



Data Sheet  
**OMD 202RS**

*Distributed by*



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- 4/6-DIGIT PROGRAMMABLE PROJECTION
- THREE-COLOR LED OR HIGH BRIGHT LED
- DIGIT HEIGHT 57; 100; 125 MM
- IR REMOTE CONTROL
- DIGITAL FILTERS, TARE, LINEARIZATION
- POWER SUPPLY 80...250 V AC/DC
- Option
  - Excitation • Comparators • Data output • Analog output
  - Power supply 10...30 V AC/DC

## OMD 202



The OMD 202 model series are large programmable displays, which are produced in many designs.

The instrument is based on an 8-bit processor and a precise A/D converter, which secures high accuracy, stability and easy operation of the instrument. Displays are designed for indoor and outdoor use with IP64 cover.

Displays are suitable for projection of measured data in productions lines and operations with legibility up to 80m.

### OMD 202UNI

DC VOLTMETER AND AMMETER  
 PROCESS MONITOR  
 OHMMETER  
 THERMOMETER PRO Pt/Cu/Ni/Thermocouple  
 DISPLAY UNIT FOR LINEAR POTENTIOMETERS

### OMB 202PWR

AC VOLTMETER AND AMMETER  
 AC NETWORK ANALYSER

### OMB 202UQC

UNIVERSAL COUNTER

### OMB 202RS

DATA DISPLAY

### OPERATION

The instrument is set and controlled by IR remote control. 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 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 6-digit display.

### OPTIONS

**EXCITATION** is suitable for feeding of sensors and transmitters. It is isolated, with continuously adjustable value in the range of 5...24 VDC.

**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.

### STANDARD FUNCTIONS

#### PROGRAMMABLE PROJECTION

**Selection:** of input type and measuring range

**Measuring range:** adjustable as fixed or with automatic change (OHM)

**Measuring modes (PWR):** voltage ( $V_{RMS}$ ), current ( $A_{RMS}$ ), real power (W), frequency (Hz) and with calculation of Q, S, cos  $\phi$

**Setting (UQC):** measuring mode 2x counter (UP/DW, IRC)/2x frequency/timer/clock with adjustable calibration coefficient, time base and projection

**Projection:** -999...9999/99999...999999, for version „UQC“ there are selectable also time formats, user-adjustable display color also with measuring units (red-green-orange)

#### COMPENSATION

**of 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 50 points (solely via OM Link)

#### DIGITAL FILTERS

**Input filter (UQC):** transmits input signal up to 1 MHz...10 min

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

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

#### MATHEMATIC FUNCTIONS

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

**Summation (UQC):** registration of the number upon shift operation

**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

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

#### EXTERNAL CONTROL

**Lock:** control keys blocking

**Hold:** display/instrument blocking

**Tare:** tare activation

**Resettting MM:** resetting the min/max value

**Resettting:** resetting counter/stopwatch/timer

