



## OM 502LX



Type OM 502LX is a precision 5-digit panel programmable display for nonlinear input signals. With the OM Link program, linear interpolation can be performed in up to 256 points and 16 tables.

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

### LINEARIZER

- 5-digit programmable projection
- Range: 0...5 mA; 0...20 mA; 4...20 mA  
±2 V; ±5 V; ± 10V
- Linearization in 256 points/16 tables
- Mathematic functions, Digital filters, Tare
- Size of DIN 96 x 48 mm
- Power supply 10...30 V AC/DC; 80...250 V AC/DC
- Option  
Comparators • Data output • Analog output • Data record

### OM 502LX LINEARIZER

#### OPERATION

The instrument is set and controlled by five buttons 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.

**PROFI MENU** is protected by optional number code and contains complete instrument setting.

**USER MENU** may contain arbitrary items from the programming menu (LIGHT/PROFI), 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 performing 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 (settings 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. As a user you can select the mode limit: LIMIT/BATCH/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/PROFIBUS protocols.

**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. 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 (40 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.

#### STANDARD FUNCTIONS

##### PROGRAMMABLE PROJECTION

**Setting:** manual, optional projection on the display may be set in menu for both limit values of the input signal, e.g. input 0...5 V > 0...250,0

**Linearization:** tnon-linear signals can be linearized by the means of a linearization table (up to 256 points and up to 16 tables)

**Projection:** -99999...99999

##### EXCITATION

**Range:** 5...24 VDC/1,2 W, for feeding sensors and transmitters

##### MATHEMATIC FUNCTIONS

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

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

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

**Mathemat. operations:** polynom, 1/x, logarithm, exponential, power, root, sin x

##### DIGITAL FILTERS

**Floating average:** from 2...30 measurements

**Exponential average:** from 2...100 measurements

**Arithmetic average:** from 2...100 measurements

**Rounding:** setting the projection step for display

##### EXTERNAL CONTROL

**Lock:** control keys blocking

**Hold:** display/instrument blocking

**Tare:** tare activation

**Resetting MM:** resetting min./max. value

