



M20 GNSS RTK

To be the Best
GNSS Solution Provider

CE FCC IP68

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.



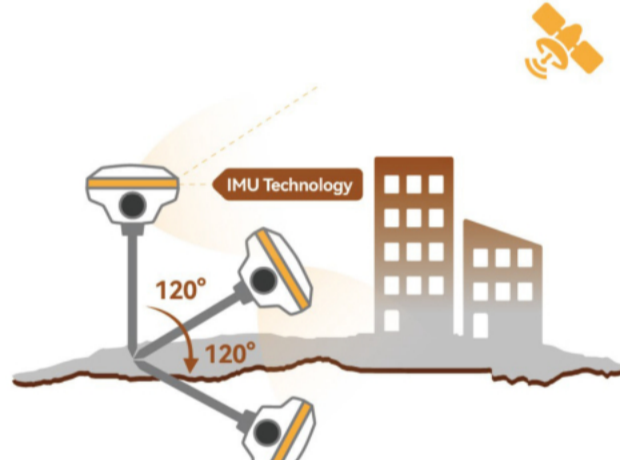
Longer Working Time

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 M20 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.



Technical Specification

System	System	Linux
GNSS Signal [®]	Channel	1408
	BDS	B1I, B2I, B3I, B1C, B2a, B2b*
	GPS	L1C/A, L1C, L2P(Y), L2C, L5
	GLONASS	L1, L2, L3*
	GALILEO	E1, E5a, E5b, E6*
	QZSS	L1C/A, L1C, L2C, L5, L6*
	SBAS	L1, L5*
	NavIC(IRNSS)*	L1, L5*
	L-band	B2b PPP (Only for the Asian-Pacific Region) & HAS*
	Data Format	CMR, CMR+, RTCM2.X, RTCM3.X
Data Output	NMEA-0183, RINEX, TXT	
Data Updating Rate	Up to 20Hz	
Time to Recapture	<1s	
Cold Start	<40s	
Positioning Performance	Single Point Positioning (RMS)	Horizontal: 1.5m Vertical: 3.0mm
	DGPS (RMS)	Horizontal: 0.4m Vertical: 0.8mm
	Real-Time Kinematic (RMS)	Horizontal: ±(8mm+1x10-6-D)
	Speed Accuracy (RMS)	Vertical: ±(15mm+1x10-6-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)
Communication	Bluetooth	20ns
	WiFi	≥0.03m/s
	Cellular	≤2cm(Tilt Angles≤60°, Up to 120°)
	Storage	200Hz
Battery	Specifications	V5.2 Dual Mode, 2.4GHz@+5dBm
	Operating Time	IEEE 802.11b/g/n
	Charging	LTE FDD: B1/3/5/7/8/20
Environment	Operating Temperature	LTE TDD: B38/40/41
	Storage Temperature	UMTS/HSPA+ B1/8
	Anti-seismic	GSM/GPRS/EDGE: 900/1800 MHz
Physical	Dust & Waterproof	Up to 64GB
	AR Camera	Transmitting Power: 1W (27 dBm ±1.5 dB) or 2 W (32 dBm ±1.5 dB)
	I/O Interface	Frequency: 410-470MHz
	Dimensions	Protocol: SOUTH, TRIMARK 450S, TRIMMK III, TRANSEOT, SATEL, MERIDIANLINK
	Weight	Air Baud Rate: 9600, 19200, 11000
		7.2V, 6600mAh lithium-ion Rechargeable Battery
		RTK Rover: Up to 26 hours (Typical Power Consumption)
		Static: Up to 30 hours (Typical Power Consumption)
		Support USB PD 15V/2A (Supports Quick Charging Adapter)
		-40°C~+85°C
		-55°C~+85°C
		2m Pole Drop Onto Concrete
		IP68
		5 MegaPixel, Large Viewing Angle, Supports Live View Stakeout
		1x USB Type-C Port; 1 x SMA Antenna Port;
		1x SIM Card Slot; 1 x 5pin LEMO Port
		119mmx119mmx76mm
		662g

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.



Meridian

WEBSITE: JPSURVEYINSTRUMENTS.COM

JIMÉNEZ & PIÑA SURVEY INSTRUMENTS DISTRIBUIDOR OFICIAL DE MERIDIAN PARA LA REPUBLICA DOMINICANA.

DIRECCIÓN: CALLE 2, URBANIZACIÓN CABIRMA DEL ESTE, SANTO DOMINGO ESTE, REPUBLICA DOMINICANA.

EMAIL: INFO@JPSURVEYINSTRUMENTS.COM TEL: +1 829-916-3012