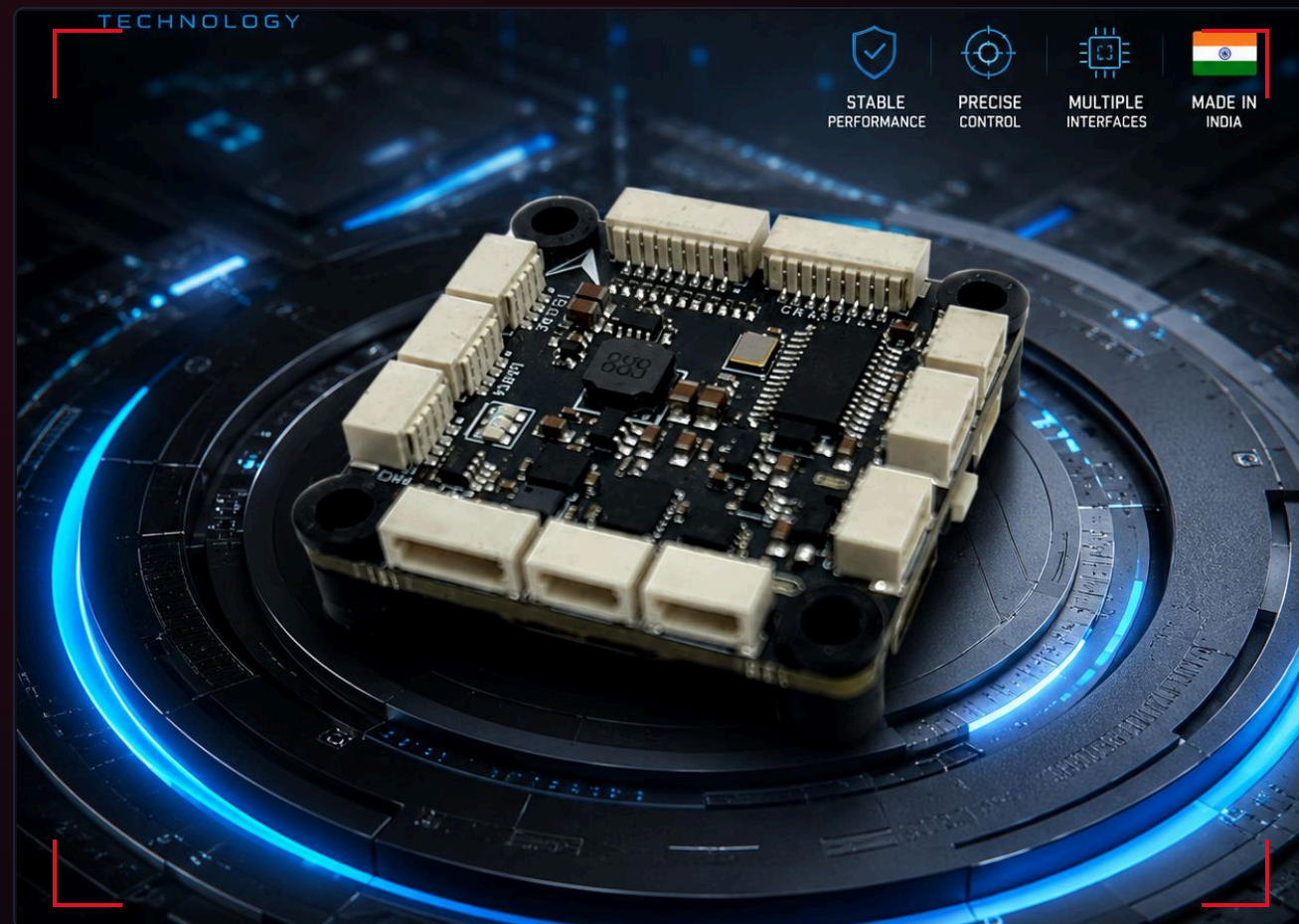


FLIGHT CONTROLLER

AERO H743

High-Performance Flight Control System for
Industrial, Autonomous, and FPV UAV Platforms



SKU

AERO-FC-H743-V1

The Aerostem Aero H743 is a professional-grade flight controller built for advanced UAV applications — autonomous navigation, survey drones, FPV systems, agricultural UAVs, and industrial inspection. Powered by the STM32H743 processor, it delivers exceptional computational performance, robust sensor integration, and reliable operation in demanding environments.

01 KEY FEATURES

- ◆ STM32H743VIT6 MCU – 480MHz
- ◆ 2MB Flash Memory
- ◆ BMI088 + BMI270 Dual IMU
- ◆ DPS310 Precision Barometer
- ◆ IST8310 Compass
- ◆ AT7456E OSD Chip
- ◆ MicroSD Card Logging
- ◆ USB Type-C Interface
- ◆ DJI O3 / O4 Air Unit Support
- ◆ ArduPilot Compatible
- ◆ PX4 Compatible
- ◆ RTK Ready Architecture

02 APPLICATIONS

Survey & Mapping Drones
Agricultural UAVs
FPV Platforms
Industrial Inspection UAVs
Autonomous Drone Systems
Drone Light Show Platforms
Research & Development UAVs

03 HIGHLIGHTS

High Processing Power
Industrial Grade Sensors
RTK Compatible
PX4 & ArduPilot Support
Compact Lightweight Design
Professional UAV Integration

TECHNICAL SPECIFICATIONS

◆ PROCESSING SYSTEM

MCU	STM32H743VIT6
Processor Speed	480 MHz
Flash Memory	2 MB

◆ SENSOR SYSTEM

IMU 1	BMI088
IMU 2	BMI270
Barometer	DPS310
Compass	IST8310
OSD	AT7456E

◆ CONNECTIVITY

UART	7	PWM	10	CAN	1
I2C	1	SWD	1	ADC	2

ADC: Battery Voltage & Current Monitoring

◆ POWER SYSTEM

Input Voltage	2S-6S LiPo
Voltage Range	6V-27V
BEC Output 1	5V / 3A
BEC Output 2	9V / 3A

Supports GPS, RTK, Receivers, Optical Flow, FPV Cameras & VTX

◆ SUPPORTED ECOSYSTEM

Aero A20 RTK GPS	DJI O4 Air Unit
Aero A10 GPS	ELRS Receivers
DJI O3 Air Unit	CAN Sensors
Optical Flow Modules	PX4 Ecosystem
ArduPilot Ecosystem	

◆ WHY AERO H743

- > Industrial-Grade Architecture
- > High-Speed Processing
- > Reliable Sensor Fusion
- > Professional UAV Integration
- > Future-Ready Expansion
- > Built for Indian & Global Platforms

Aerostem Technology Pvt. Ltd.

Designed & Developed in India

"Made in India. Built for the World."



DATASHEET



USER MANUAL



PRODUCT VIDEO