



Data Sheet
OM 502

Distributed by



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- 5-DIGIT PROGRAMMABLE PROJECTION
- MATHEMATIC FUNCTIONS, DIGITAL FILTERS, TARE
- ACCURACY 0,02% S RATE: 100 MEAS./s
- SIZE OF DIN 96 x 48 MM
- POWER SUPPLY 80...250 V AC/DC
- Option
Comparators • Data output • Analog output • Data record
Power supply 10...30 V AC/DC

OPERATION

The instrument is set and controlled by five control keys located on the front panel. All programmable settings of the instrument may be performed in three adjusting modes:

LIGHT MENU is protected by optional number code and contains solely items necessary for instrument setting

PROF MENU is protected by optional number code and contains complete instrument setting

USER MENU may contain arbitrary items from the programming menu (LIGHT/PROF), which determine the right (see, change). Access w/o password.

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 (with OML cable). The program is also designed for visualization and filing of measured values from more instruments.

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.

OPTION

COMPARATORS are assigned to monitor one, two, three or four limit values with relay output. The user may select limits regime: LIMIT/DOSING/FROM-TO. 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/MESSBUS/MODBUS/PROFIBUS protocol.

ANALOG OUTPUTS will find their place in applications where further evaluating or processing of measured data is required in external devices. We offer universal analog output with the option of selection of the type of output - voltage/current. The value of analog output corresponds with the displayed data and its type and range are selectable in menu.

MEASURED DATA RECORD is an internal time control of data collection. It is suitable where it is necessary to register measured values. Two modes may be used. FAST is designed for fast storage (80 records/s) of all measured values up to 8 000 records. Second mode is RTC, where data record is governed by Real Time with data storage in a selected time segment and cycle. Up to 266 000 values may be stored in the instrument memory. Data transmission into PC via serial interface RS232/485 and OM Link.

OM 502

OMLINK

The OM 502 model series are 5-digit panel programmable instruments.

The instrument is based on an 8-bit microcontroller with a multichannel 24-bit sigma-delta converter, which secures high accuracy, stability and easy operation of the instrument.

OM 502DC
DC VOLTMETER AND AMMETER

OM 502PM
PROCESS MONITOR

OM 502I
INTEGRATOR

OM 502LX
LINEARIZER

OM 502DU
DISPLAY UNIT FOR LINEAR POTENTIOMETERS

OM 502T
WEIGHING INDICATOR

STANDARD FUNCTIONS

PROGRAMMABLE PROJECTION

Setting: manual, in menu optional projection on the display may be set for both limit values of the input signal, e.g. input 0...300,0 V > 0...450,0

Projection: -99999...999999

Weighing function [T]: manual or automatic calibration, signalization of stabilized equilibrium, zero stabilization, automatic zero monitoring, defined number of segments on the scale

Projection [T]: ±99999 (Mode - Standard)

Selection of segment size [T]: 0,001/.../0,1/0,2/0,5/1/2/5/10/20/50/100 (Mode - WEIGHT)

EXCITATION

Range: 5...24 VDC, for feeding of sensors and transmitters

LINEARIZATION

Linearization: by linear interpolation in 50 points (solely via OM Link)

Linearization [LX]: by linear interpolation in 256 points and 16 tables

DIGITAL FILTERS

Floating/Exp./Arithmetic average: from 2...30/100/100 measurements

Rounding: setting the projection step for display

MATHEMATIC FUNCTIONS

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

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

Fixed tare [T]: firmly preset tare

Peak value: the display shows only max. or min. value

Mat. operations: polynome, 1/x, logarithm, exponential, power, root, sin x

EXTERNAL CONTROL

Lock: control keys blocking

Hold: display/instrument blocking

Tare: tare activation

Resetting MM: resetting min/max value

