PRODUCT DATASHEET

AIRDRONE FS-1F405

Airmod Drone Flight Stack

With Flight Controller and Electronic Speed Controller

Datasheet version: V1.3

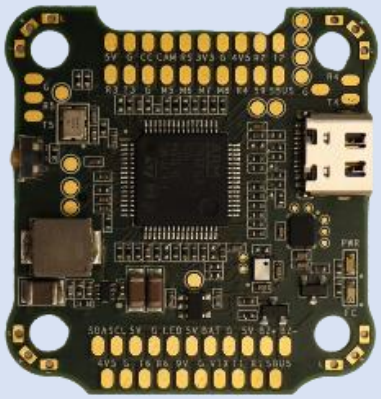
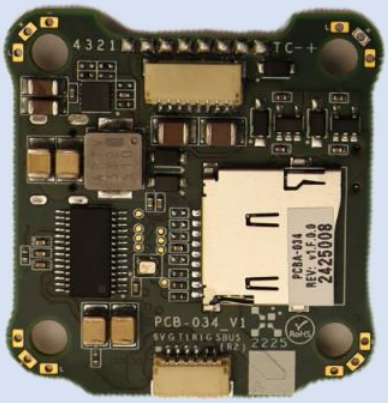
PRODUCT OVERVIEW

The Airmod Drone Flight Stack "Airdrone FS-1F405" is a high-performance, reliable "made in Europe" solution designed to power your drone with precision and stability. This powerful controller, tailored for both civil and military usage, offers seamless integration with advanced features and real-time responsiveness for smooth flight control. With a focus on durability and ease of use, it supports a wide range of drone models and is optimized for outdoor flying.

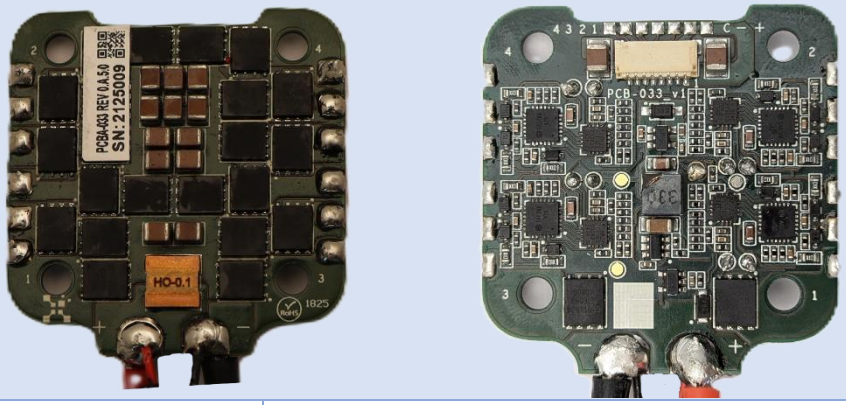
The Airmod Drone Flight Stack comes with:

- The flight controller board (FC)
- The electronic speed controller. (ESC)

PRODUCT SPECIFICATION

FLIGHT CONTROLLER BOARD (FC)		
3D VIEW	 	
	MCU	STM32F405
	IMU (Gyro)	ICM42688P
	USB Port Type	Type-C
	Barometer	DPS368
	OSD Chip	Built-in
	Wi-Fi	Not supported
	Bluetooth	Not supported
	Air Unit Connection Way	Direct soldering
	Video Transmitter	Compatible with analog and digital transmission systems ensuring interoperability with European manufacturers
	Radio Receiver Protocols	SBUS, CRSF
	Blackbox	Micro SD connector
	BetaFlight Cam Control Pad	Yes (CC pad on the front side)
	Current Sensor Input	Supported
	Power Input	3S - 6S Lipo (Through G, BAT pins/pads from the 8-pin connector or 8-pads on the bottom side)
	3.3V Output	Supported. Designed for 3.3V-input receivers. Up to 500mA current load
	4.5V Output	Supported. Designed for receiver and GPS module even when the FC is powered through the USB port. Up to 1A current load.
	5V Output	9 groups of 5V output, four +5V pads and 1 BZ+ pad (used for Buzzer) on front side, and 4x LED 5V pads. The total current load is 3A.

	9V Output	2 groups of 9V output, one +9V pad on front side and other included in a connector on bottom side. The total current load is 3A.
	ESC Signal	M1 - M4 on bottom side and M5-M8 on front side
	UART	5 user defined UART1, UART2, UART3, UART4, UART5 UART6 dedicated for telemetry
	I2C	Supported. SDA & SCL pads on front side. Used for magnetometer, sonar, etc.
	RSSI	Supported. Named as RS on the front side.
	Boot Button	Supported. For firmware flashing, Press and hold BOOT button and power the FC on at the same time will force the FC to enter DFU mode
	Traditional Betaflight LED Pad *(Optional)*	Supported. 5V, G and LED pads on bottom of the front side. Used for WS2812 LED controlled by Betaflight firmware.
	LED Pads	4
	PWM	1
	Buzzer *(Optional)*	BZ+ and BZ- pad used for 5V Buzzer
FIRMWARE	**Firmware version**	1.0
	Supported Flight Controller Firmware	BetaFlight (Default), INAV
DIMENSIONS	**Mounting**	30.5x30.5mm (4mm hole diameter)
	Dimensions	41.6mm(L) x 39.4mm(W) x 7.8mm(H)
	Weight	10.5g

ELECTRONIC SPEED CONTROLLER (ESC)		
3D VIEW		
HARDWARE	Chipset	EFM8BB2 family
	Continuous Current	55A * 4
	Burst Current	70(10 seconds)
	TVS Protective diode	Yes
	External Capacitor	1000uF Low ESR Capacitor (In the package)
	ESC Protocol	DSHOT300/600
	Power Input	3-6S LiPo
	Power Output	VBAT
	Current Sensor	Support (Scale=400 Offset=0)
	ESC Telemetry	Not supported
FIRMWARE	Firmware	Bluejay J-H-40
	PC Configurator	https://esc-configurator.com/
DIMENSIONS	Mounting	30.5 x 30.5 mm (4mm hole diameter)
	Dimension	45.6mm(L) * 44mm(W) * 8mm(H)
	Weight	23.5g

Airdrone FS-1F405 Flight Stack (ESC + FC)	
Dimension	45.6mm(L) * 44mm(W) * 16mm(H)
Weight	34g

CONTACT

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