

# CVM-1D-RS485-C

CVM-1D-RS485-C

Code: M55511. DESCATALOGADO

- > Power analyzer
- > Protocol: Modbus/RTU
- > Communications: RS-485
- > Transistor output: 1
- > Class in power: 1
- > Input current: 250 mA...32 A

## Description

**CVM-1D** is a power analyzer for single-phase circuits up to 32 A. It features an LCD display with a rotating screen system, showing a total of 24 instantaneous, maximum and minimum, electrical variables. It has been designed in an enclosure with only 1 DIN module (18 mm). The compact size of the analyzer allows it to be installed on any electric panel. The unit has the Modbus/RTU (RS-485) protocol and is compatible with the **PowerStudio** energy management software.

Its main features are:

- Sealable
- Six-digit LCD display
- RS-485 Modbus/RTU communication (depending on model)
- Programmable alarm or impulse output
- Measurement in four quadrants

## Application

- Student residences / Hotels
- Marinas
- Shopping centres
- Buildings with rented office space
- Campgrounds
- Domestic and industrial lines
- Single-phase lines in general



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Single-phase power analyzer, DIN rail

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## Specifications

### AC power supply

Consumption	2 VA
Frequency	50/60 Hz.
Nominal voltage	88...276 Vc.a

### Mechanical characteristics

Size (mm) width x height x depth	18 x 85.5 x 71.6 (mm)
Envelope	Self-extinguishing UL94-V0 plastic
Weight (kg)	0,08

### Environmental characteristics

Protection class	IP 51 (Front), IP 31 (unmounted)
Relative humidity (without condensation)	5 ... 95%
Storage temperature	-25... +70 °C
Working temperature	-5...+55 °C

### Current measurement circuit

Nominal current (In)	5 A (min./max.: 0.250...32 A)
Reference current (Iref)	5 A
Phase current measuring range	0.5...120%
Minimum current measurement	20 mA
Transition current	500 mA

### Voltage measurement circuit

Frequency measuring range	50/60 Hz(MID: 50 Hz)
Nominal voltage	110...230 Vac ± 20%

### Standards

Electrical safety, Maximum height (m)	2000
Electrical safety, Installation category	CAT III 300V, IEC 61010
Electrical safety, Contamination level/class	Pollution resistance 2
Standards	EN 50470-1, EN50470-3, EN62053-21, EN62053-23, EN61010-1, EN 61000-6-4, EN 55022 Integrated Energy Meter: Class B EN50470-3 in Active Energy, Class 2 EN62053-23 in Reactive Energy.

### Electrical safety

Insulation	Double-insulated electric shock protection class II (IEC 61010-1)
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### Digital transistor outputs



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Pulse width	40...200 ms (Programmable)
Type	NPN
Maximum frequency	1000 imp / kWh
Maximum current	50 mA
Maximum voltage	42 Vdc

Measurement accuracy

Current measurement sensors	Direct measurement (integrated shunt <0.5 mΩ)
Voltage measurement sensors	Direct measurement (integrated shunt <0.5 mΩ)
Phase current measurement	0.5% ± 1 digit
Active energy measurement (kWh)	1% ± 1 digit
Active power measurement (kW)	1% ± 1 digit
Power factor measurement	0,5...1
Phase voltage measurement	0.5% ± 1 digit

Serial communication

Technology / Type	RS-485
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Dimensions

