

# Power Monitor Recorder User Manual

Model: PWX-101

The image displays the web interface of the Power Monitor Data Recorder (PWX-101) and the physical device. The web interface shows the following data:

- Project: Los Angel CA UTC-8
- IP Addr: 192.168.1.131
- Voltage: 110 VAC
- AMP: 0.14 A
- Power: 15 Watt
- Device: 1.50 KW
- Ratio %: 1.05 %
- Today: 0.88 kWh
- Date: 2023 / 12 / 9
- Time: NOW 22 : 46 : 36
- Weekly Power Chart: Shows Power 15 Watt (blue bars) and Week Sum 31.21 kWh (red line).

The physical device is a black rectangular unit with a screen displaying the QR code and the ID 0017CF60. It has a power button, a WiFi Link button, a WiFi ID button, and a RESET button. There are also two indicator lights (red and blue) and a power switch on the right side.

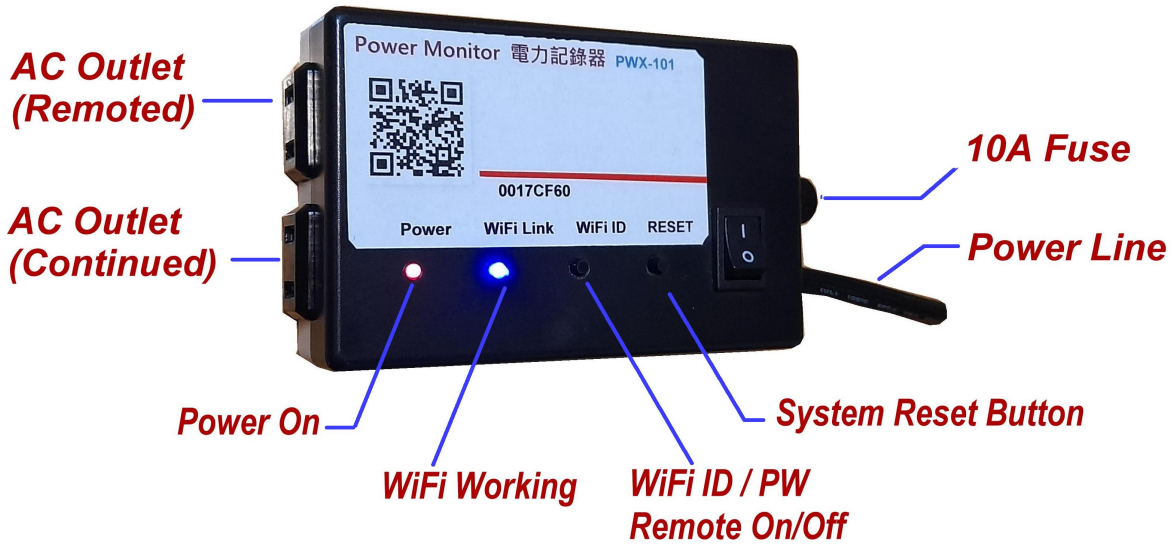
Updated: 2023 / 12 / 5 Ver: 1.385

*Primestar Energy*

# 1. Introduction

## Power Monitor / Data Recorder

PWX-101



## Power Monitor PWX-101 Operations

1. Put on power, Turn Power On
2. Search WiFi find device, set WiFi SSID Password ( Only first time installation needed )
3. Scan QR Code, Into web control pages and works





FUSE Socket

AC Power Line  
( 100 -250V )

AC Power Switch

- Power LED :** Red Power On Indicator  
**WiFi Link :** Blue WiFi Communication Indicator
- RESET :** System Manual Reset  
**WiFi ID :** WiFi ID SSID Reset / Manual Switch Power On/Off
- AC Outlets :** Upper for Remote On / Off, Timer Control Outlet  
Down for Normal continuously on outlet

- > **Put-on AC socket :** Turn on power switch, Red LED on indicated power-on working now, and the blue WiFi LED on / flashing , means WiFi already working.
- > **WiFi setup :** First time installation need proceed the WiFi pair-up and enter the WiFi SSID / Password then could into the web control pages.
- > **Scan QR Code on top :** After complete the WiFi setting, User may scan the QR-Code all time to enter the web control pages automatically.  
Or may save the web short-cut like\_ 192.168.x.x address for next time easily fast recall the Web Control Pages.

## 2. Installation



- > **Put-on AC socket :** The device applied for AC100 - 250V power line socket  
After power-on the Red LED on, and blue WiFi LED on, system ready for work.
- > **Two AC outlets :** The upper AC outlet is work for Remote On / Off and Timer Control outlet., and down outlet is continuously on outlet.  
All the outlets are included in the power monitor function.
- > **Power On OK, Go to WiFi setting :** Now the PWX-101 ready work, but still need setup the WiFi environment for first time use,

### 3. WiFi Setting

- > **Clear the old WiFi setup :** User may clear the previous WiFi setting data by press the WiFi ID button for 10 seconds until the WiFi LED On then return to original status.
- > **Log-in the PWX-101 WiFi hot spot :** Turn on the WiFi hot spot search function, search the PWX-101 hot spot entrance like ...



> “ESP32\_XXXXX” The head ESP32 WiFi hot spot is the device chip ID and add with your machine code, please select it for enter WiFi configuration.

> System will show there is no internet service but it is ok, we just only use it to enter your home WiFi SSID & Password only needed.

> Scan the top QR-Code machine ID for WiFi configuration\_



> Scan the top QR Code of machine ID, use browser to open web page for WiFi Manager and select WiFi configuration.

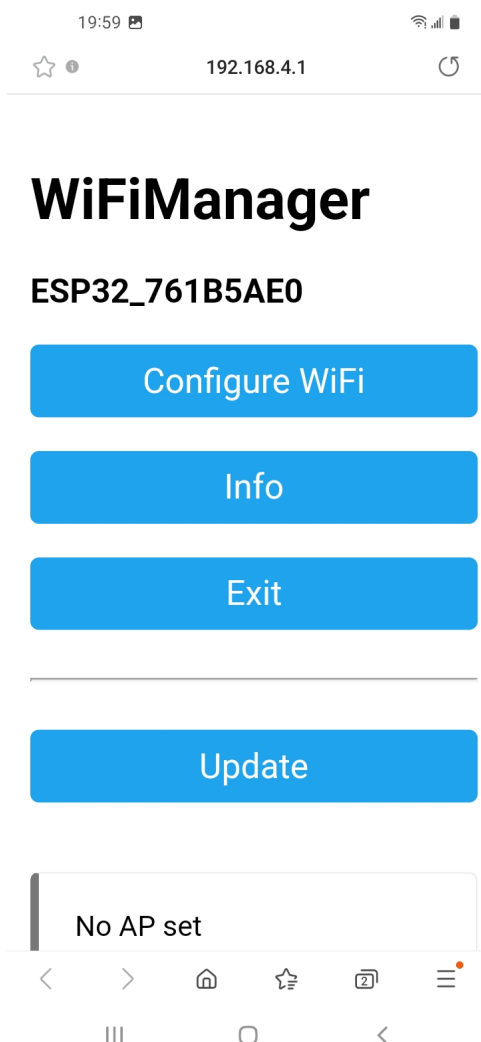
> Or user may use browser and type\_ 192.168.4.1 for into WiFi Manager page by manual operate.

> **NOTICES:**

Now procedures only available when user connected the ESP32 hot-spot complete.

If it 's not showed, please back previously step to choice the ESP32\_ xxx of WiFi service again to complete web setting.

> Enter the ESP32 WiFi Manager and select <Configure WiFi > for PWX-101 to home WiFi router connect setting.



19:59



Mi\_FH-2F



goforwildnetis2.4G



ASUS



CHT 20



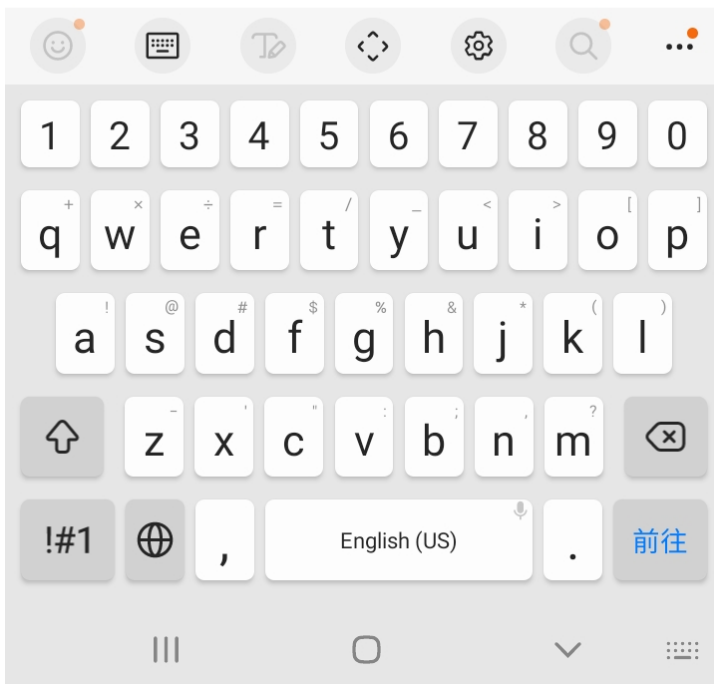
SSID

TP-LINK\_60EE50

Password

.....

Show Password



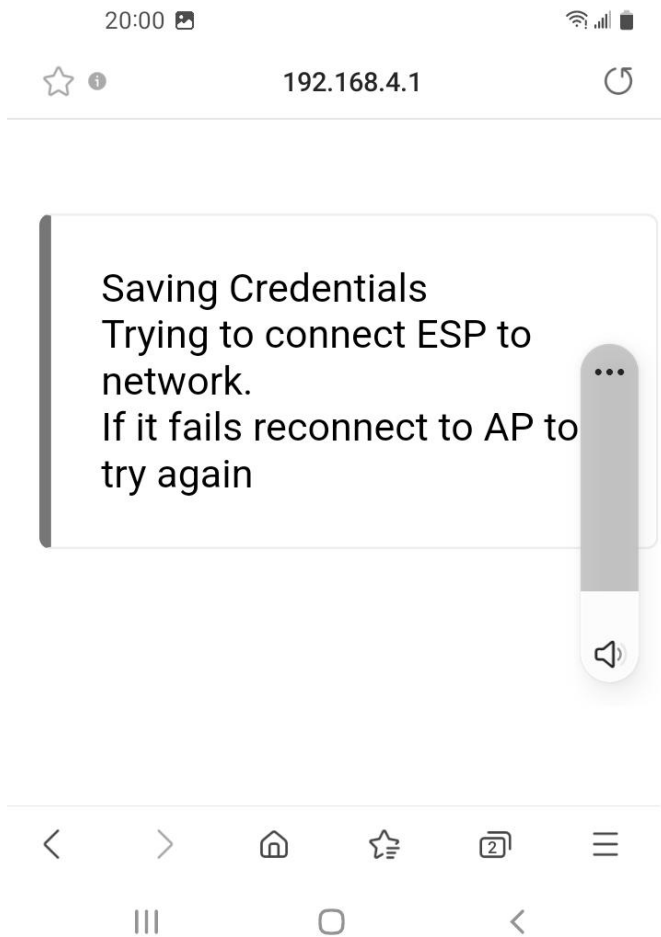
> Select your home WiFi SSID for PWX-101 to connect and enter the password then SAVED.

> **NOTICES:**

Now we selected WiFi hot spot that must be the same as later which user want to enter the PWX-101 web control functions.

If not the same WiFi SSID router that may cause fire wall blocked and unable to connect.

> The WiFi setup complete OK !



> Shown as this means WiFi Configure completed, when next time scan QR code it will go to the web page directly.

> When the WiFi configuration not success, or user and PWX-101 not in the same WiFi hot spot, it may cause miss-connection and unable to reach the web pages service.

> When too many WiFi hot-spot at home, be sure that user operation computer with PWX-101 in the same WiFi SSID router to make sure the web connection available all time.

> Please repeat the upper procedure for complete the WiFi SSID & Password setting.

> Again scan top QR Code for enter PWX-101's web function pages.

> When WiFi setting complete, after scan QR code it will show the connected IP address which get from home WiFi router, and into web page automatically when user opened browser.

> OK! Next for web function pages!







> WiFi Setup completed !

Congratulations, when you success enter the web control page of PWX-101, that means system had already work normally now.

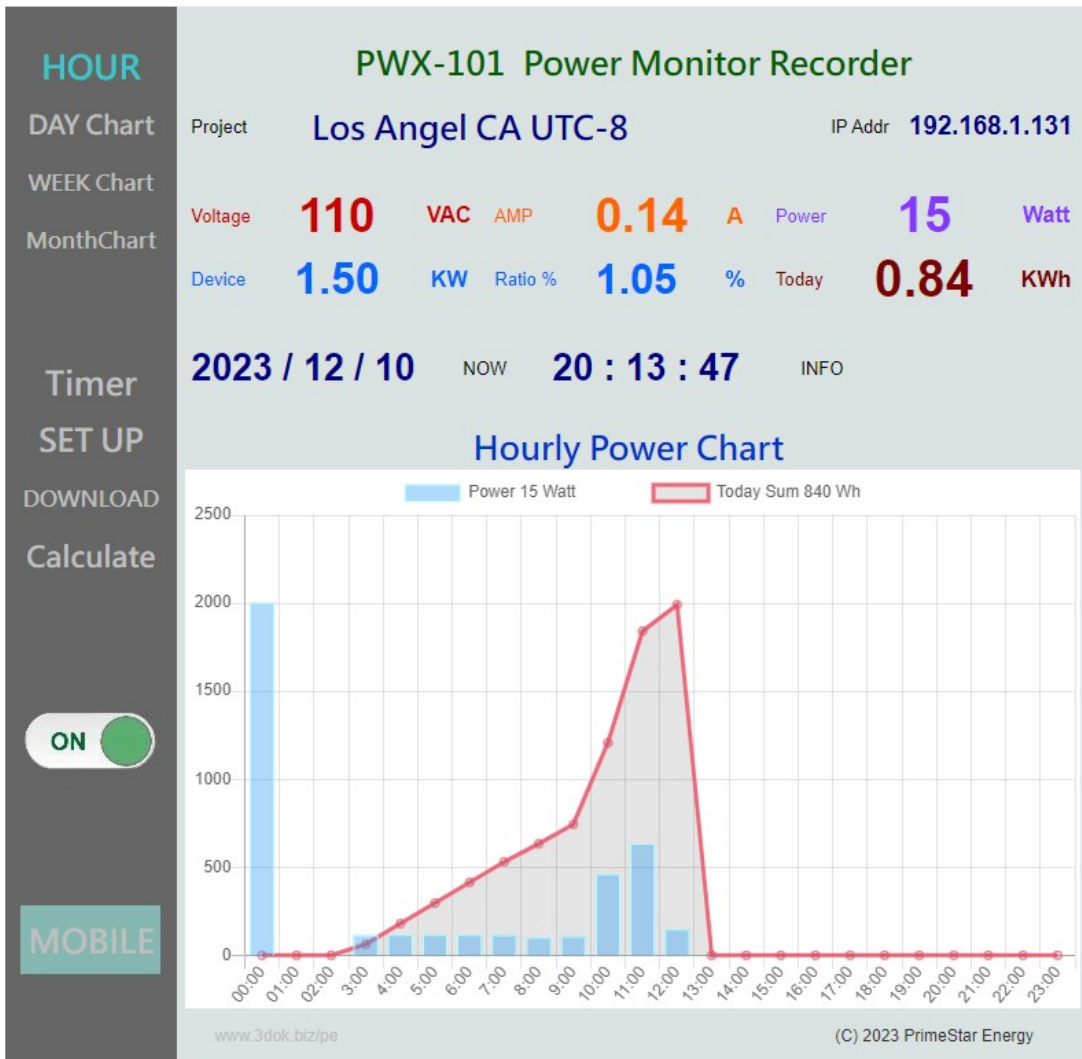
> Any time user just scan the QR code then into the web page directly like this.

Or user may save the web IP address which shows on the page\_ 192.168.x.x as short-cut, then next time can into web page quickly.

> The IP address like\_ 192.168.1.30 is the web address which get from users home WiFi router, so you may save the address as short-cut for directly open this address into the PWX-101.

> WiFi Configuration completed OK !

## 4. Functions




> HOME : [Hourly Power Chart](#) Displays today's hourly power consumption lists chart, Blue is Power Watt, Red is Power Sum in Watts / Hourh.

Left function : [HOUR Chart](#) Today / Hour Chart

[DAY Chart](#) Daily Chart

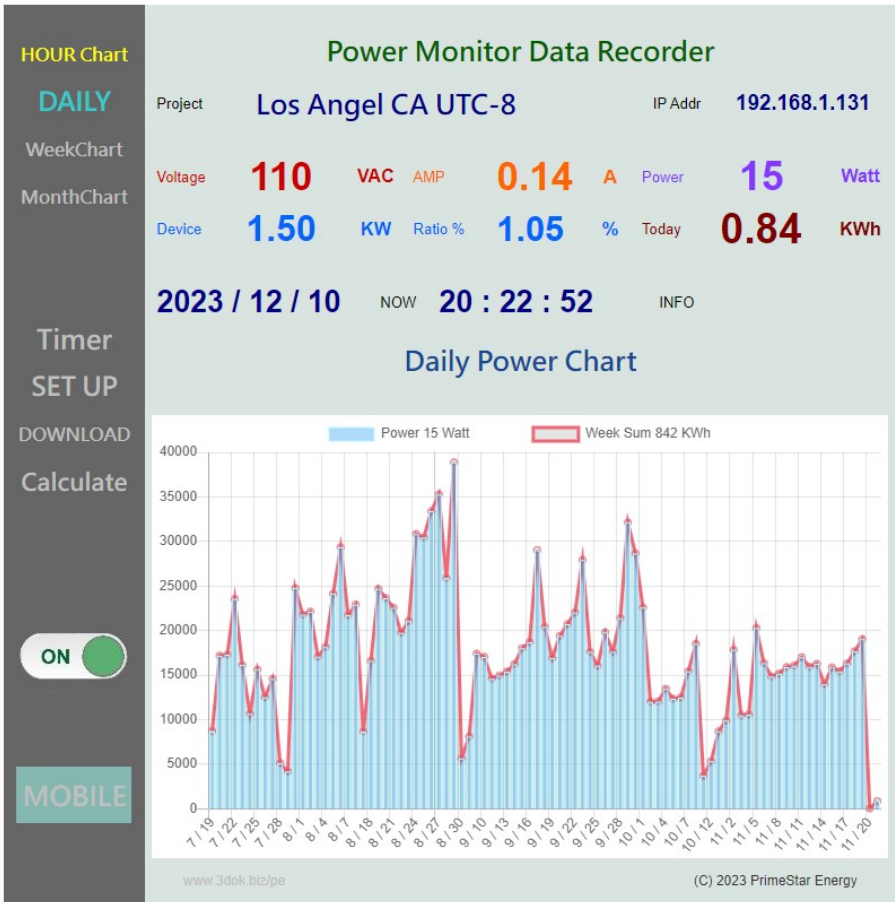
[WEEK Chart](#) Weekly Chart

[Month Chart](#) Monthly Chart

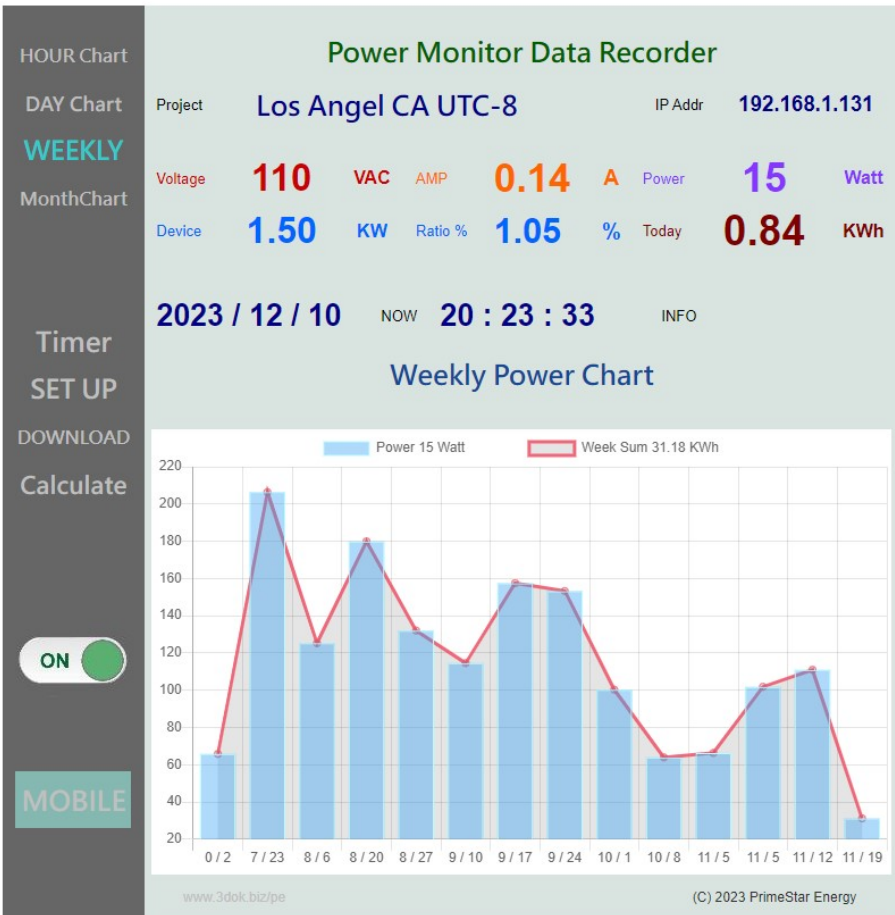
<b>Timer</b>	Timer setup page
<b>SETUP</b>	User information setup
<b>DOWNLOAD</b>	Charts Upload / Download
<b>Calculate</b>	Energy Calculator
<b>MOBILE</b>	Cell phone mobile pages
	Remote control AC outlets On / Off .

Real-time data: **Power Line Location:** User application names.

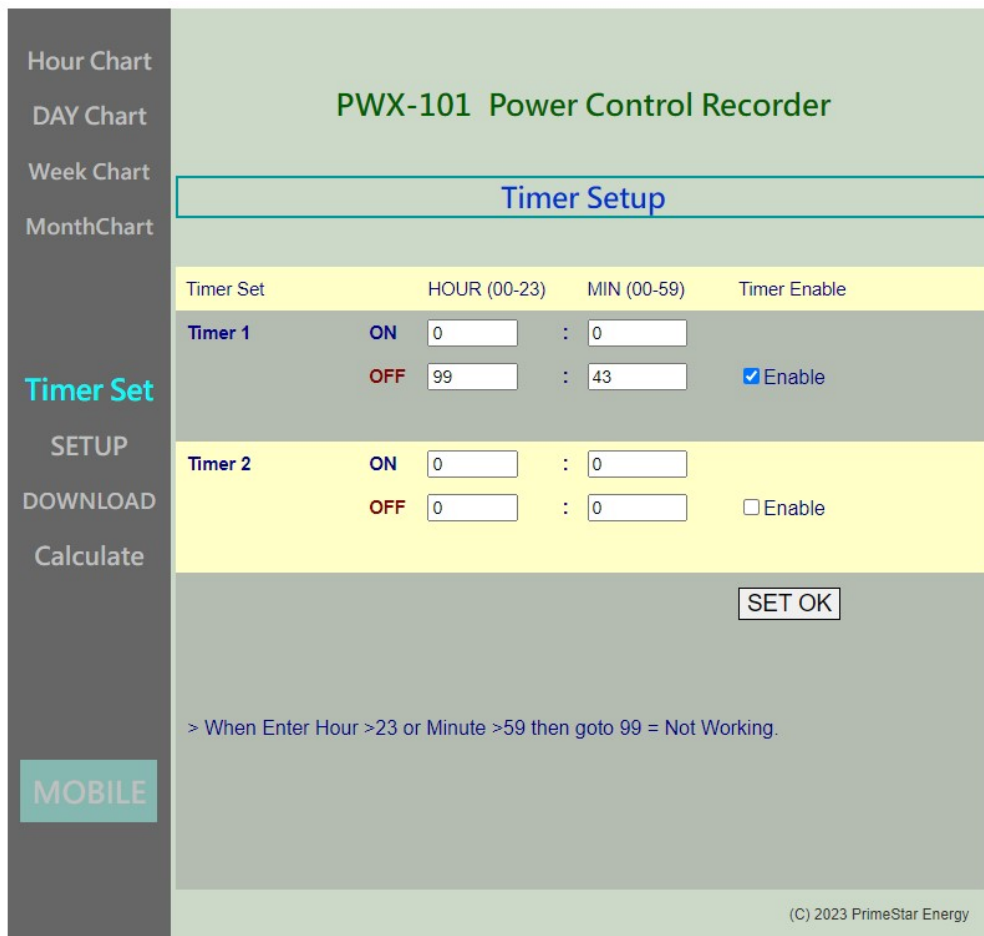
<b>IP Address</b>	<b>192.168.1.14</b> The web connecting address.
<b>Voltage</b>	User's home AC power line voltage, Default is 110V.
<b>AMP</b>	Current power ampere values.
<b>Device</b>	Maximum power supply value, default is 1.5KWh.
<b>Power</b>	Current measured power consumption of AC Watts.
<b>Ratio%</b>	The Consumption / Maximum ratio%.
<b>Today</b>	Today's power consumption summary in KWh.



> Daily / Weekly power recorded chart,



> Displays the Day / Week / Month power recorded chart,



> Timer Setup Page\_ Two timer control of Timer1 / Timer2 for setup

**ON time :** Hour (00-23) : Minute (00-59) Timer\_On

**OFF time :** Hour (00-23) : Minute (00-59) Timer\_Off

**Enable :** Click for Timer control enabled.

HOUR

DAY

WEEK

MONTH

Timer

**SET UP**

DOWNLOAD

Calculate

MOBILE

## PWX-101 Power Monitor Recorder

Function Setup

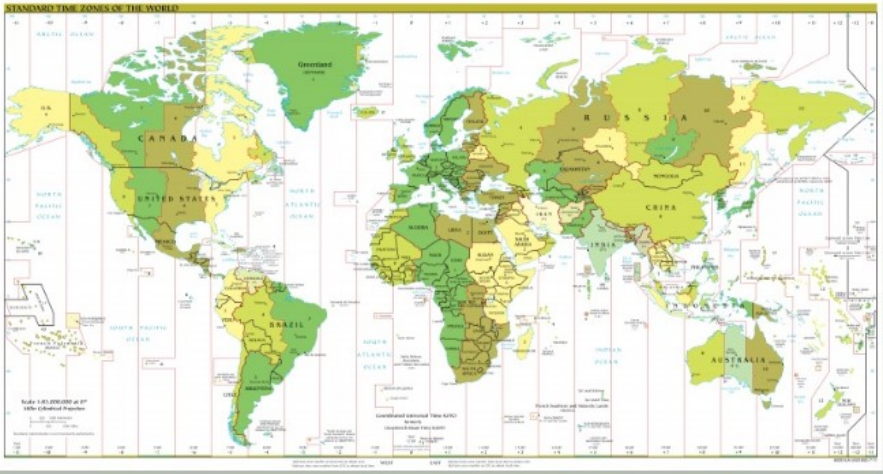
Project

Voltage  VAC

Capacity  Watts

Time Zone  SET

Version PWX-101 Power Monitor Eng ver\_1.385
2023 / 12 / 5

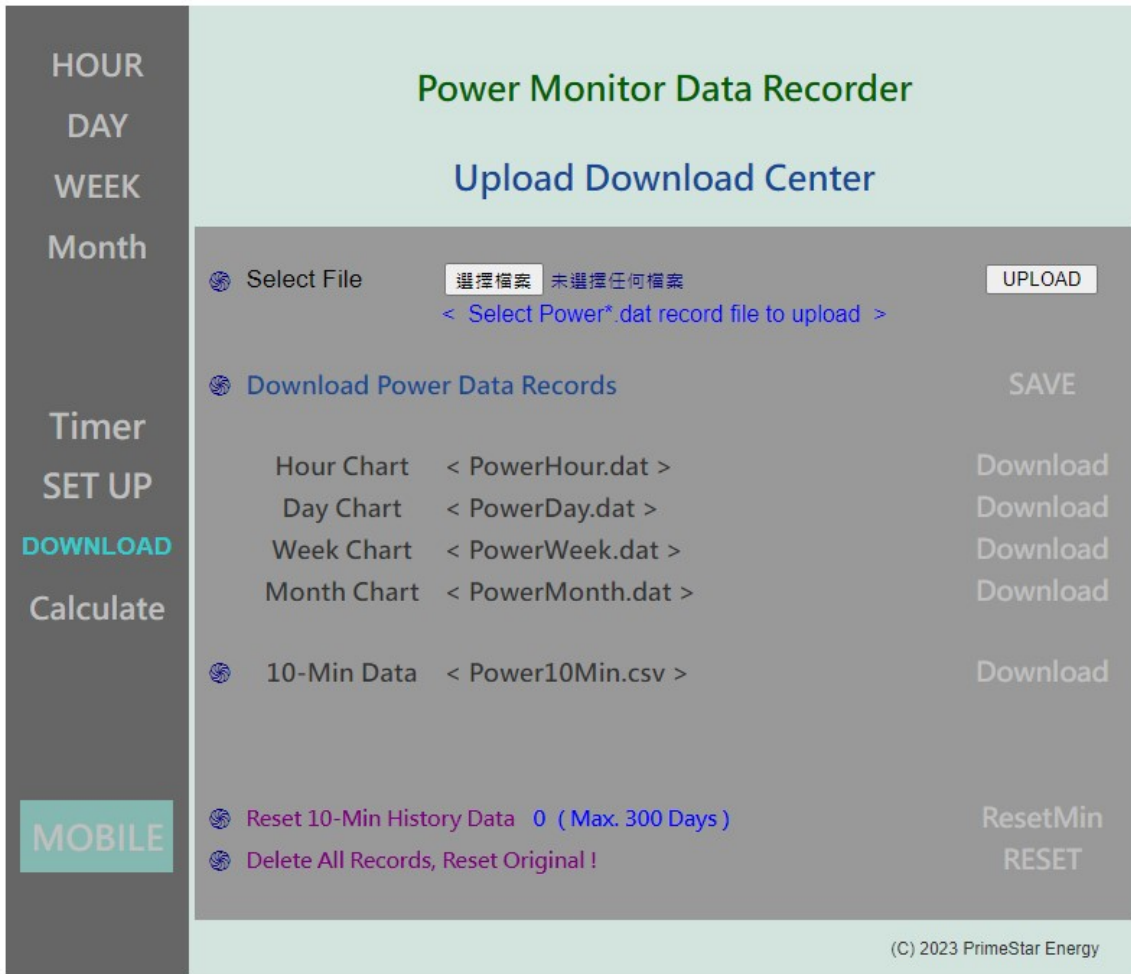


www.3dok.biz/pe      System      (C) 2023 PrimeStar Energy

> **User Setup :** For Modify / Save user's information.

- Project      Enter the user's application name.
- Voltage      Enter the power line AC voltage, Default is "110" V.
- Capacity      Enter the maximum output capacity. Default is "1500" Watts.
- Time Zone      Setting the user's home time zone, for auto time correction.
- Version      Product version code.

> **SET OK :** Setup completed, Save user's data !



> [Upload / Download page](#) : Hour / Day / Week / Month charts file server.

**Select for Upload** Upload files from user's local computer.

**Download Power Data Records** Update all files to newest before download.

**Hourly data < PowerHour.dat >** Hour / Today's hourly chart **File Download**

**Dialy data < PowerDay.dat >** Day Daily **Download**

**Weekly data < PowerWeek.dat >** Week Weekly's **Download**

**Monthly data < PowerMonth.dat >** Month Monthly's **Download**

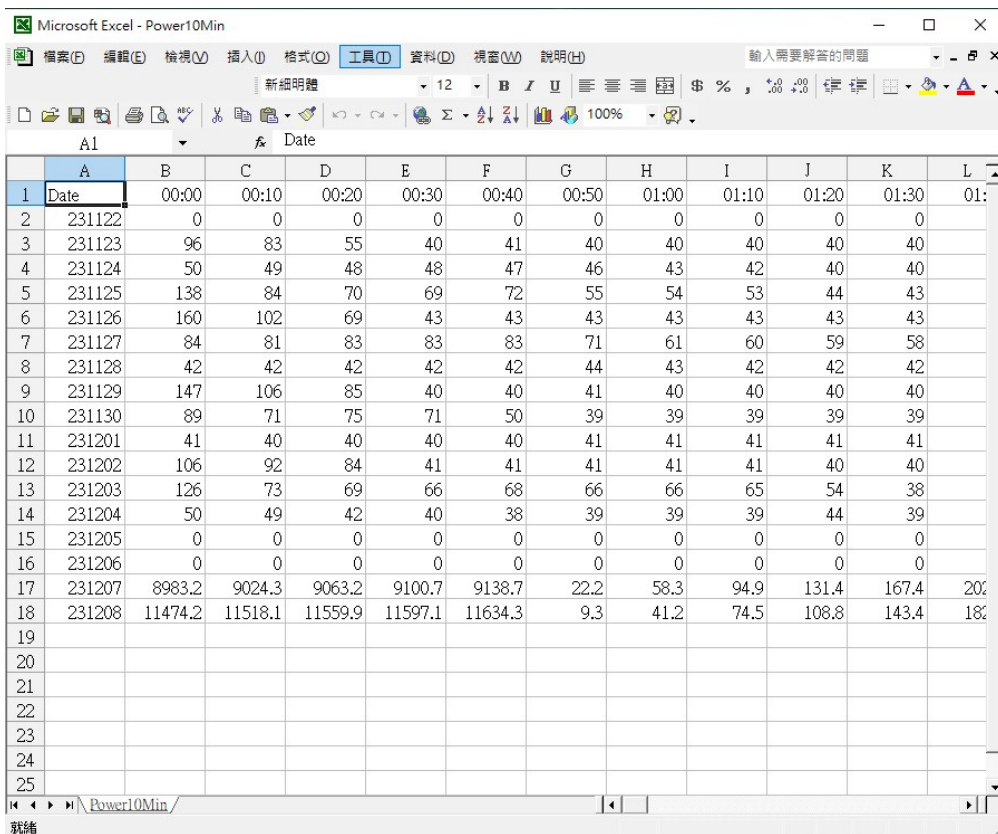
**10-Min Data < Power10Min.csv >** 10-Minutes --- Excel --- **Download**

**Reset 10-Min History Data**

Reset the 10-Min history data only.

**Delete All Records, Reset !**

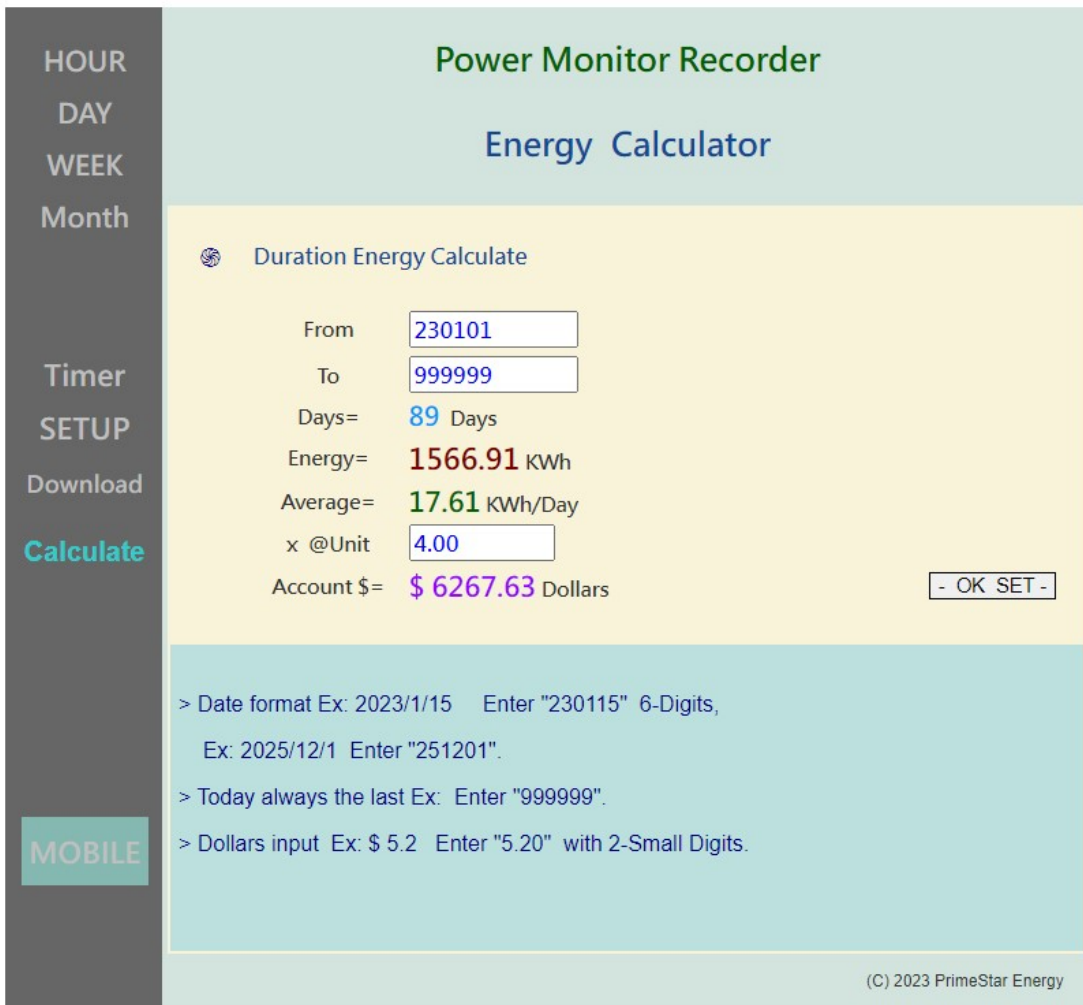
Delete all data, reset to original status.



	A	B	C	D	E	F	G	H	I	J	K	L
1	Date	00:00	00:10	00:20	00:30	00:40	00:50	01:00	01:10	01:20	01:30	01:40
2	231122	0	0	0	0	0	0	0	0	0	0	0
3	231123	96	83	55	40	41	40	40	40	40	40	40
4	231124	50	49	48	48	47	46	43	42	40	40	40
5	231125	138	84	70	69	72	55	54	53	44	43	43
6	231126	160	102	69	43	43	43	43	43	43	43	43
7	231127	84	81	83	83	83	71	61	60	59	58	58
8	231128	42	42	42	42	42	44	43	42	42	42	42
9	231129	147	106	85	40	40	41	40	40	40	40	40
10	231130	89	71	75	71	50	39	39	39	39	39	39
11	231201	41	40	40	40	40	41	41	41	41	41	41
12	231202	106	92	84	41	41	41	41	41	40	40	40
13	231203	126	73	69	66	68	66	66	65	54	38	38
14	231204	50	49	42	40	38	39	39	39	44	39	39
15	231205	0	0	0	0	0	0	0	0	0	0	0
16	231206	0	0	0	0	0	0	0	0	0	0	0
17	231207	8983.2	9024.3	9063.2	9100.7	9138.7	22.2	58.3	94.9	131.4	167.4	203.4
18	231208	11474.2	11518.1	11559.9	11597.1	11634.3	9.3	41.2	74.5	108.8	143.4	180.0
19												
20												
21												
22												
23												
24												
25												

- > **Download History Data File :** The 10-Min History data file, user may download the "Power10Min.csv" file and open by Excel as shown, to make the colorful statistic charts as power analysis documents.





> **Energy Calculate** : Statistics of power of bill calculation for a period.

**From / To** : Set duration date from – to for calculation.

**230509** **Date Format** : Date ex. “2023/5/9” Enter “230509” for 6-Digits.

**999999** : When input the Date ex. “999999” for always the last date.

**\$ 3.45** **Unit price Format** : Unit price Ex. “\$ 4.1” Enter “4.10” for 2-small digits.

**OK SET** **Start calculate** : Input complete, press **OK SET** , start calculation.

## Power Monitor Recorder

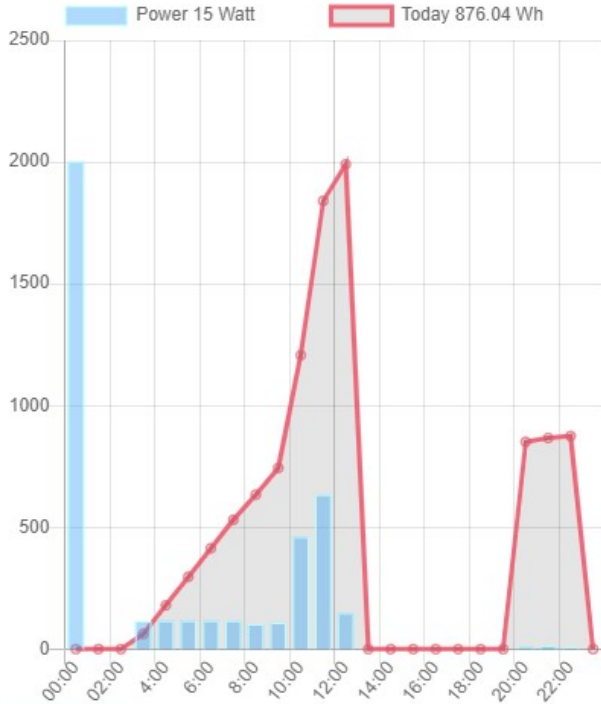
Project: **Los Angel CA UTC-8**

**0.14**      **15**      **0.88**

Amp                  Watts                  KWh

2023 / 12 / 9                  22 : 32 : 19

### Hourly Power Chart



**HOUR**   **DAY**   **WEEK**   **MONTH**   **SETUP**

## Power Monitor Recorder

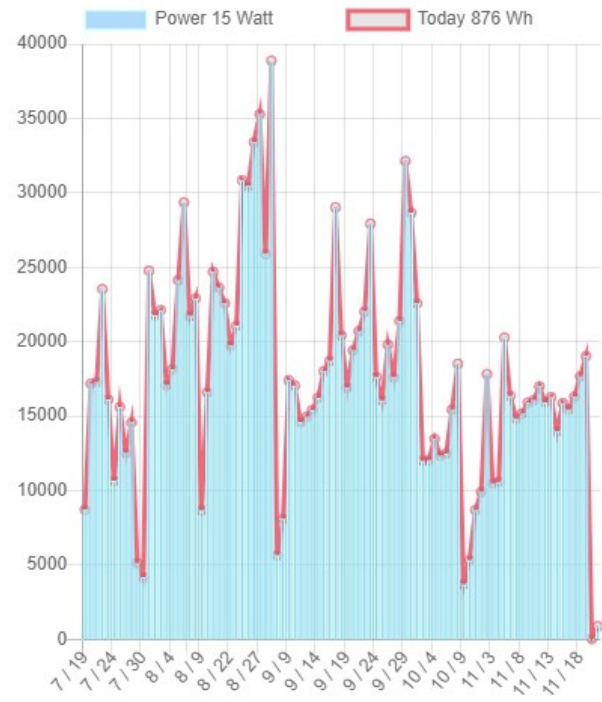
Project: **Los Angel CA UTC-8**

**0.14**      **15**      **0.88**

Amp                  Watts                  KWh

2023 / 12 / 9                  22 : 32 : 47

### Daily Power Chart



**HOUR**   **DAY**   **WEEK**   **MONTH**   **SETUP**

> **MOBILE pages** :    Hourly / Daily / Week / Month data graphs, real-time information.

> **Web Page Lagged** :    When the WiFi signal weak or blocked, the web page will display delay or slowly, user may try F5 or reload to refresh page again for re-connection.

Some times when system flash working maybe cause WiFi link lagged, but wait for some Seconds will remain normal soon.

## 供電記錄器 Power Recorder

Project: **Taiwan 台灣 UTC+8**

**0.30**

Amp

**32**

Watts

**0.01**

KWh

**2023 年 2 月 4 日**

**14 : 47 : 49**

### 功能設定 Function Setup

Project

Time Zone  SET 設定

Power **Timer setup** **ON** 

Upload Upload record charts to PWX [Hint](#)

Download Download record charts. [Hint](#)  
< PowerDay.dat >  
< PowerWeek.dat >  
< PowerMonth.dat >

RESET Reset clear all datas ! [Hint](#)

Download **Goto DOWNLOAD Page** **GO**

**HOUR**

**DAY**

**WEEK**

**MONTH**

**HOME**

> [MOBILE Setup page](#) : Update / Save user inputs.

> **ON**  : Power remote On / Off switch.

> **Timer setup** : Enter Timer Setting Page.

# Power Monitor Recorder

Project: **Los Angel CA UTC-8**

**0.14**

Amp

**15**

Watts

**0.88**

KWh

2023 / 12 / 9

22 : 35 : 58

## Timer Setup

Power

On / Off Time set HH : MM

ON 

Hour: 00-23

Min: 00-59

Timer 1

ON  :

OFF  :   Enable

Timer 2

ON  :

OFF  :   Enable

SET

HOUR

DAY

WEEK

MONTH

HOME

- > **Two Independent Timer :** ON Power On Time= HH : MM.  
OFF Power Off Time= HH : MM.  
Enable= Tick: Work / Untick: Not Work.  
SET = After press SET then work.

- > **HOME** Back to Home page.

## 5. Specifications

- Model :** Power Monitor / Data Recorder PWX-101
- Measurement :** Internal Close-loop C.T. Current Meter x 1
- Range :** AC 100 – 250V / 1 -15 Amp / 10 – 1500 Watt
- 
- Voltage :** AC 100 – 250V / 5 Watt
- Fuse :** AC 110= 15A / AC220V= 10A  
( For safety issue, official use 10A )
- 
- SizeDimension :** L=130 x W=80 x H=30 cm  
L= 52 x W=31.5 x H=11.8 inch
- Weight :** 500 gm / 1.1 pd



# Power Control PWX-103 PWX-104 Monitor Recorder

Web Page Control, No need install APP

WiFi Power Remote Control

PWX-104 PNP  
Plug & Play



PWX-103 Wire Connect

**電力控制記錄器 Power Control Recorder**

Project 名稱 Taiwan 台灣 UTC+8 P 電壓地址 192.168.1.22

Voltage 電壓 117 VAC AMP 電流 0.87 A PWR 功率 2.00 KW  
Power 功率 90 W瓦 Rpf 功率比 4.51 % Today 今日累計 0.56 kWh

2023年8月5日 電表時間 23:40:35 系統時間

**每日電力記錄 Daily Power Chart**

2023年8月5日 電表時間 23:41:36 系統時間

**電力控制記錄器 Power Control Recorder**

Project 名稱 Taiwan 台灣 UTC+8 P 電壓地址 192.168.1.22

Voltage 電壓 117 VAC AMP 電流 0.88 A PWR 功率 2.00 KW  
Power 功率 89 W瓦 Rpf 功率比 4.49 % Today 今日累計 0.57 kWh

2023年8月5日 電表時間 23:41:36 系統時間

**定時器設定 Timer Setup**

Timer 定時器 控制 時間 週日 Enable 定時器控制

Timer A 定時器 ON OFF

Timer B 定時器 ON OFF

Timer C 定時器 ON OFF

Timer D 定時器 ON OFF

Timer E 定時器 ON OFF

Timer F 定時器 ON OFF

Timer G 定時器 ON OFF

Timer H 定時器 ON OFF

Timer I 定時器 ON OFF

Timer J 定時器 ON OFF

Timer K 定時器 ON OFF

Timer L 定時器 ON OFF

Timer M 定時器 ON OFF

Timer N 定時器 ON OFF

Timer O 定時器 ON OFF

Timer P 定時器 ON OFF

Timer Q 定時器 ON OFF

Timer R 定時器 ON OFF

Timer S 定時器 ON OFF

Timer T 定時器 ON OFF

Timer U 定時器 ON OFF

Timer V 定時器 ON OFF

Timer W 定時器 ON OFF

Timer X 定時器 ON OFF

Timer Y 定時器 ON OFF

Timer Z 定時器 ON OFF

SET ON 儲存設定

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**電力控制記錄器 Power Control Recorder**

Project 名稱 Taiwan 台灣 UTC+8 P 電壓地址 192.168.1.22

Voltage 電壓 117 VAC AMP 電流 0.87 A PWR 功率 2.00 KW  
Power 功率 89 W瓦 Rpf 功率比 4.50 % Today 今日累計 0.57 kWh

2023年8月5日 電表時間 23:41:14 系統時間

**周電力記錄 Weekly Power Chart**

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Hour / Day / Week / Month Power Graphic Charts

I.O.T Internet Products\_ <https://3dok.biz/pe/power-monitor/>

On-Line Shop\_ <https://3dok.biz/pe/shop/>



## I.O.T. Internet Things

I.O.T. internet things

I.O.T. Internet Things / Web Communications



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**Primestar Energy**  
2023 Future Energy Provider

Primestar Energy Seek for new generation power  
Keep researching of clean energy  
to provides a clean future world

CLICK & DROP FOR QR CODE CONTACT US

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 <b>Recycle Energy</b> Sport Power Generator Wind turbines / Hydroelectric IOT Power Monitor / Controls	 <b>Solar Plate</b> Solar Plate Design Clean Energy House Solar Electrical Car Chargers	 <b>Mobile Powers</b> DC / AC Outdoor Mobile Powers 300W - 10KW AC / DC System Home Solar Powers	 <b>Monitor System</b> Power Monitor Control Center Remote Controls IOT Data Communication
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**Primestar Energy Corp.**



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