

## Modbus® to FF built-in module, the T610



### Summary:

- ◆ FOUNDATION fieldbus (FF) interface with Modbus Input
- ◆ The less expensive solution in the market
- ◆ Ready for instrument integration
- ◆ Easily adaptive to your application
- ◆ Straightforward configuration
- ◆ Robust design suited for industrial applications
- ◆ Loop powered
- ◆ Suited for a two-wire loop powered design



### General description

The **T610** is a **built-in module** for interfacing Modbus transmitters to a FOUNDATION Fieldbus network.

There are options for using RS485, RS232 or pure CMOS UART communication to the instrument.

It includes a Modbus master software enabling communication with a Modbus instrument. The module reads up to four dynamic variables from the instrument and converts this to dynamic variables on FF. Four Function Blocks (Analog Input) are supported.

40 generic Modbus R/W registers are supported. It is a simple configuration task to adapt the T610 to a specific instrument. The software is tested for ITK 5.2.

If you need more functionality for instance other Function blocks, you should use the T610\_C, and let Fint's design team do the customization according to your particular specifications.

### Applications

The **T610** is an OEM module intended for Modbus instruments that shall be upgraded to interface to FOUNDATION fieldbus.

### Powering and galvanic isolation

The T610 comes with

- ◆ Galvanic isolation for separately powered instruments or
  - ◆ Power supply for the instrument (3.3Vdc) for loop powered applications
- The latter is only possible for low power consuming devices. The electrical interface should be CMOS.

### T610 features:

- ◆ Modbus configuration capabilities:
  - Communication parameters
  - Modbus Address
  - Register addresses
- ◆ Data type flexibility
- ◆ Write protection of Modbus settings
- ◆ Configuration of Modbus settings from any DD based configurator
- ◆ Circuitry for EMC protection
- ◆ Circuitry for IS protection

### Specifications:

- |                               |                     |
|-------------------------------|---------------------|
| ◆ Mechanical size             | round card 65 mm    |
| ◆ Mounting                    | three 3.0 mm screws |
| ◆ Operating temperature range | -40 °C to + 85 °C   |
| ◆ Loop current draw           | 20 mA               |

### Instrument interfacing options:

#### Address:

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