

210-ES7A-0EB20, Single-phase energy meter

Code: QBM07

- > Tariff: 2
- > Entrada cambio tarifa: Yes
- > Certification: IEC
- > Class (Active/Reactive): B (1)
- > System: Single-phase
- > Measure: Direct
- > Measurement Range (V): 230
- > Measurement Range (A): 5 (65)
- > Quadrants: Abs.
- > Frequency (Hz): 50

#### Description

The **CIRWATT B101** 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 and up to 3 programmable tariffs. 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.

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.

Circutor

Page 2 of 5



## 210-ES7A-0EB20

CIRWATT B101 single-phase meter

Code: QBM07

#### 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				
Туре	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				
Туре	Serial;bi-directional				
User interface					
Resolution of the display	up to 7 digits				
Display type	LCD				





CIRWATT B101 single-phase meter

Code: QBM07

Memory

Memory capacity

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

Circutor

Creation date: 08/08/2025 - CIRCUTOR, SAU reserves the right to make technical changes or modify the content/images of this document without prior notice, in order to improve its reliability, functionality, design or for other reasons. It accepts no liability for any errors, inaccuracies or possible lack of information in this document.



### CIRWATT B101 single-phase meter

#### Code: QBM07

Туре	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 B101**

Single-phase energy meter

CODE	TYPE	Communications	Impulse output	Class (Active/Reactive)	Measurement Range (V)	Measurement Range (A)	Quadrants	Entrada cambio tarifa			
CIRWATT B101											
QBM03	210-ES7A-01B20	-	1	B (1)	230	5 (65)	Abs.	0			
QBM07	210-ES7A-0EB20	-	0	B (1)	230	5 (65)	Abs.	1			

# Circutor



CIRWATT B101 single-phase meter

Connections

Code: QBM07

Dimensions

