



Meridian M3Plus GNSS Receiver

M3Plus GNSS receiver features an ultra-light-weight, compact design combined with a full-frequency antenna, advanced multi-channel RTK engine, built-in 2W UHF radio, and advanced IMU.

Supporting both CORS and radio RTK modes, it enables fast setup, intuitive operation, and efficient fieldwork, delivering accurate and reliable positioning with exceptional portability and ease of use.



- Incredibly Flexible
- Ultra-Light Built-in 2W Radio
- Designed to Function Effectively

M3Plus MINI IMU GNSS RTK



Multi Constellation

M3Plus provides an excellent onboard real-time navigation solution with high accuracy. Multi-satellite signals (GPS, GLONASS, BEIDOU, GALILEO, QZSS, IRNSS, L-Band) are included.



Built-in IMU Feature

Equipped with calibration-free IMU technology in small body, 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.



Extended Working Coverage

With a lightweight built-in 2W radio powered by the MeridianLink protocol, M3Plus supports a working range of up to 10 km, providing reliable RTK communication while maintaining a compact, portable, and easy-to-carry design—ideal for efficient everyday field operations.



Rugged, Compact and Portable Design

Designed for versatility, the M3 supports armband, pocket, and pole-mounted use for effortless and efficient fieldwork.



All-in-view RTK Positioning

Embedded with a high precision GNSS module, the M3plus supports centimeter-level CORS & Radio differential data positioning.

Technical Specification

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)*	L5
	L-Band	B2b PPP (Only for the Asian-Pacific Region) & HAS*
	Data Format	CMR, CMR+, RTCM2.X, RTCM3.X
	Data Updating Rate	Up to 20Hz
	Initialization Time	≤5 Seconds (Typical)
Cold Start	≤30 Seconds	
Hot Start	≤3 Seconds	
Positioning Performance	Single Point Positioning (RMS)	Horizontal: 1.5m Vertical: 2.5m
	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	≥0.03m/s
	Tilt Compensation Accuracy (Up to 120°)	≤1.5cm(Tilt Angle≤30°)
Communication	Bluetooth	Bluetooth V4.0
	Indicator	Power Indicator x1
		Bluetooth Indicator x1
		Differential Data Indicator x1
		Satellite Indicator x1
Internal Radio(Optional)	Transmitting Power: 2W(33±1dBm) 1W(30±1dBm)	
	Frequency: 410-470MHz	
	Protocol: SOUTH, TRIMTALK 450S, TRIMMK III, TRANSEOT, SATEL, MERIDIANLINK	
Cellular(Optional)	Air Baud Rate: 9600,19200,11000	
	Category: LTE Cat 1 bis LTE-FDD: B1/3/5/7/8/20/28	
Battery	Specifications	7.4V / 2500mAh lithium-ion Rechargeable Battery
	Operating Times	RTK Rover: Up to 10 Hours (Typical Power Consumption)
Environment	Operating Temperature	-20°C~+75°C
	Storage Temperature	-40°C~+85°C
	Anti-seismic	1.6m Pole Drop Onto Concrete
	Dust& Waterproof:	IP67
	Humidity	95% No Condensation
Physical	I/O Interface	Type-C& Power Button
	Dimensions	54×59×127mm
	Weight	≤300g

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.

