ISKRAEMECO

Metering is our Business

SMART

Mx382

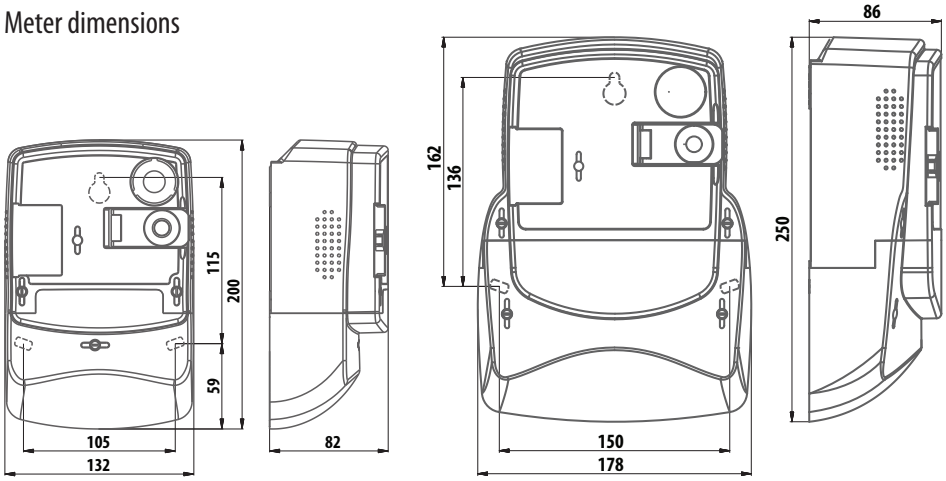
Electricity meter with
GSM/GPRS/UMTS communication

- 4 Quadrant measurement
- BS / DIN housing
- Multiple connection types
- Direct or current transformer connection
- Ingress protection
- Load profile
- Optical port
- Real-time clock
- Event logs
- DLMS – COSEM compliance
- Multi-rate registration
- Accuracy class
- Remote connection/disconnection
- Photovoltaic ready
- M-Bus communication
- GSM/GPRS communication
- Alarming
- IDIS interoperability

Single and Polyphase smart electricity meter, based on GSM/GPRS/UMTS communication provides the most reliable data transmission in smart residential and mid-size commercial environments. This future-proof investment includes:

- IDIS interoperability
- Remote connection/disconnection
- Multi-Energy management (gas, water, heat)
- Extensive anti-tampering features
- Customer port for in-house display (RJ11)
- Secure communication with encryption and authentication
- Photovoltaic friendly design
- Integrated demand/response functions
- DLMS protocol for easy integration
- Import/export energy measurement

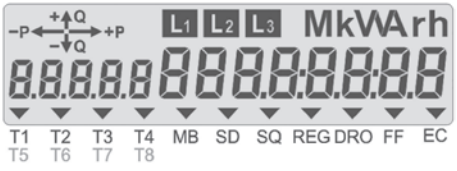
Meter dimensions



Type overview

		ME382-D3 BS	ME382-D1 DIN	MT382-D1 DIN	MT382-D2 DIN	MT382-T1 CT – DIN
Network	Low voltage	●	●	●	●	●
Connection type	1P2W	●	●			
	3P4W			●	●	●
Communication	Optical port	●	●	●	●	●
	RJ11 port	●	●	●	●	●
	M-Bus	●	●	●	●	●
	GSM/GPRS/UMTS	●	●	●	●	●
Input – output options	Output 6 A/230 V relay	●	●	●	●	●
	Output OPTOMOS 0.1 A	●	●	●	●	●
	Input alarm	●	●	●	●	●
	External key input	●	●	●	●	●

Technical specifications

			ME382-D3 BS	ME382-D1 DIN	MT382-D1 DIN	MT382-D2 DIN	MT382-T1 CT – DIN
Nominal voltage		U_n	240 V		3 x 240/415 V		
Voltage range			0.8 – 1.15 U_n				
Reference frequency			50 Hz or 60 Hz				
Current	Nominal current	I_n	–	–	–	–	5 A
	Base current	I_b	5 or 10 A			10 A	–
	Maximal current	I_{max}	100 A	85 A		120 A	6 A
Accuracy class	Active energy		Class 2 or Class 1 (IEC62052 - 11, IEC62053 - 21) A or B (EN 50470 - 3, EN 50470 - 1)				
	Reactive energy		Class 3 or Class 2 (IEC62053 - 23)				
	Apparent energy		Calibrated up to 3%				
Real-time clock	Accuracy		< 5ppm or <±3 min/year				
	Back-up power supply		Super-Cap: > 7 days; Li battery : 10 years, life time up to 20 years				
Switching device			Integrated		External		–
Temperature ranges (IEC 62052 - 11)	Operation		-25 °C ... +70 °C; extended -40 °C ... +70 °C				
	Storage		-40 °C ... +80 °C				
Ingress protection IEC 60529			IP54				
Liquid Crystal Display							

Basic functionality

Measurement features

- Two way ("energy") measurements
- Active energy & 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)
  - GSM/GPRS/UMTS

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
- Photovoltaic ready
- Secured communication channels
- Switching device up to 3x100A (UC3)
- Remote FW upgrade
- RTC (Super-Cap)

Optional

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

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