

ESC 40A (3-6S)

A compact, high-current brushless electronic speed controller designed for multirotor and fixed-wing UAV applications.



Features

- Better tuned ESC for Fast & Responsive Motor Control
- 40A continuous current rating for reliable motor power delivery.
- Shunt-Based Current Sensing enables accurate, real-time current measurement.
- Dedicated Telemetry Output provides live voltage, current, RPM, and temperature data.
- Custom firmware with configurable timing, braking, and protection parameters
- Compatible with 3-6S LiPo Systems to support a wide range of UAV configurations.
- Integrated Safety Protection safeguards the ESC against overcurrent, over temperature, etc

Applications



Multi-Rotor Drones



RC Ground Vehicles



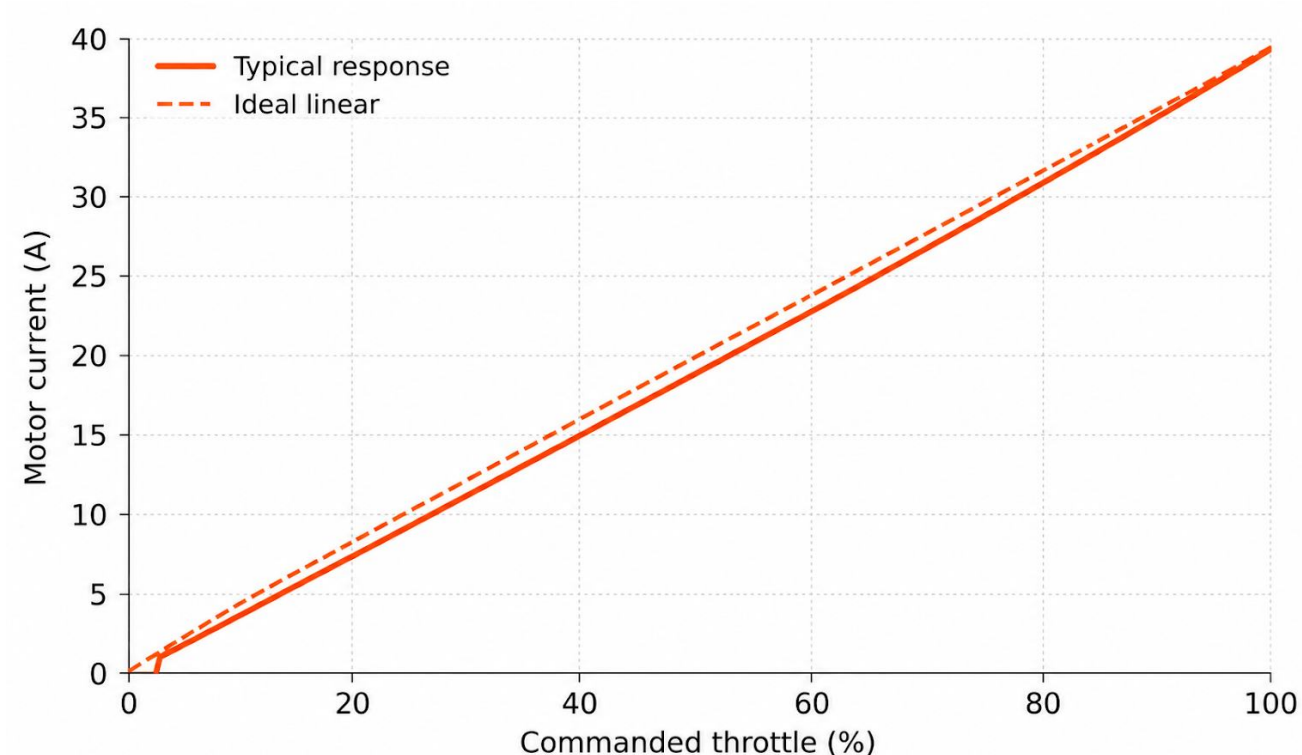
Robotics & Automation



Industrial Prototyping & Mechatronics

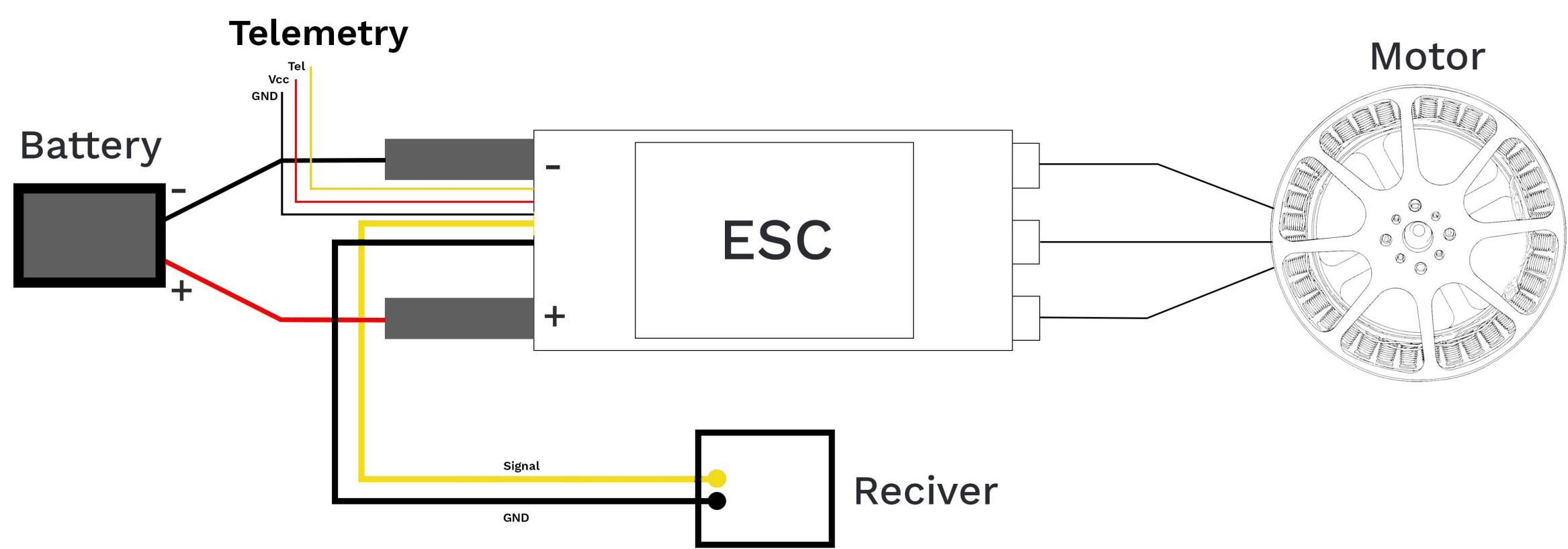
Capabilities

- High-Speed Electronic Commutation
- Precision Motor Speed & Torque Control
- Fast Acceleration with Instant Throttle Response
- Smooth Multi-Motor Synchronization
- Plug-and-Play Integration with Leading Flight Controllers



Specifications

Input voltage range	3S – 6S LiPo ($\approx 9\text{ V} - 25.2\text{ V}$)
Continuous current rating	40 A
Current sensing method	Shunt-based
Telemetry	Supported via dedicated telemetry connector
Connectors	Motor phase wires, signal wire, telemetry connector
Configuration interface	ESC configurator software
PCB dimensions	Approx. 7 mm x 2.9 mm
Weight	~28g



Headquarters and R&D Center

Digital Hub, Kerala Technology Innovation Zone, Kinfra Hi-Tech Park, Kalamassery, Kochi, Kerala 683503
Ph: +91 949 771 7654
Email: info@axldrone.com

Manufacturing Unit

Kannambra, Palakkad, Kerala, India - 678686,
Ph: +91 949 771 7654

Global R&D and Export

C5, UL Cyberpark, SEZ, Calicut, Kerala, India - 673016
Ph: +91 495 297 3774

Global Sales and Support

1441 Broadway, #5, New York, NY 10018, USA

