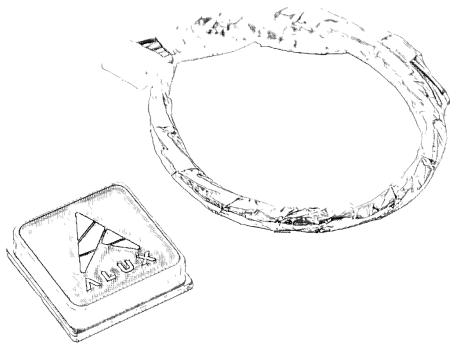


AP-M10

User Guide



AP-M10 Overview



Compact u-blox M10 GNSS module with an integrated BMM350 compass and ceramic patch antenna, tracking BDS / GPS / GLONASS / Galileo / QZSS.

AP-M10 Specifications

• Basic Specifications

Chipset	u-blox M10 Series
Compass	BMM350
Satellite Systems	BDS / GPS / GLONASS / Galileo / QZSS
Antenna Band	L1 Band Only
Antenna Type	Built-in Ceramic Patch
Single-Point Accuracy	H 1.5 m / V 2.5 m (RMS)
Cold Start	< 27 sec
Hot Start	< 1 sec
Update Rate	1 – 18 Hz (Default 10 Hz)
Data Format	NMEA / UBX
Comm. Protocol	UART (TTL)
I/O Ports	1× UART

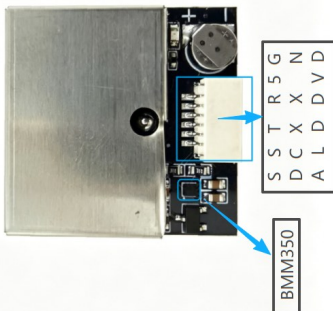
AP-M10 Specifications

• Basic Specifications

Size	18.2 × 18.2 × 8 mm
Weight	8 g
Operating Temp	-40 ~ +85 °C
Operating Voltage	3.3 – 5.0 V

AP-M10 Pinout

- Pinout



AP-M10 Setup

1. **Mounting** — Mount with a clear sky view, away from power wires, video transmitters and motors. It contains a compass: align it with the vehicle nose or set COMPASS_ORIENT.
2. **Connection** — Connect the 6-pin connector (SDA, SCL, TXD, RXD, 5V, GND) to the flight controller GPS port. GPS uses UART; the compass uses I2C. Supply: 3.3 – 5.0 V.
3. **ArduPilot** — Set SERIALn_PROTOCOL of that port to 5 (GPS) and GPS1_TYPE to 1 (Auto).
4. **Calibration** — Calibrate the compass away from metal and magnets; check satellite count and position before the first flight.

AP-M10 Safety Notes

- Always remove propellers while wiring, configuring or updating firmware.
- Pull connectors by the housing, never by the wires.
- Beware of static discharge; do not operate in wet or dusty conditions.



<Detailed Manual>

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