

## IF40, IF41 and IF42 supersede outdated IF50, IF51, IF52

*IF40, IF41 and IF42 signal converters are designed to supersede perfectly outdated models IF50, IF51 and IF52, and add a few more options.*

- *IF40 incremental to analogue, it replaces IF50*
- *IF41 SSI to analogue, it replaces IF51*
- *IF42 incremental or SSI to parallel, it replaces IF52*
- *More options, greater versatility*



**IF40** converts incremental signals to analogue or serial signals and replaces outdated IF50.

**IF41** converts SSI data to analogue or serial signals and replaces outdated IF51.

**IF42** converts incremental signals or SSI data to parallel or serial signals and replaces outdated IF52.

**New IF40 is designed to convert incremental digital signals into either analogue signals** (current or voltage) or serial RS-232/RS-485 format data (Modbus RTU). A wide range of incremental encoders and digital sensors is applicable:

- quadrature encoders with HTL level output and PNP, NPN, Push-Pull or Namur characteristics, using A and B outputs with 90° displacement;
- TTL/RS-422 quadrature encoders with AB and /AB output channels;
- single channel impulse sources such as proximity switches and photocells providing HTL level and PNP, NPN or Namur characteristics;
- symmetric single channel sources with TTL/RS-422 output providing differential signals (i.e. A and /A channels);

- asymmetric single channel sources with TTL level (without inverted signals, i.e. A channel only). Input signals can have a frequency of up to 1 MHz and are converted without delay into high-precision 16-bit analogue signals. The ranges are 0 to 20 mA, 4 to 20 mA and -10 to +10 V.

**IF41 is developed to convert SSI encoder data into either analogue signals** (current or voltage) or serial RS-232/RS-485 format data (Modbus RTU). It can be connected to singleturn and multiturn encoders and sensors which provide standard SSI interface, 10 to 32 bit resolution and either Binary or Gray code.

The unit will then deliver current or voltage analogue signals proportional to incremental counting or encoder position. As stated about IF40, the range of analogue current signals is 0 to 20 mA and 4 to 20 mA; while the range of analogue voltage signal is -10 to +10 V.

**IF42 is conceived to convert incremental digital signals or SSI encoder data into either parallel signals or serial data** (Modbus RTU).

The range of applicable incremental encoders and digital sensors is the same as described for IF40: encoders and sensors with TTL/RS-422 or HTL level output and PNP, NPN, Push-Pull or Namur characteristics. Or it can be connected to SSI interface encoders (the same as IF41): all singleturn and multiturn encoders and sensors fitted with 10 to 32 bit resolution and either Binary or Gray code are compatible.

The unit will then convert the sensor or encoder information into parallel signals. The device is equipped with a 25-pin D-Sub female connector. It is also possible to convert serial data into parallel format.

All models offer a set of new additional options such as an increased number of control inputs and a connection for encoder / sensor power supply (+5Vdc and +24Vdc). Parametrization is via free OS software and allows, among other things, to set the devices in several work modes such as frequency converter, counter, Start/Stop interface converter, etc.

### Technical details