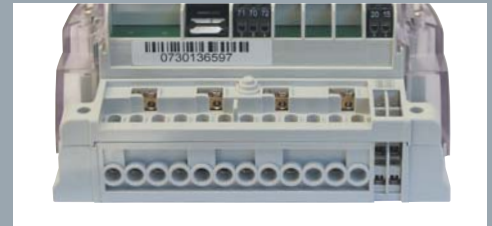


# MT375

## Poly-phase AMR meter with GSM/GPRS modem

**MT375** is targeted at deregulated energy markets and enables provision of an AMR service. It is a poly-phase meter intended for use in Commercial/Industrial and CoP5 applications. The meter incorporates a fully integrated GSM modem. The integrated GSM modem can be exchanged with integrated RS485 communication interface for multi-site installations. It is a perfect combination of well-proven metering technology and state-of-the-art GSM communication 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 and IEC 62053-21, ISO 9001, 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.



		Active/Reactive energy
		Single or double direction
		CT operated meter
		Multi-rate registration
		Real-Time Clock synchronised by comm.
		Load profile
		Log-book
		Communication protocol
		AMR communication: GSM/GPRS

- Fully integrated GSM modem
- AMR on demand and alarm call-backs
- CoP5 compatible
- 'Fit and go' – simple and fast installation procedure
- Multi-utility input for water, heat or gas meters reading
- Active/reactive, multi-rate metering
- Indication of operational statuses
- Very high EMC immunity

## FUNCTIONAL AND TECHNICAL DATA

### Measured and recorded quantities

**Active and reactive energy**, optionally apparent energy in both energy flow directions – import (A+, R+, S+) and export (A-, R-, S-), 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
- Phase voltage faults
- Voltage unbalance
- Daily peak and minimum voltage for each phase
- Number of short power-downs (less than 3 minutes), total time without power supply

#### Multi-rate registration

- Programmable tariff structure, up to 8 rates
- Up to 4 seasons

#### Load profile

- One or two channels, up to 16 objects can be saved on one channel
- Programmable LP period (typically 15, 30 or 60 minutes, 1 day)
- Capacity (one profile, one measurement value with a time stamp and status, period 1 hour): 114 days

**Log book:** up to 128 events with a time stamp

### Communication

#### GSM/GPRS

- 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 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

Two LEDs are built in, indicating 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 back-up power supply (up to 7 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)

Phase voltage presence, energy flow direction, self-diagnosis parameters as well as some communication parameters are also shown on the LCD display:

- 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
- Neutral line break-off detection

**Output relays:** Two relays are built in:

- 6 A electromechanical (for load control)
- 100 mA Opto-mos

### Multiutility

- Two S0 impulse inputs or
- M-Bus interface on which up to 4 gas, heat or water meters can be connected

### Alarm input

The meter is equipped with an additional input to which an external alarm device can be connected.

### Programming

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

### Terminals for current circuits

- Universal clamping type:  
D = 5.5 mm,  
D = 8.5 mm or D = 9.5 mm

Accuracy class (IEC 6205321) .....	2 or 1
Max. current (direct connected).....	85 A or 120 A
Max. current (CT connected) .....	5 (6) A
Nominal voltage Un .....	3 x 230/400 V
Voltage range .....	0.8 Un ... 1.15 Un
Nominal frequency fn .....	50 Hz or 60 Hz
Temperature range.....	-25°C ... +60°C
Extended temperature range .....	-40°C ... +70°C
Storage temperature .....	-45°C ... +80°C
Self-consump. current circuit .....	<0.5 VA
Self-consump. voltage circuit .....	<2 W / 10 VA
Isolation voltage .....	4 kV, 50 Hz, 1 min
Voltage shock .....	12 kV, 1.2/50 µs
Short circuit current .....	50 I <sub>max</sub>
EMC burst test.....	(IEC 801-4) 6 kV
Optical port .....	IEC 62056-21
Dimensions.....	250 x 178 x 86 mm
Mass .....	1.3 kg

### Call-back

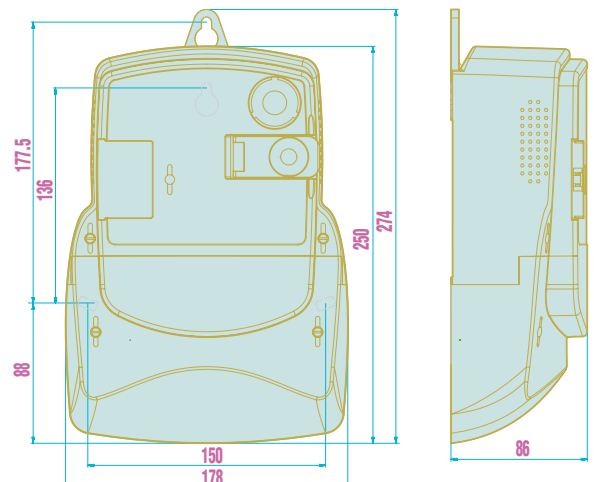
The meter can perform a call and send a message to the centre:

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

### Housing

- self-extinguishable polycarbonate
- IP 54 protection against water and dust

## 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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