

# CVM-C10

Electrical power analyzer  
with energy measurement



“An investment in knowledge  
always pays the best interest.”

Benjamin Franklin

A vast range of possibilities





Accurate



Accurate

Intuitive





Accurate

Intuitive

Innovative



Accurate

Intuitive

Innovative

Visual





Accurate

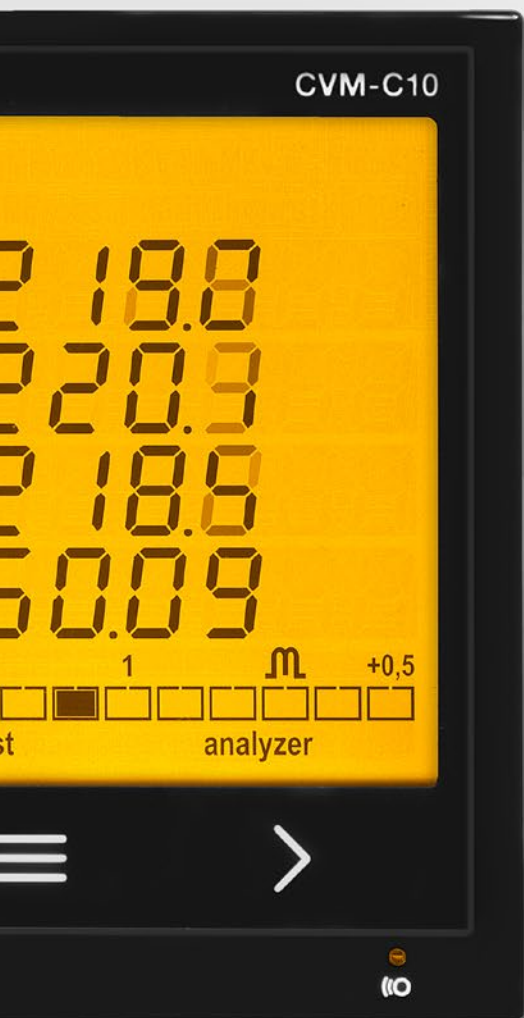
Intuitive

Innovative

Visual

Complete

# CVM-C10



Measurement of advanced parameters  
*V, A, kW, kW·h, hours, kvar, cos φ, **kgCO<sub>2</sub>**, **Costs***



Quick screen display

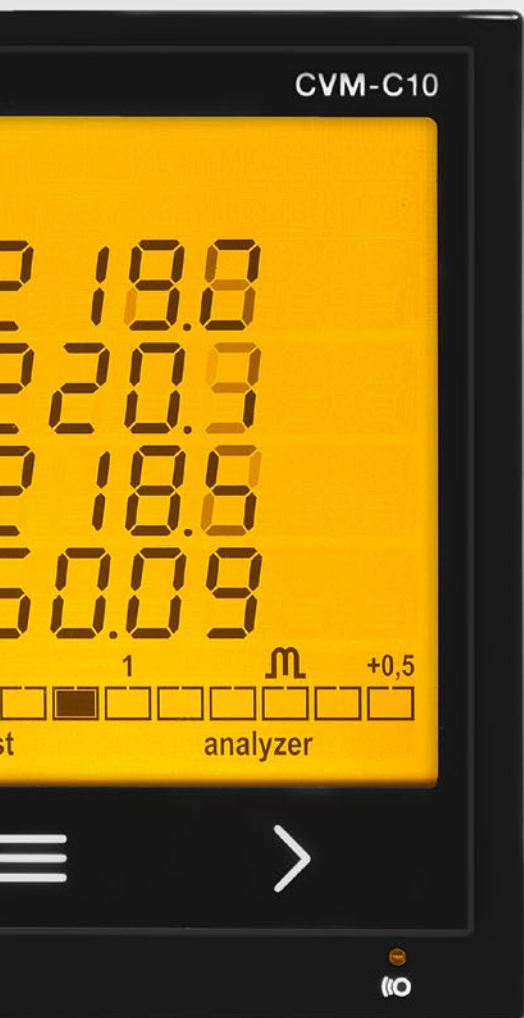


4-quadrant measurement



Capacitive control keypad

# Integration



RS-485 Modbus communications



2 digital inputs

*Change of tariffs or detection of logic state of external signals*



2 digital transistor outputs

*Generation of impulses or alarms*



2 digital outputs per relay

*Alarm generation*

# New measurements

Consumption and Generation measurement icon.

Display of type of network connected.

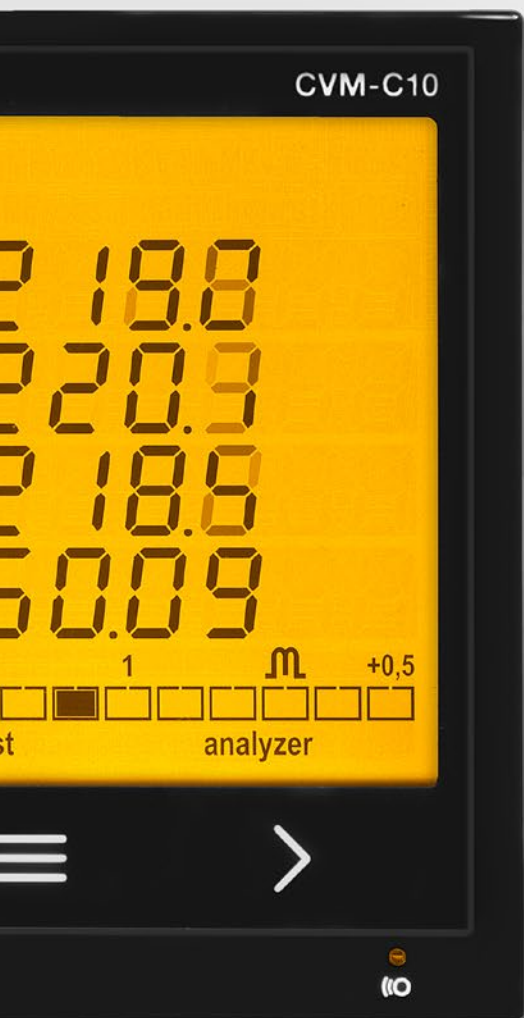
Total Energy, Hours, Costs and Emissions and for each Tariff.

3 tariffs. Selectable by digital input or communications.

Units in Kilos and Megas per parameter. Autoscaling.

Display of numerical data, per phase (instantaneous parameters), per tariff (incremental parameters).

**Graphic information.** Analogue display for instantaneous power and power factor.





# IN function



## 2 potential-free digital inputs

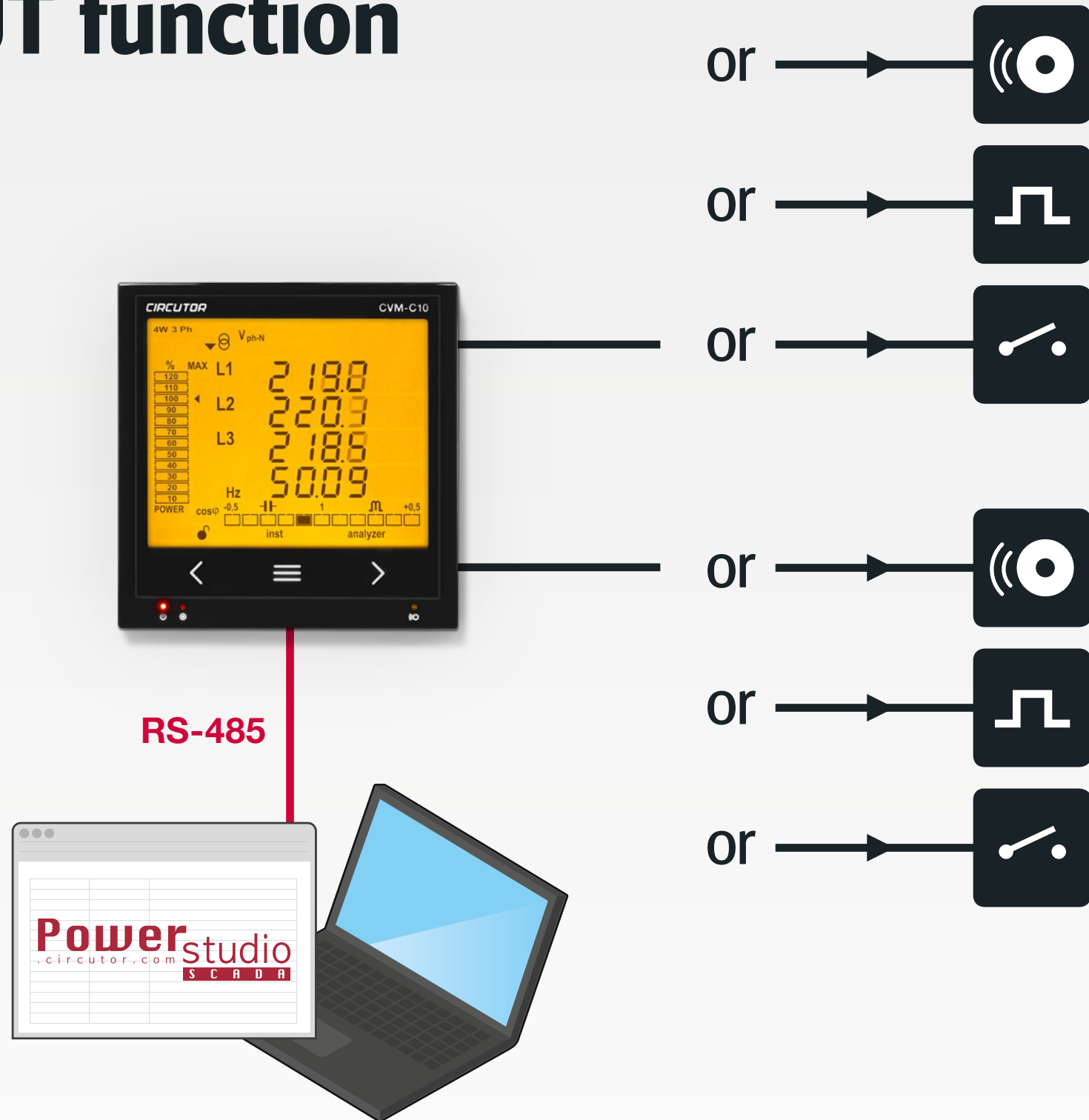
- Selection from three tariffs
- Detection of logic states

# Transistor OUT function

## 2 digital transistor outputs

- Generation of impulses
- Alarm control
- Communications control

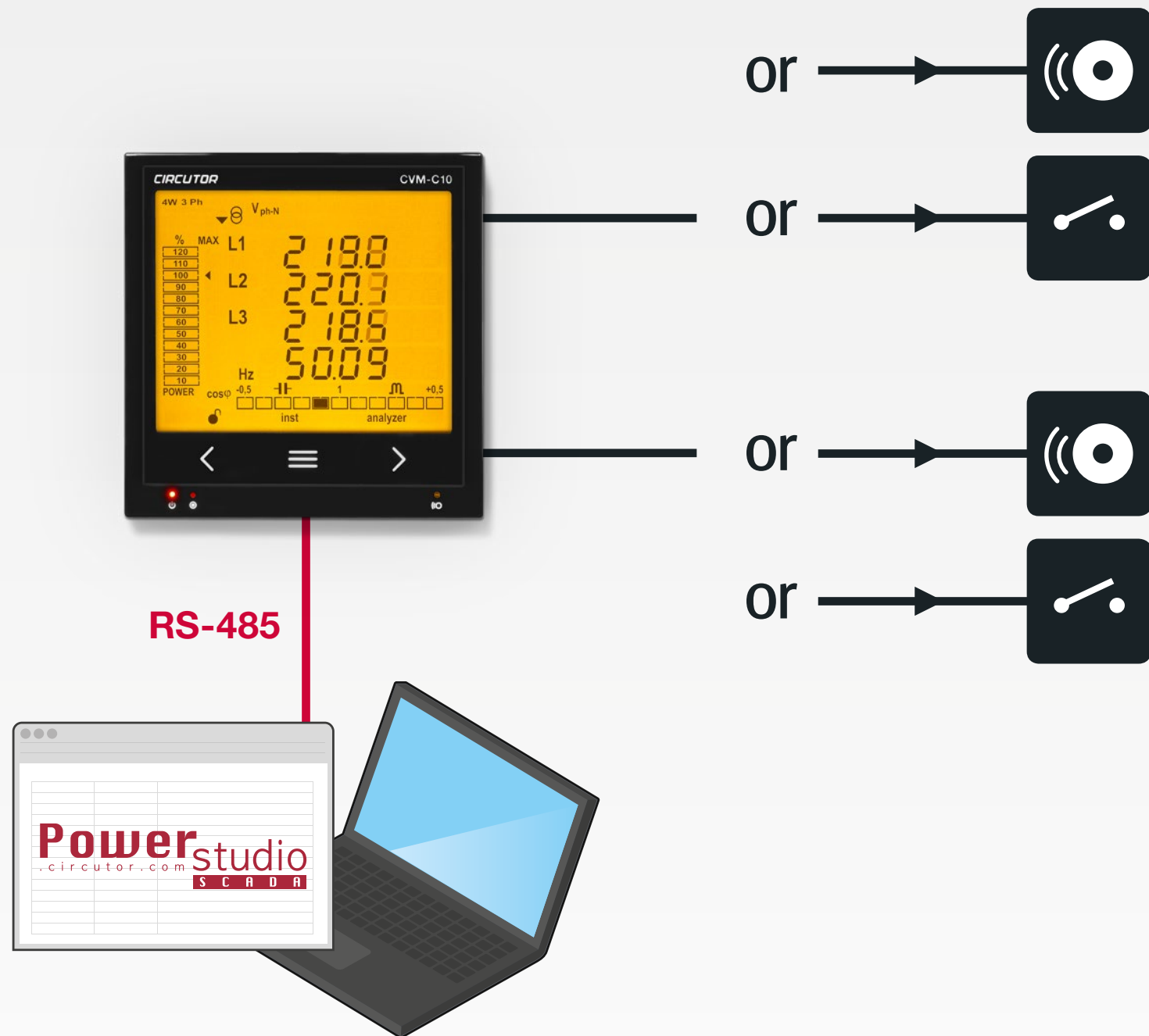
Compatible with the  
**PowerStudio**  
**SCADA system**



# Relay OUT function

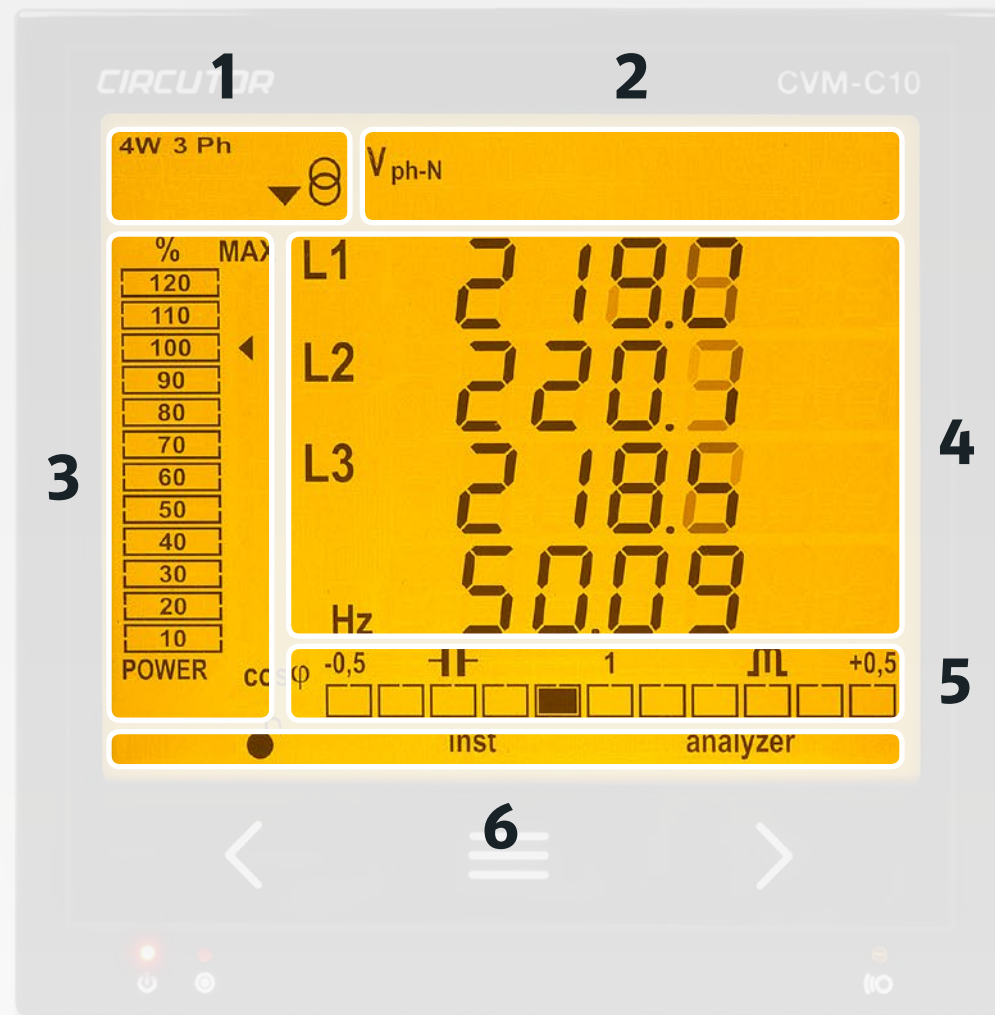
## 2 digital relay outputs

- Alarm control
- Communications control



Compatible with the  
**PowerStudio**  
**SCADA system**

# Screen display



1. Configuration of measurement system
2. Units
3. Instantaneous Power percentage and maximum reached
4. Numerical data:  
by Phase or Tariff
5. PF analogue display
6. Display status and profile  
**Analyzer / e3 / User**



# Production Plants

Enables on-screen cost allocation and control

Adapts to different types of network

Avoids excessive consumption peaks



# Panel builders

Controls consumption, costs and emissions of three tariff periods

Warns of possible problems with up to 4 digital alarms

Shows percentage of installation use and PF in analogue form



# Photovoltaic panels

Controls generation, consumption, costs and emissions of three tariffs

Generates generation or demand overpower alarms

Accepts wide scale ranges. Autoscaling from kWh to MWh



# Large consumers or generators

Increases the transformation ratio. Autoscale from kW to MW, 600 kV and 10 kA

Control of installations with high consumption or generation

Shows a large amount of data on one screen



## Other features

- Indirect power analyzer with 4-quadrant measurement
- Compact enclosure for panel in 96x96
- Encapsulated capacitive keyboard
- Backlit CUSTOM LCD
- IP64 front panel protection
- Switched power supply 85...265 Vac / 95...300 Vdc
- 4 voltage inputs (3 phases + Neutral)
  - 300 Vac P-N / 520 Vac P-P
- 3 or 4 current inputs according to version
  - Standard ../5 A and ../1 A
  - Version with neutral current input
  - MC../250 mA (for transformers **MC1** and **MC3**)
- Voltage and Current Accuracy = 0.5%
- Power and Energy Accuracy = 1%
- Transformation ratios
  - Primary V : 600 000
  - Primary A : 10 000
  - (While PrimV x PrimA < 2,000 million)

# New generation of power analyzers



## CVM-C5

Multifunction  
multimeter with  
energy measurement

## CVM-C10

Electrical Power  
Analyzer with energy  
measurement

## CVM-B100 / CVM-B150

Electrical Power Analyzers  
with energy measurement and  
innovative interface

# TC, MC

Wide range of  
measurement  
transformers





*Technology for energy efficiency*





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