



## New Vishay Intertechnology 60 mm Inductive Position Sensor Delivers High Precision for Harsh Industrial and AMS Applications

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**Allowing for Use Close to Electrical Motors, the RAIK060 Is Slimmer and Lighter Than Magnetic-Based Encoders, With Higher Rotational Speed and Lower Latency Time**

MALVERN, Pa., Feb. 05, 2025 (GLOBE NEWSWIRE) -- Vishay Intertechnology, Inc. (NYSE: VSH) today introduced a new high precision position sensor built on inductive technology for industrial and AMS applications. Compared to solutions based on magnetic technology, the Vishay MCB [RAIK060](#) absolute inductive kit encoder offers a smaller thickness of 5 mm, lighter weight of 15.5 g, higher rotational speeds to 10 000 rpm, and a lower latency time of  $\leq 5 \mu\text{s}$ . In addition, the device isn't sensitive to magnetic environments, allowing it to be used close to electrical motors.

The position sensor released today is ideal for robotics, motor drives, and other demanding industrial applications requiring accurate positioning — including conveyor belt control and automated guided vehicles — as well as gimbal functionality for missile launchers and guidance systems. Design variants can be dedicated to actuator position control for drones and commercial, regional, and eVTOL aircraft. In addition, the RAIK060 will provide pitch and yaw position control in windmills; wheel position control in cleaning robots; and actuator position control in telecom antennas and medical X-ray machines and hospital beds.

For these applications, the RAIK060 achieves  $> 13$ -bit accuracy, 18-bit resolution, and  $\geq 17$ -bit repeatability while maintaining robustness against external magnetic fields, moisture, airborne pollution, vibration, mechanical shock, and changes in temperature. Offering an off-axis design for hollow shaft mounting, the position sensor features a useful electrical angle of  $360^\circ$  and a wide temperature range of  $-40^\circ\text{C}$  to  $+105^\circ\text{C}$ . The device has a 60 mm outside diameter and 25 mm inner diameter and is available with multi-turn variants and SPI, SSI or Biss-C output signals.

Simplifying setup, the RAIK060's embedded self-calibration eliminates the need for external software, while its tolerance on airgaps up to  $\pm 0.2$  mm and inclusion of LED status indicators in its frame allow for easier mounting and assembly. For ease of use, the device memorizes the last position before power-off, while its built-in self-monitoring provides improved safety.

Samples and production quantities of the RAIK060 are available now, with lead times of 16 weeks.

Vishay manufactures one of the world's largest portfolios of discrete semiconductors and passive electronic components that are essential to innovative designs in the automotive, industrial, computing, consumer, telecommunications, military, aerospace, and medical markets. Serving customers worldwide, Vishay is **The DNA of tech**.<sup>®</sup> Vishay Intertechnology, Inc. is a Fortune 1000 Company listed on the NYSE (VSH). More on Vishay at [www.Vishay.com](http://www.Vishay.com).

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**Vishay Twitter feed:** <http://twitter.com/vishayindust>

**Link to product datasheet:**

<http://www.vishay.com/ppg?32602> (RAIK060)

**Link to product photo:**

<https://www.flickr.com/photos/vishay/albums/72177720323619098>

**For more information please contact:**

Vishay Intertechnology  
Peter Henrici, +1 408 567-8400  
[peter.henrici@vishay.com](mailto:peter.henrici@vishay.com)

or

Redpines  
Bob Decker, +1 415 409-0233  
[bob.decker@redpinesgroup.com](mailto:bob.decker@redpinesgroup.com)



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