

Metering is our Business

SMART

Mx383

Electricity meter with RS485 communication



Single and Poly phase smart electricity meter, based on RS485 communication is the cost optimal solution for smart residential and mid-size commercial environments. This future-proof investment includes:

- Remote connection/disconnection
- Multi-Energy management (gas, water, heat)
- Extensive anti-tampering features

- Customer port for in-house display
- Secure communication with encryption and authentication
- Photo-voltaic friendly
- Integrated demand/response functions
- DLMS protocol for easy integration
- Import/export energy measurement

Optical port

Load profile

Real-time clock



Event logs



DLMS – COSEM compliance



Multi-rate registration



IEC 1 Accuracy class



Remote connection/disconnection



Photo-voltaic ready



M-Bus communication

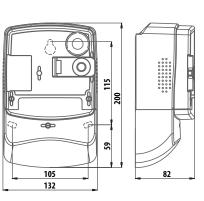


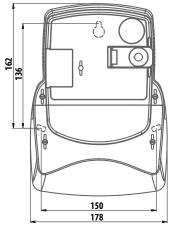
RS485 communication

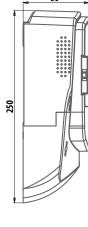


Alarming









| Type overview | | ME383-D3 BS | ME383-D1 DIN | MT383-D1 DIN | MT383-D2 DIN | MT383-T1 CT – DIN | |
|---------------------------|------------------------|--------------------|-----------------|-----------------|-----------------|----------------------|---|
| Network | | Medium voltage | | | • | • | • |
| | | Low voltage | • | • | • | • | • |
| Connection type | | 1P2W | • | • | | | |
| | | 3P4W | | | • | • | • |
| Communication | | Optical port | • | • | • | • | • |
| | | RJ11 port | • | • | • | • | • |
| | | M-Bus | • | • | • | • | • |
| | | RS485 | • | • | • | • | • |
| Input – output options | Output 6 A/230 V relay | | • | • | • | • | • |
| | Output OPTOMOS 0.1 A | | • | • | • | • | • |
| | Input alarm | | • | • | • | • | • |
| | External key input | | • | • | • | • | • |

| Technical specifi | ME383-D3 BS | ME383-D1 DIN | MT383-D1 DIN | MT383-D2 DIN | MT383-T1 CT – DIN | | |
|------------------------|---|---|-----------------|-----------------|-----------------------------|-----|--|
| Nominal voltage Un | | 240 V | | 3 x 240/415 V | | | |
| Voltage range | 0.8 – 1.15 Un | | | | | | |
| Reference frequency | 50 Hz or 60 Hz | | | | | | |
| | Nominal current In | - | - | _ | _ | 5 A | |
| Current | Base current lb | 5 or 10 A | | 10 A | - | | |
| | Maximal current Imax | 100 A | 85 A | | 120 A | 6 A | |
| | Active energy | Class 2 or Class 1 A or B (EN 50470 - 3, EN 50470 - 1) | | | | | |
| Accuracy class | Reactive energy | Class 3 or Class 2 | | | | | |
| | Apparent energy | Calibrated up to 3% | | | | | |
| Real-time clock | Accuracy | < 5ppm or <±3 min/year | | | | | |
| Real-tille Clock | Back-up power supply | Super-Cap: > 7 days; Li battery: 10 years, life time up to 20 years | | | 20 years | | |
| Switching device | Integ | rated | External | | - | | |
| Temperature ranges | Operation | -25 °C +70 °C; extended -40 °C +70 °C | | | | | |
| (IEC 62052-11) | Storage | -40 °C +80 °C | | | | | |
| Ingress protection IEC | IP54 | | | | | | |
| Liquid Crystal Display | -P + Q +P L1 L2 L3 MkVArh 11 T2 T3 T4 MB SD SQ REG DRO FF EC DLC | | | | | | |

Basic functionality

Measurement features

- Two way ("energy") measurements
- Active energy and power, 4Q Reactive energy & power, Apparent energy & power, Instantaneous value of voltage, Current, Power factor, Frequency and Power
- Absolute measurement of active energy & power

Tariff functions

 Time-of-use (TOU) measurement of active energy and maximum demand (up to 8 tariffs, 12 seasons, 12 weekly programs, 16 masks, 16 switches)

Load profiles

- Two Load profiles with different daily and hourly registration periods with up to 32 objects
- Four separate profiles for sub-metering (M-bus)
- Seven separate Event logs for different objects

Communication

- Full DLMS-COSEM and IEC 1107 compliance
- Four independent communication interfaces:
 - Optical port
 - RJ11 (for in-house display)
 - M-bus (wired)
 - RS485

Power quality

 Voltage sag, swell and cut, Daily peak and minimum, Voltage and current asymmetry, Power failure

Specifics

- Backlit LCD display
- Detection of opening main and terminal cover
- External magnetic field detector
- Detection of meter wiring
- Prepayment
- In-house display support
- Power quality supervision
- Photo-voltaic ready
- Secured communication channels
- Switching device up to 3x100A (UC3)
- Remote FW upgrade

Optional

- RTC (Li-battery or Super-Cap)
- M-Bus (wireless with external dongle)
- ZigBee (wireless with external dongle)

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