

OMETER



METER AND CONTROLLER

- 16 DRY CONTACT INPUTS
- 8 POWER OUTPUTS
- SINGLE-PHASE POWER LINES 230VAC 50HZ
- EDS BUS COMMUNICATION
- STANDARD 9-WAY DIN-RAIL MOUNT

RoHS



Device for measuring energy consumption (active and reactive), for single-phase lines (230Vac 50Hz) able to control the electrical power status of connected loads such as lights, sockets, shutters, timed lights, etc. The device has 16 programmable digital inputs to which buttons, switches, sensors or alarms are possible to connect. These inputs can be useful for controlling the on/off status of the power outputs of the same OMeter or any other device connected to the same BUS.

DATA SHEET

| | |
|--|---------------------------------|
| MODEL | OMeter |
| PRODUCT CODE | OMB |
| CERTIFICATIONS | RoHS, CE |
| SIZE | 159x90x58mm - 9 DIN modules |
| WEIGHT | 490g |
| POWER SUPPLY | 13,8÷15Vdc from EDS Bus |
| CURRENT DRAW | max 350mA, average 100mA |
| BUS COMMUNICATION | EDS (supply voltage 13,8÷15Vdc) |
| N° OUTPUT | 8 power output |
| MEASURE ACCURACY | ±1% |
| SINGLE OUTPUT BLOCK MAX CURRENT | 300A*40 ms |
| DISSIPATED POWER FOR SINGLE POWER OUTPUT | 5W at 16A |
| SINGLE BLOCK MAXIMUM LOAD POWER | 3,5kW (cosφ=1) |
| TOTAL BOARD POWER | 12kW (cosφ=1) |
| ELECTRIC POWER DISTRIBUTION ALLOWED | 230Vac with neutral |
| N° INPUT | 16 dry inputs |
| MAXIMUM CONTACT LENGTH | 100m (wire size = 1,5mm) |
| OPERATING TEMPERATURE | min -10°C max +60°C |
| WAREHOUSING TEMPERATURE | min -40°C max +80°C |

EDS BUS SPECIFICATIONS

| | | | | | | |
|--------------------|------------------------------------|-----------------------------|----------------------|----------------------|---------------------|---------------------|
| MAXIMUM BUS LENGTH | 1200m linear over the whole system | BUS LENGTH | <10m | <30m | <100m | >100m |
| BUS TOPOLOGY | Star, series or promiscuous | RECOMMENDED MINIMUM SECTION | 0,50 mm ² | 0,75 mm ² | 1,5 mm ² | 2,5 mm ² |

1,5mm² is recommended for implants, a value which however depends on the location of the modules

INSTALLATION INSTRUCTIONS

SAFETY

In order to maintain these conditions and ensure safe use, the user must follow the indications and markings contained in the following instructions.

Warning: Failure to follow the instructions below can result in death.

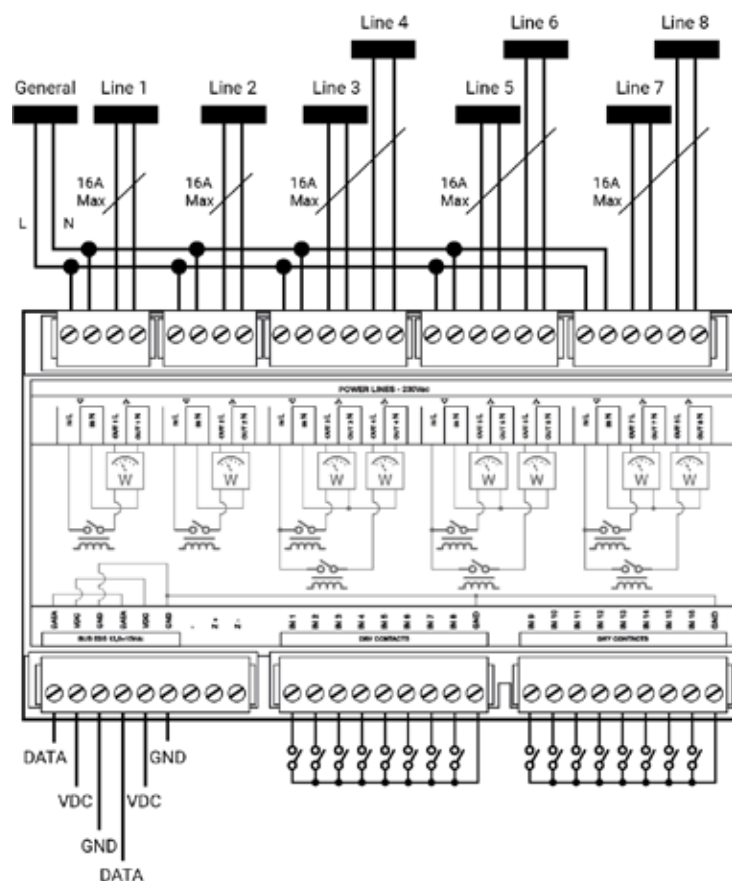


- Upon receipt of the instrument, before proceeding with the installation, check that it is intact and has not been damaged during transport.
- Check that the operating voltage and the mains voltage coincide and then proceed with the installation.
- The instrument power supply must not be grounded.
- The instrument does not have a fuse to protect the power supply, so it must be protected by the installer.
- Maintenance and/or repair operations must be carried out only by qualified and authorized personnel.
- If you suspect that the tool is no longer secure, take it out of service and make sure it is not used inadvertently.
- Dangerous voltages can be present on voltage and current transformers. Follow standard safety precautions before performing any installation or service activity.
- The instrument and its connections must be properly protected.
- The instrument must be installed following all local regulations.

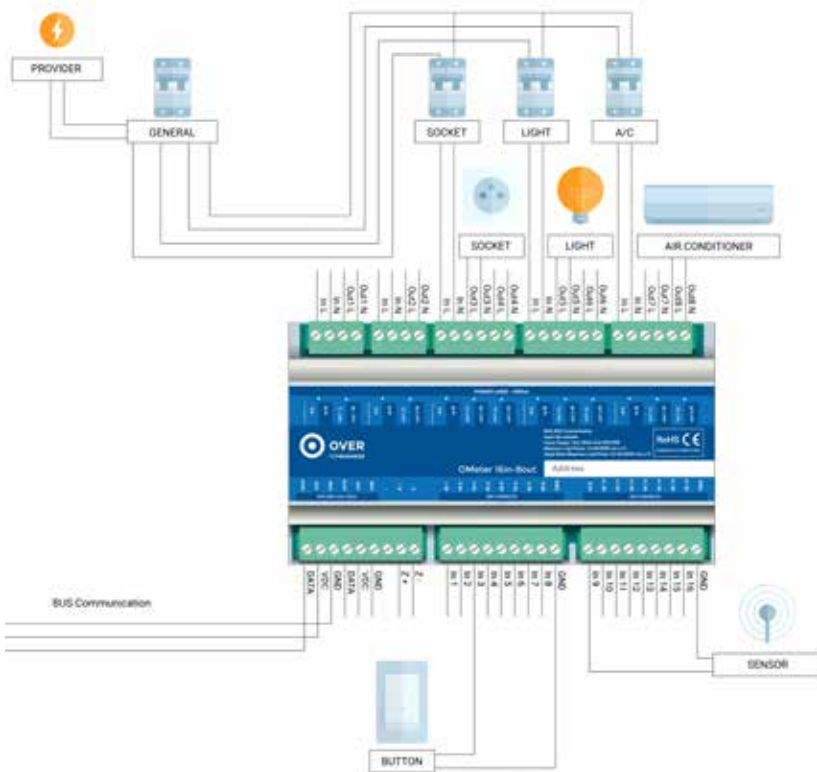
Precautions: Failure to follow the instructions below can cause persistent damage to the instrument.

- The digital outputs and inputs are low voltage and cannot be connected to external power sources.

ELECTRICAL DIAGRAM



EXAMPLE OF CONNECTION



BASIC INSTRUCTIONS

- You can control the power outputs by assigning them to designated inputs programmed by the software embedded in the OBox device.
- When the O-Meter starts, the relays are closed. However, the outputs can be programmed so that they revert to their last state when restarted. Note that in any case, when the control unit is restarted, all the relays remain temporarily closed (for about 3 seconds). When the O-Meter is not powered, the relays will remain closed.

ASSISTANCE

WARRANTY

This product is guaranteed against any material and manufacturing defects according to the period established by law from the date of purchase, even if the product has not been installed. The warranty period starts from the moment of purchase. The buyer must report any defects in the delivered products in writing to Over S.p.A.: the communication must contain a description of the reasons for defects and/or discrepancies, also indicating the serial number, the delivery date, the delivery number and date of the transport document or invoice.

The Supplier's warranty does not extend to products that are defective and/or damaged due to natural attrition or breakdown caused by improper use or an operating procedure not contemplated in this manual, of negligence, or are tampered with or repaired by third parties or accidentally damaged caused by atmospheric agents, or firmware updates.

The warranty intervention by the Supplier remains subject to the Buyer's compliance with the payment conditions as well as the technical evaluation of the existence of the warranty conditions verified by Over S.p.A. During the warranty period, Over S.p.A. undertakes to repair or replace, free of charge, those products that have manufacturing defects or bad quality at its headquarters.

RETURN AND REPAIR PROCEDURE

All returned products must be returned in the same condition in which they were supplied at the Buyer's expense, to the headquarters of Over S.p.A. in Viale Piemonte 37 - 20093 Cologno Monzese (MI) and packed by the Buyer in order to avoid damages for which the Buyer himself would be responsible. No return of goods will be accepted in the absence of authorization by Over S.p.A. to the Buyer.

No refund, even if authorized, will be accepted if the information regarding quantity, type of device returned and reason for return is not included in the transport document or the accompanying letter.

Products not covered by the warranty will be returned to the Buyer at his own expense and charged to him for the costs incurred, after quantification and communication, for the control and further testing and calibration of the same.

The replaced parts remain the property of Over S.p.A.

DECLARATION OF CONFORMITY

Over S.p.A. declares that its family of instruments complies with the directives EMC 89/336/ECC 73/23CE 93/68 CE and meets the requirements of the following product standards IEC 61326, IEC 61010.

The device was tested in the typical installation configuration and with peripherals complying with the directive EMC and the low voltage directive.

Device designed, produced and distributed by Over S.p.A.

This manual was last updated on 11/27/2020.

The latest updated version of the manual is available in digital format downloadable from the website www.overttechnologies.com

Check that the version of this manual, written on the front cover, corresponds to the updated version of the manual.