# OMM 350DC

## DC V-A METER

- 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

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 single-chip microcontroller with an A/D converter, which ensures good accuracy, stability and easy operation of the instrument.

**OMM** 350DC
DC VOLTMETER AND AMMETER

## 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 signals can be linearized by the means of a linearization table (up to 25 points)
**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

| | | | | |
|---|---|---|---|---|
| Number of inputs | 1 | | | |
| DC | Range | fixed - by order | | |
| | | ±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 | 1 input, on contact | | | |

The following functions can be assigned:

| | |
|---|---|
| OFF | input off |
| LOC. | control keys blocking |
| HOD | display stop |
| TAR. | tare activation |

### 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 ACCURACY

TC: 50 ppm/°C
Accuracy: ±0,2 % of range + 1 digit (for projection -999...1999)
Rate: 0,5...10 measurement/s
Overload capacity: 2x; 10x (t < 30 ms) - not for 200 V and 5 A
Linearization: linear interpolation in 25 points (only via OM Link)
Digital filters: exponential average, rounding
Functions: Tare
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.

### COMPARATORS

Type: digital, menu adjustable, contact switch-on < 50 ms
Hysteresis mode: switching limit, hysteresis band (Lim and ±1/2 Hys.) and time (±99,9 s) determining the switching delay
Output: 1...2x relay with bistable contact (48 VAC/30 VDC, 3 A);
1...2x open collector (30 VDC/100 mA)

### 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

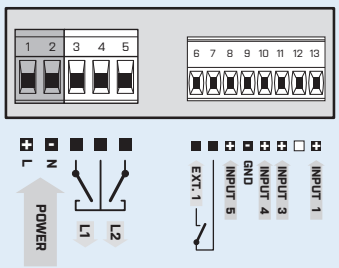
Material: Noryl GFN2 SE1, incombustible UL 94 V-I
Dimensions: 72 x 24 x 106 mm (w x h x d)
Panel cutout: 68 x 21,5 mm (w x h)

### OPERATING CONDITIONS

Connection: connector terminal blocks, section < 1,5/2,5 mm²
Stabilization period: within 5 minutes after switch-on
Working temperature: -20°...60°C
Storage temperature: -20°...85°C
Protection: IP42 (front panel only)
El. safety: EN 61010-1, A2
Dielectric strength: 2,5 kVAC per 1 min test between supply and input
4 kVAC per 1 min test between input and relay output
Insulation resistance: for pollution degree II, measuring cat. III
Instrument power supply, input > 300 V (PI), 150 V (DI)
EMC: EN 61326-1
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.