



## **IQCT04000br1**

### **Current Clamp 3-Phase Meter**

- > Plug and play LTE Cat-M communication module with NB-IoT fallback
- > Compliant with DLMS/COSEM and MID
- > Improve revenue and energy efficiency with advanced measurement and tariffication.
- > Remote authenticated firmware upgrade.
- > Protected from fraud or tampering.
- > Alarm and events record.
- > P1 port to push data in accordance with DSMR 5.0.2.
- > Accurate clock and daylight-saving time supported.
- > Wireless m-bus

## **Contact**

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## Main features

### Measurement and power quality

- > Energy registers: active energy, reactive energy, and apparent energy in four quadrants.
- > Rated energy registers: energy values per tariff rate.
- > Demand: (rated) demand and maximum demand registers with configurable maximum demand integration period (typically 5, 15, 30 or 60 minutes).
- > Instantaneous/average active, reactive and apparent power
- > Instantaneous net frequency, power factor, voltage (rms) and current (rms).
- > The measurement resolution is dependent on the ratio of the current clamp used.

### Tariffs

- > Programmable 2 sets of tariff structure, with 4 seasons, 4 weeks, 4 days and 8 Time-Of-Use tariffs
- > 30 special days tariffs
- > 13 months of billing history available; cumulative (re)active energy import & export

### Profiles for energy and power quality

- > 55 days logging of cumulative active energy import and export with a capture period of 15 minutes.
- > 31 days logging of cumulative active energy import and export for rate 1 and rate 2, with daily captures.
- > 15 days logging of cumulative active energy import and export with 10 minute captures.
- > Periodicity and channels of the profiles are programmable.

### Firmware upgrade

- > Remote authenticated firmware upgrade.

### Real time clock

- > Accuracy according to EN62054-21
- > Daylight-saving time supported.
- > Remote and local synchronization available.
- > Retention of 5 days without power.

### CT ratio

- > Configurable Locally through optical port
- > Configurable remotely over DLMS

### Communication interface

- > Remote communication to HES via modular LTE Cat-M / NB-IoT communication module.
- > P1 port with RJ12 connector to push data to customer's device (DSMR 5.0.2).
- > Local communication via optical port
- > Wireless M-bus based local communication, factory mounted, RF wireless on ISM band 868 MHz

### Display

- > LCD without backlight.
- > With Obis codes and icons.
- > Two programmable display modes (auto scroll and manual scroll).
- > LEDs on the WAN communication module to indicate the communication status.
- > Two LED for energy pulse output.

### Anti-tamper features

Detection and alarming for:

- > Main and terminal cover open detection (regardless of meter power status).
- > Access attempt with incorrect credentials.
- > Magnetic field tampering.
- > Phase sequence reverse detection
- > Inverse current detection

### Event record

- > Up to 255 kinds of event records with timestamp such as:
  - > Long / short term power failure.
  - > Tampering events.
  - > M-Bus events.
  - > Firmware upgrade events.
- > Remote Communication session log in 1 year

### Privacy and security

- > DLMS Low Level Security
- > DLMS High Level Security 3, 4, 5 (AES/GMAC).
- > Data encryption and authentication.
- > Encryption Key-wrapping.

## Technical specifications

### Reference standard

- > EN 50470-1, EN 50470-3, IEC 60529, IEC 62052-11/21, IEC 62053-21/22/23/31/61, IEC 62054-21, IEC 62055-31,
- > IEC 62056-21/46/53/61/62, DIN 43857-2/4
- > EN 13757-3/4

## Electrical

<b>Accuracy</b>	Active	Class C
	Reactive	Class 2
<b>Voltage</b>	Rated Voltage	3*230V / 400v
	Operation voltage range	80% to 120% Un
<b>Current</b>	Rated current	1A
	Min / Max current	1mA / 6A
<b>Frequency</b>	50Hz $\pm$ 5%	
<b>Power consumption</b>	Voltage circuit	$\leq$ 2W, 10VA
	Current circuit	$\leq$ 1VA
<b>Pulse constant</b>	1000 imp/kWh(kvarh)	

## Reliability

<b>Meter life</b>	15 Years	<b>Data retention</b>	$\geq$ 15 Years
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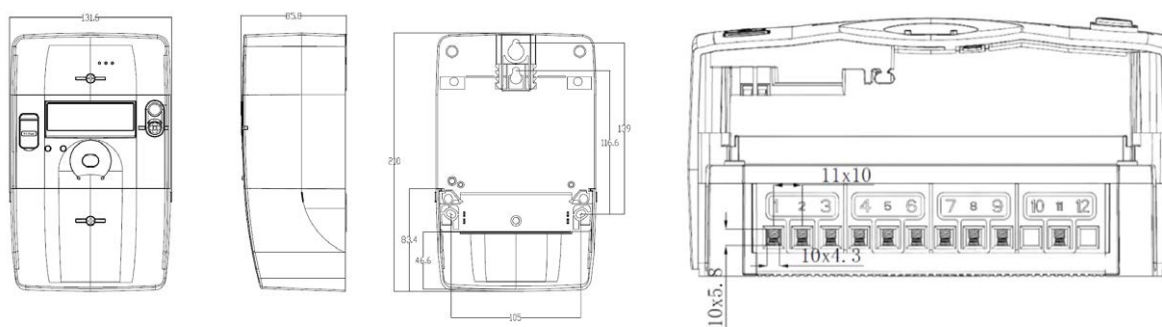
## Mechanical

<b>Dimensions (L x W x H)</b>	249 x 170 x 90(mm)	<b>Weight (Kg)</b>	1.4
<b>Enclosure material</b>	PC+GF(glass filled polycarbonate)	<b>Insulation protection</b>	Class II
<b>Terminals</b>	Professional Lifting system		

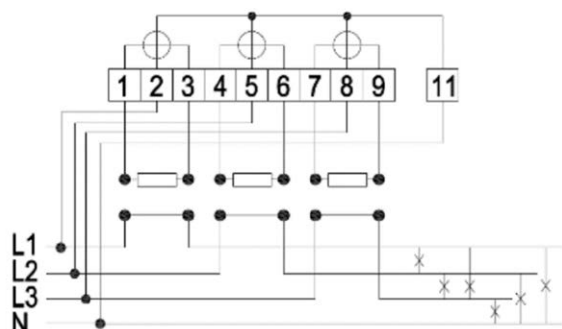
## Environmental

<b>Operating temperature</b>	-40 ° C to 70 ° C	<b>Storage temperature</b>	-40 ° C to 80 ° C
<b>Operating humidity</b>	Maximum 95% RH	<b>Ingress protection</b>	IP54

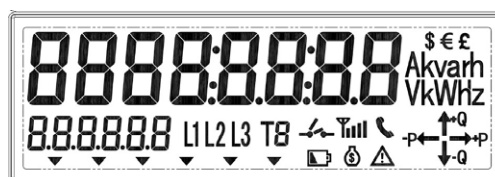
## Overall dimensions



## Wiring diagram



## Display format



## contactinformation



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