



212-ES7A-2EB10

212-ES7A-2EB10, Single-phase energy meter

Code: QBMDB DESCATALOGADO

- > Tariff: 2
- > Entrada cambio tarifa: Yes
- > Certification: IEC
- > Communications: RS-485 (Modbus/RTU)
- > Class (Active/Reactive): 1 / 2
- > System: Single-phase
- > Measure: Direct
- > Measurement Range (V): 230
- > Measurement Range (A): 5 (65)
- > Quadrants: 4
- > Frequency (Hz): 50

Description

The **CIRWATT B102** invoicing meter is a single-phase meter for residential use. It is IEC certified to invoice electricity to end users. It features Class-1 accuracy for active energy, Class-2 for reactive energy, and up to 3 programmable tariffs, with RS-485 communications and optical communications via the front port.

The meter has a load profile with more than 400 days of data, 12 end-of-billing periods and the option to record any tampering or fraud in a special event and service quality file.

For easier reading, these meters have a backlit display that makes it easy to see the electricity consumption in places with low lighting.

Application

Official electricity meter via on-screen verification or by data download via optical port.

By using an RS-485 communications port, which allows connecting up to 32 meters to the same bus, and remotely downloaded using a GSM/3G modem or IP router.

The device has, depending on the version, a digital input for forced tariff changes, especially designed for installations with dual supply sources, accumulating in tariff 1 the energy from the grid and in tariff 2 the power from the second source based on the status of the digital input.

Depending on the version, the meter can be integrated with LM devices via pulse output to collect pulses, which allow the energy consumption to be centralized and sent remotely to the PowerStudio data management system.



212-ES7A-2EB10

CIRWATT B102 single-phase meter

Code: QBMDB

Specifications

AC power supply	
Tolerance	80 % ... 115 % Un
Consumption	< 2 W; < 10 VA
Frequency	50 / 60 Hz
Nominal voltage	230 V
Battery specification	
Performance-guarantee	> 20 years @ 30 °C
Type	Lithium
Mechanical characteristics	
Size (mm) width x height x depth	129 x 215 x 62 (mm)
Envelope	DIN 43859
Environmental characteristics	
Relative humidity (without condensation)	95 % max.
Storage temperature	-40 ... +85 °C
Working temperature	-40 ... +70 °C
Voltage measurement circuit	
Connection	Asymmetrical or Symetrical
Consumption	< 2 W; 10 VA
Nominal frequency	50 / 60 Hz
Nominal voltage	230 V
Current measurement circuit	
Reference current (Iref)	5 A
Maximum current	65 A
Minimum current measurement	250 mA
Optical communication interface	
Protocol	IEC 62056-21 mode C
Type	Serial;bi-directional
User interface	
Resolution of the display	up to 7 digits
Display type	LCD



212-ES7A-2EB10

CIRWATT B102 single-phase meter

Code: QBMDB

Memory

Memory capacity

Up to 4 tariffs, optional load profile, 9600 records for load profiles



212-ES7A-2EB10

CIRWATT B102 single-phase meter

Code: QBMDB

Type	FIFO
Measurement accuracy	
Reactive energy measurement (kvarh)	IEC 62053-21 (Class 2)
Active energy measurement (kWh)	Class 1 - IEC 62053-21 Class B - EN 50470
Features / performance	
Billing closures	15

CIRWATT B102
Single-phase energy meter

CODE	TYPE	Communications	Impulse output	Class (Active/Reactive)	Measurement Range (V)	Measurement Range (A)	Quadrants	Entrada cambio tarifa
CIRWATT B102								
QBM83	212-ES7A-21B20	RS-485 (IEC 62056-21)	1	B (1) / 2	230	5 (65)	Abs.	0
QBM85	212-ES7A-23B20	RS-485 (IEC 62056-21)	0	B (1) / 2	230	5 (65)	Abs.	0
QBM87	212-ES7A-2EB20	RS-485 (IEC 62056-21)	0	B (1) / 2	230	5 (65)	Abs.	1
QBMD3	212-ES7A-21B20	RS-485 (Modbus/RTU)	1	B (1) / 2	230	5 (65)	Abs.	0
QBMD5	212-ES7A-23B20	RS-485 (Modbus/RTU)	0	B (1) / 2	230	5 (65)	Abs.	0
QBMD7	212-ES7A-2EB20	RS-485 (Modbus/RTU)	0	B (1) / 2	230	5 (65)	Abs.	1

These meter models are not MID certified.



212-ES7A-2EB10

CIRWATT B102 single-phase meter

Code: QBMDB

Dimensions



Connections

