



Smart Clamp/Appliance

User Manual

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Chapter 1: Product

Introduction

Thank you for purchasing Power Tracker Smart Clamp/Appliance. This Power Tracker Clamp/Appliance has a number of functions for electricity estimation and wireless transmission. The meter is able to indicate various information for electrical appliance in use including Total Cumulative Kilowatt Hours, Interval Cumulative Kilowatt Hours, Electricity cost, Elapsed Time and others. It is suitable for electricity data collection or use as a standalone power meter.

- **Measurement function**

The measurement functions for this power meter include Active Power (W), Total Accumulated Electricity Consumption (kWh), Interval Electricity Consumption (kWh), Voltage (V), Current (A), Apparent Power (VA), Power Factor (PF)

- **High Resolution**

Capable of measuring very small electricity power to 0.01W as well as very small electricity energy to 0.001kWh.

- **Great Accuracy**

Electricity Energy (kWh) measure accuracy $\pm 0.5\%$ (At PF=1.0, at Rated Current). Electricity Power (W) measure accuracy $\pm 1\%$ (At PF=1.0, at Rated Current).

- **Power Surge Protection (For Smart Appliance Only Only)**

Built in real zero-crossing switch and soft start power surge protection.

- **Small in Size**

The dimensions are
10.06cm(W)×3.8cm(H)×3.4cm(D).

- **Electricity Cost Calculation**

Together with the Smart Energy Gateway sends data to the Power Tracker website which automatically calculates Total Cumulative Electricity Cost or Interval Electricity Cost, as well as estimating 24hr electricity cost assuming current electricity usage and other information.

Chapter 2: Installing the Adapter

Package Content

Power measurement pack:

- SG3010 Compact Smart Clamp or Smart Appliance
- Quick Start Guide
- CD (containing User Manual)

Important note for using this device



Warning

- Smart Clamp: The maximum current of the CT is 100A.
- Smart Appliance: The maximum current of the Smart Appliance is 10A.
- Do not open or repair the case yourself, please turn off the power immediately and have it repaired at a qualified service center.
- Avoid using this product and all accessories outdoors.

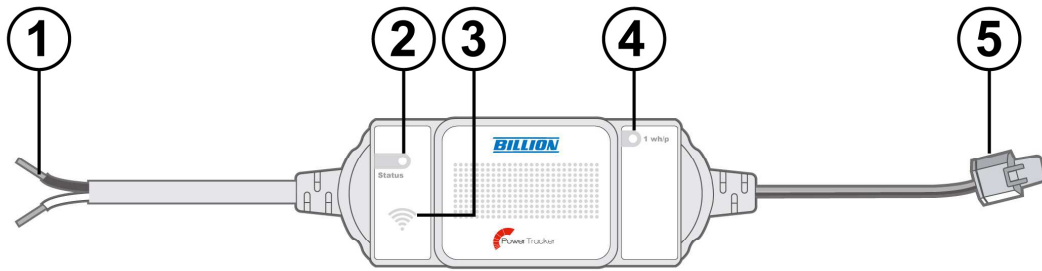


Attention

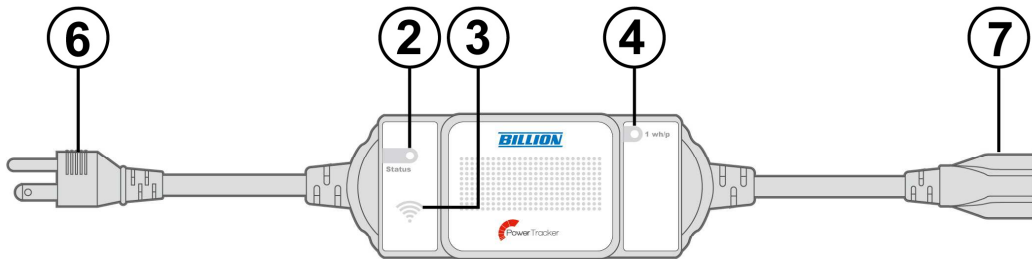
- The communication distance will be shortened if there is a wall or shelter between the smart clamp/appliance and smart energy gateway.

Device Overview

Smart Appliance



Smart Clamp



1. Input Power (100-240V)

Connect to the power supply terminal

2. Status Indicator

Lit solid green when the device is not connected to the Smart Energy Gateway

Flashing once every 3 seconds when the device is connected to the Smart Energy Gateway

3. Hidden Button

Press the hidden button to detect signal strength

Blinking green 5 times when the signal strength achieves the highest level

Blinking less times when the signal is at a lower level.

4. Energy Indicator

Note: it will flash once when the signal achieves consumption accumulated to 1wh (0.001kwh)

5. 1x100A/33.3mA split-core Current Transformer

Install to the electrical wire that you intended to monitor.

6. Input Power (100-240V)

Connect to the power supply terminal

7. Power Outlet

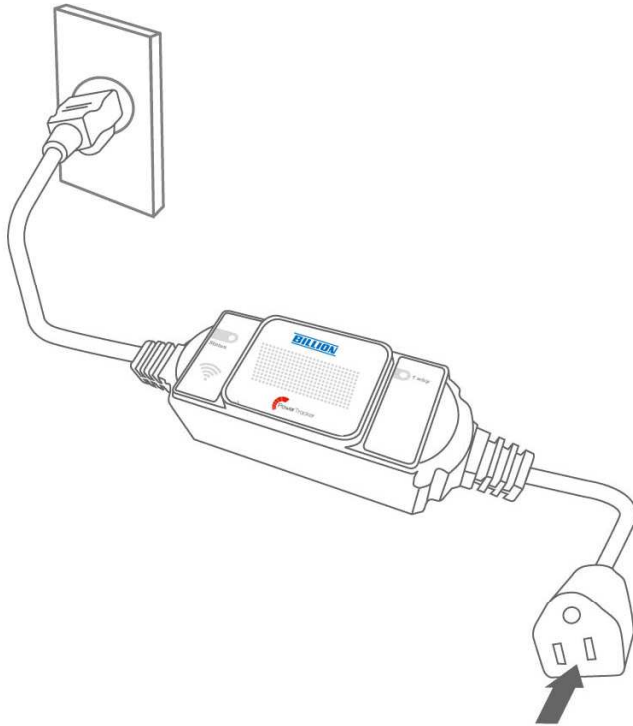
Insert the plug of an electrical appliance that you intended to monitor into the product's outlet

Connecting the Power Meter

It is easy to connect SG3010 T1/T3 simply by performing the following instructions:

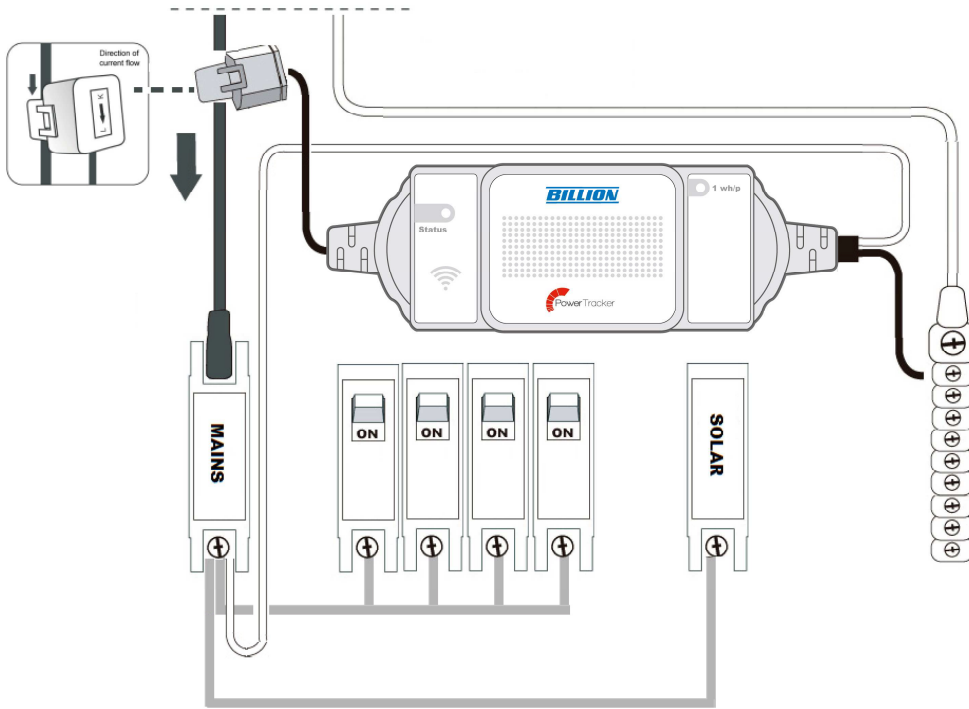
Note: Ensure that the Power Meter is turned off or the power supply is cut off before beginning setup.

Smart Appliance



1. Insert the plug of an electrical appliance that you intended to monitor to the Smart Appliance's outlet.
2. Plug the Smart Appliance directly into a wall outlet/socket.
3. Set up the connection between the Smart Appliance and Smart Energy Gateway. (Please refer to **Networking Setup** section).
4. After use, extract the appliance's plug and then pull out the plug from the wall to complete the power-off procedure.

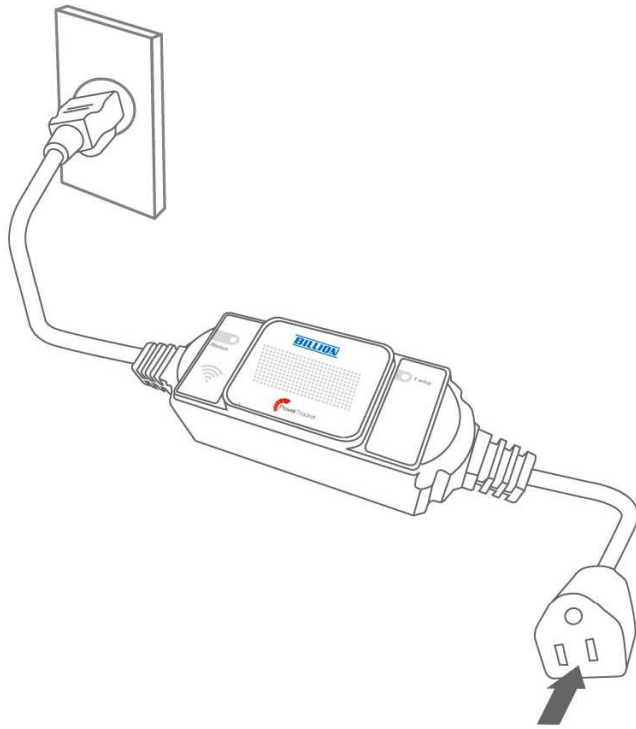
Smart Clamp



1. Following the instructed electricity current direction at the bottom of the split-core CT to install the CT to the electrical wire.
2. Connect the 2 input power ends to the appropriate terminal, the Brown wire to “Active”, and the Blue wire to “Neutral”. (Please ensure the screws and the wires connected to the terminals are secured)
3. Turn on the power after ensuring the CT and wires are secured.
4. Set up the connection between the Smart Clamp and Smart Energy Gateway (Please refer to **Networking Setup** section).

Networking Setup

Refer to the steps as below:



Note: When the Status Control Indicator lit green indicating that it is not connected. You need to create a connection with the Power Meter and Gateway.

Note: If this product is used for the first time, please do the following.

1. Press the small brown Zigbee button on the rear of your Smart Energy Gateway for 1 second, the Zigbee LED should now start flashing quickly indicating that it is ready to sync with your Smart Clamp/Smart Appliance. **(please refer to your Smart Energy Gateway manual)**
2. Press and hold the Hidden Button of all the Smart Clamps and/or Smart Appliances you want to connect at the same time for 1~3 seconds.
3. Once the Status Indicator light starts to blink, this is indicating that the sync has begun, and the Smart Clamp and/or Smart Appliance are attempting to connect to the Smart Energy Gateway.
4. After a short wait, the Status Indicator light will now flash once every 3 seconds indicating the device is connected to the Smart Energy Gateway.
5. If the Status Indicator light is lit solid green again, please repeat the **Networking Setup** process again from step1.

What do I do next?

Note: Once you have successfully installed and connected all your Power Tracker devices you are ready to register your devices and started viewing your power readings via the Power Tracker website.

1. Visit <http://www.powertracker.com.au> and create a user account.
2. Once you have created a user account follow the instructions to register all your Power Tracker Products.

Troubleshooting

1. Can't sync the Smart Clamp or Smart Appliance with the Smart Energy Gateway.

The distance between the Smart Clamp and Smart Energy Gateway may be too far. Please relocate the Smart Energy Gateway closer and try again. If problems still persist you can purchase a Smart Repeater to boost the wireless signal. Please contact your dealer to purchase a Smart Repeater.

2. The Smart Appliance is powered up but my electrical appliance is off.

The Smart Appliance has an inbuilt relay which can be controlled to turn devices on/off. Please turn the relay back ON via the Smart Energy Gateway interface or power down the smart appliances for a few minutes to reset the relay.

Product Support and Contact Information

Most problems can be solved by referring to the **Troubleshooting** section in the User Manual. If you cannot resolve the problem with the **Troubleshooting** chapter, please contact the dealer where you purchased this product.

Contact Power Tracker

<http://www.powertracker.com.au>