

PRODUCT DATA SHEET

MARSFLY AUTOPILOT AP200



OVERVIEW:

MARSFly Autopilot AP200, designed for lower-cost UAVs, provides autonomous capabilities for UAVs performing various mapping or tactical missions.

The AP200 autopilot system seamlessly blends state-of-the-art algorithms with intuitive design to meet safety, convenience, and flight performance objectives.



Comprehensive Autonomous Capabilities



Adaptability to Customer Needs



ITAR Free



Integratability with Various Platforms, Sensors and Avionics Systems



Versatile Hardware for Cross-Functional Mission



Advanced Proprietary GNSS-INS Solution

MARSFLY AUTOPILOT AP200 AUTONOMOUS

- **Auto Takeoff**
- **Auto Land**
- **Waypoints Multi-Missions**
- **Failsafe Options**
- **Target Tracking**
- **Real-time Auto Gains Tuning**
- **Geofence**
- **Surface and Sensors Calibration**
- **Area Scanning Mission**
- **Terrain Following**

SPECIFICATIONS:

Hardware Specifications:

533 MHz Micro-Processor

Up to 6 Serial Ports

Up to 2 CAN Bus

10 PWM

Up to 7 Configurable Pins

2 Fixed Analog, Up to 60V

Internal GPS

Internal Radio (Optional)

Tactical Grade Gyros and Accelerometers

On Board Air Data Unit

Mechanical Specifications:

Dimensions	126 x 92 x 29 mm (Max dimensions)
Weight	- 250 g with 900 MHz radio, Enclosure/mounting - Anodized aluminum, including flange

Environmental & Power:

Operating Case Temperature	-40° C to 80° C
Power Requirements	- VIN: 7.5 - 18 volts - Power: 20 W max (typical including 900 MHz radio)

Interface Specifications:

RS232 Payload Interface	Up to 4
CAN	- External ADU - Extended to other devices
Digital/Analog I/O	- 5 configurable (Digital I/O, PWM or analog input) Maximum voltage is 3.3V - 2 configurable (Digital I/O or analog input) Maximum voltage is 3.3V - 2 fixed analog Input up to 60V
Integrated RF Data Link Options	- 900 MHz unlicensed ISM - 400 MHz discrete. - Optional to connect external RF data link
GPS & IMU	- 4 Hz uBlox module GPS receiver, 5 volt Pressure sensors - 3 axis gyroscopes, 300°/sec. 3 axis acceleration, 10g - Internal magnetometer
Air Data Unit	- Ported static, 15Psi - Ported pitot, 1Psi differential - 100 m/s indicated airspeed
Supported Devices	- secondary comms radios, laser altimeters, Extended for user needs
Onboard SD Card	Yes

Ground Station Control Software:

Supported GS Control Software Allowing UAV Attitude Observation and Control of All Aforementioned AP Functionalities.