



- 6-DIGIT PROGRAMMABLE PROJECTION
- MULTIFUNCTION INPUT (DC, PM, RTD, T/C, DU)
- DIGITAL FILTERS, LINEARIZATION
- SIZE OF DIN 72 X 24 MM
- POWER SUPPLY 10...30 V AC/DC

- Option
Comparators

OMM 350



The OMM 350 model series are small 6-digit panel programmable instruments designed for maximum usefulness and user comfort while maintaining its fair price. There are two versions available: UNI and DC.

The OMM 350UNI type is a multifunction instrument with the option of configuration for 8 different input options, easily configurable in the instrument menu. Version OMM 350DC is suitable for measurement of larger ranges of DC voltage and current.

The instrument is based on an 8-bit microcontroller with A/D converter, which ensures good accuracy, stability and easy operation of the instrument.

OMM 350DC

DC VOLTMETER AND AMMETER

OMM 350UNI

DC VOLTMETER AND AMMETER

PROCESS MONITOR

OHMMETER

THERMOMETER FOR Pt/Cu/Ni/Termocouples

DISPLAY UNIT FOR LINEAR POTENTIOMETERS

OPERATION

The instrument is set and controlled by four 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

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).

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

OPTION

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

STANDARD FUNCTIONS

PROGRAMMABLE PROJECTION

Setting (UNI): manual, in menu optional projection on the display may be set for both limit values of the input signal, e.g. input 0...19,99 V \Rightarrow 0...150,0

Projection: -99999...999999

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: through linear interpolation in 25 points (solely via OM Link)

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

PROJECTION

Display: -99999...999999, red or green 7-segment LED, digit height 9,1 mm
Decimal point: setting - in menu
Brightness: setting - in menu

INSTRUMENT ACCURACY

TK: 50 ppm/°C
Accuracy: ±0,2% of range + 1 digit (for projection ±1999) ±0,3% of range + 1 digit **T/C**
Accuracy of cold junction measurement: ±1,5°C
Rate: 0,5...10 meas./s
Overload capacity: 2x; 10x (t < 30 ms) - not for 200 V and 5 A
Resolution: 0,1°C (RTD), 1°C (T/C)
Watch-dog: reset after 500 ms
Functions: HOLD, LOCK, Digital filters
DM Link: Company communication interface for operation, setting and update of instruments
Calibration: at 25°C and 40 % r.h.

COMPARATORS

Type: digital, setting in menu, contact switch-on < 50 ms
Limit: -99999...999999
Hysteresis: 0...999999
Delay: 0...99,9 s
Output: 2x bistable relays (4B VAC/30 VDC, 3 A)

POWER SUPPLY

10...30 VDC/24 VAC, max. 4 VA, PF ≥ 0,4, I_{SP} < 45 A/1 ms, isolated

MECHANIC PROPERTIES

Material: Noryl GFN2 SE1, incombustible UL 94 V-1
Dimensions: 72 x 24 x 106 mm
Panel cutout: 68 x 21,5 mm

OPERATING CONDITIONS

Connection: connector terminal board, section < 1,5/2,5 mm²
Stabilization period: within 15 minutes after switch-on
Working temperature: -20°...60°C
Storage temperature: -20°...85°C
Cover: IP42 (front panel only)
El. safety: EN 61010-1, A2
Dielectric strength: 2,5 kVAC after 1 min between supply and input
 2,5 kVAC after 1 min between supply and relay output
Insulation resistance: for pollution degree II, measuring cat. III.
 Power supply, input > 300 V (Z1), 150 V (D1)
EMC: EN 61326-1
Seismic capacity: IEC 980:1993, par. 6

PI - Primary insulation, DI - Double insulation

MEASURING RANGES

OMM 350 is a multifunction instrument available in following types and ranges

type UNI

DC: ±20/±60/±1 000 mV
PM: 0...20 mA/4...20 mA; 0...2/5/10 V
OHM: 0...300 Ω/0...1,5/3/30 kΩ
RTD: Pt 50/100/500/1 000
Cu: Cu 50/100
Ni: Ni 1 000/10 000
T/C: J/K/T/E/B/S/R/N/L
DU: Linear potentiometer (min. 500 Ω)

type DC

DC - Hi: ±1/±5 A; ±20/±40/±100/±200 V

CONNECTING INDIVIDUAL INPUTS

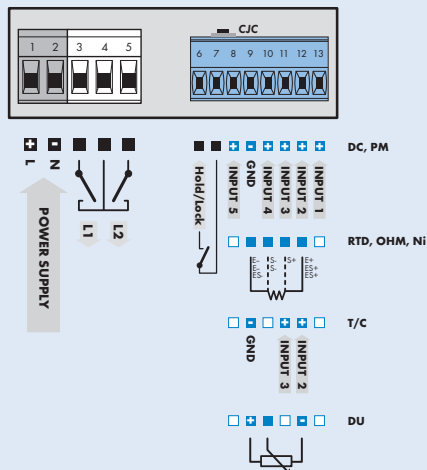
	INPUT 1	INPUT 2	INPUT 3	INPUT 4	INPUT 5
DC	0...1 V		0...60 mV	0...20 mV	
PM	0...5/10 V			0...2 V	0...20 mA, 4...20 mA
T/C			J/K/E/N/L	B/S/R/T	
DC/Hi	±100/±200 V	±20/40 V			±1/±5 A

SPECIFICATION OF INPUT RANGE IN THE ORDER CODE

UNI	
A	Pt 100/0...300 Ω
B	Pt 500/0...1 500 Ω
C	Pt 1 000/Ni 1 000/0...3 kΩ
D	Ni 10 000/0...30 kΩ
Z	on request

Only resistance type input ranges need to be specified at the point of order (OHM, RTD, Ni), other ranges (DC, PM, T/C, DU) are user selectable in the instrument's menu.

CONNECTION



ORDER CODE

OMM 350

□ □ □ - 0 □ □ □ - □

Type

Order code shall not include blank spaces!

Type	U	N	I	D	C	?	0	1	2	3	4	00
Power supply							0					
Measuring ranges, see table "Specification"								?				
Comparators											no	
											1x relay (Form A)	0
											2x relays (Form A)	1
											1x open collector	2
											2x open collectors	3
												4
Display color											red	1
											green	2
Other											customer version, do not fill in	00

*In the „UNI“ type the measuring range is selected under the order code solely for RTD, Ni, OHM. For other types this item has no significance with default setting „A“ !

Default execution is shown in bold