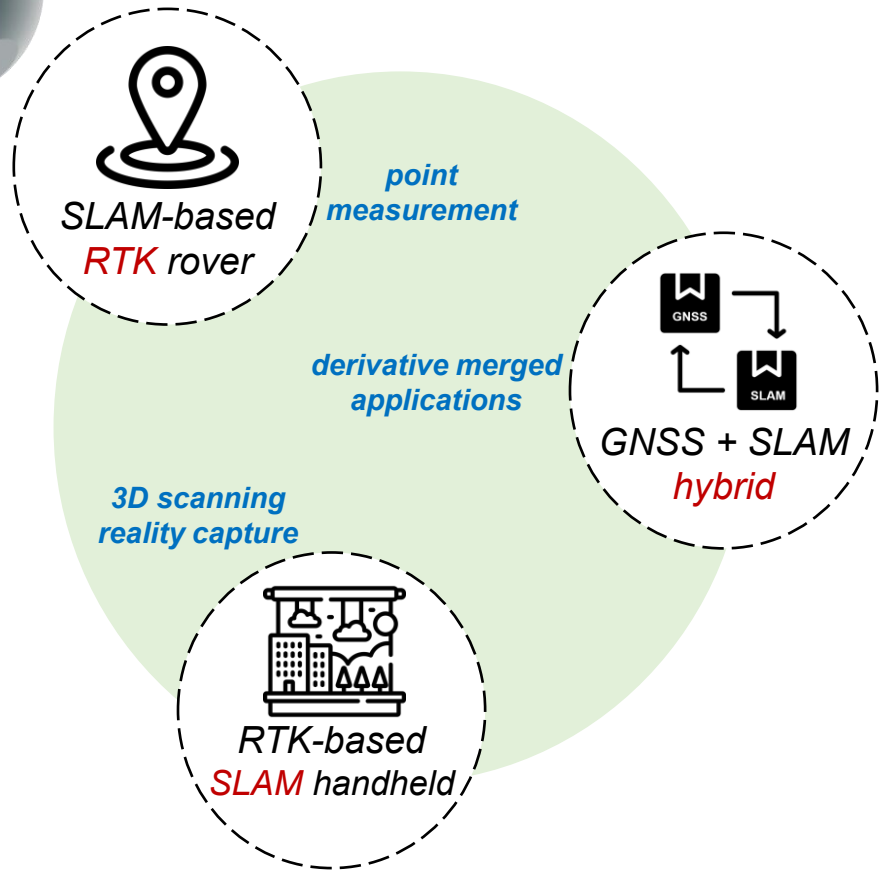


SLAM RTK Hybrid Supreme ME

When RTK Meets SLAM

1+1 > 2 Is True



Map It **Real**

Datasheet V.202508



SPECIFICATION

MODEL	ME	ME Plus
PHYSICAL -----		
Dimension	13 x 147 x 138 mm	
Net Weight	1.38 kg	
Camera (for SLAM)	12MP x2 left and right, 8MP x1 forward	
Camera (for GNSS)	2MP x1 downward	
Laser Scanner	Livox Mid-360	
Temperature Sensor	built in, intelligent variable frequency control	
IMU Module	built in for GNSS, and supports tilt survey option	
Wi-Fi Module	built in and serves as a hotspot source	
Network Telecom	SIM card slot built in, Nano SIM	
Radio Wireless	N/A	available
ELECTRICAL -----		
Power Supply	inbuilt battery + handgrip battery	
Endurance	inbuilt battery ≥0.5h; handgrip battery ≥2h	
Power Consumption	26 W	
Charging	1-2 h	
Input Voltage	14.4 V	
Power Output	30 W	
TECHNICAL -----		
GNSS Features	full constellation tracking and smart dynamic sensitivity positioning technology	
GNSS Performance	Signal Tracking	1,698 channels
	Multi-constellation	GPS/Glonass/BDS/Galileo/QZSS/NavIC/IRNSS/SBAS
	Positioning Output Frequency	1-10 Hz
	Initialization Time	< 10 sec
	Cold Restart	< 12 sec
	Initialization Reliability	> 99.9%
	IMU Refresh Rate	200 Hz
GNSS Accuracy	Single Point Positioning	H. 1.5m RMS; V. 2.5m RMS
	DGPS	H. 0.4m RMS; V. 0.8m RMS
	Real Time Kinematic (RTK)	H. 8mm+1ppm RMS; V. 15mm+1ppm RMS
	Post Processed Kinematic (PPK)	H. 3mm+1ppm RMS; V. 5mm+1ppm RMS
	Precise Point Positioning (PPP)	supports PPP-B2b, H. 10 cm; V. 20 cm
	High-precision Static	H. 2.5mm+0.1ppm RMS; V. 3.5mm+0.4ppm RMS
	Static and Rapid Static	H. 2.5mm+0.5ppm RMS; V. 5mm+0.5ppm RMS
	Code Differential	H. 0.4m RMS; V. 0.8m RMS
	Positioning Refresh Rate	1Hz/5Hz/10Hz
Time for First Fixed Solution	cold start 45sec; hot start 10sec; single repeat 1sec	
SLAM Performance	Scanning Range	0.1-70m (70m/40m @ 80%/10% reflectivity)
	Measurement Rate	200,000 pts/sec
	Field Of View (FOV)	360° x 59°
	Laser Wavelength	905 nm
	Laser Safety Class	Class 1 (IEC 60825-1:2014), eye-safe
	Loop Closure Free	available when RTK is enabled outdoors
	PPK Mode	available
SLAM Accuracy	Realtime Assessment	available
	Relative Accuracy	≤10 mm
	Range Noise	approx. 5-20 mm (optimized)
	Absolute Accuracy (RTK)	best up to 3-5 cm (powered by onboard RTK)
	Absolute Accuracy (PPK)	best up to 2-4 cm (post processed)
Merged Applications	Positioning Accuracy while Satellites Unlocked (known as Magicalc)	best up to 2-3 cm, typical 5-10 cm
	Contactless Measurement Accuracy	≤5 cm (@15 m)
	Super Stake-out Accuracy	optimal H. 8mm+1ppm RMS; V. 15mm+1ppm RMS typical H. 10mm+1ppm RMS; V. 20mm+1ppm RMS
AR Stake-out Performance	Visual Stake-out Accuracy	optimal H. 8mm+1ppm RMS; V. 15mm+1ppm RMS typical H. 10mm+1ppm RMS; V. 20mm+1ppm RMS
COMMUNICATION -----		
Radio Datalink	N/A	Rx module built in
Voice Language	CHN/ENG/KOR/RUS/PRT/ESP/TUR as default	
Audio Messaging iVoice	smart audio for status broadcasting and instructions	
Bluetooth	BT4.2 (BR/EDR+BLE) standard	
NFC Wireless	auto pairing between device and controller by touch	
WLAN	802.11b/g/n standard	
ENVIRONMENTAL -----		
Working Temperature	-20°C ~ +55°C	
Storage Temperature	-40°C ~ +80°C	
Operating Humidity	80% non-condensing	
DATA MANAGEMENT -----		
Data Format	Static: South STH, Rinex2/3.02, etc.; Differential: RTCM3.0/3.2; GPS output: NMEA0183, PJK plane coordinate, binary code; Network Mode: VRS/FKP/MAC/N-trip	

SOUTH

