



# AeroFC V2

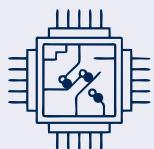
One Flight Controller. Every Drone Mission.  
Proudly Made in India.

Compatible with  
any open-source  
firmware and GCS.



## About

AeroFC V2 is a next-generation, high-performance flight controller engineered to power any drone, any mission, anywhere. Designed and built in India, it brings together precision, reliability, and intelligent control to support everything from agriculture and mapping to logistics, surveillance, inspection, and custom UAV innovations. With full compatibility for any open-source firmware and ground control software, AeroFC V2 gives you complete freedom to build without restrictions.



### ● Superior Processing Power

AeroFC V2 Flight Controller is powered by a high-performance main processor built on a 32-bit architecture, running at high speed. It operates alongside an efficient I/O processor to manage input and output seamlessly.



### ● Advanced External Sensor Support

AeroFC V2 Flight Controller supports CAN-based front and back obstacle avoidance radars, allowing your drone to navigate complex environments with ease. Additionally, the CAN-based altimeter provides precise terrain - following capabilities, ensuring stable and accurate flights even in rugged or varied landscapes.

- CAN-Based Front and Back Obstacle Avoidance Radars
- Provides Precise Terrain-Following Capabilities



### ● Broader Connectivity For Flexibility

AeroFC V2 Flight Controller offers 8 PWM outputs for motors, 4 auxiliary PWM/GPIO outputs, and 2 CAN buses, 3 UART ports for complex configurations and seamless connectivity. The dedicated R/C inputs for PPM and S. Bus signals ensure compatibility with a wide range of external systems, giving you ultimate flexibility in customizing your drone setup.

- AeroFC V2 offers 8 PWM outputs for motors
- 4 auxiliary PWM/GPIO outputs
- 2 CAN buses, 3 UART ports
- Dedicated R/C inputs for PPM and S



### ● Enhanced Sensors For Precision

AeroFC V2 Flight Controller features a highly advanced sensor suite with precision accelerometers, gyroscopes, a magnetometer, and dual barometers, ensuring exceptional accuracy in motion detection, altitude, and orientation measurements.



### ● Future-ready Design

AeroFC V2 Flight Controller is built to handle the growing needs of precision agriculture and advanced drone operations. Its compact design makes it lightweight and easy to integrate into a variety of drone systems.



## Hardware Specification

<b>Main Processor</b>	STM32H7 Series 32-Bit ARM Cortex-M7 Core, 480 Mhz
<b>Coprocessor</b>	STM32F1 Series 32-Bit ARM Cortex-M3 Core, 72MHz
<b>Supported RC Signals</b>	PPM/SBUS
<b>Connectors</b>	Standard And Widely Used Connectors
<b>Sensors</b>	Triple IMU System
<b>Sensors Details</b>	IMU1 (Isolated) MEMS High-Impact Applications IMU3 (Isolated) High Vibration Robustness MAG 1 (Isolated) High-Precision, Ultra-Low Noise MAG2 + MAG3 (External) Supports External Magnetometer BARO1 (Isolated) High-Resolution Barometric Pressure Sensor BARO1 (On Board) High-Resolution Barometric Pressure Sensor
<b>Supported Vehicle Types</b>	Survey Drone, Spraying Drone

## Specification

<b>Chassis Material</b>	aerospace grade aluminum
<b>Size</b>	89 x 45 x 30 mm
<b>Operating Temperature</b>	-40°C to +85°C
<b>Motor PWM I/Os</b>	8
<b>Auxiliary PWM / Digital I/Os</b>	4
<b>Dedicated Telemetry Interface</b>	1
<b>Number Of GPS Supported</b>	2
<b>Auxiliary UARTs</b>	2
<b>I2C Interface</b>	1
<b>CAN Interface</b>	2
<b>Power and Current, Voltage Measurement Interface</b>	1
<b>RCIN Interface</b>	1
<b>USB Interface</b>	1
<b>SDCARD Interface</b>	1
<b>Power and Current, Voltage Measurement Interface</b>	1



