

product-info.md

Micro M9N GPS

- Handle: `micro-m9n-gps`
- Vendor: PCBA
- Product type: GPS & RTK System
- Store URL: <https://holybro.com/products/micro-m9n-gps>

Description

Description: These Micro GPS use multi-constellation GNSS powered by u-blox M9N, a concurrent GNSS receiver that can receive and track multiple GNSS systems. Owing to the multi-band RF front-end architecture, all four major GNSS constellations, GPS, Galileo, GLONASS, and BeiDou, can be received concurrently. It also comes with the IST8310 or IST8308 compass. The high-gain 25 x 25 mm² patch antenna provides excellent performance, and the omnidirectional antenna radiation pattern increases flexibility for device installation. It features active circuitry for the ceramic patch antenna and a rechargeable backup battery for warm starts. High-Speed Drone GPS Comparison: This blog post put Holybro M10, M9N, F9P, and Matek M10Q to an ultimate test to determine which GPS units could keep pace with a high-speed drone in acro mode while ensuring precision during RTL and autonomous missions. Features Ublox M9N GNSS Receiver Accurate Positioning Fast Navigation Update Rate IST8310 or IST8308 Compass Small Form Factor Note IST8308 is supported by PX4 V1.16.0+ on Pixhawk 6C and 1.14.3+ on Pixhawk 6X Specifications: Holybro Micro M10 GPS Holybro Micro M9N GPS GNSS Receiver Ublox M10 Ublox M9N Number of Concurrent GNSS Up to 4 GNSS - BeiDou - Galileo - GLONASS - GPS - QZSS Up to 4 GNSS - BeiDou - Galileo - GLONASS - GPS - QZSS Frequency Band - GPS L1 - Galileo E1 - GLONASS L1 - BeiDou B1 - SBAS L1 - QZSS L1 - GPS L1 - Galileo E1 - GLONASS L1 - BeiDou B1 - SBAS L1 - QZSS L1 Compass IST8310 or IST8308 IST8310 or IST8308 Output Protocol - UBX (U-blox) - NMEA - UBX (U-blox) - NMEA Accuracy 2.0m CEP 1.5m CEP Nav. Update Rate Up to 25 Hz (single GNSS), Up to 10 Hz (4 concurrent GNSS) Up to 25 Hz (4 concurrent GNSS) GNSS Augmentation System EGNOS, GAGAN, MSAS and WAAS QZSS: L1S EGNOS, GAGAN, MSAS and WAAS QZSS: L1S Default Baud Rate 115200 115200 Input Voltage 4.7-5.2V 4.7-5.2V Port Type JST-GH-6P JST-GH-6P Antenna 25 x 25 x 4 mm ceramic patch antenna Antenna Gain 1.5dbi Antenna LNA Gain 22dB Power consumption Less than 200mA @ 5V Less than 200mA @ 5V Operating Temperature -40~80°C -40~80°C Dimension - 32 x 26 x 9mm (w/o Case) - 34 x 28 x 11mm (With Case) - 32 x 26 x 9mm (w/o Case) - 34 x 28 x 11mm (With Case) Weight - 14g (w/o Case) - 16g (With Case) - 14g (w/o Case) - 16g (With Case) Other - LNA MAX2659ELT+ RF Amplifier - Rechargeable Farah capacitance - Low-noise 3.3V regulator - LNA MAX2659ELT+ RF Amplifier - Rechargeable Farah capacitance - Low-noise 3.3V regulator Pin Map Reference Link Holybro Documentation Dimension 3D CAD Download Package Includes: - 1x Micro GPS module *1 - 1x JST GH 6-pin Connector 15 cm - 1x JST-GH 6-pin Colored Silicon Cable 15 cm

Variants

- **With Case / IST8310**: \$38.99 – SKU `12046` – available=None
- **With Case / IST8308**: \$38.99 – SKU `12100` – available=None
- **w/o Case / IST8310**: \$38.99 – SKU `12045` – available=None
- **w/o Case / IST8308**: \$38.99 – SKU `12099` – available=None

Options

- Version: With Case, w/o Case
- Magnetometer: IST8310, IST8308