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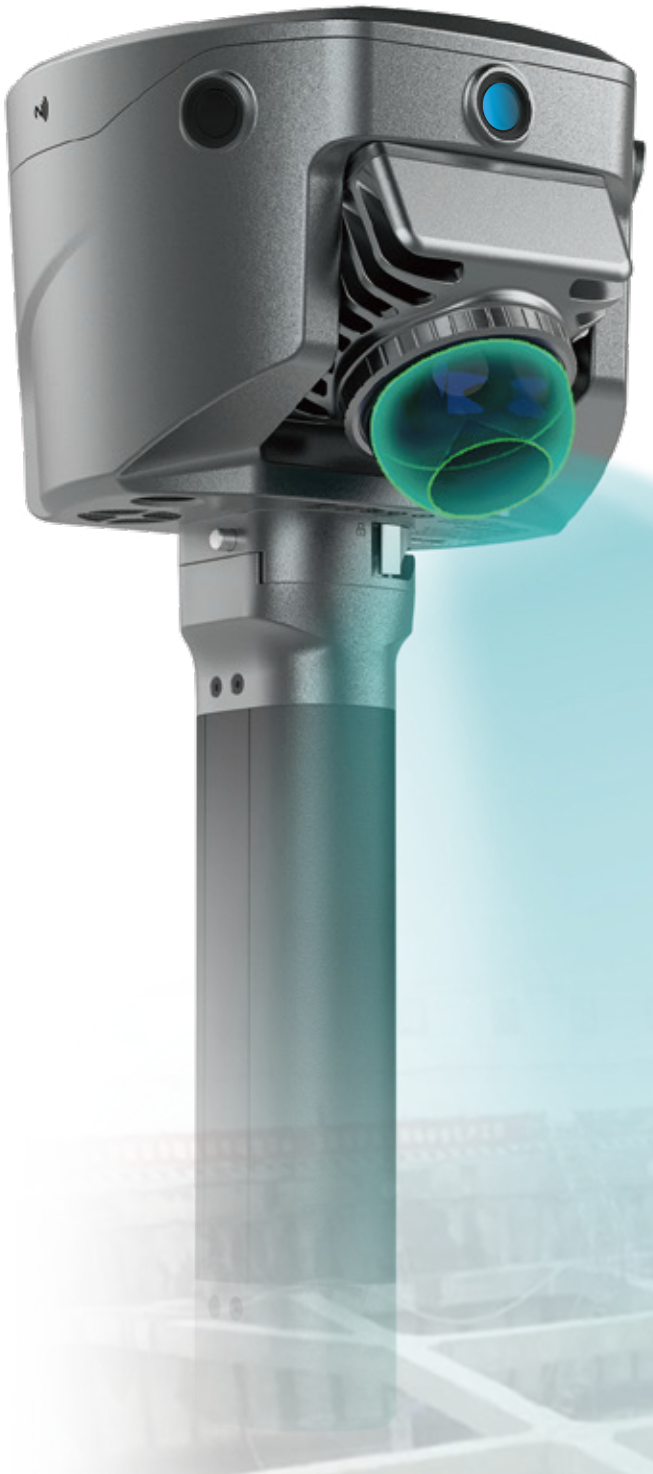
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Hi-Target

V700S

SLAM RTK





Full-Constellation Tracking: Strong Signal & High-Quality Data

- **Supports 1408 channels**
- **New GNSS SoC chip:** Low power consumption, extended battery life.
- **Advanced technology:** Advanced multi-frequency anti-interference and adaptive filtering technology ensures strong signal reception, high-quality data and excellent accuracy.



Innovative Industrial Design

- **Compact & lightweight** for easy handling.
- **Metal lock mechanism** securely connects the device and battery handle, ensuring stable operation.

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E:435687.323

Z:2.645

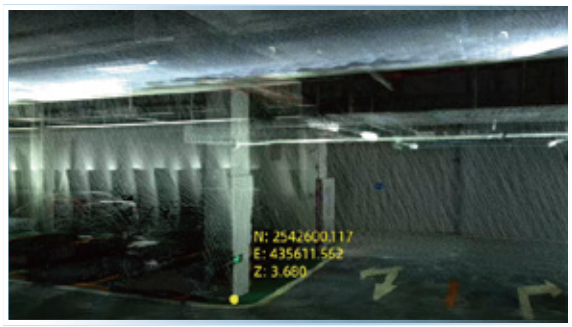
Contactless Measurement

- Utilizing laser point cloud data and image data provides real-time acquisition of rich geospatial information efficiently and conveniently.
- This technology greatly expands the application scope of GNSS, allowing measurements in areas like under bridges, culverts, and enclosed spaces, ensuring efficient and safe operations.
- Leveraging Android's high-performance laser point cloud and image processing technology, users can simply take a photo to obtain coordinates of multiple points on the handheld software. With an accuracy better than 5cm within a 15m working distance, it doubles working efficiency.

Unified Coordinate Framework

● RTK + SLAM Fusion: V700S delivers real-time centimeter-level positioning outdoors while automatically aligning point cloud data, ensuring unified coordinate output (BLH/NEZ).

● Control-free scanning: V700S requires no control points, allowing users to scan freely without returning to previous locations - dramatically improving on-site efficiency.





Laser Reverse Positioning Technology: Precision Measurement without Signal

Hi-Target's innovative Laser Reverse Positioning Technology enables seamless cross-environment measurement. Outdoors, the high-precision RTK module delivers centimeter-level accuracy. In GNSS-denied areas like under bridges or eaves, the system automatically switches to laser-based positioning, ensuring uninterrupted data capture.



Volume Calculation

Through laser point cloud data, rich three-dimensional data of ground objects can be obtained in real time. By leveraging high-performance Android-based processing technology, quantitative results can be derived efficiently and conveniently.

8-INCH ROBUST TABLET



- 2.0GHz, 8 cores high-speed processor
- 6+128GB large memory
- 8200 mAh high capacity battery
- Based on Android 10, more smooth operation

APPLICATIONS



Urban Renewal



Volume Measurement



Tunnel Surveying



Forestry Survey



Underground Pipelines



Architectural Survey

SOFTWARE

Hi-Survey Field Software



- High-performance laser point cloud & image processing engine for real-time solutions and visualization.
- Precision heat map display allows users to monitor accuracy in real time.
- Integrates industry-leading CAD & real-scene engines for an intuitive, visual measurement and layout experience.

Office Software for Post-processing



- Hi-LiDAR software refines real-time data, delivering point clouds with sub-2 cm thickness and <1 cm relative measurement precision.
- Automated excavation analysis: Calculates over/under-excavation for tunnel sections, enabling construction progress tracking and validation.
- Advanced section visualization & drafting: Supports horizontal/vertical section views, aiding in renovation planning for older buildings with precise architectural measurements.

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CE

TECHNICAL SPECIFICATIONS

GNSS Configuration	Channel	1408	
	GNSS Signal	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, E6-HAS	
	Output format	ASCII: NMEA-0183, Binary	
	Output rate	1Hz~20Hz	
	Static data format	GNS, Rinex	
	Real Time Kinematic	RTCM2.X, RTCM3.X	
	Network Mode	VRS, FKP, MAC, Support NTRIP protocol	
System Configuration	Operation system	Linux	
	Storage	Circulating 512GB ROM	
Accuracy and Reliability[1]	High-Precision Static	H: 2.5 mm + 0.1 ppm RMS	V: 3.5 mm + 0.4 ppm RMS
	Static and Fast Static	H: 2.5 mm + 0.5ppm RMS	V: 5 mm + 0.5ppm RMS
	PPK	H: 5mm + 1ppm RMS	V: 10mm + 1ppm RMS
	PPP	H: 10cm	V: 20cm
	Code Differential GNSS Positioning	H: ±0.25m+1ppm RMS SBAS: 0.5m (H), 0.85m (V)	V: ±0.5m+1ppm RMS
	Real Time Kinematic (RTK)	H: 8mm+1ppm RMS Initialization time: Typically <10s	V: 15mm+1ppm RMS Initialization reliability: Typically > 99.9%
	Tilt Survey Performance[2]	8mm+0.3mm/°tilt	
	AR stakeout	Support	
	Image measurement	A single photo can acquire multiple point coordinates, with an accuracy of better than 5cm within 15 meters[3]	
	Real-time accuracy evaluation	Supports absolute pressure ≤ 5 cm (RTK) / ≤ 4 cm (PPK).	
Camera	Pixel	3 Professional Dual HD Cameras	
	Function	Support AR stakeout, image measurement, working distance 2~15m	
Laser Scanner	Range	0.1~ 40m@10%, 0.1~ 70m@80%	
	Laser product classification	Class 1 Eye Safe Compatibility for exporting LAS, LAZ, PLY or equivalent formats	
	FOV	H: 160°	V: 59°
IMU	Update rate	200Hz	
Communication	I/O Interface	USB type C port; SMA antenna port; Nano SIM card slot	
	Network	TDD-LTE，FDD-LTE，GSM	
	WiFi	IEEE 802.11a/b/g/n/ac/ax，2.4GHz/5GHz，Wifi hotspot	
	Bluetooth	Bluetooth 5.2	
	Internal UHF Radio	Power：0.5W/1W Adjustable　Frequence: 410MHz~470MHz	
		Protocol: HI-TARGET, TRIMTALK450S, TRIMMARK III, SATEL-3AS, TRANSEOT, etc.	
		Channel: 116（16 scalable）	
Sensor	Electronic bubble	Supports	
	Tilt Survey	Built-in High-precision IMU Module	
Control Panel	Physical button	Single button	
	Display	2.8 inch, 480×640 pixel touchable screen	
	LED lights	Mode, Accuracy, Network	
Application	Advanced function	NFC, WebUI, Firmware upgrade via U-disk	
	Intelligence application	Intelligent Voice, Self-check	
	Remote service	Message push, online upgrade, remote control	
Physical	Power[4]	Lithium battery, portable charger	
		RTK rover(UHF/Cellular): up to 10 hours	SLAM mode: up to 5 hours
		USB 45W fast charging, fully charged in 2 hours	
	Size	Φ134.4mm×109.9mm	
	Weight	1.68kg	
Environments	Water/dustproof	IP64	
	Humidity	100% non-condensing	
	Operation temperature	-20℃~+55℃	
	Storage temperature	-40℃~+70℃	

"Note:
[1]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.
[2]Irregular operations such as rapid rotation and high-intensity vibration may affect the inertial navigation accuracy.
[3]The results are the accuracy obtained in laboratory scenarios, and some scenarios may have accuracy deviations.
[4]The battery operating time is related to the operating environment, operating temperature and battery life.
Descriptions and Specifications are subject to change without notice.