



Data Sheet

Digital Isolated Transmitter
Model OMX 380iPM

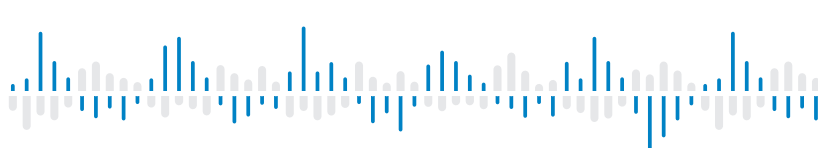
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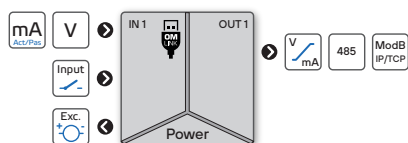
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OMX 380iPM

- Input 0...20 mA/4...20 mA/0...10 V
- Output 0/4...20 mA/0...5 mA/0...2/5/10 V/±10 V
- Rate up to 7200 meas./s
- Teach-in, Digital filters, Tare, Linearization
- Quick configuration by DIP switch
- PC configurable via USB port
- Excitation 24 VDC
- Galvanic separation 2.5 kVAC
- Power supply 10...30 VDC/24 VAC

DIGITAL ISOLATED TRANSMITTER



Option

Excitation ● Data output

The OMX 380i model series are very fast DIN rail mountable digital transmitters with a Teach-in function.

Type OMX 380iPM is a isolated transmitter. Setting of both the input and output ranges can be done conveniently by a DIP switch located on the side of the housing or from a PC via the OM Link SW.

This device is based on a 32-bit processor, fast 24-bit $\Delta\Sigma$ ADC with PGQ and 16-bit DAC, which guarantees high accuracy and excellent stability.

OPERATION

The device can be configured either by DIP switches located on the side of the housing or by PC using the OM Link SW. The same SW can be used to edit and archive all device settings, as well as to perform firmware updates and customer calibration

Tech-in process can be performed for the measuring range currently selected using the front panel buttons.

All settings are stored in the EEPROM memory (preserved even after power-off).

OPTION

DATA OUTPUTS are for their rate and accuracy suitable for transmission of the measured data for further projection or directly into the control systems. We offer an isolated RS485 with ASCII and Modbus protocol.

STANDARD FUNCTIONS

PROGRAMMABLE INPUT

Measuring range: adjustable in menu

Standard setting: any display values can be assigned to Min and Max values of a defined standard input signal

Teach-in: any display values can be assigned to Min and Max values of actual (unknown) input signal

Manual setting: known Min and Max input signal values can be entered manually and any display values can be assigned to each signal

ANALOG OUTPUT

Type: isolated, programmable with a resolution of 16 bit, rate < 160 μ s

Ranges: 0...2/5/10 V/±10 V, 0...5 mA/0/4...20 mA

EXCITATION

Range: 24 VDC/1 W, isolated

FUNCTIONS

Linearization: non-linear signal is converted by a 100-point linear interpolation

Tare: designed to reset display upon non-zero input signal

Fixed tare: fixed preset tare

Min./max. value: registration of min./max. value reached during measurement

Simulation: test mode in which range, value and duration of the step can be set

Math functions: polynomial, inverse polynomial, logarithm, exponential, power, root

DIGITAL FILTERS

Floating average: from 2...30 measurements

Exponential average: from 2...100 measurements

Arithmetic average: from 2...100 measurements

Rounding: setting a „shorter“ number for further signal processing

EXTERNAL CONTROL

Hold: display/instrument blocking

Lock: control keys blocking

Tare: activation and tare resetting

Resetting Min/Max: resetting min/max value

Hold Min/Max: start of a measurement to evaluate the Min/Max value

Sample: start of a one-time measurement

