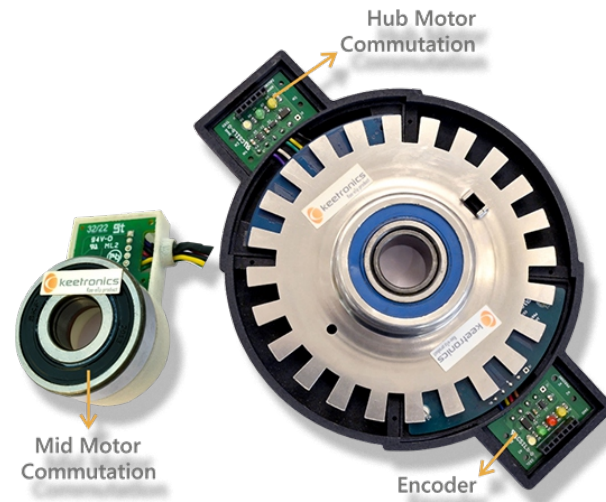




Hub & Mid Mount Commutation Sensor and Encoder (iHMC / iMMC / iENC)

Key Highlight

- Accurate rotor position and velocity sensing for efficient motor commutation
- Coil on PCB inductive technology for reliable, contactless operation
- Wide operating temperature range from -40°C to 125°C

Production Information

The Hub and Mid Mount Commutation Sensor and Encoder (iHMC / iMMC / iENC) is an advanced inductive sensing solution developed for electric vehicle motor control applications. Designed specifically for hub motors and mid-mount BLDC motors, this sensor enables precise rotor position and velocity detection to support efficient motor commutation.

Built using Coil on PCB inductive technology, the sensor offers high reliability, stable performance at elevated temperatures, and improved durability compared to conventional magnetic sensing solutions. Accurate rotor position feedback ensures optimal motor performance, minimizes energy losses, and helps maximize vehicle driving range.

The sensor supports a 5V operating supply with low current consumption and is engineered to operate across a wide temperature range from -40°C to 125°C. With a sensing air gap range of 0.5 to 2 mm and Open Drain (sinking type) output, it integrates easily with standard motor controllers.

Designed for harsh automotive environments, the iHMC / iMMC / iENC platform is PPAP ready and suitable for OEM integration. Field trials are complete, and the product is available with multiple customization options including voltage variants, mechanical form factor adjustments, and mating connector configurations.

This solution is ideal for TRAP BLDC motor applications requiring reliable, contactless commutation sensing in electric vehicles.

Features

- Industrial Grade
- Custom Layout
- High Quality
- Made In India

Technical Specifications

Model Number	iHMC-iMMC-iENC
Category	Smart Sensors for EV