SMAR4, The Super Miniature Absolute Modular Encoder

Lika Electronic's **SMAR4 absolute modular encoder + MRA magnetic ring** is ultra-compact, ultra-flat, ultra-lightweight, bearingless, and accurate. Its size is incredibly small: the open PCB readhead measures 22.5 by 6 mm only!

The **SMAR4 is the new off-axis absolute modular encoder** from Lika Electronic. It combines an open PCB readhead with an MRA magnetic ring in a very compact assembly. It is engineered and shrunk down in size and weight to be directly integrated into high performance space and weight critical applications according to the latest design trends such as in robotics, robotic joints, hollow shaft motors (direct drive torque motors, ...), brushless and servo motors, video surveillance systems, drones/UAVs, gimbals, 3D printers, electro-medical and laboratory devices, OEM equipment.

Its readhead is a few millimetres in size only (22.5 mm x 6 mm x 3.9 mm h / 0.886" x 0.236" x 0.153" h), it can fit even the smallest installation places.

Also **the ring is very thin and axially magnetized** and has an outer diameter of 34 mm / 1.338" with max. 19 mm / 0.748" through bore.

The rotational speed can be up to 6,000 rpm and the range of the operating temperature is -40°C +100°C (-40°F +212°F). The construction is frameless and bearingless, i.e. the encoder is not equipped with shaft, bearings, flange, and housing. **The operation is without contact and no components are subjected to wear and mechanical fatigue.**

The SMAR4 is equipped with **SSI and BiSS C-mode absolute interfaces**. The available resolutions are **up to 19 bits (up to 524,288 cpr).**

Lika Electronic develops and manufactures customer-specific solutions to meet individual size, shape, shaft, resolution, and interface/connection needs.
To know more contact our team.