

📍 Technical Specification

System	System	Linux	
GNSS Signal ^②	Channel	1408	
	BDS	B1I, B2I, B3I, B1C, B2a, B2b*	
	GPS	L1 C/A, L1C*, L2P(Y), L2C, L5	
	GLONASS	L1, L2, L3*	
	GALILEO	E1, E5a, E5b, E6*	
	QZSS	L1, L2, L5, L6*	
	SBAS	L5*	
	NavIC(IRNSS)*	L1, L2, L5	
	L-band	B2b PPP (Only for the Asian-Pacific Region)	
	Data Format	CMR, CMR+, RTCM2.X, RTCM3.X	
	Data Output	NMEA-0183, RINEX, TXT	
	Data Updating Rate	Up to 20Hz	
	Time to Recapture	<1s	
Positioning Performance	Cold Start	<40s	
	Single Point Positioning (RMS)	Horizontal: 1.5m	Vertical: 3.0mm
	DGPS (RMS)	Horizontal: 0.4m	Vertical: 0.8mm
	Real-Time Kinematic (RMS)	Horizontal: ±(8mm+1×10-6-D)	
	Speed Accuracy (RMS)	Vertical: ±(15mm+1×10-6-D)	
	Static Accuracy (RMS)	0.03m/s	
	Time Accuracy (RMS)	Horizontal: ±(2.5mm+0.5-6-D)	
	Speed Accuracy	Vertical: ±(5mm+0.5-6-D)	
	Tilt Compensation Accuracy	20ns	
	IMU Update Frequency	≥0.03m/s	
Communication	Bluetooth	≤2cm(Tilt Angle≤60°, Up to 120°)	
	WiFi	200Hz	
	Cellular	V2.1+EDR/V4.0 Dual Mode	
	Storage	802.11 a/b/g/n/ac	
	Internal Radio	LTE FDD: B1/2/3/4/5/7/8/12/13/18/19/20/25/26/28	
		LTE TDD: B38/39/40/41	
		WCDMA: B1/2/4/5/6/8/19	
		GSM: B2/3/5/8	
Battery	Specifications	Up to 64GB	
	Operating Time	Transmitting Power:2W(37±1dBm) 1W(30±1dBm)	
	Charging	Frequency: 410~470MHz	
		Protocol: TRIMTALK, TRIMMK3, SOUTH, TRANSEOT, SATEL, MeridianLink optional	
Environment	Operating Temperature	Air Baud Rate: 9600, 19200	
	Storage Temperature	7.4V, 7000mAh Lithium-ion Rechargeable Battery	
	Anti-seismic	RTK Rover: Up to 26 hours (Typical Power Consumption)	
	Dust & Waterproof	Static: Up to 30 hours (Typical Power Consumption)	
Physical	AR Camera	Support USB PD 15V/2A (Supports Quick Charging Adapter)	
	I/O Interface	500 MegaPixel, Large Viewing Angle, Supports Live View Stakeout	
	Dimensions	1× USB type-C Port; 1 × SMA antenna Port; 1× SIM Card Slot; 1 × 5pin LEMO Port	
	Weight	119mm×119mm×76mm	

1. *Description and Specifications are subject to change without notice.
2. *BDS B2b, GALILEO E6, QZSS L6, IRNSS L5 will be provided through future product upgrade.



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Meridian



M20
GNSS RTK



To be the Best
GNSS Solution Provider

CE FCC IP67

M20

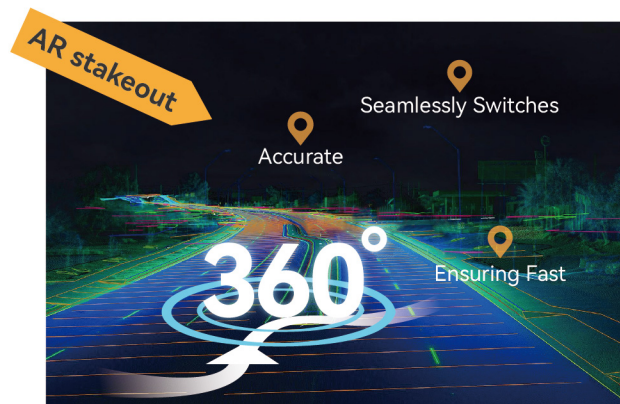
LIVE VISUAL STAKEOUT GNSS RTK



Meridian M20 GNSS RTK is an innovative solution that combines advanced technology with **upgraded high-definition** Camera, IMU, and 4G integration. It is calibration-free, significantly boosting operational efficiency. **The compact and lightweight design makes M20 a feasible and portable choice for engineering personnel in stakeout, surveying and improving positional accuracy.**

AR Stakeout

Visual positioning eases point finding by overlaying design files onto real scenes, enhancing stakeout efficiency. A high-performance HD camera achieves high accuracy with precise signal tracking. The 360-degree AR stakeout seamlessly switches between the handheld controller and rover, ensuring fast and accurate stakeout experiences.



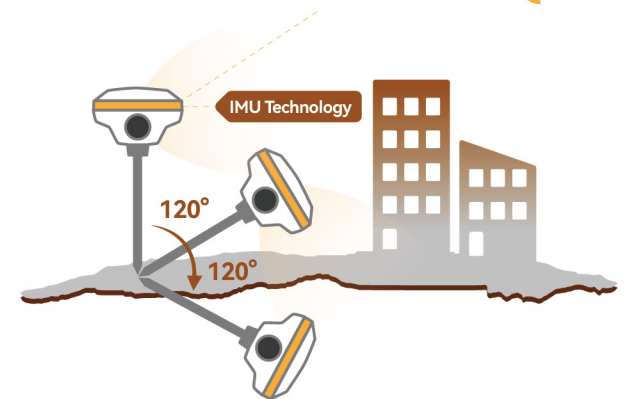
Longer Working Time

Offers a longer working time of up to 26 hours, allowing users to work for an entire day, also ensures that data is saved safely and securely without the risk of losing important information due to a dead battery.



Calibration-Free Solution

Highly equipped with 120° calibration-free IMU technology in a small body, M20 offers stability and high precision without the need for device calibration, extending the M20's application range to locations that traditional RTK systems cannot reach, opening up new horizons for product applications.



Longer Working Distance

Equipping the MeridianLink protocol internal radio offers 15km working range and increases flexibility. By eliminating the need for an external radio, the M20L becomes more lightweight, less complex, and more portable, which can lead to increased efficiency and convenience in the field.



Full Constellations

Supports BDS, GPS, GLONASS, Galileo, QZSS, and SBAS. Its 1408 channels offer comprehensive GNSS signal tracking capabilities.

