

M3

PORTABLE GNSS RECEIVER

To be the Best
GNSS Solution Provider

CE FCC IP67

M3

MINI IMU GNSS RTK

The **Meridian M3** is a user-friendly and portable smart antenna with IMU that offers high-quality positioning data, greatly improves your working efficiency.

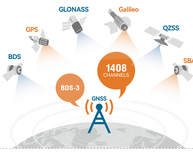
Supports multiple constellation and frequency tracking, calibration-free tilt compensation IMU technology, it is designed to be worn and used on-the-go, and it can provide professional-grade results. Equipped with a high precise GNSS module, the M3 is capable of achieving centimeter-level positioning accuracy using CORS differential data.



A IMU · B User-friendly · C Portable · D Centimeter-level

Full Constellations and Multi-frequency

The Meridian M3 is a versatile device that supports various satellite constellations including BDS, GPS, GLONASS, Galileo, QZSS, and SBAS. With its 1408 channels and full support for BDS-3, it offers comprehensive GNSS signal tracking capabilities.



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 and conveniently than ever before with increased speed, safety and comfort and greatly improving your working efficiency.



Ideal for Multiple Applications

The M3 is suitable for a range of survey and layout tasks, such as road construction, power line surveying, site leveling control, and CAD applications.

Road Construction · Power Line · Site Leveling · CAD Applications



All-in-view RTK Positioning

Embedded with a high precision GNSS module, the M3 supports centimeter-level CORS differential data positioning.



Rugged, Compact and Portable Design

The M3 is specifically designed to function effectively in challenging environments.

The M3 is incredibly flexible and can be carried in an armband bag, shirt pocket, or attached to a pole using a pouch.

It has excellent heat dispersion properties and weighs less than 170g, making it perfect for mobile surveys.

This provides users with multiple wearable modes, allowing them to choose the mode that best suits their needs and makes their job easier.

TO BE THE BEST

GNSS SOLUTION PROVIDER

- ☑ Designed to Function Effectively
- ☑ Weighs Less Than 170g
- ☑ Incredibly Flexible

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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®4.0
	Indicator	Power Indicator x1
		Bluetooth Indicator x1
		Differential Data Indicator x1
		Satellite Indicator x1
Battery	Specifications	8.4 V / 1800 mAh 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	108 mm x 52 mm x 36 mm
	Weight	≤170g

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.

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