



# Technologically advanced

- **CVM-B** can be integrated with remote management systems (XML, WEB, SNMP)
- Customisable display of parameters, in accordance with configurable ratios
- Elegant design, with a colour VGA graphics display and tactile buttons, as well as a high front panel protection (IP 65 \* with sealing joint).

and...

- Displays the electrical consumption by tariff in your country's currency, according to three tariffs or the source of consumed electrical energy.
- Calculates the indicator of emitted or avoided  $\text{kgCO}_2$  for each tariff.

# Technical features

<b>Power circuit</b>	Power supply voltage	85...265 Va.c. / 120...300 Va.c. 20...120 Vd.c. (SDC Model)
	AC Frequency	45...65 Hz
	AC Consumption	CVM-B100 - 6...8 VA (max. 24 VA) CVM-B150 - 7...12 VA (max. 28 VA)
	DC consumption	CVM-B100 - 3...4 W (max. 22 W) CVM-B150 - 4...7 W (max. 26 W)
<b>Voltage measurement circuit</b>	Voltage range	500 Vp-n - 866 Vp-p (functional up to 600 Vp-n / 1000 Vp-p)
	Frequency	40...70 Hz
	Measurement margin	7 %...200% of the Un for Un=300 Vac (p-n)
	Admissible overvoltage	750 Vac
<b>Current measurement circuit</b>	Current measurement	4 (3 phases + 1 neutral)
	Input current	.../5 A or .../1 A or .../250 mA
	Minimum current for class	250 mA
	Start-up current	10 mA
	Measurement margin	0,2...200% In (.../5 A), 1...200% In (.../1 A), 4...200% In (.../250 mA)
	Admissible overload	2 In permanent, 100 A t < 1 s
	Consumption	< 0.9 VA
<b>Maximum transformation ratios</b>	Primary V : 500,000	
	Primary A : 999,9 (10 kA) .../5 and .../1A, 63...2000 MC type	
	Product of Primary V x Primary A <60 MW	
<b>Accuracy class</b>	Voltage, Current	0.2%
	Neutral current	1%
	Active power	0.5% ± 1 digit
	Active energy	Class 0.5 S (.../5 A), Class 1 (.../1 A and .../250 mA)
<b>Display of harmonics</b>	Voltage/Current	up to 50
<b>Safety</b>	Designed for CAT III 300/520 Vac installations, in accordance with EN 61010 Double-insulated electric shock protection, class II	
<b>Standards</b>	IEC 62053-22, ANSI (class 0.5S), IEC 62053-23 ANSI C12.1 (class 2), IEC 61010, IEC 61000, UNE-EN 55022. Measurement in accordance with MID, UL certification IEC 61000-4-2, IEC 61000-4-3, IEC 61000-4-11, IEC 61000-4-4, IEC 61000-4-5	

## References

### 96x96

Current measuring secondaries	Type	Code
.../5 ó .../1 A or ...250 mA	CVM-B100-ITF-RS485-ICT2	M56011
.../5 ó .../1 A or ...250 mA	CVM-B100-SDC-ITF-485-ICT2*	M5601100F0000

### 144x144

Current measuring secondaries	Type	Code
.../5 ó .../1 A or ...250 mA	CVM-B150-ITF-RS485-ICT2	M56111
.../5 ó .../1 A or ...250 mA	CVM-B150-SDC-ITF-485-ICT2*	M5651100F0000

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# CVM-B100 CVM-B150

Much more than a  
power analyzer

*The new generation of CVMs*





# “Accurate, innovative and elegant measurement”

CVM-B100 and CVM-B150 are panel mounted equipment, with the following dimensions: 96x96 mm and 144x144 mm, respectively. The user can enjoy a new concept of power analyzers based on the new SCV interface (slide, choose & view) with 3.5" and 5.6" colour VGA screens, which have been fully and exclusively designed by CIRCUTOR. CVM-B series offers top-performance features and their measurement engine allows the user to analyse countless electrical parameters, as well as the harmonic breakdown in terms of voltage and current, up to the 50th order harmonic.

Thanks to the CVM-B's expansion possibilities, these equipment are more versatile, and they can even display data gathered from other systems on their interface. They offer endless possibilities as measurement terminals during on-site electric energy management and monitoring processes.

# Versatile

expandable, accurate, intuitive and customizable

The NEW and RENEWED image of the CVM analyzer range is one of the keys to its evolution, offering a discreet, elegant and industrial design. All details of the front panel have been carefully designed, offering the best performance features in this segment to the customer.



Integral parameter measurement with analogue display

*V, A, kW, kW·h, hours, kvar, cos  $\varphi$ , kgCO<sub>2</sub>, Costs*



Quick display on the screen with the SCV interface



4-quadrant measurement



Neutral current measurement



Modular, expandable

## New redesigned interface

- Screen with SCV interface (Slide, Choose & View)
- High-resolution colour display
- Backlit touch-screen (capacitive)
- Red high bright alarm LED indicator

**CVM-B** analyzers have a modern design and they feature **many different options, thanks to their expansion modules.**

**CVM-B** can be expanded and they are prepared for future evolutions, i.e., they can **adapt to new technologies.**

## Parameters and variables

- **kW·h, hours, Cost, kgCO<sub>2</sub>**  
Energy, Hours, Cost and Emissions
- **T1 / T2 / T3**  
3 Tariffs (digital input selection) or communications
- **V, A, W, VA, var, varL, varC, Demand, PF, cosφ**  
Instantaneous parameters, three-phase and by phase.  
Harmonics up to the 50th order

## And more....

- Expandable high-end CVM range
- Indirect power analyzer with 4-quadrant measurement
- Compact enclosure: 96x96 and 144x144 mm
- Touch keyboard
- IP65 front panel protection
- VGA Colour Screen
- SCV (Slide, Choose & View) Screen interface
- 4 digital outputs
- Universal power supply 85...265 Vac / 95...300 Vdc
- 5 Voltage inputs (3 phases + Neutral + Earth)
- 300 Vac Ph-N / 520 Vac Ph-Ph
- 4 channels current inputs (/5 or /1, /250mA)
- 0.2 class in voltage and current
- 0.5 class in power
- 0.5S class in Energy