

CA168-CS23

Single Phase Keypad Electricity Meter

The CA168-CS23 is a new generation single-phase multi-function meter with modular design. The meter is used to measure electrical energy accurately for commercial and residential customers. The meter has a wide range of functions and the possibility of intelligent measurement, and its flexible communication module instrument can provide remote management and reading of various communication media.

This meter can be used for prepayment (Comply with STS standard) and post payment applications (optional by company). CA168-CS23 has outstanding anti-tamper feature like terminal cover detection to help users for revenue protection. CA168-CS23 can utilize different communication media to CIU or DCU (for Smart Metering application) like PLC/GPRS/3G/4G/RF according to customer requirements.



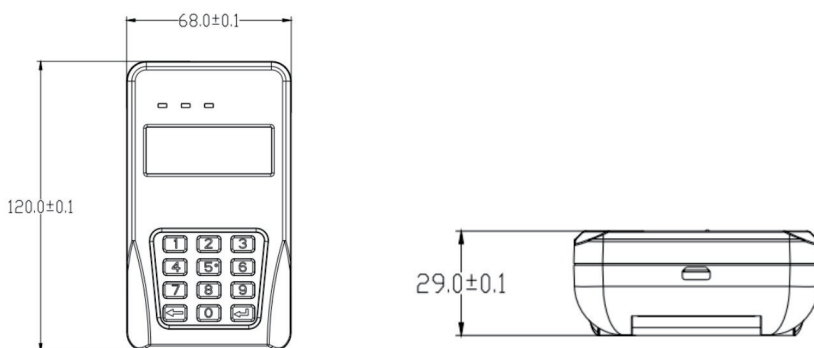
Main Features

- Dual relay
- Multi tariff
- DLMS/COESM
- Infrared port/RS485
- Tamper detection and record
- LCD display, read without power
- Active/reactive energy measurement
- Double CT for Phase and Neutral line
- Disconnects on overload and no credit
- Prepayment / post-payment mode switching
- Plug & Play module PLC/ GPRS/ 3G/ 4G/ RF
- Display scroll button or STS keypad (optional)
- Programmable load limit & Low credit warning

Split Configuration for Increased Revenue Protection

The CIU (Customer Interface Unit) is optional. The MCU (Metering & Control Unit) and CIU is linked via Mbus 2 wires communication, galvanically-isolated PLC or RF wireless communication, the communication method is on request.

The CIU is installed within consumer' s home, while MCU is installed in a meter cabinet away from consumers.



ELECTRICAL PARAMETERS

VOLTAGE

Nominal voltage U_n	230V
Limited voltage	70%~120% U_n

FREQUENCY

Nominal frequency f_n	50-60Hz
Tolerance	$\pm 5\%$

CURRENT

Basic current(I_b)	5A
Maximum current(I_{max})	60A (80/100A optional)
Starting current(I_{st})	20mA
Active energy constant	1000imp/kWh

MEASUREMENT ACCURACY

Active energy to IEC62053-21	Class1.0
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Burden

Voltage circuit	<2W <8VA
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Current circuit	<1VA
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TEMPERATURE RANGE

Operation meter	-25°C~+70°C
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Storage	-40°C~+85°C
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INSULATION

Insulation level	4kV rms 1min
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Voltage impulse withstand	8kV 1.2/50 μ s
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Insulation System Classification	Protective Class II
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ELECTRO MAGNETIC COMPATIBILITY

ELECTROSTATIC DISCHARGES

Contact discharge	8kV
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Air discharge	15kV
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ELECTROMAGNETIC RF FIELDS

27MHz to 500MHz typical	10V/m
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100kHz to 1GHz typical	30V/m
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Fast transient burst test	4kV
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MECHANICAL REQUIREMENTS

Meter shell Protection Rate	IP54
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Insulation System Classification	Protective Class II
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Maximum cable size	8 mm
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