SIGNAL CONVERTERS AND DEVICES FOR INTEGRATION OF INCREMENTAL AND ABSOLUTE ENCODERS

Lika Electronic offers a varied range of **converters, interpolators, amplifiers, splitters, gateways, and modules designed for the integration and communication of both incremental and absolute encoders**, no matter whether rotary or linear.

It includes devices with simplified operation and basic functions; and devices with an advanced set of functions, they offer complete programmability either via DIL switches or free software tool (for example they allow to set the input and output signal characteristics, the scaling, the filtering of the signals, etc.); and further add smart options such as TEACH-IN setting, linearization, availability and programmability of control inputs and external outputs, and many others.

Whether they need to be used in industrial processes where different types of communication and interfaces must coexist in the same system; or they must be installed on existing and maybe obsolete industrial machinery with equipment to be **retrofitted** for up-to-date connections, signal converters always allow modern and outdated industrial devices to reliably and safely communicate in the same system.

Among the devices **for incremental encoders are:**

- **IF09, IF10, IF20:** devices designed for conversion, amplification, and splitting of digital incremental signals (AB0 / AB0, Push-Pull HTL, Line Driver TTL, single input-single output, single input-double output, double input-double output, isolated inputs and outputs)
- **IF31:** converter to convert Sine/Cosine (1Vpp) signals to digital incremental signals (AB0 /AB0, Push-Pull HTL, Line Driver TTL)
- **IF40:** converter to convert digital incremental signals (AB0 /AB0, Push-Pull HTL, Line Driver TTL) to analog / serial signals (RS-232, RS-485)
- **IF42:** converter to convert digital signals (AB0 /AB0, Push-Pull HTL, Line Driver TTL) to parallel / serial signals (RS-232, RS-485)
- **IF60 / IF61:** devices designed to transmit incremental signals (AB0 /AB0, Push-Pull HTL, Line Driver TTL) via optical fiber (for instance for use in hazardous areas and potentially explosive zones as well as in environments affected by extremely strong electromagnetic fields)
- **IFS-10:** safety controller and splitter for integration of digital and Sine/Cosine incremental encoders into systems that require up to SIL3/PLe Functional Safety Level

The range **for absolute encoders** includes:

- **IF11:** switcher for one SSI Master and two (or more) SSI encoders
- **IF41:** converter to convert SSI signals to analog (0-20mA, 4-20mA, 0-10V, ...) / serial signals (RS-232, RS-485)
- **IF42:** converter to convert SSI signals to parallel / serial signals (RS-232, RS-485)
- **IF55:** converter to convert SSI signals to fieldbus interfaces: Profibus, CANopen, DeviceNet
- **IF56:** converter to convert SSI and BiSS signals to Ethernet interfaces: Profinet, EtherNet/IP, EtherCAT, POWERLINK, MODBUS/TCP, CC-Link
- **IF62 / IF63:** devices designed to transmit SSI signals via optical fiber (for instance for use in hazardous areas and potentially explosive zones as well as in environments affected by extremely strong electromagnetic fields).

For more information on the comprehensive range of interfaces **please refer to our web site**