2025/12/05 03:10 1/4 Three phase power sensor

Three phase power sensor

3-phase power-sensor



| Model number: | | PM3-E-D | |
|--|-------------------------------------|------------------------------|--|
| Connect to: | | MC-230 | |
| | | RS485 power sensor bus A - B | |
| Mounting: | | DIN rail, 1M, 18 mm | |
| Dimensions: | | 66 × 72 × 100 mm | |
| Used for measuring power and energy of | | | |
| ✓ | single/three-phase energy sources | | |
| ✓ | single/three-phase energy consumers | | |

Applications

• Digital multi-function power sensor for single/three phase networks

Features

- DIN rail mounting
- Three Phase 100A Direct Fed
- Accuracy Class 0.5 (Active Energy)
- Bi-directional Measurement for kW and kWh
- Configurable Pulsed output (Import/ Export/Nett kWh)
- Line Frequency
- Power, maximum power demand and power factor
- Active energy imported and exported
- Reactive energy imported and exported
- Supported Modbus (SDM630Modbus)

General description

SDM630 series measures and displays the characteristics of 1p2w, 3p3w and 3p4w supplies, including voltage, frequency, current, power, active and reactive energy, imported or exported, harmonic etc. Bi-directional measurement makes it an ideal choice for Solar PV measurement. The units support

Max. 100A direct connection, saving the cost and avoiding the trouble to connect external CTs. Two pulse outputs and 1 communication port (Mbus/Modbus) are provided for remote monitoring. The unit has been approved to meet the requirements of EU Directive 2014/32/EU.

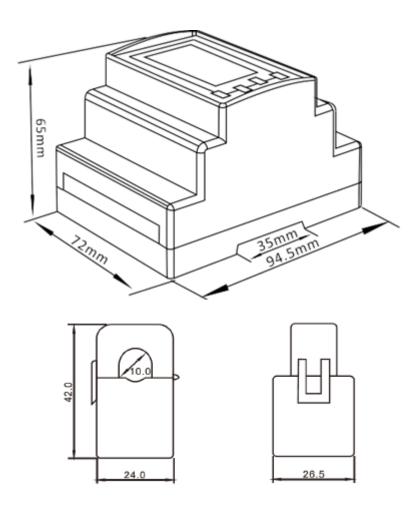
Technical specifications

| Technical Data | | | | |
|------------------------------|---|--|--|--|
| Operating Humidity | ≤ 75% | | | |
| Storage Humidity | ≤ 95% | | | |
| Operating Temperature | -25°C - +50°C | | | |
| Storage Temperature | -40°C - +70°C | | | |
| Mounting | DIN rail (DIN 43880) | | | |
| Sealing | IP51 Indoor | | | |
| Auxiliary supply voltage | Nominal ± 1% | | | |
| Auxiliary supply frequency | Nominal ± 1% | | | |
| Frequency | 50Hz or 60Hz(±2%) | | | |
| Power Consumption | ≤ 10W | | | |
| Accuracy | | | | |
| Voltage, Current | 0.5% | | | |
| Frequency | 0.2% of Mid-Frequency | | | |
| Power Factor | 1% of Unity (0.01) | | | |
| Active Power, Apparent Power | ± 1% of Range Maximum | | | |
| Reactive Power | ± 1% of Range Maximum | | | |
| Reactive Energy (Varh) | ± 1% of Range Maximum | | | |
| Active Energy (Wh) | Class 1 IEC 62053-21 | | | |
| Current transformer | | | | |
| Frequency | 50-60 Hz | | | |
| Rated current | 50 A | | | |
| Accuracy | from 20% to 120% of rated current | | | |
| Phase angle | less than 2 degrees at 50% of rated current | | | |
| Insulation voltage | 600 VAC | | | |
| Maximum primary voltage | 5000 VAC (insulated conductor) | | | |
| Dielectric strength | 2.5 kV/1mA/1min | | | |
| Operating temperature | -15 to 60°C | | | |
| Operating humidity | < 85 % | | | |
| Case material | PC/UL94-V0 | | | |
| Bobin | PBT | | | |
| Core | Permalloy | | | |
| Internal structure | Ероху | | | |
| Leads | UL 1015, Twisted pair, 22 AWG | | | |
| Modbus | | | | |
| Bus Type | RS485 (Semi-Duplex) | | | |
| Protocol | Modbus RTU | | | |
| Baud Rate | 1200/2400/4800/9600bps | | | |
| Address Range | 1-247 | | | |
| Max. Bus Loading | 64pcs | | | |

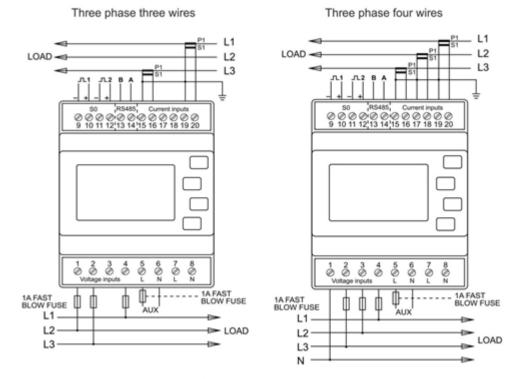
http://wiki.hiq-home.com/ Printed on 2025/12/05 03:10

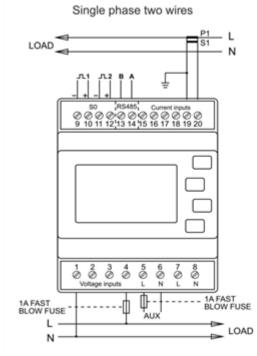
| Communication Distance | 1000 Meters |
|------------------------|---------------|
| Parity | EVEN/ODD/NONE |
| Data Bit | 8 |
| Stop Bit | 1 |

Dimensions



Installation





hiq_pm3-e-d-ct_user_manual_v1.pdf hiq_pm3-e-d-ct_protocol_v1.6.pdf

From:

http://wiki.hiq-home.com/ -

Permanent link:

http://wiki.hiq-home.com/doku.php?id=en:hiq_hw:pm3-e-d&rev=1669799944

Last update: 2022/11/30 09:19



http://wiki.hiq-home.com/ Printed on 2025/12/05 03:10