

PC473-Z-bwr

Power Meter

Quick Start Guide

Safety Handling

WARNING: Failure to follow these safety notices could result in fire, electric shock, other injuries, or damage to the device and other property. Read all the safety notices below before using the device.

- Avoid high humidity or extreme temperatures.
- Avoid long exposure to direct sunlight or strong ultraviolet light.
- Do not drop or expose the unit to intense vibration.
- Do not disassemble or try to repair the unit yourself.
- Do not expose the unit or its accessories to flammable liquids, gases or other explosives.

Technical Specifications

Wireless Connectivity

Wireless Protocol	• ZigBee 3.0
--------------------------	--------------

RF Characteristics	• Operating frequency: 2.4GHz • Internal antenna
---------------------------	---

Physical Specifications

Operating Voltage	• 90~277 VAC 50/60 Hz
--------------------------	-----------------------

Measurement	• $\leq 100\text{W}$ (Within $\pm 2\text{W}$)
--------------------	---

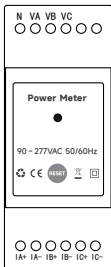
Accuracy	• $>100\text{W}$ (Within $\pm 2\%$)
-----------------	---------------------------------------

Operating	• Temperature: $-20^{\circ}\text{C} \sim +55^{\circ}\text{C}$
------------------	---

Environment	• Humidity: $\leq 90\%$ Non-condensing
--------------------	--

Dimensions	• 90 (L) x 35(W) x 65 (H) mm
-------------------	------------------------------

1 Welcome



PC473-Z-bwr helps you to monitor the power consumption in your facility by connecting the clamp to the power cable. It can also measure Voltage, Current, PowerFactor, ActivePower.

This guide will provide you an overview of the product and help you to get through the installation.

Features:

- Single/3 - phase system compatible
- Measures real-time Voltage, Current, PowerFactor, Active Power and Frequency
- Support Energy Usage/Production measurement
- Lightweight and easy to Din-rail install

2 Wiring

Please make sure the main breaker is off before installing!

1. Check the direction of CT

For Split Core CT: Open the clamp to see the arrow (P1→P2) or (K→L) or you can find it on the sticker on the outside of the clamp. This is the direction of CT. The CT support bi-directional sensing.

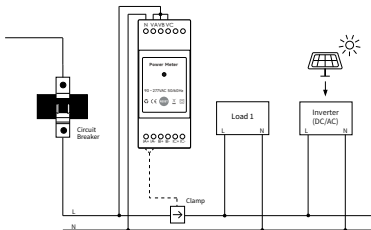


2. Connect AC Input cable to a socket near the Electrical Box to power on the PC473-Z-bwr according to the wiring diagram. And apply the CT on the electric cable and ensure the direction of CT is correct.

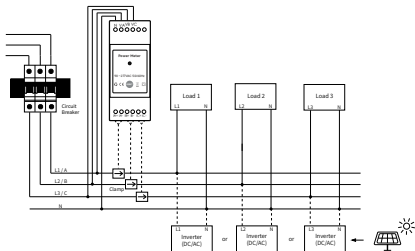
3. To measure energy consumption, the direction of the CT should be consistent with the direction of the electricity current flows. The power value will be positive.

To measure energy production, the direction of the CT should be opposite to the direction of the electricity current flows. The power value will be negative.

4. Please make sure the main power in your facility is off before installing. Follow the schematics below as an example to wire the Power Meter for different phase.



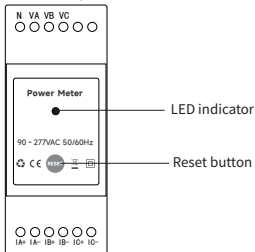
Single-Phase electricity wiring diagram



3-Phase electricity wiring diagram

Note: When installing, please ensure that the circuit measured by CT is in the same phase as the circuit powered by PC473-Z-bwr.

3 Get to know your device



- **Pairing Mode.** When the device is power on, and unpaired state, it will be in pairing mode automatically for 3min, the LED indicator flash green constantly.
- **Quit Network.** Press and hold the reset button for 10 seconds until the LED indicator flashes green 3 times quickly to clear the ZigBee information (energy data will not be cleared). After that, the LED indicator will constantly flash green and wait for pairing.
- **Reset.** Make the "Quit Network" twice in 10 seconds, the LED indicator flashes red and green alternately 3 times to clear the ZigBee information and energy data. After that, the LED indicator will constantly flash green and wait for pairing.

LED indicator

The LED status gives the following information :

LED color	Status	Network
Green	Flash quickly 3 times	Remind to release the button
	Flash constantly	The device is waiting for pairing
	Solid on	The ZigBee network communication is normal
Red	Flash constantly	The ZigBee network communication is abnormal
	Solid on	The device is unpaired state
Red/Green	Flash alternately 3 times	The device returns to factory default setting