

OMX 100



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| OMX 100DC | DC VOLTMETER AND AMMETER |
| OMX 100PWR | UNIVERSAL WATTMETER |
| OMX 100PM | PROCESS MONITOR |
| OMX 100OHM | OHMMETER |
| OMX 100RTD | THERMOMETER FOR Pt/Ni |
| OMX 100T/C | THERMOMETER FOR THERMOCOUPLES |
| OMX 100DU | LINEAR POTENTIOMETERS |
| OMX 100F | UNIVERSAL COUNTER FREQUENCY METER |

Description

The OMX 100 model series are programmable transmitters. The instrument is based on an 8-bit controller with precise A/D converter, which secures high accuracy, stability and easy operation feasibility. For projection of measured data, easier setting and clear function arrangement is, as a standard, equipped with illuminated LCD display. Transmitters have galvanic separation with isolation voltage of 500 V.

Operation

The instrument is set and controlled by two control keys located on the front panel or via data line RS 232/485.

Standard equipment is the OM Link interface, which together with operation program enables modification and filing of all instrument settings as well as perform firmware updates.

All settings are stored in the EEPROM memory (they hold even after the instrument is switched off).

The measured units may be projected on the display.

Options

Excitation is suitable for feeding of sensors and transmitters. It has a galvanic isolation with fixed preset value of 12...15 VDC.

Comparators are assigned to monitor two limit values with relay output. The limits have adjustable hysteresis within the full range of the display as well as selectable delay of the switch-on in the range of 0...99,9 s. Reaching the preset limits is signalled by LED and simultaneously by the switch-on of the relevant relay.

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 RS232 and RS485 with the ASCII protocol.

- Programmable isolated transmitters
- LCD display, Digital filter, Tare
- Output: 0/4...20 mA/0...5 mA/0,2...2,2 kHz
0...2/5/10 V
- Power supply 230 VAC

OMLINK

Options

- Excitation • Dual comparator • Data output
- Power supply: 24/110 VAC, 10...30 VDC

Standard functions

PROGRAMMABLE INPUT

Setting: manual, in menu it is possible to set for both limit values of the input signal arbitrary type (V, mA, Hz) and range of the analog output as well as projection on the LCD display

Setting (F): measuring mode counter/frequency with adjustable calibration coefficient and time base

ANALOG OUTPUT

Type: isolated, programmable with resolution of max. 12 bit, type and range are selectable in programming mode

Ranges: 0...2/5/10 V, on request ± 5 V/ ± 10 V

0...5 mA, 0/4...20 mA, on request ± 20 mA, (comp. < 500 Ω)

Frequency: isolated, programmable, open collector with inside power resistor, 0,2...2 200 Hz

COMPENSATION

Conduct (RTD, OHM): automatic (3- and 4-wire) or manual in menu (2-wire)
of conduct in probe (RTD): internal connection (conduct resistance in measuring head)
of CJC (T/C): manual or automatic, in menu it is possible to perform selection of the type of thermocouple and compensation of cold junctions, which is adjustable or automatic (temperature at the input brackets)

LINEARIZATION

Linearization (DC, PM, DU): by linear interpolation in 25 points (solely via OM Link)

DIGITAL FILTERS

Exponential average: from 2...100 measurements

Rounding: setting the projection step for display

Filtration constant (F): transmits input signal up to 5...200 Hz

FUNCTIONS

Preset (F): initial non-zero value, which is always read after resetting the instrument to zero

Tare: resetting display upon non-zero input signal

EXTERNAL CONTROL

Hold: display/instrument blocking

Resetting (F): counter resetting

Lock: control keys blocking

