



## CVM-C10-ITF-IN-485-IC2

CVM-C10-ITF-IN-485-IC2, Power analyzer

Code: M55942.

- > Protocol: Modbus/RTU | BACnet
- > Communications: RS-485
- > N° relays: 2
- > Digital inputs: 2
- > Measuring current Channels: 4
- > Harmonics: 31
- > Input current: .../5 A | .../1 A
- > Mounting: Pannel
- > Modules: 96 x 96

### Description

The **CVM-C10** is a panel mounted (96 x 96 mm) power analyzer that records energy values. Compact and versatile, with 4-quadrant measurement (consumption and generation). Suitable for Medium or Low voltage installations, in both 3 or 4-wire three-phase circuits, two-phase circuits with or without neutral, single-phase circuits or ARON connections.

Display features and interface:

- Backlit touch-screen (capacitive)
- Analogue display of instantaneous parameters (power, maximum power reached and  $\cos \varphi$  or PF)
- Backlit display
- Alarm LED indicator.
- Tariff cost
- Operating hour indicator for preventive maintenance

### Application

- Record the energy consumption from three different sources: network, generator set or photovoltaic energy generation system.
- Generation of an impulse signal associated with the cost, kgCO<sub>2</sub> emissions or savings, according to the consumption or generation of energy.
- Selection of tariffs with digital inputs. Perfect to calculate costs in three different work shifts.
- Programs alarms on any instantaneous parameter measured or calculated. Configurable parameters: Low/High, hysteresis (%), NO/NC, connection/disconnection delay and interlocking.



## CVM-C10-ITF-IN-485-IC2

Power analyzer for panel

Code: M55942.

### Specifications

#### AC power supply

Installation category	CAT III 300 V
Consumption	4 ... 6 VA
Frequency	50 ... 60 Hz
Nominal voltage	95 ... 240 V ~ ± 10%

#### DC power supply

Installation category	CAT III 300 V
Consumption	2 ... 6 W
Nominal voltage	105 ... 272 Vdc ± 10%

#### Mechanical characteristics

Size (mm) width x height x depth	96 x 96 x 60.9 (mm)
Envelope	Self-extinguishing V0 plastic
Fastening	Panel
Weight (kg)	0,322

#### Environmental characteristics

Protection class	IP 51 (Front), IP 64 (with accessory), IP 21 (rear)
Relative humidity (without condensation)	5 ... 95%
Storage temperature	-10... +65 °C
Operating temperature	-10 ...+60 °C

#### Standards

Certifications	UL/CSA 61010-1 3rd edition, UL, VDE
Electrical safety, Maximum height (m)	2000
Standards	UNE EN 61010, UNE EN 61000-6-3, UNE EN 61000-6-1, IEC 664, VDE 0110, UL 94, BS EN 61000-6-2, BS EN 61000-6-4

#### Current measurement circuit

Installation category	CAT III 300 V
Nominal current (In)	.../5A , .../1 A
Neutral current measurement	.../5A , .../1 A
Phase current measuring range	2 ... 120% In
Maximum input current consumption	0,9 VA
Maximum pulse current	100 A
Minimum current measurement	10 mA

#### Voltage measurement circuit



## CVM-C10-ITF-IN-485-IC2

Power analyzer for panel

Code: M55942.

Installation category	CAT III 300 V
Input impedance	440 kΩ
Frequency measuring range	45 ... 65 Hz
Voltage measuring range	5 ...120% Un
Nominal voltage	300V Ph-N, 520V Ph-Ph
Minimum measurement voltage (Vstart)	15 V

### Communications

Fieldbus (BACnet)	MS/TP
Fieldbus (ModBus)	RS-485 / RTU
Stop bits (BACnet)	1
Stop bits (ModBus)	1-2
Parity (BACnet)	non
Parity	non-pair-impar
Protocol	ModBus/BACnet
Speed	9600-19200

### User interface

LED	3 LED
Keyboard	Capacitive, 3 keys
Display type	LCD Custom COG

### Digital inputs

Input/output insulation	Optoisolated
Quantity	2
Type	NPN Potential-free contact

### Digital relay outputs

Electrical life (at maximum load)	60x10 <sup>3</sup> cycles
Mechanical life	10x10 <sup>6</sup> cycles
Maximum switching capacity	1500 VA

### Measurement accuracy

Phase voltage measurement	0.5% ± 1 digit
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# CVM-C10-ITF-IN-485-IC2

Power analyzer for panel

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CVM-C10  
Power analyzer, panel mounted 96 x96

CODE	TYPE	Input current	Transistor output	N° relays	Digital inputs	Communications	Protocol
M55911.	CVM-C10-ITF-485-ICT2	.../5 A   .../1 A	2	2	2	RS-485	Modbus/RTU   BACnet
M55921.	CVM-C10-MC-485-ICT2	.../250 mA	2	2	2	RS-485	Modbus/RTU   BACnet
M55942.	CVM-C10-ITF-IN-485-IC2	.../5 A   .../1 A		2	2	RS-485	Modbus/RTU   BACnet
M559210000V00	CVM-C10-mV-485-ICT2	.../333 mV	2	2	2	RS-485	Modbus/RTU   BACnet

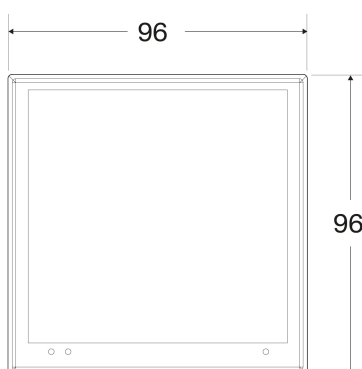
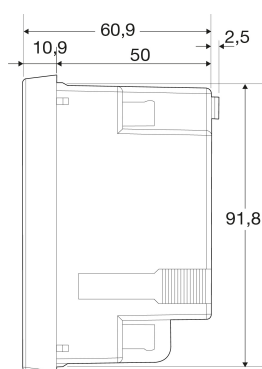


## CVM-C10-ITF-IN-485-IC2

Power analyzer for panel

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### Dimensions



### Connections

