

ES FlightMaster



ES Systems has developed the ES FlightMaster, primarily used in drones and UAV systems to manage flight operations. It is commonly integrated into multirotor drones for aerial photography, mapping, and inspections, fixed-wing UAVs for long-range missions in agriculture and environmental monitoring, and FPV racing drones for high-speed precision control. Additionally, it supports autonomous UAV systems for tasks like deliveries and is used in research projects focused on drone technology innovations.

The ES FlightMaster from ES Systems offers powerful, precise control for multirotor and fixed-wing UAVs, delivering seamless performance for a range of applications from aerial photography to racing drones. Featuring cutting-edge hardware and versatile compatibility, the F405-TE is designed for high-end UAV systems with INAV, ArduPilot, and BetaFlight firmware support.



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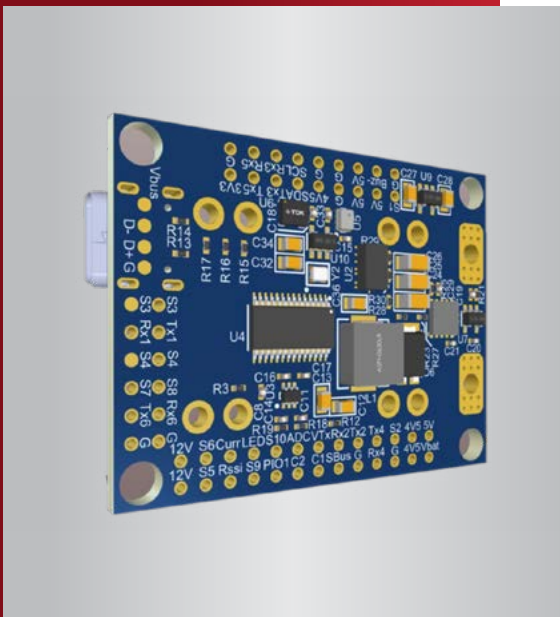
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Specifications

Key Specifications	
MCU	168MHz STM32F405RGT6
IMU	ICM42688-P (SPI) for high-precision motion sensing
Barometer	SPL06-001 (I2C) for accurate altitude measurement
OSD	AT7456E (SPI) integrated On-Screen Display
Blackbox	MicroSD slot for flight data logging
6x UARTs	1x Softserial_Tx for versatile communication
11x PWM outputs	(8x Dshot-compatible for Betaflight/ArduPilot)
4x ADC	Monitors VBAT, Current, RSSI, Airspeed
Dual Camera Input	Switchable for FPV flexibility
Built-in-SBUS Inverter	For easy SBUS receiver integration
Power Distribution Board (PDB)	
Input Voltage	9-36V
PDB	4x 35A (Max.4x 50A)
BEC Outputs	5V 1.5A, 12V 2A
LDO 3.3V	200mA
Current Sensor	220A, 3.3V ADC for INAV, ArduPilot & BetaFlight
Battery Voltage Divider	Scalable for different firmware needs
Firmware Compatibility	
ArduPilot	MatekF405-TE
INAV	MATEKF405TE_SD
BetaFlight	MATEKF405TE_SD
Physical & Mounting	
Dimensions	35 x 45mm
Weight	10g
Mounting	30.5 x 30.5mm, Φ4mm with grommets Φ3mm



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