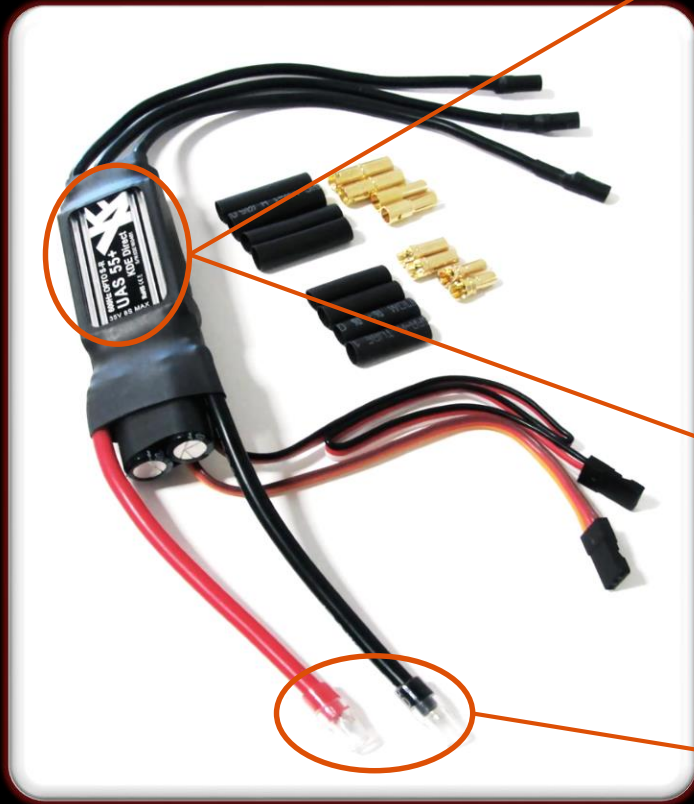


KDE DIRECT UAS ELECTRONIC SPEED CONTROLLER SERIES TECHNOLOGY REVIEW

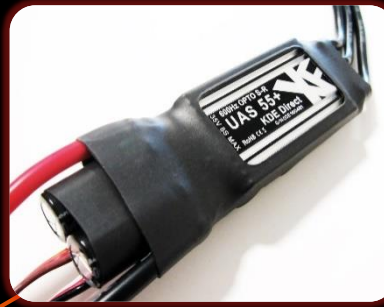
INDUSTRY-LEADING PERFORMANCE

The KDE Direct UAS Series Electronic Speed Controllers (ESC) are optimized for commercial and industrial-level UAS and Multi-Rotor applications; incorporating the latest market-leading technologies and advanced motor control algorithms for optimal flight performance. The ESCs are specifically tuned to the KDE Direct UAS Multi-Rotor Brushless Motors for peak performance and plug-and-play operation.



INDUSTRIAL-QUALITY COMPONENTS

All UAS Electronic Speed Controllers use the highest-grade, extremely-low resistance (0.9 mΩ) MOSFETs for industry-leading performance and maximum efficiency. 10,000+ hour, long-life and low-ESR Aluminum Electrolytic Capacitors are used for high-durability and maximum protection of the internal circuitry for optimal operation.



The new series comes pre-loaded with the latest production firmware, including a host of new, market-leading technologies such as:

- **Regenerative Braking** – active braking during motor deceleration phase, providing instantaneous response to the flight controller commands and matched-control speed to acceleration profiles (less “float” during flight).
- **Temperature-Controlled Synchronous Rectification** – new proprietary algorithm for smooth running motors at low-throttle and improved, faster response under high-peak loads; all while significantly increasing flight-time efficiency and reducing operating temperatures (“active-freewheeling”).

DETAILED CONSTRUCTION

Critical internal components are protected by the thermal-epoxy bonded Aluminum 6061-T6 heat-sink and a vibration-damping, foam-composite backing; allowing the ESCs to be installed into a wide-range of applications, without detrimental effects to the lifespan and performance of the electronics.



SILICON-WIRE POWER LEADS

High-temperature (200°C/392°F), silicon-wire power leads and 24K gold-plated bullet connectors provided for easy, hassle-free installation. Bullet connectors come pre-soldered and heat-shrink wrapped at the motor leads; saving valuable time during assembly and simplifying connection to the



KDE Direct UAS Multi-Rotor Brushless Motor Series for plug-and-play compatibility.