IKS11 MINIATURE INCREMENTAL ENCODER FOR LINEAR AND ROTARY APPLICATIONS

The IKS11 from Lika Electronic is a **miniature magnetic incremental encoder** that is ideally suited for installation in the most confined spaces (the unhoused PCB version, called the IKP11, is the smallest sensor available on the market!). Additionally, it can withstand severe working conditions in challenging environments.
The readhead measures only 13 mm (W) x 14 mm (H) x 6 mm (D), which is smaller than a little candy, and encapsulates electronics capable of operating at temperatures ranging from -40°C to +125°C (-40°F to +257°F). Despite its tiny size, it can also read double-track scales, featuring an incremental track on one side and a track with one or more Reference marks on the other. The Reference marks can be magnetized at predefined distances or customised to meet the client's requirements. For example, when the sensor is paired with the MTI magnetic tape, the Reference signal can be provided for each pole, every 20 mm, every 50 mm, or at any custom position along the travel, according to individual needs, when the marks are encoded in the additional track of the magnetic tape.
The maximum length of the tape is 2.3 m (90.55") when the additional reference track is provided.

The IKS11 is easy to mount due to the generous gap of up to 2.5 mm permitted between the readhead and the scale. Its operation is magnetic and contactless, rendering it unaffected by wear, vibrations, dust, moisture, oil, and contaminants.
The range of resolutions extends from 0.02 microns to 1.25 mm. DPI resolutions are also available to facilitate integration with printing machines.
This encoder provides AB0 (/AB0) quadrature signals through the Push-Pull or Line Driver RS-422 outputs.
The small circuit also includes a dual-colour LED for diagnostic information, signalling active errors and signal quality. Also noteworthy is the possibility to choose between two low voltage power supply options: +5Vdc or +3.3Vdc.
The IKS11 is perfect for integration into various industrial applications where minimum size and reliability are prerequisite, such as embedded motion control systems in OEMs, cameras and video surveillance systems, electromedical equipment, and printing machines.
Additionally, the countless customisation possibilities make it an ideal choice for almost any application.