

# FPV Flight Controller

## G-F1

The G-F1 FPV flight controller is designed for fixed-wing, UAV, and VTOL applications. Powered by the STM32F405 processor with a high-precision IMU and integrated sensors, it delivers accurate flight control. The G-F1 supports open-source firmware including Betaflight and INAV. Its compact design fits small frames perfectly. Built on a premium IC solution, the G-F1 delivers superior stability and expandability. In addition, the G-F1 provides connectors rather than soldering points, eliminating the requirement for users to perform manual soldering. It is ideal for both hobbyists and professionals—unlocking ultimate flight freedom!



### Application Scenarios

- FPV Racing & Freestyle
- Long-Range Fixed-Wing
- VTOL Survey Drones
- Cine-Whoops

### Specifications

<b>MCU</b>	STM32F405RGT6, 168 MHz, 192KB RAM, 1MB Flash
<b>IMU</b>	ICM-42688-P
<b>Barometer</b>	DPS368
<b>Compass</b>	IST8310
<b>OSD</b>	AT7456E (optional)
<b>Blackbox (Data Logger)</b>	NAND Flash 2Gbit
<b>CAN</b>	1x CAN Bus
<b>UART Ports</b>	6x UART
<b>PWM Outputs</b>	9x PWM (8x motor outputs; 1x customize)
<b>ADC Inputs</b>	2x ADC (1x battery voltage; 1x battery current)
<b>I2C Ports</b>	1x I2C
<b>LED Indicators</b>	3 colors LED indicate
<b>USB Interface</b>	USB Type-C with DFU key on board
<b>Static Power Consumption</b>	110mA @ 5V
<b>Input Voltage</b>	3S~6S Lipo input voltage with voltage monitoring
<b>BEC 9V Output</b>	BEC-2 Output: 9V/3A
<b>BEC 5V Output</b>	BEC-1 Output: 5V/3A
<b>BEC 3.3V Output</b>	Linear Regulator, Continuous current: 300mA
<b>Operating Temperature</b>	0°C~55°C
<b>Mounting</b>	30.5 x 30.5mm, M4 hole
<b>Dimensions</b>	36 x 36 x 8 mm
<b>Weight</b>	10 g

## Interface Definition

