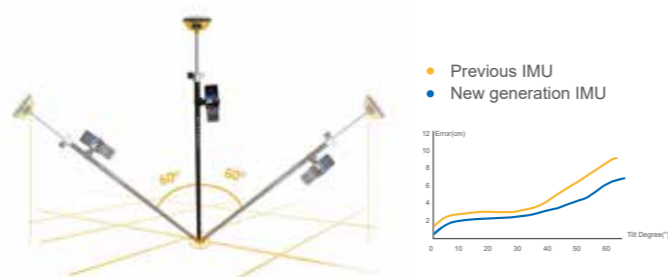
## • More Portability

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.



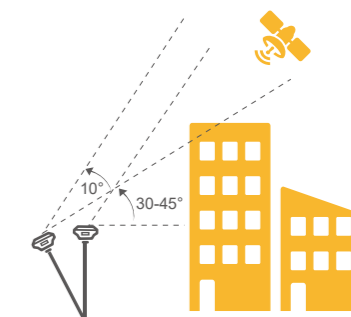
## • Greater Flexibility

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



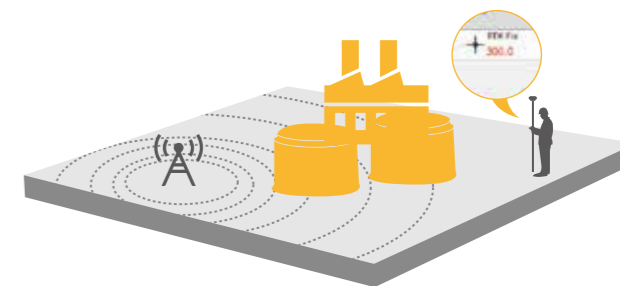
## • Higher Accuracy and Precision

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.



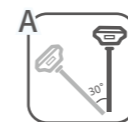
## • More Stability

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 Road

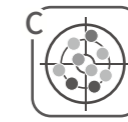
## Survey Data Collection Software



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.



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



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



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..

