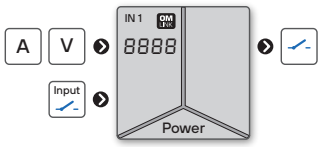
OMM 350DC

- 3.5-digit programmable projection
- Range ±1 A/±5 A
  ±20 V/±40 V/±100 V/±200 V
- Digital filters, Linearization
- Size of DIN 72 x 24 mm
- Power supply 10...30 VDC / 24 VAC

Option

Comparators

DC V-A METER



The OMM 350 model series are small 3.5-digit panel programmable instruments designed for maximum usefulness and user comfort while maintaining its fair price.

Type OMM 350DC is a multi-range DC-VA meter.

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

OPERATION

The instrument is controlled by four buttons situated 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).

All settings are stored in the EEPROM memory (settings 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: manual, optional projection on the display may be set in menu for both limit values of the input signal, e.g. input 0...100 V > 0...250.0
Projection: -9999...9999

FUNCTIONS
Linearization: non-linear signal is converted by a 25-point linear interpolation
Tare: designed to reset display upon non-zero input signal

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

TECHNICAL DATA

INPUT

No. of inputs	1 The range is adjustable in the instrument menu		
DC Range	±1 A	> 12 mV	Input 5
	±5 A	> 60 mV	Input 5
	±20 V	> 2 MΩ	Input 4
	±40 V	> 2 MΩ	Input 3
	±100 V	> 10 MΩ	Input 1
	±200 V	> 10 MΩ	Input 1

EXTERNAL INPUT

No. of inputs	1, on contact
Function	No function assigned Measurement paused Control keys blocking Menu access blocking

PROJECTION

Display	-99999...999999, single color 7-segment LED
Digit height	9.1 mm
Display color	red or green
Decimal point	adjustable - in menu
Brightness	adjustable - in menu

INSTRUMENT SPECIFICATION

TC	50 ppm/°C
Accuracy	±0.2 % of FS *above accuracies apply for projection 1999*
Rate	0.5...10 measurement/s
Overload	10x (t < 30 ms), 2x *not valid for 200 V and 5 A ranges*
Functions	Tare
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 500 ms
Calibration	at 25°C and 40 % r.h.

RELAYS / OC OUTPUT

No. of outputs	2
Type	digital, menu adjustable
Mode	HYSTER. active above set value
Function Relays/OC	CLOSE is closed in active mode OPEN is open in active mode
Limits	-99999...999999
Hysteresis	0...9999
Delay	0...99.9 s
Outputs	1...2x relay with bistable contact (Form A) (48 VAC/30 VDC, 3 A)* 1...2x open collector (30 VDC/100 mA)
Relays	1/8 HP 277 VAC, 1/10 HP 125 V, Pilot Duty D300

* values apply for resistance load

POWER SUPPLY

Range	10...30 VDC / 24 VAC, ±10 %, PF ≥ 0.4, I_{STP} < 45 A / 1 ms, isolated
Consumption	< 2.1 W / 2.2 VA

MECHANIC PROPERTIES

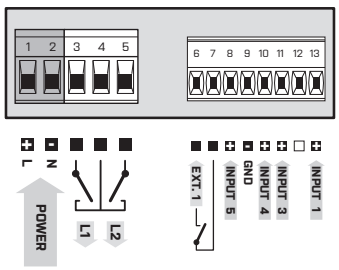
Material	Noryl GFN2 SE1, incombustible UL 94 V-I, black
Dimensions	72 x 24 x 106 mm (w x h x d)
Panel cutout	68 x 21.5 mm (w x h)

OPERATING CONDITIONS

Connection	connector terminal blocks, section < 1.5 / 2.5 mm²
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	IP42, 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, input > 300 V (PI), 150 V (DI)
EMC	EN 61326-1:2021, Industrial area
RoHS	EN IEC 63000:2018
Seismic capacity	IEC 980: 1993, par. 6

* PI - Primary insulation, DI - Double insulation

CONNECTION



ORDER CODE

OMM 350DC - **0** [ ][ ] - [ ]

Power supply	10...30 VDC / 24 VAC, isolated	**0**			
Comparators	no		**0**		
	1x relay (Form A)		**1**		
	2x relay (Form A)		**2**		
	1x open collector		**3**		
	2x open collector		**4**		
Display color	red			**1**	
	green			**2**	
Specification	customized version, do not fill in				**00**

Basic configuration of the instrument is indicated in bold.