



Meridian M5Plus GNSS Receiver

M5Plus GNSS receiver is an extremely lightweight, full-featured, intelligent GNSS receiver system equipped with an integrated full-frequency antenna and advanced multi-channel RTK engine, built-in radio, and 8GB internal storage, allowing users to attain accurate, reliable solutions.

Its powerful RTK algorithm makes M5Plus easy to get fixed solutions in the most demanding environments, brings you to focus on your surroundings and not the bubble to measure the points that previously could not be measured, making your stake out more efficiently and conveniently than ever before with increased speed, safety and comfort and greatly improving your working efficiency.



Multi Constellation

M5Plus provides an excellent onboard real-time navigation solution with high accuracy. Multi-satellite signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS, IRNSS, L-Band) are included.



Powerful IMU Feature

Equipped with 120° calibration-free IMU technology in a small body, extending the M5Plus's application range to locations that traditional RTK systems cannot reach, opening up new horizons for product applications.



Palm Size

The palm-sized RTK (Real-Time Kinematic) system combines elegance with precision, offering a compact solution for accurate positioning on-the-go.



Powerful Battery

With 7.4V 7000mah and the quick-charge capability, supports you in working more than 26hours and greatly saves your time.



Rugged Housing

IP67 waterproof and dustproof design and magnesium-aluminum alloy housing.



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, TXT
	Data Updating Rate	Up to 20Hz
	Time to Recapture	<1s
Cold Start	<40s	
Positioning Performance	Single Point Positioning (RMS)	Horizontal: 1.5m Vertical: 3.0m
	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
	Speed Accuracy	≥0.03m/s
	Tilt Compensation Accuracy	≤2cm(Tilt Angle≤60°, Up to 120°)
Communication	IMU Update Frequency	200Hz
	Bluetooth	V2.1+EDR/V4.0 Dual Mode
	WiFi	802.11 a/b/g/n/ac
	Storage	8GB
Battery	Internal Radio	Transmitting power: 2W(37±1dBm) 1W(30±1dBm) Frequency: 410~470MHz Protocol: TRIMTALK, TRIMMK3, SOUTH, TRANSEOT, SATEL Air Baud Rate: 9600, 19200
	Specifications	7.4V, 7000mAh lithium-ion Rechargeable Battery
	Operating Time	RTK Rover: Up to 26 hours (Typical Power Consumption) Static: Up to 30 hours (Typical Power Consumption) Support USB PD 15V/1.5A (Supports Quick Charging Adapter)
Environment	Charging	Support USB PD 15V/1.5A (Supports Quick Charging Adapter)
	Operating Temperature	-40°C~+85°C
	Storage Temperature	-55°C~+85°C
	Anti-seismic	2m Pole Drop Onto Concrete
	Dust & Waterproof	IP67
	I/O Interface	1× USB type-C port; 1× SMA antenna port; 1× 5 pin LEMO port
Physical	Dimensions	119mm×119mm×76mm
	Weight	599g
	Material	Magnesium-alloy Casing + ABS/PC Plastic Top Cover
	Dimensions	Φ147.9*68mm

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.

