

# **MARSTEK**

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## **Three phase meter TPM-100CTW USER MANUAL**



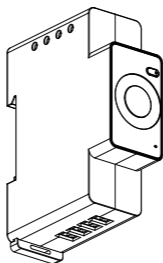
Please read this user manual carefully before use and keep it properly.



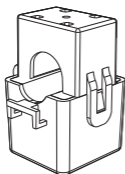
# Product Guide

## 1 Packing List

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TPM-100CTW\*1



Current transformer\*3

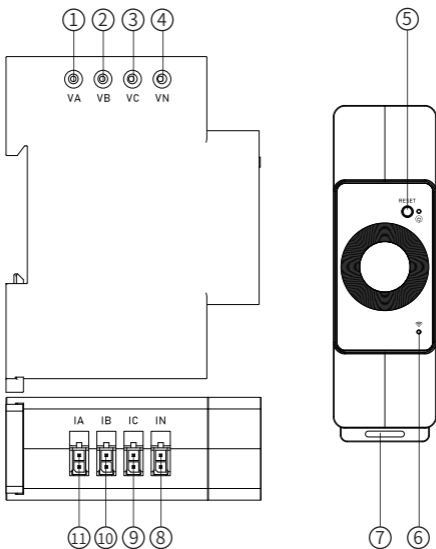


User manual

## 2 Product Appearance and Overview

The TPM-100CTW (device) is a DIN-rail mounted three-phase energy meter. It features a built-in antenna for stronger signal strength and can be used in conjunction with various MARSTEK products. Additionally, it allows you to monitor your household's real-time power consumption independently.

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1	A-Phase Voltage Input
2	B-Phase Voltage Input
3	C-Phase Voltage Input
4	N Line Interface
5	Power Indicator/Reset
6	WIFI Indicator
7	DIN Rail Mounting Clip
8	N-Phase CT Interface
9	C-Phase CT Interface
10	B-Phase CT Interface
11	A-Phase CT Interface

### 3 Specification

Electric Parameter	
Model	TPM-100CTW
Power Supply(AC)	100-260V,50/60Hz
Supply voltage deviation	$\pm 10\%$
Device Power Consumption	$< 3W$

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Measurement Specifications(per phase)	
Measurement voltage(VA-VN, VB-VN, VC-VN)	100~260V
Measuring voltage frequency	50Hz/60Hz
Voltage Measurement Accuracy	$\pm 1\%$
Maximum Single-Phase Measurement Current (IA B C)	100A
Current Measurement Accuracy	$\pm 1\%(5-100A)$

Wireless Connection	
Wi-Fi protocol	802.11b/g/n(20)
Wi-Fi Range	Up to 100m outdoors(Depends on local conditions)
Bluetooth Range	Up to 50m outdoors(Depends on local conditions)

RF Band	2.4GHz
Bluetooth	5.2

Operating Environment	
Operating temperature	-20°C~40°C
Altitude	≤2000m
Operating humidity	5%~80%

Device Appearance	
Conductor stripped length	3 to 4mm
Dimensions	65.4*26.5*83mm
Weight	0.2KG
Installation	DIN rial
Maximum Torque for Screw Terminals	0.4Nm/4,43lbs
Enclosure Material	Plastic
Enclosure Color	Black
Pollution degree	III
Protection level	IP20

## Light Status

Green	Steady On	Off
	Power supply available	No power supply
Blue	Steady On	Off
	Network configuration available	No network configuration

## 4 APP

MARSTEK APP can connect all your devices via Bluetooth to track your energy use and production in real time, dynamically display the status data of the device in real time, and control the energy of the device.



APP usage instructions



APP Download

## 5 User Guide

This document contains important information regarding the installation and safe use of this device. Please read this guide



and any accompanying documents carefully before beginning installation. Failure to follow the installation procedure may result in malfunction and damage to your device.

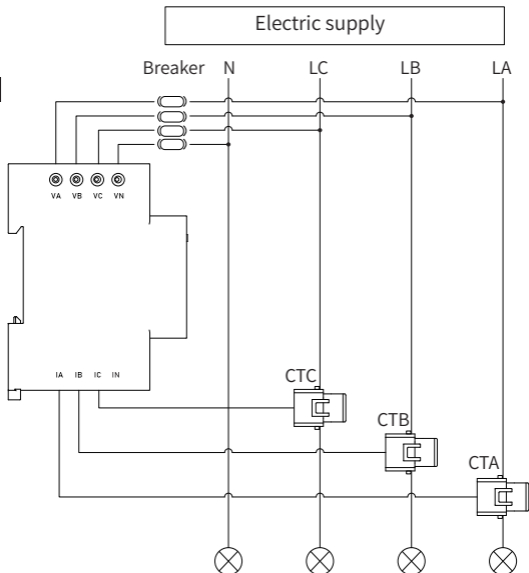
**Caution!! Installation and wiring must be performed by professional.**

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1. Verify the accessory list (three CTs).
2. Check if the device is damaged.
3. Confirm the wiring arrow marking, with the arrow pointing towards household appliances.
4. Warning! Risk of electric shock! Do not connect the current sensors to the circuit before connecting them to the TPM-100CTW, even if the current sensors are only connected to the cable separately. The current sensors must be connected last.
5. Warning! Risk of electric shock! Even if the device is powered off, the current sensors may still have induced voltage. When moving the device, ensure the device is completely powered off and disconnect the current sensor clips first.
6. Warning! Do not connect the device to circuits exceeding the maximum rated load.
7. Warning! Connect the device only in the manner indicated in the instructions. Any other method may damage the device.
8. Warning! If using single-phase only, connect it to the A-phase voltage and A-phase current terminals of the device.
9. Warning! Connect the measurement wires of the device first, and then connect the power supply wires last.

## Connection Diagram

Note: Strictly follow the wiring diagram!



### Attention:

1. The optimal distance between the device and the router is within 5m.
2. There should be no obstructions or walls between the device and the router.

3.The recommended parameters for the open circuit breaker are working voltage > 400VAC and working current > 1A.



## Warnings!

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### Product Safety Precautions

Please pay careful attention to the following safety precautions:

1.Do not place the product in highly humid or dusty environments.

2.Do not disassemble the product in any way.

3.Do not place heavy objects on the product or apply strong impact to it.

Dispose of the product properly in accordance with regulations.

Do not dispose of it as household waste to avoid potential hazard

### Chemical Composition of Toxic and Harmful Substances

Part Name	Toxic and harmful substances or chemical elements					
	Pb	Hg	Cd	Cr(VI)	PBB	PBDE
Product Shell	O	O	O	O	O	O
Circuit Module	X	O	O	O	O	O
Small Hardware	O	O	O	O	O	O

O : The content of hazardous substances in homogeneous materials all components are limit requirement specified in GB-T 26572.

X: The content of hazardous substance in at least one of the average materials of the part exceeds the limit requirement of GB-T 26572, and there is no mature alternative in the industry at present, which meets the environmental protection requirements of the EU RoHS directive.

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This information for reference purposes only and does not represent a binding agreement. Product (Color, Size, OSD, etc.) in kind prevail.

## — Warranty Card —

EN This product, under normal use, will not be affected by defects in materials or workmanship. This warranty covers the entirety of the product, and we do not assign or authorize anyone to be responsible for any other products.

### **Warranty period**

Product warranty period of 10 years. In all cases, the warranty period starts from the date of purchase by the consumer. In order to ensure the start date of the warranty period, the consumer needs to provide proof of purchase or other reasonable supporting documents.

### **The following conditions are not covered by the warranty**

- 1.The appearance of the product is damaged after use.
- 2.Unauthorized disassembly and maintenance of non-professionals.
- 3.Performance problems caused by human factors.
- 4.Damage caused by natural disasters, lightning Strikes, accidents and other irresistible factors.

### **How to get warranty service**

You can contact our customer service through our official website, Thank you for your cooperation!

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