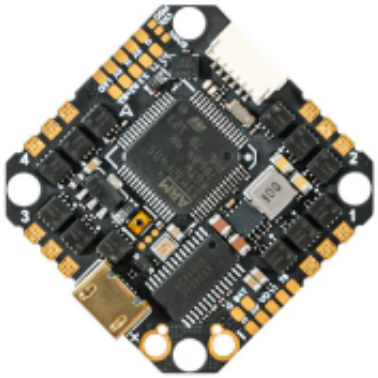
Dane aktualne na dzień: 26-11-2026 20:16

Link do produktu: https://www.nobshop.pl/kontroler-lotu-betafpv-f411-4s-20a-v5-blheli-s-icm42688-p-4868.html



Kontroler lotu BETAFPV F411 4S 20A V5 BLHeli_S (ICM42688)

Cena brutto	**339,99 zł**
Cena netto	**276,41 zł**
Dostępność	**Aktualnie niedostępny**
Czas wysyłki	**1 - 3 dni**
Producent	**BetaFPV**

Opis produktu

Kontroler lotu BETAFPV F411 4S 20A V5 BLHeli_S (ICM42688)

Based on the F405 2-4S 20A Brushless Flight Controller V4, the F405 4S 20A Toothpick Brushless Flight Controller V5 applies a new ICM42688 gyro and ESC chip that comes with BLUEJAY ESC firmware so it supports bidirectional D-shot. In addition to plug&play ports for the receiver and HD Digitial VTX the same as the V4 board, the V5 board is made with a rational layout for easy solder and preventing solder from jumping to another pad and shorting components.

Bullet Point

- Not only is the flight controller board made with a rational layout but it is also designed with larger solder pads. It is very easy for pilots to solder external electronics.
- The flight controller is capable of handling 20A continuous current and reaching 25A peak current due to high-quality MOSFETs.
- Soldering motor wires to pad directly allows lower resistance for more current on motors. Besides, solder pads are reinforced by thick copper and edge plating process, ensuring a solid value and durable use.
- Reserving the UART ports layout, UART3 for RX, UART4 for HD digital VTX, UART6 for Analog VTX and UART1 for spare use, it is more convenient for pilots to solder.
- Come with a 25.5*25.5mm whoop mounting pattern, this board can be added to both the toothpick drone and the cinematic whoop quadcopter frame like Pavo25 and X-knight 35.

Specifications

Flight Controller

- CPU: STM32F405RGT6
- Six-Axis: ICM42688 (SPI connection)
- Mounting Size: 25.5*25.5mm (M2 Anti-vibration rubber damper available)
- FC Firmware: betaflight_4.3.1_BETAFPVF405
- OSD: Built-in Betaflight OSD (OSD chip: AT7456E)
- Receiver: SBUS/CRSF/DSMX Receiver
- BEC: 5V 3A
- Built-in current sensor
- Weight: 8.35g

ESC

- ESC Chip: SILABS EFM8BB21F16G-C
- Support D-shot150, D-shot300, D-shot600, Oneshot125, Multishot, PWM
- Input voltage: 2S-4S Lipo
- Continuous current: 20A

- Peak current: 25A
- Firmware: G_H_20_48_v0.16.HEX (Default BLUEJAY), BLHeli_S (Optional)

Note: F405 4S 20A FC V5 is available to flash both BLHeli_S and BLUEJAY ESC firmware and it comes with default BLUEJAY firmware. The main difference is that the BLUEJAY firmware supports bidirectional D-shot, while BLHeli_S does not support it.

Comparison to F405 2-4S 20A V4 FC

We upgraded the F405 2-4S 20A V4 board to V5 by adopting ICM42688 gyro instead of MPU6000 and adding some new features. ICM42688 gyro works great in most cases. Except for the gyro, the V5 board comes with a completely new ESC firmware that supports bidirectional D-shot. The way to connect motors changed and is solderable only on the V5 board. Besides the V5 FC board features high-quality material for stability and durability. The below pictures show the difference between the two flight controllers.

Note: The F405 2-4S 20A Flight Controller V4 with BMI270 gyro will be available for purchase for a period of time.

Diagram for Toothpick F405 20A AIO FC V5

The board integrates 2 LEDs, including the Power LED (Red) and the FC LED (Blue).

LED	Status	Description
Power LED (Red)	Solid	Power on
FC LED (Blue)	Solid	Motor Armed

Connecting External RX/HD Digital VTX

F405 4S 20A FC V5 integrates the Plug & Play port for the external RX and HD digital VTX, and there will be a 4-pin connector for RX and a 6-pin connector for HD digital VTX in the package. Thus, we highly recommend pilots use the port to save the solder work.

FC & ESC Firmware

The default firmware is including CLI dump file. But if you flash firmware from the Betaflight configurator official site, please flash a CLI dump file for F405 4S 20A FC V5. We offer the default firmware and CLI dump file to download.

- *Download the FC default firmware betaflight_4.3.1_BETAFPVF405 and CLI dump file.*

F405 4S 20A FC V5 is available to flash both BLHeli_S and BLUEJAY ESC firmware and it comes with default BLUEJAY firmware. The main difference is that the BLUEJAY firmware supports bidirectional D-shot, while BLHeli_S does not support it. Here are the download links for two firmware.

Here are the download links for ESC firmware. Please configure the BLUEJAY firmware through ESC - Configurator or Bluejay Configurator software.

- *Download the BLUEJAY ESC firmware*
- Download the ESC - Configurator
- *Download the Bluejay Configurator*

We offer BLHeli_S ESC firmware for pilots. Please configure the BLHeli_S ESC firmware through BLheliSuite, BLHeli - Configurator, or ESC - Configurator software.

- *Download the BLHeli_S ESC firmware*
- *Download the BLHeliSuite16714902a*
- Download the BLHeli - Configurator
- Download the ESC - Configurator

Recommend Parts

- Motors: 1404 Brushless Motors, 1506 Brushless Motors
- Battery: 2S 600mAh, 3S/4S 850mAh, 4S 750mAh, or 4S 1000mAh
- Frame: Pavo25 Frame, X-knight 35, or other frames with whoop mounting pattern.

Package

- 1 * F405 4S 20A Toothpick Brushless Flight Controller V5 BLHeli_S (ICM42688)
- 1 * Cable Pigtail (XT30)
- 1 * 6-Pin Connector for Digital VTX
- 1 * 4-Pin Connector for RX
- 4 * M2x12 Screws
- 8 * M2 Nuts
- 4 * M2 Anti-vibration Rubber Dampers