



## SLAM RTK



## 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
		07\$\$`11121516
		NavlC: 15
		SBAS-11 12 15
		ACCIL NIMEA 0102 D
	Output format	ASCII: NIVIEA-UT83, Binary
	Output rate	IHz~20Hz
	Static data format	GNS, Rinex
	Real Time Kinematic	RTCM2.X, RTCM3.X
	Network Mode	VRS, FKP, MAC, Support NTRIP protocol
System	Operation system	Linux
Configuration	Storage	Circulating 512GB ROM
Accuracy and	High-Precision Static	Horizontal: 2.5 mm + 0.1 ppm RMS / Vertical: 3.5 mm + 0.4 ppm RMS
	Static and Fast Static	H: 2.5 mm + 0.5 ppm RMS L V: 5 mm + 0.5 ppm RMS
	PPK	H: 8mm + 1ppm RMS V: 15mm + 1ppm RMS
		H: 10cm   V: 20cm
	Code Differential	
	GNSS Positioning	H: ±0.25m+1ppm RMS   V: ±0.5m+1ppm RMS SBAS: 0.5m (H), 0.85m (V)
Reliability <sup>[2]</sup>	Real Time Kinematic (RTK)	H: 8mm+1ppm RMS V: 15mm+1ppm RMS
		Initialization time: Typically <10s   Initialization reliability: Typically > 99.9%
	Tilt Survey Performance <sup>[3]</sup>	8mm+0.7mm/°tilt
	AR stakeout	Support
	Non-contact measurement	A single photo can acquire multiple point coordinates, with an accuracy of better than
	Mesurement without	Abachute accuracy of E am for 10 minutes oven if actallite signal is last
	GNSS signal	Absolute accuracy of 5 cm for 10 minutes even it 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)
-	Electronic bubble	Supports
Sensor	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	NEC WebIII Firmware upgrade via U-disk
	Intelligence application	Intelligent Voice Self-check
	Remote service	Message push online upgrade, remote control
Physical	Power <sup>[4]</sup>	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	0134.4mm×109.9mm
	Weight	≤1.6kg
Environments	Water/dustproof	IP64
	Humidity	100% non-condensing
	Operation temperature	-45°C ~+75°C
	Storage temperature	-55 °C ~ +85 °C

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.