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Fit the meter & read it over the internet!









CRSIM_ME372

CRsim is designed to be read from any PC or Lap-top with an internet connection. As long as you have access to your login and password it can be read instantly from anywhere in the world.

Installation couldn't be simpler: install the same as any single phase meter; when that's done ring the number (supplied with the meter) and register it.

Login: spwales
password: spwales1



	Active power
	Single or double direction
	Multi-rate registration
	Real-time clock synchronized by comm.
	Single phase
	Load profile – 1 & 2 channel
	Meter Log-book
	Communication protocol
	AMR communication: GSM, GPRS, SMS

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

FUNCTIONAL AND TECHNICAL DATA

AMR communication – GSM/GPRS/SMS:

GSM modem is fully integrated into the meter.

Comm. frequency: multiple bands are supported: 1800 MHz, 900 MHz, 800 MHz and 1900 MHz.

High performance antenna is integrated into the meter.

External antenna option:

available for installations with insufficient GSM signal.

Option for multi-sites – the meter with RS485 comm. bus: Up to 31 meters can be connected to one communication (1 km) loop.

SIM card exchange:

The SIM card can be hot-swapped and automatically registered with the service provider. The SIM connector is designed for high reliability contacting and is positioned under the meter terminal cover.

Metrological LED

- Indication of the energy flow
- Calibration of the meter

Customer interfaces

Backlit Liquid Crystal Display (LCD) for a clear and simple display of the billing registers, modem comm. statuses:

- Indication of the GSM signal level
- The modem registered with the GSM network
- GSM communication indication

Other parameters: self-diagnosis and tamper

LCD modes:

- Automatic Scroll mode
- Manual Scroll (with a blue button)

Programmable data set and sequence.

Data codification: OBIS (IEC 62056 - 61)

Alarm call-backs (self-triggered):

The meter can send alarm messages about pre-programmed events.

Alarm inputs: two signal inputs (24 V) are available for triggering alarms from external devices.

Communications:

GSM/GPRS: Integrated GSM/GPRS modem; IEC62056-46 (DLMS) protocol

SMS option: the meter can function in SMS mode using various scheduled options for outbound AMR calls.

RS485 (option): IEC62056-46 (DLMS) protocol

Opto-port (IEC 62056 – 21): IEC 62056 – 21 (IEC 61107) or IEC62056 – 46 (DLMS) protocols

Multi-utility AMR options:

M-bus communication interface for reading up to four sub-meters.

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.

Installation procedure:

It is a fast and easy 4-step process, consisting of the meter fitting, automatic connection check and communication verification.

Measured and recorded quantities:

Energy-active: import (A+), export (A-), and absolute IAI

Maximum Demand (Ti = programmable)

Available periods are 5, 15, 30 and 60 minutes.

Power quality parameters: power-downs, under/over voltages

Multi-rate registration:

Programmable tariff structure (1... 4 rates), 8 daily programs, day-light saving time, 4 seasons

Real-time clock:

Accuracy: according to IEC 62052-21

Power-down back up options: Super-cap up to 10 days.

Synchronization: periodically by GSM communication.

Load Profile:

Two load profile objects with 16 capture objects each.

LP period - programmable: 15, 30, 60 minutes or 1 day. Other periods on demand.

Log-book:

128 meter events with the time stamps

Meter programming: all programming modes including meter SW down-loading can be done locally (by HHU) or remotely (by GSM) under the pre-defined security level access.

Self diagnosis

The meter detects and time stamps any critical system failures and sends an alarm call via an SMS message.

Accuracy class (IEC 61036).....	2 or 1
Ib (DIN. BS).....	5 or 10 A
I _{max} (DIN).....	85 A
I _{max} (BS).....	100 A
U _n	230 V
Voltage range.....	0.8 U _n ... 1.15 U _n
f _n	50 Hz, 60 Hz
Temperature range.....	-25°C ... +60°C
Extended temp. range.....	-40°C ... +70°C
Storage temperature.....	-45°C ... +85°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.....	50 I _{max}
EMC: burst test (IEC 801-4).....	6 kV
Optical port.....	IEC 62056-21
Relay (100A).....	10 ⁶ actions
Dimensions.....	200 x 132 x 82 mm
Mass.....	0.8 kg

Relay-bistable (100A):

High quality relay: 106 actions, integrated into the meter. Status detection: on/off (available by comm.)

DSM option: for load control by tariff program or remote signal. 6 A relay output is available.

Enclosure:

Self-extinguishable polycarbonate
Protection against water and dust: IP 53

Accessories

- Meter Read CE software for local programming and data read-out
- Meter View and SMS Client for local/remote meter programming
- IR optical probe with a DB9 or an USB connector

OVERALL DIMENSIONS (mm)

