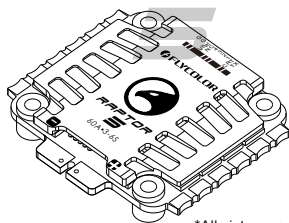


RAPTOR



*All pictures are for reference only



Thank you for using our product. Any improper operation may cause personal injury damage to the product and related equipments. This high power system for RC model can be dangerous, we strongly recommend reading the user manual carefully and completely. We will not assume any responsibility for any losses caused by unauthorized modifications to our product. We have the right to change the design, appearance, performance and usage requirements of the product without notice.

01 Main features

- ARM 32-bit Cortex MCU STM32G071, frequency up to 64 MHZ, 25% higher than the previous generation of MCU.
- PWM frequency up to 128k, high frequency for higher throttle makes running smoother.
- Compared with the previous generation of ESC, the ESC firmware is optimized, makes the throttle linearity smoother and the response faster.
- Compared with the previous generation of ESC, it has better routing and component layout.
- 4in1 ESC built-in current sensor and VBAT output.
- Large area aluminum heat sink can effectively slow down the temperature rise.
- Supports regular 1-2ms pulse width input, as well as Oneshot125 (125-250us), Oneshot42 (41.7-83.3us) and Multishot (5-25us). The input signal is automatically detected by the ESC upon power up.
- All Dshot and Proshot signals are supported.
- Damped light does regenerative braking, causing very fast motor retardation, and inherently also does active freewheeling.
- Supports higher power load, more suitable for violent flight of racing drone.

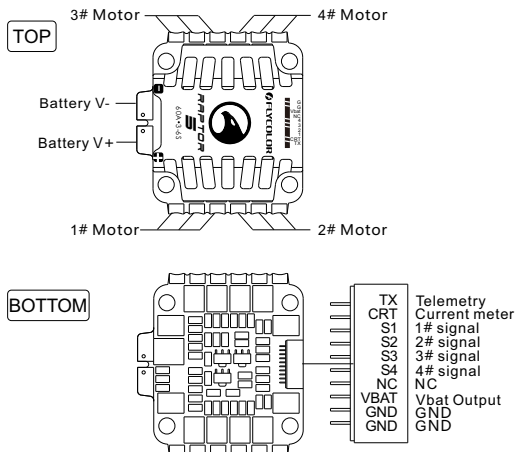
02 Specification

●Model:	Raptor 5_4in1	
●Con. Current:	45A	60A
●Burst Current:	55A (10s)	70A (10s)
●BEC:	No	
●LiPo cells:	3-6S	
●Weight:	19.6g(with heat sink)	
●Size:	45x41x8.3mm	
●Mounting:	30.5x30.5mm,M3	
●Configurator:	BLHeliSuite32	
●Firmware :	Flycolor_Raptor_5	
●Application:	170-450 Multi	



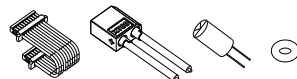
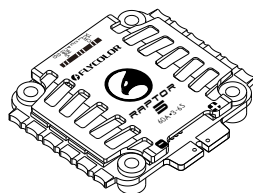
To view or change programmable items and parameter values, Please use BLHeliSuite 32.

03 Connect diagram



04 Part list

- Raptor5 4in1 1x
- Silicone vibration absorber 4x
- O-Ring 5x
- Power cable+XT60 1x
- FC/ESC connecting wire 1x
- Low ESR capacitor 1x
- Heat sink 1x



All pictures are for reference only

- Please use the parts supplied with the product for installation. Please ensure enough safety space between the ESC & Drone frames, as short circuit will damage the product.
- To enhance better filtering effect, please solder included capacitor to the positive and negative terminals on the ESC.
- Please use the wire supplied with the product for connecting, confirm the pinout and sequences between flight controller and ESC before applying power. Modify as necessary.

05 Attention

- ESC will automatically detect the input throttle signals every time as soon as it powered on, and then execute the corresponding signal-receiving mode.
- User need to calibrate the throttle range when starting to use a new ESC or another transmitter. When the input signal is Dshot, throttle calibration is disabled.
- Please don't flash any other firmware except "Flycolor_Raptor_5".
- VBAT is battery output, make sure your device operating voltage is matched if you want to use VBAT.
- CRT.(Current)port can be connect to the port on F.C for current meter.
- Observe polarity at all times. Double check before applying power.
- Power off before unplugging, plugging in or making any connections.
- Please do not exceed the current & voltage range.
- All welding requires good welding technology, short circuit between the element or the wire should be avoided at any time.
- Do everything you can to prevent vibrations.
- Please ensure that all wires and connecting parts are well insulated to avoid product damage due to short circuit.
- Never use this product in harsh environments such as humidity, high temperature, and so on to avoid product damage.
- Please contact Flycolor sales or technical support for more information.