

M10 GPS Module

Specification:

GPS :M10 GPS

Compass :QMC5883

Size: 36x36mm

Mounting holes: 30.5x30.5mmNSS Receiver :Ublox
M10

Number of Concurrent GNSS :Up to 4

GNSS/BeiDo/Galileo/GLONASS/GPS/QZSS

Frequency Bands: GPS L1/Galileo E1/GLONASS
L1/BeiDou B1/SBAS L1/QZSS L1

Compass :QMC5883

Output Protocol: UBX (U-blox)/ NMEA

Accuracy :2.0m CEP

Nav. Update Rate :Up to 25 Hz (single GNSS), Up
to 10 Hz (4 concurrent GNSS)

GNSS Augmentation System: EGNOS, GAGAN,
MSAS and WAAS : QZSS: L1S

Default Baud Rate :115200

Input Voltage :4.7-5.2V

Port Type :JST-GH-6P

Antenna: 25 x 25 x 4 mm ceramic patch antenna

Power consumption :Less than 200mA @ 5V

Operating Temperature :-40~80C

Description:

M10 is a GPS module commonly used in unmanned aerial vehicles, with the following characteristics and applications:

High precision positioning: The M10 adopts advanced GNSS technology, supports multiple satellite navigation systems, and can provide high-precision position positioning information. For unmanned aerial vehicles, it can achieve accurate positioning and navigation.

Multi system support: The M10 supports multiple satellite navigation systems, including GPS, GLONASS, Galileo, BeiDou, etc. This allows drones to receive multiple satellite signals simultaneously, improving positioning accuracy and reliability.

Quick positioning: M10 has fast cold start and hot start times, which can quickly obtain satellite signals and perform positioning, making it crucial for the rapid takeoff and task execution of unmanned aerial vehicles.

Strong anti-interference ability: M10 has excellent anti-interference performance, which can work stably in complex electromagnetic environments and is not susceptible to interference from other electronic devices.

In drone applications, M10 can be used in the following aspects:

Positioning and Navigation: The M10 provides accurate position and speed information to help drones achieve precise navigation and flight control.

Waypoint navigation: By inputting pre-set waypoint information into M10, unmanned aerial vehicles can automatically fly according to the route, achieving autonomous waypoint navigation tasks.

Multi aircraft collaboration: Multiple drones can use the M10 module for positioning and synchronization to achieve applications such as team collaborative flight and formation flight.

Return to return: The M10 can provide accurate return positioning information, enabling the drone to safely return to the takeoff point or preset return point.



