

## EtherNet/IP absolute encoders for time-critical & high-speed industrial automation

*Lika Electronic offers a comprehensive range of high-performance encoders with Ethernet-based interfaces, it includes the leading industrial protocol EtherNet/IP.*

As a key player in the manufacturing of encoders with Ethernet and bus technologies, **Lika Electronic offers one of the most comprehensive ranges in the market, it includes EtherNet/IP.** EtherNet/IP is among the most widespread Ethernet-based protocols and is accounted for 11% of the Ethernet/bus global market share, according to the latest HMS survey. In particular it has a top market share of 24% of the global Industrial Ethernet solutions, and is better established in the USA and Asia.

EtherNet/IP encoders from Lika support the complete package of EtherNet/IP functions and attributes and comply with the latest ODVA specification.

In more detail they are **22 hex type devices** and comply with "Device Profiles, Encoder Device Type 22 hex" specifications of the "CIP NETWORKS LIBRARY".

**They are Class 1 Real Time Ethernet (RTE) devices according to IEC 61 784-2 for time-critical** and high-speed industrial automation applications and implement **DLR Device Level Ring protocol** for continuous system operation even when a fault occurs.

Among their key features are also:

- user-friendly Integrated Web Server for easy and quick configuration and diagnostics;
- firmware upgrade capability;
- comprehensive diagnostic functions both via five duo LEDs and via software;
- IP addressing via hardware switches and via software (including DHCP server);
- flexible network architecture compatible with commercially available Ethernet installation options.

EtherNet/IP encoders further provide the full set of encoder configuration attributes: position and velocity readout, scaling, preset, code sequence, etc., they are contained in the application-specific Position Sensor Object, Class ID 23h.

As in the whole range, these encoders are available in three series and offer robust magnetic and high resolution optical versions, singleturn and multiturn configuration, solid and hollow shaft mechanical design:



- **EM-series: low cost** 27-bit multiturn encoders equipped with robust magnetic sensing technology for standard industrial applications;
- **HS-series: 18-bit singleturn** optical encoders for finest accuracy demands;
- **HM-series: 30-bit high-resolution multiturn** encoders, optical sensing technology, for high-end applications.

They are designed in a complete selection of mechanical versions: solid shaft versions with 6, 8, 9.52, 10 and 12 mm (0.24", 0.31", 3/8", 0.39", 0.47") diameter and servo or clamp flange mounting; and blind hollow shaft versions with 14 and 15 mm (0.55", 0.59") diameter.

The industrial 58 mm flange enclosure enables IP65 protection and allows for operating temperatures between -25°C and +85°C (-13°F +185°F).

Standard M12 connectors provide ease of use, safe and cost-saving installation and minimization of the risk of errors.

Further information and technical specifications about the range of Ethernet and fieldbus encoders from Lika Electronic can be found at <https://goo.gl/ZvZv35>