

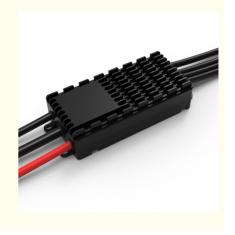
Electronic Speed Controler FOC 100A 8-14S Drone

Basic Information

• Place of Origin: Guangdong, China

• Brand Name: GS

Model Number: FOC 100A 8-14SPrice: Negotiable



Product Specification

• Name: AMPX FOC 100A 8-145

• Recommended Pulling 8-10Kg

Force:

Maximum Input Voltage: 60.9V
Rated Output Current: 80A
Peak Output Current: 100A(10S)

PwM Input Level: 3.3V/5V
PWM Pulse: 200-2000uS
PWM Frequency: 50-450 Hz
Weight(without Cable): 85g
Working Temperature: -20-50°C

• Highlight: Drone Remote Controller, rc drone control,

uav remote control







Electronic Speed Controler FOC 100A 8-14S Drone

FOC 100A 8-14S ESC is aimed at the application ofindustry UAv, with Mad8318,M9C12,M10,M13,V62,V68,V8010,V8013,V8015 motor, single rotor up to8~10kg take-off weight. FOC sinusoidal drive is adopted for electric modulation. Optimized control algorithm and circuit design make the power system have fastthrottle response capability and stable operation in harsh environment. Combined with the hardware failure mode, a comprehensive hardware power-onself-check program is customized to effectively detect potential hardware system faults and improve overall stability and security. With excellent protectionfunction, effectively reduce the damage degree of the system after failure reduce the loss.

	ESC Protection Mechanism
1	Fast motor acceleration and deceleration response. When the electrical speed controller receives a large throtle change in fight control, the maximum limiting current can be reached within 10ms, effectively improving the response speed.
2	Optimized heat dissipation design. The power device adopts double-sided heat disipation process, which can efectively reduce the thermalresistancebetween the shel, and the measured maximum temperature ofthe internal device is only 15'c higherthan the surace temperature ofthe shel. The device lfeis greatly improved under full load operation condition.
3	Perfect hardware self- check procedures.it can effectively detect internal hardware circuit defects (mainlyintroduced by the manufacturing proces),power-on selftest can ensure that the electrical control is not sick, effectively reduce the risk offalure; lfany abnormalty is found during operation, it can be indicated by indicator light or software interface.
4	Integrated comprehensive protection functions. Relable blocking protection can guarantee the protection of motor and Esc itself after abnormalexplosion; short circuit protection can guarantee the burnine fault caused by short circuit of motor ine; Input pwM throttle identication protection, canprevent the introduction ofinterference during maintenance of misoperation.
5	Electric modularization design. Electric and motor. power line, signal line, lamp board ine are completely separated, only need a screwdriver can be easil removed, quick repair.
6	CAN communication interface. provides firmware updates, in conjunction with the electrically tuned communication boxto record data individually, orcommunicate with the fight control, Improve the black box data record of



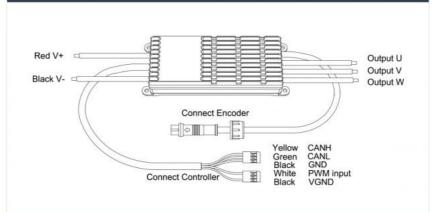


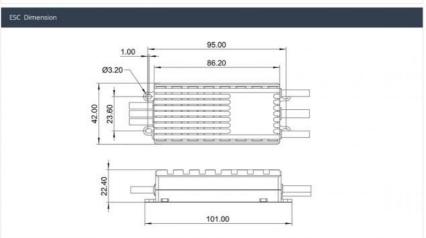
SC Prote	ction Mechanism
1	Fast motor acceleration and deceleration response. When the electrical speed controller rec elves a large throttle change in flight control, the maximum limiting current can be reached within 10mS, effectively improving the response speed.
2	Optimized heat dissipation design. The power device adopts double-sided heat dissipation process, which can effectively reduce the thermal resistance between the shell, and the measured maximum temperature of the internal device is only 15°C higher than the surface temperature of the shell. The device life is greatly improved under full load operation condition.
3	Perfect hardware self - check procedures. It can effectively detect internal hardware circuit defects (mainly introduced by the manufacturing process), power-on self-sect can ensure that the electrical control is not sick, effectively reduce the risk of failure: If any abnormality is found during operation. It can be indicated by indicator light or software interface.
4	Integrated comprehensive protection functions. Reliable blocking protection can guarantee the protection of motor and ESC itself after abnormal explosors. Short creuze protection can guarantee the burning fault caused by short creux of motor line: Input PWM throttle identification protection, can prevent the introduction of interfence during maintenance of misoperation.
5	Electric modularization design. Electric and motor, power line, signal line, lamp board line are completely separated, only need a screwdriver can be easily removed, quick repair.
6	CAN communication interface. Provides firmware updates, in conjunction with the electrically tuned communication box to record data individually, or communicate with the flight control. Improve the black box data record of the entire system to improve the accuracy of fault locating after sales.

Name	AMPX FOC 100A 8~14S	Working Temperature	-20-50°C
Recommended pulling force	8-10Kg	IP Code	IP45
Recommend Battery	6-14S(LiPo)	Digital Throttle	Yes (by CAN)
Maximum Input Voltage	60.9V	Firmware Upgrade	Yes
Rated Output Current	80A	Motor Stall Protection	Yes
Peak Output Current	100A(10S)	Over Current Protection	Yes
Maximum RPM	13000RPM (10 Pole Pairs)	Short Current Protection	Yes
PWM Input Level	3.3V/5V	Over Voltage Protection	Yes
PWM Pulse	200 - 2000u5	Under Voltage Protection	Yes
PWM Frequency	50 - 450 Hz	High Temp Protection	Yes
Communication	CAN	PWM High Protection	Yes
Weight(without cable)	85g	PWM Lost Protection	Yes

	PWM pulse width(uS)	Motor RPM
PWM+	1100~1920	Idling RPM ~ Full RPM
PWM-	1920 - 2400	Full RPM
stop	Other Pulse	0 RPM

ESC Connection



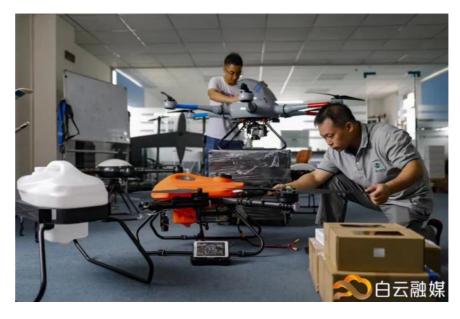


Electric Regulation	Motor	Voltage	Propelle
	8318 IPE KV100	48V	30"~32"
	8318 IPE KV120	48V	28"~30"
	M9C12 IPE KV100	48V	30"-32"
	M10 IPE KV100	48V	30"~32"
	M10 IPE KV120	48V	30*-32"
	M13 EEE KV90	48V	36"
	M13 EEE KV105	48V	36"
AMPX 100A FOC	V62 IPE KV210	48V	22°
	V62 IPE KV280	48V	18"
	V68 IPE KV230	48V	22"
	V8010 EEE KV120	48V	28"-30"
	V8010 EEE KV150	48V	26"
	V8013 EEE/IPE KV135	48V	26"~28"
	V8013 EEE/IPE KV150	48V	26"

You can instantly tell the ESC's status by observing the LED indicator and emitted abunds.				
LED Indicator/Sound	Cause Collection	Solution		
e motor does not turn after the aircraft is locked, but only after the throttle is raised.	Flight control or remote control output unlocked idle throttle value less than 1100uS.	Set the idle throttle value of the flight control or remote control to be greater than 1100u5, 1180u5 > 1180u5 is recommended		
hen the plane is powered on, connect the remote ntrol and the motor turns	The remate control is set to lock the throttle over 1100u5, or close to 1100u5	The remote control needs to set the lock throttle less than or equal to 1050uS.		
then the power-on self-test fails, the motor seps' every 1.5 seconds, and the indicator light ohes yellow briefly.	The throntle PWM signal is missing or the identification throntle PWM range is incorrect	Ensure that the throttle signal cable is properly connected, and check whether the signal cable is damaged.		
tion the power-on self-test fails, the motor seeps' every 0.5 seconds, and the indicator light shes yellow briefly.	Detects high throttle when get power and enters protected state	Make sure that the electric self-test passes before lifting the throttle.		
re mater does not sound. The indicator light shes yellow 4 times every 1.5 seconds: "short - ort - short-long".	If the power-on self-test fails, the motor line loop may be disconnected.	Open the ESC cover and check whether the three motor wires are well welded.		
ne motor does not sound. The indicator light sakes yellow 4 times every 1.5 seconds: "long - ort - long-short".	The power-on self-test falls, and the power supply voltage is abnormal	Check whether the battery voltage is normal. Check whether the power cable is properly connected		
ne mator does not sound. The indicator light shes yellow 4 times every 1.5 seconds: other shing methods.	The power-on self-test fails, and the electrical hardware is abnormal.	Record the LED flathing mode video, contact MAD after-sales service;Replace the ESC and test again.		
e power-on self-test is normal, the motor does trurn after unlocking, and the indicator light is flow for 0.5 seconds the motor does not und when the indicator light is off for 0.5 conds.	Motor startup failure, blocking protection occurred during startup	Power on and off again and restart the power supply. If it reappears, check whether the motor is damaged.		
ne power-on self-test is normal, the motor does to turn during operation, indicator light: 0.5 conds yellow light – 0.5 seconds off, the motor les not sound	The motor is blocked and entered the protection state.	Check whether the machine is blocked because of blasting, check whether the motor is smooth by hand.		
se power-on self-test is normal, the motor does is start or stops midway, indicator light: 1 second flow light \sim 1 second off, the motor does not und	Short circuit or overcurrent protection occurs, and the device enters the protection state.	Disassemble the electric adjusting cover and check whether the motor line is damaged and whether the copper terminal of the motor line is loose.		
e indicator light flashes alternately red and green ring operation.	The PWM throttle signal is missing.	Make an emergency landing and check whether the PWM signal line is well connected and whether the signal line is damaged halfway.		
e indicator light flashes yellow every 0.2 seconds ring operation.	The power-on self-test fails, and the electrical hardware is abnormal.	After the aircraft lands and stops, check whether the temperature of the ESC shell is too high. If the temperature is too high, check whether the screws of the five		

Our Services

- 1. We provide 1 Year Warranty. Buy with confidence.
 2. If you are not satisfied when you receive your item, please return it within 14 days for a replacement or money back. Please contact me before you return it.
- 3. If item is defective in 3 months, We will send you a replacement without extra charger, or offer refund after we receive the defective item.
- 4. If item is defective after 3 months, you can still send it back to us. We will send you a new one after receiving the defective item. But you have to pay the extra shipping fee.



Q1: Do you support OEM/ODM?

A1: Yes. We can print your logo on the product.

Q2: About samples.

A2: Under normal circumstances, samples will be ready within 7 days, and 10-20 days for OEM/ODM orders. Sample fee and shipping will be charged.

Q3: What is the delivery time?

A3: For regular orders, we can ship within 15 days, for OEM/ODM, we can ship within 25-45 days (depending on the quantity). In the event of delays, we will notify you in advance of the status and resolution.

Q4: What is the minimum order quantity?

A4: There is no MOQ for wholesale (1 piece accepted), including OEM/ODM.

Q5: What are your payment terms?

A5: L/C.TT100%.

Q6: Can you reduce the shipping cost?

A6: When calculating the shipping cost for you, we always choose the cheapest and safest express. Although we have partnerships with shipping companies, we can't keep costs down because it's not us who get paid. If you think it's expensive for you. You can always make your own choice.

Q7: Return policy.

A7: If you want to replace the received item, you must contact us within 7 days after receiving the item. Returned items should be in their original condition and you should pay for additional shipping.



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