

Metering is our Business

# SMART

### Mx382

Electricity meter with GSM/GPRS/UMTS communication



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

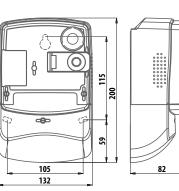
Meter dimensions

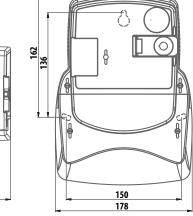
- Remote connection/disconnection
- Multi-Energy management (gas, water, heat)

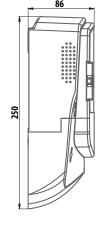
- Extensive anti-tampering features
- Customer port for in-house display (RJ11)
- Secure communication with encryption and authentication
- Photovoltaic friendly design
- Integrated demand/response functions
- DLMS protocol for easy integration
- Import/export energy measurement

## Multi-rate registration Accuracy class Remote connection/disconnection Photovoltaic ready M-Bus communication GSM/GPRS communication









Alarming

Optical port

Real-time clock

DLMS - COSEM compliance

**Event logs** 

IDIS interoperability

Type overview		<b>ME382-D3</b> BS	ME382-D1 DIN	MT382-D1 DIN	MT382-D2 DIN	<b>MT382-T1</b> 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 specifi	<b>ME382-D3</b> BS	ME382-D1 DIN	MT382-D1	MT382-D2 DIN	<b>MT382-T1</b> CT – DIN		
Nominal voltage Un		24	0 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	85 A		6 A	
	Active energy	Class 2 or Class 1 (IEC62052-11, IEC62053-21 A or B (EN 50470 - 3, EN 50470 - 1)					
Accuracy class	Reactive energy	Class 3 or Class 2 (IEC62053-23)					
	Apparent energy	Calibrated up to 3%					
Real-time clock	Accuracy	< 5ppm or <±3 min/year					
Keai-time Clock	Back-up power supply	Super-Cap: > 7 days; Li battery: 10 years, life time up to 20 years				20 years	
Switching device	Integ	Integrated Ext		ernal	-		
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	T1 T2 T3 T4 MB SD SQ REGDRO FF EC						

#### **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)
  - 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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