

PC321-W

Single/3-phase Power Clamp

Quick Start Guide

Safety Handling

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

- 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 on your own.
- Do not expose the unit or its accessories to flammable liquids, gases or other explosives.

Technical Specifications

Wireless Connectivity

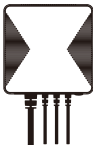
Wi-Fi	• 802.11 B/G/N20/N40
BLE	• Bluetooth 4.2 Low Energy
RF Characteristics	• Operating frequency: 2.4GHz • External antenna • Output Power: Up to +20dBm

Physical Specifications

Operating Voltage	• 100~240 Vac 50/60 Hz
Calibrated Metering Accuracy	• $\leq 100\text{W}$ (Within $\pm 2\%$) • $>100\text{W}$ (Within $\pm 2\%$)
CT Provided	• CT 80A (default) • CT 120A/200A/300A(optional)
Operating environment	• Temperature: $-20\text{ }^{\circ}\text{C} \sim +55\text{ }^{\circ}\text{C}$ • Humidity: $\leq 90\%$ non-condensing
Dimension	• 86(L) x 86(W) x 37(H) mm

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Welcome



PC-321-W Power Clamp helps you monitor the amount of electricity usage in your facility by connecting the clamp on to the power cable. It can also measure Voltage, Current, PowerFactor, ActivePower.

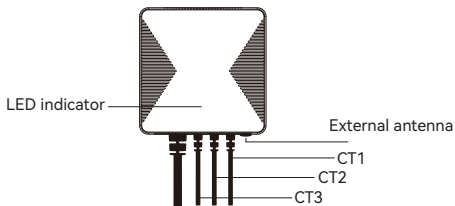
This guide will provide you with an overview of the product and help you get through the initial setup to installation.

Features:

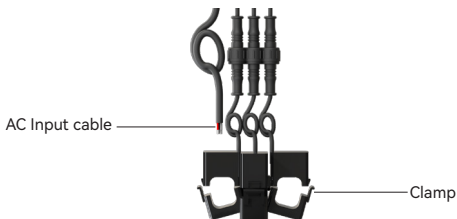
- Single/3 - phase electricity compatible
- Three current transformers for Single phase application
- Measures real-time Voltage, Current, PowerFactor, ActivePower and total energy consumption
- Measure the current temperature of the device
- Suitable for both residential and commercial application
- Lightweight and easy to install

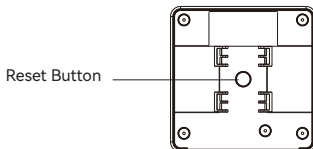
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Get to know your device



CT: Current Transformer Cable





Reset Button

- **Reset.** Press and hold the reset button for 5 seconds until the LED indicator flashes red 3 times quickly to reset network setting. And it will turn to network config mode.

LED indicator

The LED status gives the following information of the power clamp:

LED Status		What it means
Green	Flash Quickly	Device is under network config mode
	Alaway-on	Device has connected to cloud server
Red	Flash Rapidly for three time	Device's network setting has been cleared
	Flash Quickly	Device is trying to connect to the Wi-Fi router
	Flash Slowly	Device is trying to connctet to cloud server

Note:

Flash Quickly: The indicator flashes at 500ms intervals

Flash Slowly: The indicator flashes at 1500ms intervals

Flash Rapidly: The indicator flashes at 100ms intervals

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Installation

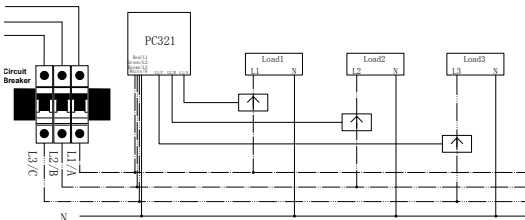
Important safety information!

- The power clamp must be installed and serviced only by a qualified electrical personnel.
- Do not touch the terminals of the device during testing.
- Turn off all the power supply for this equipment before installing.
- Make sure that the power supply is off before connecting or disconnecting it to an auxiliary device.
- Always use a properly rated voltage sensing device to confirm power is off.
- Replace all devices, doors and covers before applying power to the equipment.

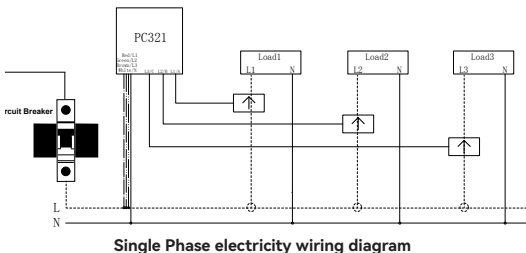
Failure to follow these instructions will result in death or serious injury.

Get started:

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

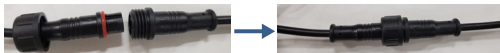


3 Phase electricity wiring diagram

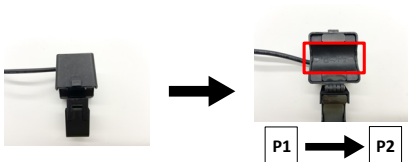


Follow the steps below:

1. Connect AC Input cable to a socket near the Electrical Box to power on the Power Clamp according to the corresponding phase wiring diagram.
2. Attach both ends of the Current Transformer Cables first like the picture shown below. Then spinning the waterproof latch clockwise until both ends have been tightened and secured.



3. Open the clamp as shown below. Apply it on the electric meter cable. The arrow on the clamp should face to the correct direction of the electricity current flows (P1→P2). If the arrow faces the reverse direction, the reading meter will display 0.



Tips about the clamp:

- Cable diameter does not affect usage as long as the cable can pass through the clamp hole.
- The meter has three clamps which can be applied to cable devices for separate measurement. If applied to the same cable, all clamps will produce the same reading.

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Mounting

The Power Clamp has a mounting bracket for mounting purposes.

1. Use the mounting bracket as template to mark the two holes on the wall for installing screws.
2. Screw the mounting bracket onto the wall according to marked location. Install wall plugs if necessary.
3. Locate the hooks of the mounting bracket and line up the hooks with the mounting holes on the Power Clamp. Fit the hooks into the mounting holes as the picture below. Installation is now completed.

