# KDE DIRECT UAS MULTI-ROTOR SERIES BRUSHLESS MOTORS TECHNOLOGY REVIEW

### **INDUSTRY-LEADING PERFORMANCE**

Computerized electromagnetic-field simulation and years of field testing utilized to optimize power-output efficiency and torque-curves for multi-rotor and UAS specific applications. The UAS Multi-Rotor Brushless Motor series produce a high-level of performance and are built to the highest-quality standards and manufacturing technology available.



### UNIVERSAL PROPELLER MOUNTING PATTERN

All UAS Series motors have multiple propeller mounting profiles for use with the included KDE Direct UAS adapters; and simple compatibility with a wide-range of available propulsion options for easy installation.

All motors are installed with triple-supported, ABEC-7 rated Japanese NMB and/or NSK radial-bearings for extremely smooth operation and industry-leading life (200+ hours).



### UNIVERSAL FRAME MOUNTING PATTERN

An innovative, universal frame mounting pattern and shaft-retaining collar is utilized for easy drop-in installation and safe construction for various frames and applications.

All motors are permanently bonded and sealed internally, protecting critical components from weather (rain and snow), dust and debris, and vibrational hazards for long-lasting operation in the most-demanding requirements.



## **OPTIMIZED STATOR AND MAGNET BELL**

Stator construction uses the highest-grade, Japanese 0.2 mm silicon steel laminations and military-spec, Polyimide ultra-high temperature (240°C/464°F) windings for optimum efficiency and power transfer. Permanent attachment to the stator is achieved with a Kevlar-tie wrap around all stator teeth and vacuum-pulled epoxy coating to reduce chance of winding failures.

High-temperature rated (180°C/356°F), N45UH Neodymium sintered-magnets are installed for maximum, industry-leading performance.



An upper CNC-machined magnet retaining ring, dedicated slots, and 360° epoxy bonds are incorporated at each magnet location to secure a permanent connection to the magnet bell. In addition, all mounting hardware and 24K bullet-connectors are included with each motor edition, for easy and hassle-free installation.