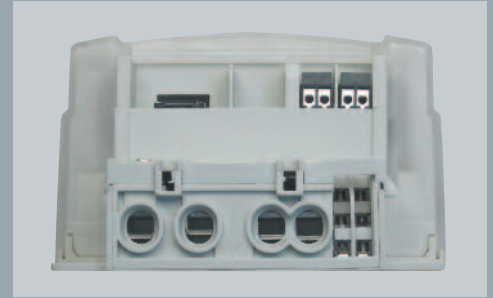




## ME372

Single-phase meter with GSM/GPRS/SMS communication for AMR and remote control



**ME372** is targeted at deregulated energy markets and enables provision of an AMR and prepayment service. It is a single-phase meter intended for use in residential applications. The meter incorporates a fully integrated GSM/GPRS modem that can be exchanged with integrated RS485 communication interface for block installations. It is a perfect combination of well-proven metering technology and state-of-the-art GSM/GPRS modem, all integrated and sealed in a single enclosure. The integrated solution attains the same high quality and reliability of Iskraemeco meters. The meter is approved according to IEC 62052-11, IEC 62053-21, ISO 9001, EN 50470-1, EN 50470-3 and designed according to even higher internal Iskraemeco standards, based on 60 years of experience of meter manufacturing and more than 55 million meters installed worldwide.



<b>kWh</b>	<b>kvarh</b>	Active energy Reactive energy (option)
		Single or double direction
<b>T(4)</b>		Multirate registration
		Real-time clock synchronised by comm.
		Single phase
		Load profile
		Log-book
		Communication protocol
<b>GSM</b>		AMR communication: GSM/GPRS

- Fully Integrated AMR communication – GSM/GPRS/SMS
- AMR on demand and alarm call-backs
- 'Fit and go' – simple and fast installation procedure
- Multi-utility input for gas or water meters
- Power disconnection or limitation – integrated switching device
- DSM: local or remote load control – integrated load relay
- Indication of operational status
- Tamper detection

## FUNCTIONAL AND TECHNICAL DATA

### Measured and recorded quantities

Active and reactive energy in both energy flow directions – import (A+), export (A-) and absolute IAI, accuracy class 1 or 2

Maximum demand with programmable integration period (typically 5, 10, 15, 30 or 60 minutes)

### Power quality parameters

- Instantaneous voltage and current
- Under/over voltages
- Voltage faults
- Daily peak and minimum voltage
- Number of short power-downs (less than 3 minutes), total time without power supply

### Multirate registration

- Programmable tariff structure, up to 4 rates
- Up to 4 seasons
- Up to 4 weekly programs
- Up to 4 daily programs
- Up to 8 daily tariff changeovers

### Load profile

- Two independent load profiles (LP1, LP2) up to 16 channels each
- Programmable LP period (typically 15, 30 or 60 minutes, 1 day)
- Capacity (one measurement value with a time stamp and status, period 1 hour): 144 days

**Log book:** up to 64 events with a time stamp

### Communication

#### GSM/GPRS/SMS

- Fully integrated GSM/GPRS modem
- Dual-band EGSM 900/1800 MHz is supported
- High performance internal antenna is integrated into the meter

#### External antenna option

Available for installation in case of insufficient GSM signal. An external antenna can be connected via a special inductive coupler - no need to open a meter or a terminal cover.

#### SIM card exchange

A SIM card can be hot-swapped and automatically registered in a GSM network. The SIM connector is designed for high reliability contact and is positioned under the meter terminal cover.

#### RS485

Optionally, instead of a GSM/GPRS modem, the meter can be equipped with RS485 interface. Up to 31 meters can be connected to one communication loop at a distance up to 1200 m.

### Communication protocols

Two protocols are supported:

- IEC 62056-46 (DLMS) on a GSM modem and optionally on RS485
- IEC 62056-46 (DLMS) and IEC 62056-21 (former 61107) on optical port

### Metrological LED

Built-in LEDs indicate active and reactive energy flow. Blinking frequency is related to energy consumption.

### Real time clock

- Accuracy according to IEC 62052-21
- Day-light saving feature
- Remote synchronization available
- Super Cap for backup power supply (up to 10 days)

### LCD display

- Data can be displayed in automatic or manual scroll mode
- Programmable data set and sequence
- Data identification according to IEC 62056-61 (OBIS)

Switching device state, energy flow direction, self-diagnosis parameters as well as some communication parameters are also displayed on LCD:

- 3-state GSM signal level indicator (high, low, too low)
- Registration to the GSM network
- Communication in progress

### Tamper-proof features

- The meter detects the main cover and the terminal cover opening, records it in a logbook and optionally triggers an alarm call
- Alarm call after power down

### Output relay

One 6 A relay is integrated into the meter. It can be used for load control according to the internal tariff program or can be managed remotely.

### Switching device

High quality 100 A switching device (10<sup>6</sup> actions) is integrated into the meter. Information about the state of the switching device is available in the certain register and on the display (code red and load limitation functionality).

### Multiutility

The meter is equipped with an M-Bus micro master to which up to 4 gas, heat or water meters can be connected.

### Alarm input

The meter is optionally equipped with two additional inputs (an external alarm device can be connected).

### Call-back

The meter can perform a call to the centre:

- After installation
- If a pre-defined alarm condition exists (e.g. after Power Down/Up event)
- If a signal appears on the alarm input

### Prepayment mode

The meter can be remotely switched to the prepayment mode. Information about the amount of purchased energy is sent to the meter remotely. The purchased energy is consumed according to the tariff programme.

### Terminals for current circuits

- Universal clamping type: D=8.5 mm or D=9.5 mm

Accuracy class (IEC 62052-11, IEC 62053-21, EN 50470-1, EN 50470-3).....	2 or 1
Nominal current I <sub>n</sub> .....	5 or 10 A
Maximum current I <sub>max</sub> .....	85 A or 100 A
Nominal voltage U <sub>n</sub> .....	230 V
	(other voltages on request)
Voltage range .....	0.8 U <sub>n</sub> ... 1.15 U <sub>n</sub>
Nominal frequency f <sub>n</sub> .....	50 Hz or 60 Hz
Temperature range .....	-25°C ... +60°C
Extended temp. range .....	-40°C ... +70°C
Storage temperature .....	-45°C ... +80°C
Self-consumption current c.....	<0.5 VA
Self-consumption voltage c.....	<2 W / 10 VA
Isolation voltage .....	4 kV, 50 Hz, 1 min
Voltage shock .....	12 kV, 1.2/50 μs
Short current.....	30 I <sub>max</sub>
EMC: burst test (IEC 61000-4-4) .....	6 kV
Optical port.....	IEC 62056-21
Switching device (100 A).....	10 <sup>6</sup> actions
Dimensions .....	200 x 132 x 82 mm
Mass.....	0.8 kg

### Programming

Programming of the meter as well as Firmware upgrade can be done locally (via an optical port) or remotely (via a GSM modem) in compliance with the predefined security levels.

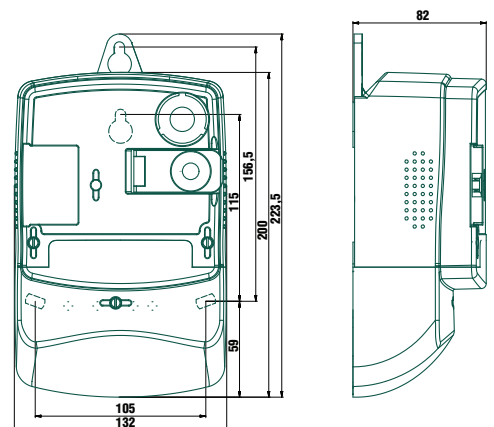
### Housing

- Self-extinguishing polycarbonate
- IP 54 protection against water and dust

### Available accessories

- MeterRead software for local reading and programming using HHU
- MeterView software for local or remote programming using PC
- IR optical probe (DB9 or USB)

## OVERALL DIMENSIONS (mm)



Owing to periodical improvements of our products the supplied products may differ in some details from the data stated in the prospectus material.

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