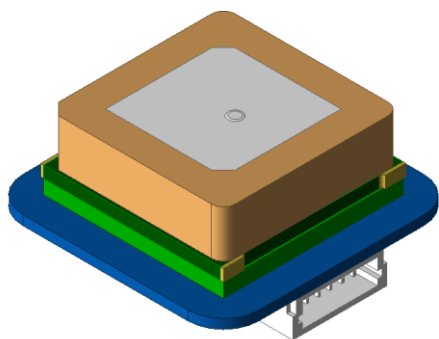




GPS Smart Antenna Module

OX-CSA-GP030A-00



Supported Constellations: GPS, GLONASS, Galileo, BeiDou

GNSS Receiver : u-blox M10 series (SAM-M10Q)

Magnetometer: IST8310, 3- axis

UART Baudrate : 9600 (default)

GNSS Interface : UART (TX,RX)

Compass Interface : 12C (SDA, SCL)

Voltage Supply : 4~9V

PPS LED Indicator : Red LED Blinking at 3D fix (1Hz)

Protocol : UBX or NMEA (1Hz)

Connector : JST-SH-6P

Dimension : 20*20*10.4mm

Power Consumption : 13mA typical

Temperature : -40°C to + 85°C

Weight : 8g

EVERCOM COMMUNICAITON TECHNOLOGY CO., LTD.

No.108 Jiesin St. Taoyuan District Taoyuan City 33063, Taiwan R.O.C.

Tel: +886-3- 376- 5678 Fax: +886-3- 376- 5319 E-Mail: service@evercomtech.com



Features:

- High performance three-axis magnetometer
- Concurrent reception of GPS, Glonass, Galileo and BeiDou
- Multi-constellations GNSS receiver power
- Module delivers sensitivity and fast acquisition for all L1 GNSS signals
- Visible satellites maximizes position available
- Super-signal technology enhance RF dynamic position accuracy non-line-of-sight scenarios



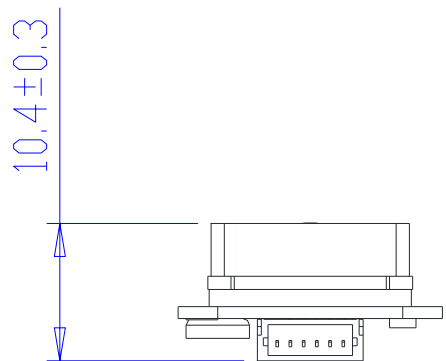
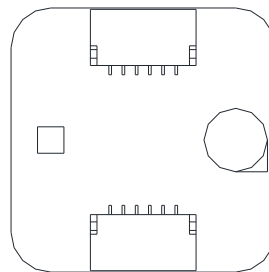
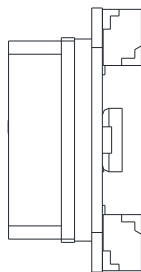
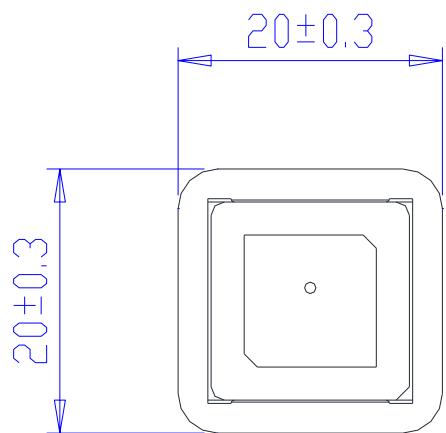
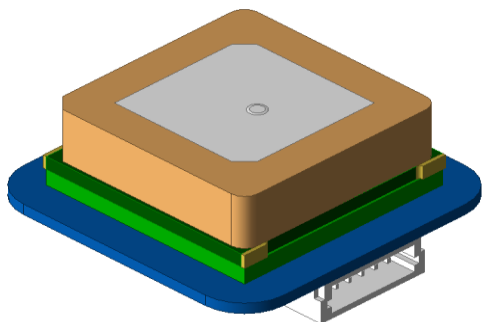
Tips and Notes :

- Do not tilt the magnetometer. Flat mounting is strongly recommended.
- INAV/ BetaFlight: If compass arrow faces forward, set CW270° Flip; if backward, set CW90° flip.
- ArduPilot/ Mission Planner: Set compass rotation to none.
- Place compass/magnetometer at least 10cm away from power lines, ESCs, motors, or iron-based materials.
- U-Blox M10 series modules do not include onboard flash. Settings will reset after power loss if supercapacitor is drained.
- GNSS settings can be configured via UBX protocol from the flight controller—no need for u-center configuration.
- To reset the module, short RST pad to GND for ≥ 100 ms. this will trigger a cold start and clear all settings.
- Scratches on the ceramic antenna may result from tuning and do not affect performance.



Applications:

- Challenging environments such as urban 、
canyons





Block Diagram:

The diagram is intended to provide the advanced information to aid customers in GP34-01 GNSS module design. Following this directive, customers will be familiar with the application circuit and speed up the product development.

