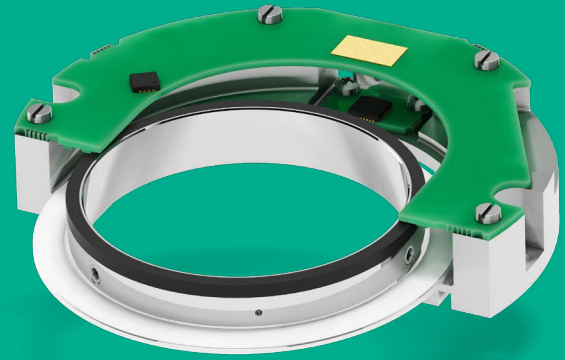


Singleturn Kit Encoders

Lika Electronic enriches its range of OEM encoder solutions and launches the series of compact, lightweight, and high accuracy optical kit encoders.



Lika Electronic offers a comprehensive line-up of **optical kit encoders and magnetic modular encoders**. They are designed in an extensive choice of specifications, technologies, and options and can be customized to fit OEM application requirements of robotics industry and motor manufacturers. New from Lika Electronic is the extensive range of **optical absolute encoders designed in a kit module**. Kit encoders are **frameless and provide singleturn resolution**.

They are distinguished by their *small size, low profile, minimum weight, high resolution, and fine accuracy*.

They are perfect for direct integration into high performance and space critical applications according to the latest design trends such as in robotics, robot joints, hollow shaft motors (direct drive torque motors, brushless motor kits, ...), mechanical transmission devices.

Their compact, slim, and lightweight design allows the automation system designers the greatest flexibility, especially in applications where constricted or hardly accessible space and minimum weight are crucial. The elimination of parts that add size also gives designers the advantage of reducing cost. Their operation is **non contact and there are no components subject to wear and fatigue**.

They are designed to perfectly fit common motor sizes with shaft diameters ranging between 12 mm and 50 mm (0.472" ÷ 1.968"). The outer diameter of their package is comprised between 25 mm and 80 mm (0.984" ÷ 3.150"), while the average thickness is 12.5 mm only (0.492").

They are supplied fully calibrated and the assembly process is limited to the mechanical mounting. The range of the operating temperature is -40°C to +100°C (-40°F to 212°F).

From the electrical point of view, kit encoders provide position feedback via SSI, BiSS, and RS-485 protocols.

The resolution is **21 bit singleturn** (2,097,152 cpr) and the accuracy is in the $\pm 0.010^\circ$ range. An **additional incremental track** further provides up to 1,024 Sine/Cosine 1Vpp signals for speed feedback and interpolation needs.

Absolute optical kit encoders are also available in **multiturn version**. It provides multiturn resolution up to **40 bits instead**.

Because of their minimum footprint and weight and their high performance, kit encoders are ideal for direct integration into advanced and/or space critical applications such as robotics, articulated robots, collaborative robots, pick & place robots, articulated arms, torque motors, hollow shaft motors, brushless DC motors, stepper motors, spindle motors, OEM applications.

For detailed information about optical kit encoders and magnetic modular encoders and to look into how they differ from and what are their advantages over each other and over the conventional shaft encoders please download Lika's white paper "[Optical Kit Encoders and Magnetic Modular Encoders. Benefits and Applications](#)".

Lika Electronic draws on its first-hand experience to develop **customer-specific solutions** that meet individual size, shape, resolution, and connection needs.