



Meridian

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 |
| | Internal Radio(Optional) | Satellite Indicator x1 |
| | | Transmitting Power: 2W(33±1dBm) 1W(30±1dBm) |
| Frequency: 410-470MHz | | |
| Cellular(Optional) | Protocol: SOUTH, TRIMTALK 450S, TRIMMK III, TRANSEOT, SATEL, MERIDIANLINK | |
| | Air Baud Rate: 9600,19200,11000 | |
| | Category: LTE Cat 1 bis | |
| 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.



Website: www.meridiangnss.com

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

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

Email: info@meridiangnss.com Tel: +8615241043026