

V700S SLAM RTK



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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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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.



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



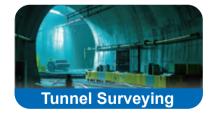
APPLICATIONS













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

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- 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.





AUTHORIZED DISTRIBUTION PARTNER

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TECHNICAL SPECIFICATIONS

	Channel	1408		
		GPS: L1C/A, L1C, L2P(Y), L2C, L5		
GNSS Configuration		BDS: B1I, B2I, B3I, B1C, B2a, B2b		
	GNSS Signal	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		
	Operation system			
System Configuration				
	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	
	РРК	H: 8mm + 1ppm RMS	V: 15mm + 1ppm RMS	
	PPP	H: 10cm	V: 20cm	
	Code Differential	H: ±0.25m+1ppm RMS	V: ±0.5m+1ppm RMS	
	GNSS Positioning	SBAS: 0.5m (H), 0.85m (V)		
		H: 8mm+1ppm RMS	V: 15mm+1ppm RMS	
	Real Time Kinematic (RTK)	Initialization time: Typically <10s	Initialization reliability: Typically > 99.9%	
	Tilt Survey Performance ^[2]	8mm+0.3mm/°tilt		
	•	Support		
	AR stakeout	A single photo can acquire multiple point coordinates, with an accuracy of better than 5cm within		
	Image measurement	15 meters ^[3]		
	Real-time accuracy evaluation			
Camera	Pixel	3 Professional HD Cameras		
Camera	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		
	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		
	Advanced function	NFC, WebUI, Firmware upgrade via U-disk		
	Intelligence application	Intelligent Voice, Self-check		
Application	Demote comiles	Message push, online upgrade, remote control		
Application	Remote service			
Application	Remote service	Lithium battery, portable charger		
	Power ^[4]	RTK rover(UHF/Cellular): up to 10 hours	SLAM mode: up to 5 hours	
Application Physical			SLAM mode: up to 5 hours	
	Power ^[4] Size	RTK rover(UHF/Cellular): up to 10 hours USB 45W fast charging, fully charged in 2 hours Φ134.4mm×109.9mm	SLAM mode: up to 5 hours	
	Power ^[4]	RTK rover(UHF/Cellular): up to 10 hours USB 45W fast charging, fully charged in 2 hours	SLAM mode: up to 5 hours	
	Power ^[4] Size	RTK rover(UHF/Cellular): up to 10 hours USB 45W fast charging, fully charged in 2 hours Φ134.4mm×109.9mm	SLAM mode: up to 5 hours	
Physical	Power ^[4] Size Weight	RTK rover(UHF/Cellular): up to 10 hours USB 45W fast charging, fully charged in 2 hours Φ134.4mm×109.9mm 1.68kg	SLAM mode: up to 5 hours	
	Power ^[4] Size Weight Water/dustproof	RTK rover(UHF/Cellular): up to 10 hours USB 45W fast charging, fully charged in 2 hours Φ134.4mm×109.9mm 1.68kg IP64	SLAM mode: up to 5 hours	

[&]quot;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 temperating temperature and battery life. Descriptions and Specifications are subject to change without notice.