



CVM-C4-ITF-485-ICT2, Power analizer, panel mounted 96x96

Code: M52706.

> Protocol: Modbus/RTU> Communications: RS-485

> Transistor output: 2

> Nº relays: 2

> Digital inputs: 2

> Measuring current Channels: 3

> Input current: .../5 A | .../1 A

> Mounting: Pannel

### Description

**CVM-C4** is a power analyser that measures, calculates and displays the main electrical parameters for single-phase and three-phase networks (with or without neutral) on its screen. Measurement is made in true rms value, by means of 3 AC voltage inputs and 3 /5 A or /1 A current inputs. Relay outputs enable local operation in the event of an alarm event being triggered. Its dimensions are 96 x 96 mm with a depth of only 41.5 mm. Current measurement is indirectly carried out by /5A or /1A transformers. It allows AC (80...270 Vac)and DC (80...270 Vdc or 18... 36 Vdc power supply systems). It features RS-485 communications enabling remote data readout or Scada or Master centralisation.

### **Application**

- For electrical parameter measurement in areas whose reduced dimensions require the installation of a space-saving panel analyser.
- Instantaneous value measurement of electrical parameters with communications.
- o Logging of consumed or generated Active or Reactive Energy.
- o The device's relay outputs allow the installation to be locally operated.
- Programmable alarms by setting relay activation time, connection delay and hysteresis.
- o 5000 imp/kWh energy impulse outputs
- o Energy measurement of two different sources on 2 separate meters (by digital input activation).
- o Voltage and current THD% measurement to check for harmonics in the installation.







Multifunctional multimeter for panel

Code: M52706.

### **Specifications**

AC power supply	
Installation category	CAT III 300 V
Consumption	6 18 VA
Frequency	50/60 Hz
Nominal voltage	80 270 Vac
DC power supply	
Installation category	CAT III 300 V
Consumption	1.5 1.8 W
Nominal voltage	80270 Vdc
Mechanical characteristics	
Size (mm) width x height x depth	96 x 96 x 41.5 (mm)
Envelope	Polycarbonate + ABS
Torque setting	0.5 Nm
Communications cable cross-section	2.5 mm <sup>2</sup>
Cable gauge at power supply terminals	2.5 mm <sup>2</sup>
Cable gauge at input and output terminals	2,5 mm <sup>2</sup>
Cable gauge at current terminals	2,5 mm <sup>2</sup>
Cable gauge at voltage terminals	2.5 mm <sup>2</sup>
Weight (kg)	0,268
Environmental characteristics	
Protection class	Front: IP54, Rear: IP20
Relative humidity (without condensation)	5 95%
Storage temperature	-20 +70 °C
Working temperature	-10 +60 °C
Current measurement circuit	
Installation category	CAT III 300 V
Consumption	< 0.2 VA (por fase)
Nominal current (In)	1 A / 5 A ~
Allowable overload	1.2 In continuous, 10 In instantaneous(5s)
Voltage measurement circuit	
Installation category	CAT III 300 V
Consumption	< 0.2 VA (por fase)
Sampling frequency	4565 Hz







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Input impedance	> 1.7 MΩ
Voltage measuring range	4565 Hz
Nominal voltage	100277 V~ Ph-N (± 8%)
Maximum permanent measurement voltage	1.2 Un continuous, 2 Un instantaneous (1 min)
Minimum measurement voltage (Vstart)	10 V
Communications	
Data bits	8
Stop bits (ModBus)	1-2
Parity	without, even, odd
Protocol	ModBus RTU
Speed	2400-4800-9600-19200
Standards	
Electrical safety, Maximum height (m)	2000
Electrical safety, Installation category	CAT III 300 V
Electrical safety, Contamination level/class	Pollution resistance 2
Standards	IEC 61010-1, IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-4, IEC 61000-4-5, IEC 61000-4-8, IEC 61000-4-11
User interface	
Keyboard	3 keys
Display type	LCD
Digital inputs	
Input/output insulation	3,75 kV RMS
Quantity	2
Туре	Potential-free contact
Maximum short-circuit current	4 mA
Maximum open circuit voltage	30 V
Digital relay outputs	
Quantity	2
Туре	Relay
Resistive load (max.)	250 Vca / 5 Aca, 30 Vcc / 5 Acc
Maximum current	5 A ~
Maximum open contact voltage	277 V ~ / 30 Vdc
Electrical life	(250 V ~ / 5 A) 1 x 10 <sup>5</sup>
Maximum switching capacity	1385 VA / 150 W



Digital transistor outputs





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Pulse width	Minimum pulse width: 80mA		
Туре	Passive impulse		
Maximum frequency	10 Hz		
Maximum current	27 mA		
Maximum voltage	27 Vcc		

#### Measurement accuracy

Frequency measurement	0.5 %
Phase current measurement	0.2 %
Reactive energy measurement (kvarh)	0.5 %
Reactive power measurement (kvar)	0.5 %
Active energy measurement (kWh)	0.5 %
Active power measurement (kW)	0.5 %
Phase voltage measurement	0.2 %

### CVM-C4 Power analyzer, panel mounted 96x96

CODE	TYPE	Input current	Transistor output	N° relays	Digital inputs	Communications	Protocol
M52706.	CVM-C4-ITF-485-ICT2	/5 A  /1 A	2	2	2	RS-485	Modbus/RTU

<sup>4-</sup>quadrant measuring unit. Can be used to program the voltage transformer ratio







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### Dimensions Connections



