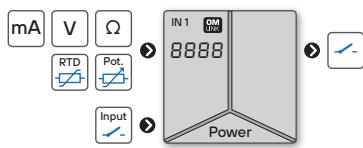




## UNIVERSAL BARGRAPH



## OPERATION

The instrument is set and controlled by five buttons located under the front panel. All programmable settings of the instrument may be performed in two adjusting modes.

**LIGHT MENU** contains solely items necessary for instrument setting.

**PROFI MENU** contains complete instrument setting, which is accessible only via OM Link.

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

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

## OPTION

**COMPARATOR** is assigned to monitor one limit value with relay output. The limit has adjustable hysteresis within full range of the display and selectable delay of the switch-on within the range of 0...99 s. Reaching the preset limits is signalled by LED and simultaneously by the switch-on of the relevant relay.

# OMB 200UNI



- Three-color bargraph - 20 LED
- Multifunction input (PM, OHM, RTD, DU)
- Digital filters, Linearization
- Size of DIN 72 x 24 mm
- Power supply 10...30 VDC/24 VAC

## Option Comparator

The OMB 200/300/500UNI model series are simple bargraphs designed for maximum efficiency and user comfort while maintaining their favourable price. Type OMB 200UNI is a multifunction instrument with the option of configuration

for 5 various input options, easily configurable in the instrument menu.

The instrument is based on a microcontroller with ADC which secures good accuracy, stability and easy operation of the instrument.

By selecting the insertion mode of the front plexiglass (reverse/face) you may choose the required scale printing for vertical or horizontal design of the instrument.

## STANDARD FUNCTIONS

### PROGRAMMABLE PROJECTION

Selection: of input type and measuring range

Setting: manual, in menu optional projection on the display may be set for both limit values of the input signal

Projection: 20 LED

### FUNCTIONS

Linearization: non-linear signal is converted by a 25-point linear interpolation

### DIGITAL FILTERS

Exponential average: from 2...100 measurements

Rounding: setting the projection step for display

### EXTERNAL CONTROL

Hold: display/instrument blocking

Lock: control keys blocking

## TECHNICAL DATA

INPUT			
No. of inputs	1	The range is adjustable in the instrument menu	
<b>PM</b>	Range	0...20 mA	< 12 V
		4...20 mA	< 12 V
		0...2 V	182 kΩ
		0...5 V	182 kΩ
<b>OHM</b>	Range	0...100 kΩ	
	Connection	2-wire	
<b>RTD</b>	Range	Pt 1 000, 3 850 ppm/°C	-50°...450°
	Connection	2-wire	
<b>Ni</b>	Range	Ni 1 000, 5 000 ppm/°C	-50°...250°
	Connection	2-wire	
<b>DU</b>	Sensor power supply	2.5 VDC/6 mA, potentiometer	resistance > 500 Ω

## PROJECTION

Bargraph display	20 LED
Bar color	red / green / orange
Brightness	adjustable - in menu
<b>INSTRUMENT SPECIFICATION</b>	
TC	50 ppm/ $^{\circ}$ C
Accuracy	$\pm 1\%$ of FS
Rate	0.5...50 measurement/s
Overload	10x (t < 30 ms), 2x
Compensation of conduct	< 30 $\Omega$
Digital filters	exponential average, rounding
Linearization	linear interpolation in 25 points setup only via OM Link
OM Link	company communication interface for operation, setting and update of instruments
Watch-dog	reset after 25 ms

### RELAYS OUTPUT

No. of outputs	1
Type	digital, menu adjustable
Mode	HYSITER. active above set value
Function Relays	CLOSE is closed in active mode OPEN is open in active mode
Limits	-99999...999999
Hysteresis	0...99999
Delay	0...99 s
Outputs	1x bistable relays (250 VAC/250 VDC, 3 A/0.3 A)
Relays	1/8 HP 277 VAC, 1/10 HP 125 V, Pilot Duty D300

## POWER SUPPLY

Range	10...30 V DC / AC, $\pm 10\%$ , $PF \geq 0.4$ , $I_{STP} < 40\text{ A} / 1\text{ ms}$ , isolated
Consumption	< 10 W (10 VA)

---

#### MECHANICAL PROPERTIES

MECHANIC PROPERTIES	
Material	Noryl GFN2 SE1, incombustible UL 94 V-1, black
Dimensions	72 x 24 x 100 mm (w x h x d)
Panel cutout	69 x 21.5 mm (w x h)

---

#### OPERATING CONDITIONS

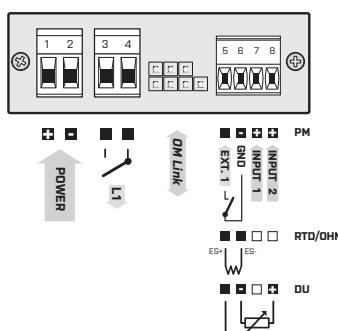
## OPERATING CONDITIONS

\* values apply for resistance load

Stabilization period	within 5 minutes after switch-on
Working temperat.	-20°...60°C
Storage temperat.	-20°...85°C
Working humidity	< 95 %r.v., non condensing
Protection	IP40, front panel only
Construction	safety class I
El. safety	EN 61010-1, A2
Dielectric strength	2.5 kVAC for 1 min. between power supply and input 4 kVAC per 1 min test between input and relay output
Insulation resist.*	for pollution degree II, measuring cat. III power supply > 300 V (P) input, output > 300 V (P), 150 V (D)
EMC	EN 61326-1:2021, Industrial area
RoHS	EN IEC 63000:2018
Seismic qualification	IEC/IEEE 60980-344 Edition 1.0, 2020, par. 6, 9
Mechanical resistance	EN 60068-2-6 ed. 2:2008

\* PI - Primary insulation, DI - Double insulation

## CONNECTION



**ORDER CODE**

OMB 200UNI

- 
-

## Comparator

1

1

1x relay (Form A)

**Specification** customized version, do not fill in