



## CVM-C4-ITF-485-ICT2

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

Code: M52706.

- > Protocol: Modbus/RTU
- > Communications: RS-485
- > Transistor output: 2
- > N° 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.
- Logging of consumed or generated Active or Reactive Energy.
- The device's relay outputs allow the installation to be locally operated.
- Programmable alarms by setting relay activation time, connection delay and hysteresis.
- 5000 imp/kWh energy impulse outputs
- Energy measurement of two different sources on 2 separate meters (by digital input activation).
- Voltage and current THD% measurement to check for harmonics in the installation.



## CVM-C4-ITF-485-ICT2

Multifunctional multimeter for panel

Code: M52706.

### Specifications

#### AC power supply

Installation category	CAT III 300V
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	80...270 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	45...65 Hz



## CVM-C4-ITF-485-ICT2

Multifunctional multimeter for panel

Code: M52706.

Nominal voltage	100...277 V~ Ph-N ( $\pm 8\%$ )
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	non-pair-impar
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 61000-4-6, 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
Type	Potential-free contact
Maximum short-circuit current	4 mA
Maximum open circuit voltage	30 V

### Digital relay outputs

Quantity	2
Type	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) $1 \times 10^5$
Maximum switching capacity	1385 VA / 150 W

### Digital transistor outputs

Pulse width	Minimum pulse width: 80mA
Type	Passive impulse



# CVM-C4-ITF-485-ICT2

Multifunctional multimeter for panel

Code: M52706.

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	Nº relays	Digital inputs	Communications	Protocol
M52706.	CVM-C4-ITF-485-ICT2	.../5 A   .../1 A	2	2	2	RS-485	Modbus/RTU

4-quadrant measuring unit. Can be used to program the voltage transformer ratio

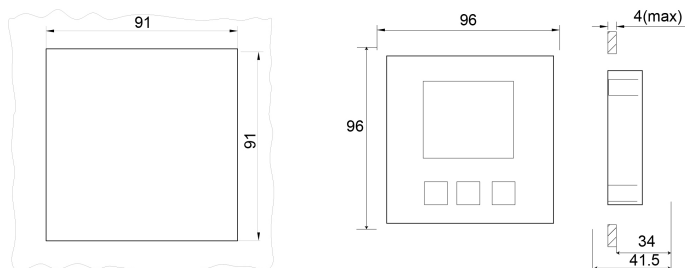


## CVM-C4-ITF-485-ICT2

Multifunctional multimeter for panel

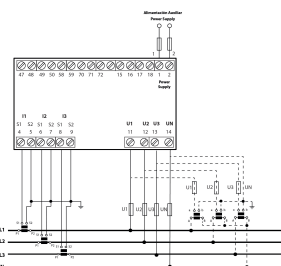
Code: M52706.

### Dimensions



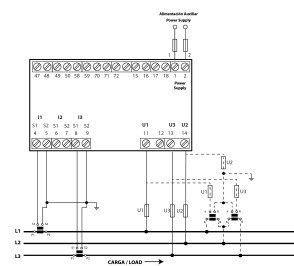
### Connections

Medida de red trifásica con conexión a 4 hilos.  
Measuring three-phase networks with a 4-wire connection



Energy pulse outputs

Medida de red trifásica con conexión a 3 hilos.  
Measuring three-phase networks with a 3-wire connection



Digital Inputs



Output Relays