IF56 NEXT GENERATION SSI & BISS TO ETHERNET CONVERTER

The IF56 converter from Lika Electronic is specifically designed to interface SSI and BiSS encoders and integrate them fully and easily into the most popular industrial Ethernet networks: **Profinet, EtherNet/IP, EtherCAT, POWERLINK, MODBUS–TCP, and CC–LINK.** Compared to the previous model IF55, it offers completely new hardware with cutting-edge technology and adds some new features, such as the integrated web server available in all interfaces (except POWERLINK), the firmware update function, and the extended range of the resolutions that can be interfaced.

Any SSI or BiSS encoder (singleturn and multiturn rotary encoder, linear encoder, or bearingless encoder) can be connected having a singleturn resolution of max. 18 bits and a total resolution of max. 31 bits, the MSB Left Aligned or LSB Right Aligned protocols, and the binary or Gray output codes. In addition, there is no need to make any changes in the hardware or software of the encoder; only the converter needs a simple parametrization to be provided. The encoder will be configured as a Slave device and be able to communicate in the Ethernet network in a complete and efficient manner, in compliance with the specifications of each protocol.

The IF56 gateway is ideally suited for the following uses:

- when it comes to retrofit outdated plants or integrate stand-alone machines;
- when the space is narrow and does not allow for larger standard Ethernet encoders to be installed;
- when the integration of small linear encoders and bearingless encoders is required.

In the case of old plant retrofit or integration projects, instead of being discarded, an existing SSI or BiSS encoder can be converted and reused in a more modern and integrated communication system. It is also perfect when the space is constricted. Because of their electronics, Ethernet encoders have larger dimensions than SSI encoders, and the minimum size is the 58 mm flange design. Today it is finally possible to install even small 36 mm flange encoders and connect them to the Ethernet network through the gateway. Furthermore, the IF56 converter allows to integrate also minimum-footprint linear encoders and bearingless encoders that cannot be installed in the Ethernet applications because of their physical features.

The IF56 gateway **is easy and quick to install and set up.** It has a metal housing with an IP65 protection rate and also clips for DIN TS35 rail mounting. Its mechanical dimensions are exactly the same as the previous IF55 model. It is fully compliant with each protocol and the Ethernet

technology and offers real-time communication, high speed up to 100 Mbit/s, flexible network topologies, extensive diagnostics, and complete IT integration. It is equipped with the full set of information and configuration parameters and functions (position readout, scaling, preset, code sequence, by-pass, web server, firmware update, etc.), as well as with LEDs for visual diagnostic information in compliance with the specifications of the installed protocol.

The IF56 gateway will replace the previous IF55 model in the near future.