

V700S

SLAM RTK



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	
System Configuration	Real Time Kinematic	RTCM2.X, RTCM3.X	
	Network Mode	VRS, FKP, MAC, Support NTRIP protocol	
	Operation system	Linux	
Accuracy and Reliability[2]	Storage	Circulating 512GB ROM	
	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: 8mm + 1ppm RMS	V: 15mm + 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[3]	8mm+0.7mm/°tilt	
	AR stakeout	Support	
	Non-contact measurement	A single photo can acquire multiple point coordinates, with an accuracy of better than 5cm within 15 meters	
	Mesurement without GNSS signal	Absolute accuracy of 5 cm for 10 minutes even if satellite signal is lost	
	Real-time accuracy evaluation	Supports	
Camera	Pixel	3 Professional Dual HD Cameras	
	Function	Support AR stakeout, image measurement, working distance 2~15m	
Laser Scanner	Range	40m	
	Laser product classification	Class 1 Eye Safe	
	FOV	H: 160°	V: 59°
	Point cloud thickness	2cm	
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	Satellite, Signal, Power	
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, supports hot-swapping and portable charger	
		RTK rover(UHF/Cellular): up to 15 hours	SLAM mode: up to 5 hours
		USB 45W fast charging, fully charged in 2 hours	
	Size	Φ134.4mm×109.9mm	
Environments	Weight	≤1.6kg	
	Water/dustproof	IP64	
	Humidity	100% non-condensing	
	Operation temperature	-45℃~+75℃	
	Storage temperature	-55℃~+85℃	

Note:

[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]Irregular operations such as rapid rotation and high-intensity vibration may affect the inertial navigation accuracy.

[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