

## OMD 201



- **4/6 digit programmable projection**
- **Digit height 57/100/125 mm**
- **DC/AC/PM/OHM/RTD/TC/DU Counter/Frequency/Stopwatch/RS**
- **Mathematic functions**
- **Power supply 230 VAC**

### Extension

Comparators • Excitation • Data output • Universal analogue output  
Power supply 24VAC, 110 VAC, 8...32 VDC

### Description

The OMD 201 model is a 4 or 6 digit large display. The instrument is based on an 8-bit  $\mu$ -processor with very precise A/D converter, that secures high accuracy, stability and easy operation of the instrument. Given the IP64 cover the display is construed also for outdoor application. Connection is executed through cable bushings and also the connector for control keyboard has the necessary protection. A holder for wall mounting applications may be supplied upon request to large display.

### Standard functions

#### Programmable display projection

Setting manual or automatic  
Projection  $\pm 9999/\pm 99999/\pm 999999$

#### Digital filters

Floating average from 2...128 measurements  
Exponen. average from 2...128 measurements  
n-th value from 2...255 measurements  
Radius of insensitiv. band of suppressed change of measured value

#### Mathematic functions

Min./max. value registration of min./max. value reached during measurements  
Tare designed to reset display upon non-zero input signal  
Top value the display shows only max. (min.) value for a selected time period

#### External control

Hold display/instrument blocking  
Lock control keys blocking  
Tare tare activation  
Resetting MM resetting min/max value to zero  
Instrument setting 4 keybutton keyboard with 5 meter cable

### Operation

The instrument is set and controlled by four control keys located on an individual box, which is connected with a 5 m cable. All programmable settings of the instrument are realised in two adjusting regimes.

**Configuration menu** (hereinafter referred to as CM) is protected by an optional number code and contains complete instrument setting

**User menu** may contain arbitrary programming settings defined in „CM“ with another selective restriction (see, change)

All programmable parameters 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

**Comparators** are assigned to monitor one or 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...99,9s. Reaching the preset limits is signalled by LED and simultaneously by the switch-on of the relevant relay.

**Excitation** is suitable for feeding of sensors and transmitters. It is isolated, with continuously adjustable value in the range of 2...24 VDC.

**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 DIN MessBus/ASCII protocol.

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

## Technical data

### MEASURING RANGE

DC-U	0...60/150/300 mV/0,3999/3,999/39,999/399,9 V	1 MOhm
DC-I	0...39,99/399,9 mA/1/5 A	< 260 mA
AC-U	0...0,3999/3,999/39,999/399,9 V	1 MOhm
AC-I	0...39,99/399,9 mA/1/5 A	< 260 mA
PM	0/4...20 mA/0...2/5/10 V	< 400 mV/1 MOhm
W	0...5 A/0...450 V	
OHM	0...0,399/3,999/39,99/100 kOhm	2, 3, 4 wire
RTD	Pt 100/Pt 1000/Ni 1 000/Ni 10 000	2, 3, 4 wire
T/C	J, K, T, E, B, S, R, N	
UQC	counter/frequency/watch	0...100 kHz
Data	RS 232/RS 485	

### PROJECTION

Display:	4 or 6 digit red or green 7-segment LED, digit height 57, 100 or 125 mm
Decimal point:	adjustable - in Configuration menu
Brightness:	adjustable - in Configuration/User menu

### INSTRUMENT ACCURACY

Watch-dog:	reset after 1,2 s
Setting:	external keyboard with 5 m cable
Standard function:	Digital filter - adjustable in Configuration menu
Mathematic functions:	min. and max. value, Tare, averaging, top value - according to the type of input section of OM 371/601 at 25°C and 40 % r.h.

### COMPARATOR

Type:	digital, adjustable in programming mode, contact switch-on < 10 ms
Limit 1 and 2	999999, the limits setting depends on the used input section
Hysteresis:	0...99999
Delay:	0...99,9 s
Outputs:	2 relay with switching contact (250 VAC/50 VDC, 3 A)

### DATA OUTPUTS

Data format:	rate 600...115 200 Baud 7 bit + even parity + 1 stop bit (DIN MessBus), 8 bit + no parity + 1 stop bit (ASCII)
RS 232	isolated
RS 485	isolated, addressing (max. 31 instruments)

### ANALOGUE OUTPUTS

Type:	isolated, programmable with resolution 14 bit, analogue output corresponds with displayed data, output type and range are selectable in CM
Non-linearity:	0,2 % of range
Tempco:	100 ppm/°C
Rate:	response to change of value < 10 ms
Voltage:	0...2 V/5 V/10 V
Current:	0...5 mA/20 mA/4...20 mA (compensation of conduct up to 600 Ohm)

The analogue and data outputs cannot be fitted in the instrument simultaneously

### EXCITATION

Adjustable:	2...24 VDC/50 mA, isolated
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### POWER SUPPLY

24/110/230 VAC/50 Hz, ±10 %, 8...32 VDC

### MECHANIC PROPERTIES

Material:	anodized aluminium, black
Dimensions:	see dimensions
Panel cut-out:	see dimensions

### OPERATING CONDITIONS

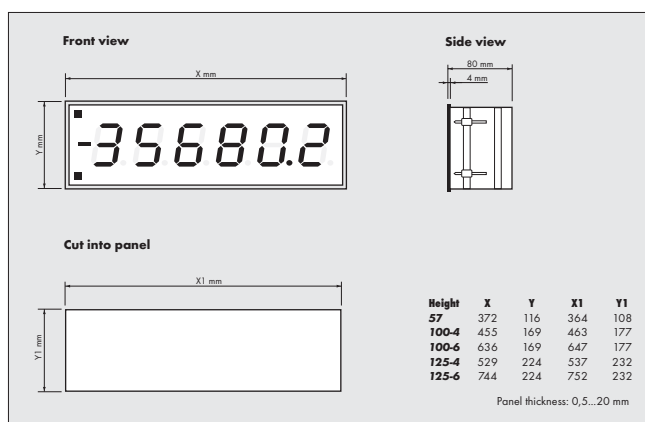
Connection:	terminal board, conductor section up to 2,5 mm <sup>2</sup>
Stabilization period:	within 15 minutes after switch-on
Working temperature:	0°...60°C
Storage temperature:	-10°...85°C
Covering:	IP64
Construction:	safety class I
Power sup.isol.resist.:	against measuring input 300 V
Electrical safety:	EN 61010-1, A2
EMC:	EN 61000-3-2+A12; EN 61000-4-2, 3, 4, 5, 8, 11; EN 550222, A1, A2

Technical parameters for individual measuring quantities depend on the used inputu, which is identical with the OM 371 or OM 601 instruments.

## Connection

To maintain the IP65 coverage the display connection is realised through bushings directly on the terminal board inside the instrument.  
The cable from control keyboard ends by a connector with IP64 covering.

## Dimensions



## Order code

