



### Technical features

Power circuit	100...240 V <sub>ac</sub> +/-15% / 100...300 V <sub>dc</sub> +/-15%
	AC Frequency 45...65 Hz
	AC Consumption min. 4 VA / max. VA (25 VA with all expansion options)
Voltage measurement circuit	DC Consumption min. 4 VA / max. VA (25 W with all expansion options)
	Voltage range 20V <sub>p-n</sub> -600V <sub>p-n</sub> (functional, up to 600V <sub>p-n</sub> /1000V <sub>p-p</sub> )
	Frequency 40 / 70 Hz (360...440 Hz)
	Measurement margin 2.54 %...120% of the Un for Un=500Vac (p-n)
	Admissible overvoltage 750 Vac
Current measurement circuit	Maximum consumption (limited current) < 0.1 VA
	Current measurement channels 4 (3 phases +1 Neutral)
	Input current .../5A or .../1A .../250mA (MC-ITF)
	Minimum current for class 250 mA
	Start-up current 10 mA
	Measurement margin 0.010 .. 8.48 A
	Allowable overload 10A permanent, 100 A t<1s
	Consumption < 0.15 VA
Maximum transformation ratios	Primary V : 6,000,000 (phase-neutral)
	Primary A : 50,000
	Product of Primary V x Primary A<300,000,000,000
Maximum meter value (total)	Yes (Primary A / Secondary A) <1000 (2 GW)
	Yes (Primary A / Secondary A) >=1000 (2 TW)
Accuracy class	Class 0.2 V, A / Class 0.5 +/- 1 digit for power / class 0.5S for active energy / class 2 for reactive energy
Display of harmonics	up to the 50th order harmonic
Standards	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, design in accordance with UL, 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 , /1A or 250mA	CVM-B100-ITF-RS485-ICT2	M56011

144x144

Current measuring secondaries	Type	Code
/5 , /1A or 250mA	CVM-B150-ITF-RS485-ICT2	M56111

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**m** Measurement and Control

# CVM-B100 CVM-B150

Much more than a power analyzer

The new generation of CVMs



**CIRCUTOR**  
Technology for energy efficiency



## “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 φ, 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)
- Backlit touch-screen (capacitive)
- High-resolution colour display
- 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 P-N / 520 Vac P-P
- 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