

SQESC 12100

Brushless ESC

无刷电子调速控制器说明书

感谢您购买本产品!请您在使用前仔细阅读说明书,严格遵守规定的操作说明,使用者需具备一定电子基础和良好的焊接技术,错误的使用可能造成人身伤害和设备损坏。我们不承担因使用本产品或擅自对产品进行改造而引起的任何责任,包括但不限于对附带损失或间接损失的赔偿责任。

Thanks for buying this product! Please read the instructions carefully before use and strictly abide by the specified operating instructions. Users must have a certain electronic foundation and good welding skills. Wrong use may cause personal injury and equipment damage. We do not assume any liability arising from the use of this product or unauthorized modifications to the product, including but not limited to liability for incidental or indirect losses.



1. English instruction manual	01 - 03
2. 中文说明书	04 - 06



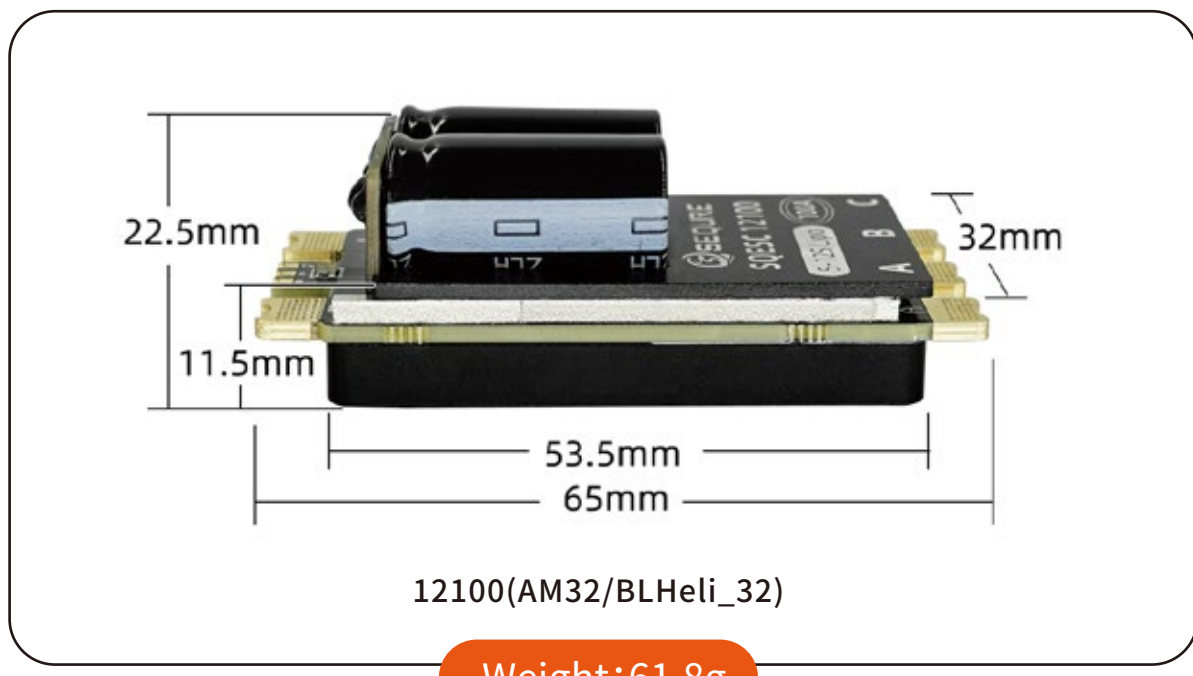
1 PRODUCT DESCRIPTION

- Adopting 32-bit high-performance processor STM32G071, with a working frequency of up to 64MHz and maximum support 128KHz motor PWM frequency.
- Adopts high-power MOSFET, and combines with CNC metal radiator, this esc dissipates heat effectively under high current load and works stably & continuously.
- Supports multiple motion modes such as unidirectional, bidirectional, and braked motors.
- Supports multiple protections such as low voltage protection, temperature protection, locked rotor protection, and current protection.
- The ESC automatically detects the throttle signal when it is powered on, supports all Dshot signals, and also supports signal protocols such as PWM, Oneshot and Multishot.
- Visual programming parameter adjustment tool supports motor timing, throttle calibration, current detection, motor steering, telemetry signal and other settings.
- Onboard RGB LED color light settings, multiple LED colors can be customized.
- Widely used in model airplane plant protection machines, multi-rotor drones, RC model ships and cars.

2 PRODUCT PARAMETERS

Model	SQESC 12100	Programming parameter adjustment	Support
Processor	STM32G071	Throttle calibration	Support
Input voltage	DC 18V-50.4V (5-12S Lipo)	Timing angle setting	Support
Continuous current (good heat dissipation)	100A	Current detection	Support
Maximum current (good heat dissipation)	180A	Telemetry signal	Support
Support firmware	BLHeli_32, AM32	Motor steering settings	Support
Signal protocol	Dshot (All), PWM, Oneshot, Multishot, etc.	RGB LED color lights	Support
		Application scenarios	Suitable for multi-axis drones, fixed-wing aircraft models, multi-rotor drones, plant protection machines, model ships, RC model cars, and rock crawlers.

3 SIZE AND WEIGHT

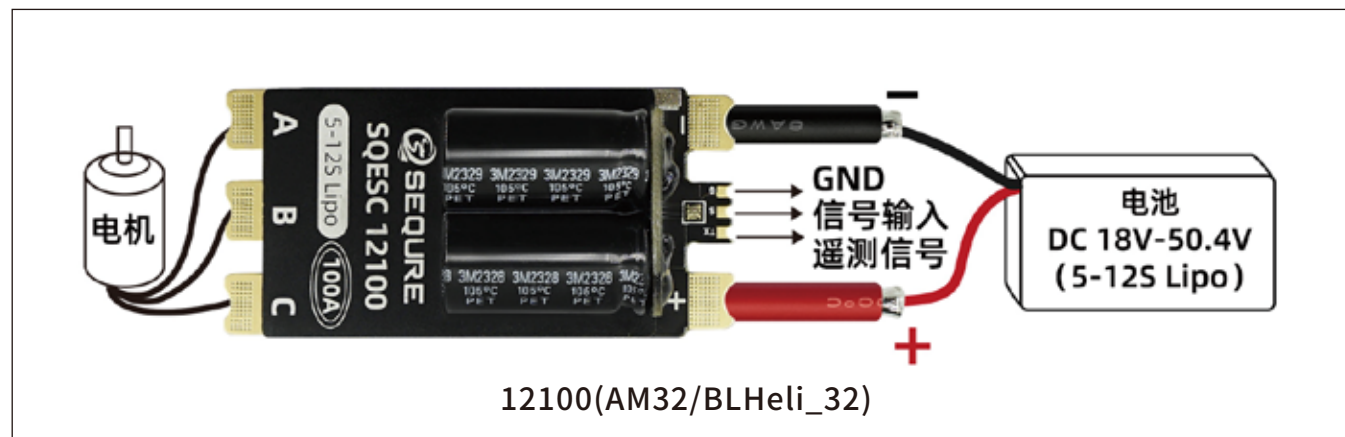


Weight: 61.8g

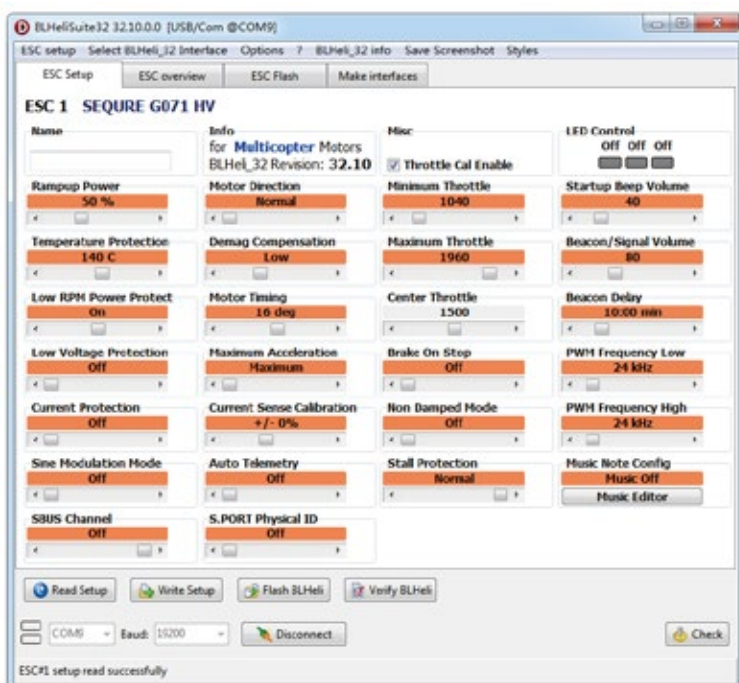
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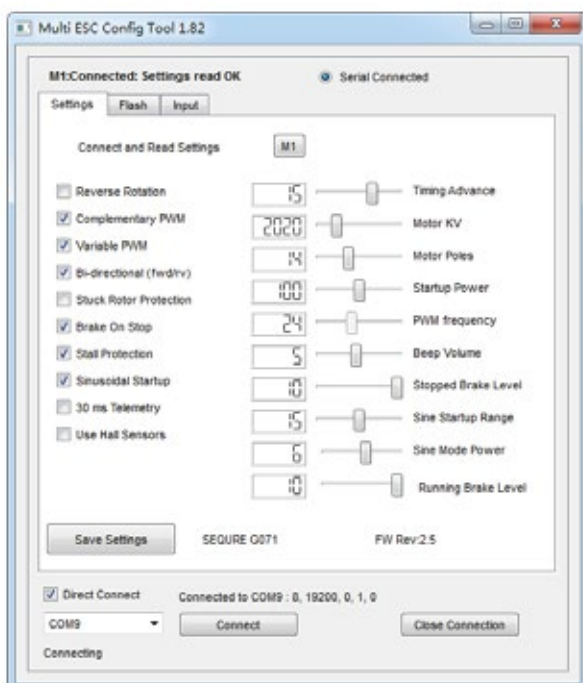
4 WIRING DIAGRAM



5 PROGRAMMING PARAMETERS



BLHeli_32 firmware visual programming parameter adjustment interface



AM32 firmware visual programming parameter adjustment interface

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6 WARRANTY TERMS

1. For those performance faults caused by non-human factors within 3 months from the date of purchase, we provide repair & maintenance service for free. After 3 months, no labor fee will be charged for repairs. If you would like to replace parts, you must pay for the cost.
2. All man-made damage, faults caused by self disassembly & improper use, and all consumables like soldering tips are not covered by the warranty.

7 SAFETY PRECAUTIONS ⚠

- Please do not flash unofficial firmware to avoid damage to the ESC.
- Please do not use it beyond the ESC operating voltage and current range.
- Please check and make sure the positive and negative polarity are correct before powering on.
- Please use the product in compliance with local regulations and ensuring safety.
- Please use accessories that meet safety standards and store them out of reach of children.



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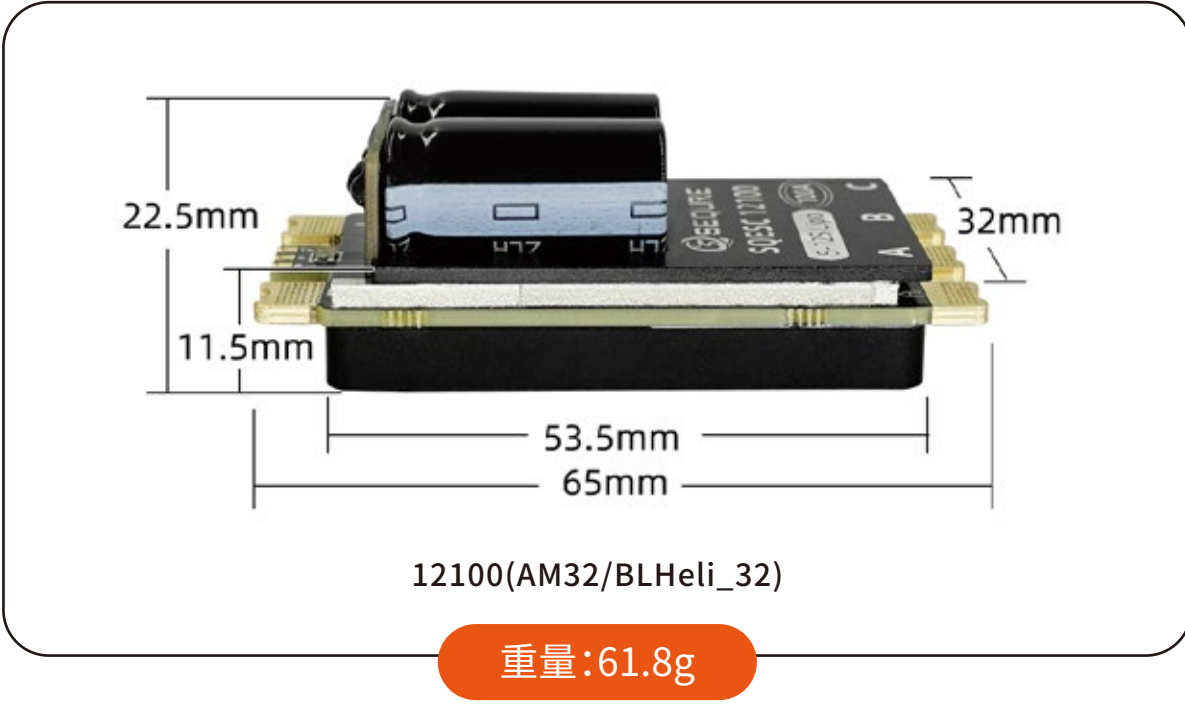
1 产品描述

- 采用32位高性能处理器STM32G071,工作频率高达64MHz,最高支持128KHz电机PWM频率。
- 采用高功率MOSFET,结合CNC金属散热器,大电流负载下也能有效散热,持续稳定工作。
- 支持电机单向,双向,带刹车等多种运动模式。
- 支持低压保护,温度保护,堵转保护,电流保护等多重保护。
- 电调上电自动检测油门信号,支持全部Dshot信号,同时支持PWM,Oneshot和Multishot等信号协议。
- 可视化编程调参工具,支持电机进角,油门校准,电流检测,电机转向,遥测信号等设置。
- 板载RGB LED彩色灯设置,可自定义多种LED颜色。
- 广泛应用于航模植保机,多旋翼无人机,RC模型船,RC模型车等场景。

2 产品参数

型号名称	SQESC 12100	编程调参	支持
处理器	STM32G071	油门校准	支持
输入电压	DC 18V-50.4V (5-12S Lipo)	进角设置	支持
持续电流 (良好散热)	100A	电流检测	支持
最大电流 (良好散热)	180A	遥测信号	支持
支持固件	BLHeli_32, AM32	电机转向设置	支持
		RGB LED彩色灯	支持
信号协议	Dshot (全部) , PWM, Oneshot, Multishot等	应用场景	多轴无人机, 固定翼航模, 多旋翼无人机, 植保机, 模型船, 攀爬车, RC模型车等

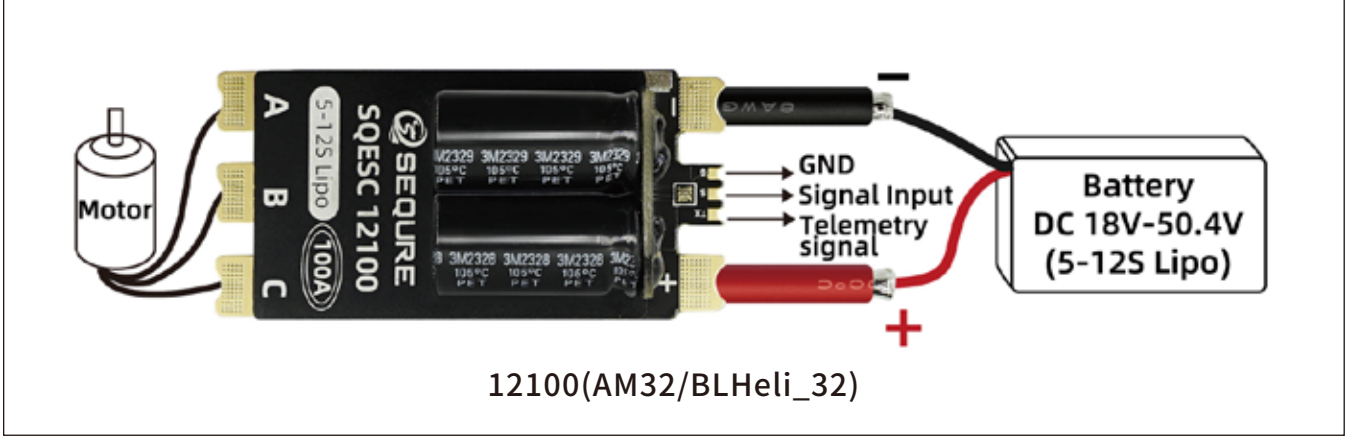
3 尺寸重量



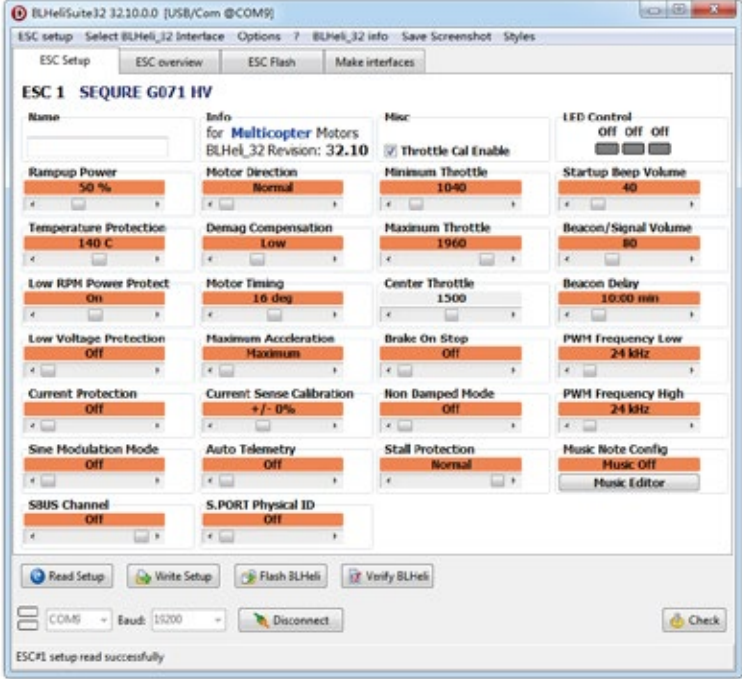
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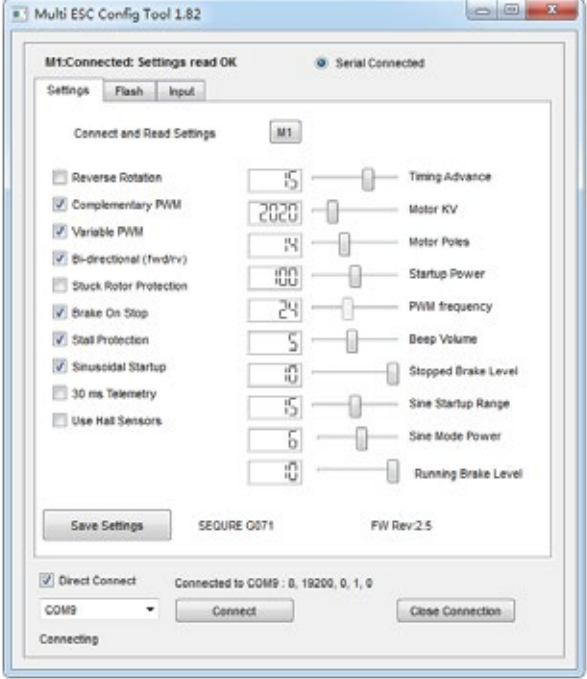
4 接线图



5 编程参数



BLHeli_32固件可视化编程调参界面



AM32固件可视化编程调参界面

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6 保修条款

- (1)自购机之日起3个月内出现非人为因素造成的性能故障,厂家提供免费修理服务.3个月后,修理不收取人工费,若更换配件,费用需用户承担。
- (2)一切人为损坏,自行拆机,使用不当造成的故障,不在保修范围。

7 安全须知 ⚠

- 请勿刷写非官方指定的固件,以免损坏电调。
- 请不要超过ESC工作电压,电流范围使用。
- 请供电前检查并确保正负极性无误,才能通电使用。
- 请在符合当地法规和确保安全情况下使用产品。
- 请使用符合安全标准的配件,存放在儿童不容易接触的地方。



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