



CVM-C11-ITF-IN-485-ICT2, Power analyzer 96 x 96

Code: M58541.

> Protocol: Modbus/RTU | BACnet

> Communications: RS-485

> Transistor output: 2

> N° relays: 2

> Digital inputs: 2

> Measuring Channels: 4

> Harmonics: 31

> Power supply: 100...270 Vac/dc > Input current: .../5 A | .../1 A

> Mounting: Pannel > Modules: 96 x 96

#### Description

The CVM-C11 is a power analyzer for a panel (96  $\times$  96 mm) with power logging. Ideal for analyzing electrical and consumption quality variables, such as THD% for voltage and current, as well as individual harmonics for each phase up to the 31st. The inclusion of neutral current measurement lets users detect any imbalance, as well as detect overloads in the neutral conductor. Compact and versatile with measurements in 4 quadrants (consumption and generation), suitable for medium- and low-voltage installations. Display and interface characteristics:

- o User-defined parameter display.
- o Backlit screen
- o On-screen graphic display of instantaneous active power
- o On-screen graphic display of all quadrants (Q1, Q2, Q3, Q4).
- $\circ~$  On-screen numerical indication of the value of cos  $\phi$  or PF.
- $\circ \;\;$  On-screen indication of the status of outputs, inputs and/or active tariff.
- LED alarm indicator
- Costs, kg of CO₂ emitted and operating time per tariff

#### **Application**

- Discrimination of power consumption into three tariffs. Ideal for determining consumption during three different work shifts or from three different energy sources (grid, generator and photovoltaic generation), using the digital inputs.
- Generation of an impulse signal related to cost, kg of CO<sub>2</sub> emitted or proportional to energy consumption or generation.
- Alarm control (2 relay outputs + 2 digital outputs) for any instantaneous parameter, whether measured or calculated. Adjustable based on maximum/minimum value, hysteresis (%), NO/NC, connection/disconnection delay and interlocks.







Power analyzer for panel

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#### **Specifications**

lastallation astronomy	CAT III 200 V					
Installation category	CAT III 300 V					
Consumption	2 5 VA					
Frequency	50 60 Hz					
Nominal voltage	100 270 V ~ ± 10%					
DC power supply						
Installation category	CAT III 300 V					
Nominal voltage	100 270 Vdc ± 10%					
Mechanical characteristics						
Size (mm) width x height x depth	96 x 96 x 67.2 (mm)					
Envelope	Self-extinguishing VO plastic					
Fastening	Panel					
Weight (kg)	0,353					
Environmental characteristics						
Protection class	IP 54 (Front), IK 08					
Relative humidity (without condensation)	5 95%					
Storage temperature	-25+75 °C					
Working temperature	-25+70 °C					
Current measurement circuit						
Installation category	CAT III 300 V					
Nominal current (In)	5A/5A ,/1 A					
Phase current measuring range	1 120% In (50 mA6 A)					
Minimum current measurement	10 mA					
Voltage measurement circuit						
Installation category	CAT III 300 V					
Input impedance	> 1.7 MΩ					
Frequency measuring range	45 65 Hz					
Voltage measuring range	5120% Un (11.5 276 V)					
Nominal voltage	230V Ph-N, 380V Ph-Ph					
Minimum measurement voltage (Vstart)	10 V ~					
Communications						
Fieldbus (BACnet)	MS/TP					
Fieldbus (ModBus)	RS-485 / RTU					







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Stop bits (BACnet)	1					
Stop bits (ModBus)	1-2					
Parity (BACnet)	non					
Parity	non-pair-impar					
Protocol	ModBus RTU / BACnet					
Speed	9600-19200-38400 bps (ModBus RTU & BACnet)					
Standards						
Electrical safety, Maximum height (m)	2000					
Electrical safety, Installation category	CAT III 300 V					
Electrical safety, Contamination level/class	Pollution resistance 2					
Standards	EN IEC 61326-1, EN 61000-4-2, EN 61000-4-3, EN 61000-4-4, EN 61000-4-5, EN 61000-4-6, EN 61000-4-8, EN 61000-4-11, EN 61010-2-030, EN IEC 61557-12					
User interface						
LED	2 LED					
Keyboard	3 keys					
Display type	LCD Custom COG					
Digital inputs						
Input/output insulation	2000 V					
Quantity	2					
Туре	NPN					
Digital relay outputs						
Electrical life (at maximum load)	60x10 <sup>3</sup> cycles					
Mechanical life	10x10 <sup>6</sup> cycles					
Maximum switching capacity	625 VA / 75 W (AC1)					
Digital transistor outputs						
Pulse width	30 ms a 400 ms (Programmable)					
Quantity	2					
Туре	NPN					
Maximum frequency	16 imp / s					
Maximum current	50 mA					
Maximum voltage	24 Vdc					
Measurement accuracy						
Phase current measurement	0.2%					
Reactive power measurement (kvar)	1% ± 2 digit					
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Active power measurement (kW)

0.5% ± 2 digit





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Phase voltage measurement

0.2%

# **CVM-C11**Power analyzer, panel mounted 96 x96

CODE	TYPE	Measuring Channels	Input current	Transistor output	N° relays	Digital inputs	Communications	Protocol	Harmonics	Power supply
M58531.	CVM-C11-ITF-IN-ETH-ICT2	4	/5 A  /1 A	2	2	2	Ethernet	Modbus/TCP   BACnet	31	100270 Vac/dc
M58541.	CVM-C11-ITF-IN-485-ICT2	4	/5 A  /1 A	2	2	2	RS-485	Modbus/RTU   BACnet	31	100270 Vac/dc
M58561.	CVM-C11-FLEX-IN-485-ICT2	4	100 mV/kA	2	2	2	RS-485	Modbus/RTU   BACnet	31	100270 Vac/dc
M58581.	CVM-C11-MC-IN-485-ICT2	4	/250 mA	2	2	2	RS-485	Modbus/RTU   BACnet	31	100270 Vac/dc



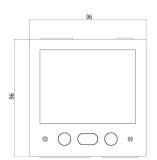


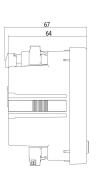


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Connections Dimensions





### Red Trifásica 4 hilos 4-wire three-phase network

