Link do produktu: https://www.nobshop.pl/f4-2s-aio-bezszczotkowy-kontroler-lotu-betafpv-frsky-p-1375.html



# F4 2S AIO bezszczotkowy kontroler lotu BetaFPV FrSky

Cena brutto	199,99 zł
Cena netto	162,59 zł
Dostępność	Aktualnie niedostępny
Czas wysyłki	1 - 3 dni
Numer katalogowy	00313462

# Opis produktu

This AIO F4 FC is suitable for a lighter 2S whoop drone, like <u>Beta65 Pro 2</u> or <u>Beta75 Pro 2</u> etc. It integrated a Betaflight F411 processor FC, Betaflight OSD, SPI Frsky receiver and 1-2S 5A ESC. So the 2S drone could save many weight for a faster fly experience.

Note: No receiver version will be available at the end of December.

# SPECIFICATIONS OF FC

- CPU: STM32F411CEU6 (100MHZ )
- Six-Axis: MPU-6000 triaxial accelerometer / triaxial gyroscope (SPI connection)
- Size: 26mm x 26mm, fully compatible with the all whoop drone mounting pattern, recommend the Beta65X frame and Beta75 Pro frame.
- Firmware version: betaflight\_matekf411rx\_4.0.0 (Development Version)
- OSD: Built-in BetaFlight OSD (STM32 controls OSD chip over SPI in DMA mode)
- Built in SPI Frsky D16 protocol native receiver, compatible with almost ALL Frsky FCC radios(e.g. Taranis X9D/X9D Plus/X7) or Frsky compatible transmitter module. Not compatible with Frsky LBT protocol.
- Power Cable: 55mm, with 2pcs JST-PH 2.0 connector, AKA PowerWhoop connector
- Weight: 4.5g

# DIAGRAM FOR F4 2S AIO FC (BUILT-IN FRSKY RX)

### SPECIFICATIONS OF ESC

- Built-in ESC with 5A continuous and peak 6A current
- Power supply: 1-2S
- Support BLHeliSuite programmable
- Factory firmware: S\_H\_50\_REV16\_7.HEX
- Signal Support: D-shot150, D-shot300, D-shot600, Oneshot125, Multishot, PWM

#### Status LED

There are 3 LEDs on the bottom of the board to indicate the status, including Receiver LED (Green), FC Status LED (Red) and FC Power LED (Blue).

LED Receiver LED ( Green) Status Solid Description Connected or in bind mode Receiver LED ( Green) Power LED ( Blue ) Status LED ( Red ) Flashing Solid Solid Not connected Power on Motor Armed

#### **SPI Frsky Receiver**

Currently the built in Frsky receiver is compatible with Taranis, Taranis Plus, X9E, Horus X12S, XJT Modules. Pay attention, this is a SPI connection receiver. In Betaflight Configuration, it should be setted as FRSKY\_D receiver (aka Frsky D8 mode) or FRSKY\_X receiver (aka Frsky D16 mode) in SPI RX mode.

The Frsky D16 unstable connection issue is totally resolved since Betaflight 3.4.1. Nowadays, the default configuration from factory is Frsky D16 mode (FRSKY\_X).

Note: If you are using EU-LBT firmware radio controller, you might find that you can't bind successfully to this SPI Frsky receiver. Here are the <u>solutions</u> we provide for you. Thanks to Sebastian Abramowski for giving us the important feedback about binding to EU-LBT firmware radio controller.

#### **Binding Procedure**

The binding procedure is reversed as usual. No need to click the bind button when power on.

- Power on the board, either by connecting the battery or USB power. Then the green receiver LED start to flash.
- The second step, click the bind button for 3s. Then the green receiver LED will be solid on. This means that the receiver is in bind mode and you could start to bind your radio transmitter.

For detail procedure of binding, please check the SPI Frsky Receiver Binding Manual.

Note: This FC board could support the SPI Futaba protocol with this firmware.

Some pilots would complaint that it is definitely not a long range FC. It looses signal with my transmitter far too often and for what appears to be no reason. This issue is often caused by the location of the antenna. You should keep the antenna away from the FC board to get a stronger signal. For example, run the singal upwards. Thanks for <u>Harley Finberg's advice</u>.

# CLI DUMP of F4 2S Brushless FC

You can get the Cli dump of F4 AIO 2S Brushless FC here on the BETAFPV Support Freshdesk.

### DIAGRAM FOR F4 2S AIO FC (NO RX)

# HOW TO CONNECT THE EXTERNAL RX TO THE FC

For detailed information of other external receivers, please find out in our support page.

#### FAQ

1. Can this FC used on the Beta75X with 1103 motors?

Yes, we have tested this FC board with 1103 motors on Beta75X. It performance very well and almost no wash-out issue then. So if you already have a Beta75X, you could just take this AIO FC to replace the stock FC&ESC stack.

Note: because of the built-in ESC and Frsky receiver, you will lose some remote range and little bit power on Beta75X with this AIO FC.

2. About the alarm buzzer and LED port?

No alarm buzzer is supported on this FC board. Programable LED is supported.

### **RECOMMENDED PARTS LIST**

- Frame: <u>Beta65X frame</u> / <u>Beta75 Pro 2 frame</u>
- Props: <u>31mm 4-Blades props</u> (for Beta65 X frame) / <u>40mm 4-blades props</u> (for Beta75 Pro 2 frame)
- Motors: <u>0802 motors</u>
- Battery: 2pcs <u>300mAh 1S batteries</u>

### PACKAGE

- 1 \* F4 2S brushless flight controller
- 4 \* M1.2x4mm screws
- 4 \* M1.4x5mm screws
- 4 \* Anti-vibration ruber dampers