

Technical Specification

Platform	Hardware	Qualcomm MDM9x07 Cortex-A7	
	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, GNS	
	Data Updating Rate	5Hz	
	Time to Recapture	<1s	
Cold Start	<40s		
Positioning Performance	Single Point Positioning (RMS)	Horizontal: 1.5m	Vertical: 3.0m
	DGPS (RMS)	Horizontal: 0.4m	Vertical: 0.8m
	Real Time Kinematic (RMS)	Horizontal: ±(8mm+1×10 ⁻⁶ ·D) Vertical: ±(15mm+1×10 ⁻⁶ ·D)	
	Speed Accuracy (RMS)	0.03m/s	
	Static Accuracy (RMS)	Horizontal: ± (2.5mm+0.5·6·D) Vertical: ± (5mm+0.5·6·D)	
	Time Accuracy (RMS)	20ns	
	Tilt Compensation Accuracy(up to 60°)	≤2cm	
Communication	Bluetooth	V2.1+EDR/V4.0 Dual Mode	
	WiFi	802.11 a/b/g/n/ac	
	Cellular	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	
	Storage	GSM: B2/3/5/8	
		Built-in 32GB	
Internal Radio	Transmitting power: 5W(37±1dBm) 1W(30±1dBm)		
	Frequency: 410~470MHz		
	Protocol: TRIMTALK, TRIMMK3, SOUTH, TRANSEOT Air Baud Rate: 9600, 19200		
Battery	Specifications	7.4V, 6500mAh lithium-ion Rechargeable Battery	
	Operating Times	RTK Rover: Up to 20 hours (Typical Power Consumption) Static: Up to 26 hours (Typical Power Consumption)	
	Charging	Support USB PD 15V/2A Support 5V/3A (Support Quick Charging Adapter)	
Environment	Operating Temperature	-20°C~+70°C	
	Storage Temperature	-40°C~+85°C	
	Anti-seismic	2m Pole Drop Onto Concrete	
	Dust & Waterproof	IP68	
Physical	Material	Magnesium-alloy Casing + ABS/PC Plastic Top Cover	
	Dimensions	Φ143.5mm*90.7mm	
	Weight	≤0.9kg	

1. *This information is for reference only. The product parameters are subject to changes due to product upgrading without notice.
2. *BDS B2b, GALILEO E6, QZSS L6, IRNSS L5 will be provided through future product upgrade.



Website: www.meridiangnss.com

Manufacture: **Guangzhou Meridian GNSS CO., LTD.**

Address: Building 3, No. 6, Hanqi Avenue, Dalong Street, Panyu District, Guangzhou, PRC.

Email: meridiangnssvip@gmail.com Tel: +8613229468806

M8

GNSS RECEIVER



CE FCC IP68

To be the Best
GNSS Solution Provider

M8 HIGH PERFORMANCE GNSS RECEIVER

With Long-range And Long-lasting



The Meridian M8 features a new generation RTK engine and supports tilt measurement, allowing for high-precision surveying in complex environments. It also has built-in 4G connectivity, Bluetooth, Wi-Fi, and a 5W data transmission radio, enabling high-speed data transfer and User-friendly WebUI, which improves efficiency and convenience.

The M8 has a rugged design and a lightweight structure, making it suitable for outdoor and harsh environments. Equipped with 5 watt build-in radio and 32GB internal storage, allowing users to attain accurate, reliable solutions, makes M8 the perfect base station receiver.

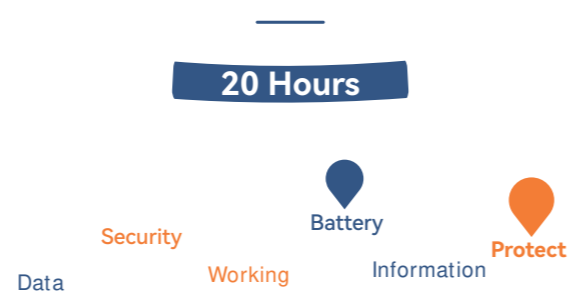
Longer Working Distance

Equipping the Meridian M8 with a 5W internal radio offers numerous benefits, including increased flexibility and improved safety. By eliminating the need for an external radio, the M8 becomes more lightweight, less complex, and more portable, which can lead to increased efficiency and convenience in the field.



Longer Working Time

Offers a longer working time of up to 20 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.

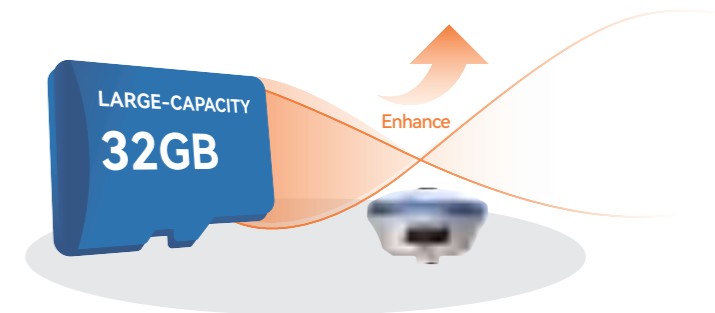


Highly Integrated Four-in-one Antenna

The highly integrated four-in-one antenna on the M8 provides several advantages, including saving space, improving performance and reliability, and reducing the failure rate during use, making M8 more portable and easier to handle, increasing the efficiency and accuracy of measurements.

Large-capacity Data Storage

32GB internal memory is a valuable feature that can enhance the device's capabilities and streamline data management for users.



Enhanced Tilt IMU

Equipped with calibration-free IMU, support up to 60° tilt angle within 2cm accuracy, allows for quick and accurate measurements without leveling the pole. Concentrate on where the pole tip needs to go, which is especially useful during a stakeout. Additionally, users can easily survey environments that are hard to reach, such as building corners and slopes.

