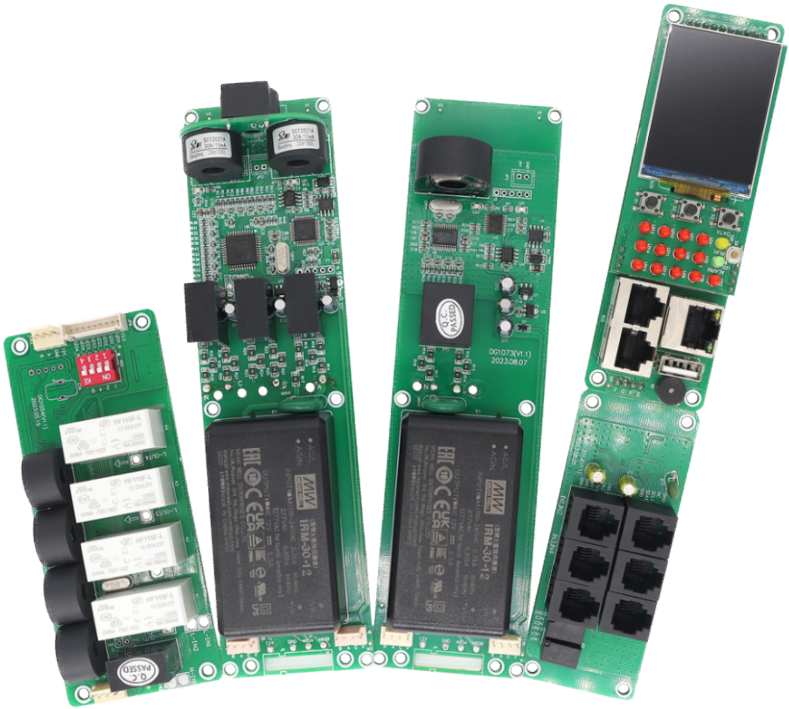
JSY-MK-351

Intelligent PDU Modules

User Manual



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1. Introduction

The professional-grade network remote monitoring and management power distribution system is the latest scientific research achievement achieved after years of dedicated research in the field of power distribution technology. This product is based on the development trend of the world's future power distribution monitoring and management technology, combined with the technical requirements of the modern data center application environment, and adopts the latest core technology with completely independent intellectual property rights, as well as network communication, power distribution, and electric energy metering technologies to integrate the latest network remote monitoring and management power distributor.

This device refers to the following standards:

Q/GDW 1354-2013 "Smart Electricity Meter Functional Specifications".

GB/T 17626.2-1998 Electromagnetic compatibility test and measurement technology - Electrostatic discharge immunity test. GB/T 17626.3-1998 Electromagnetic compatibility test and measurement technology -

Radio frequency electromagnetic field radiation immunity test .

GB/T 17626.4-1998 Electromagnetic compatibility test and measurement technology - Electrical fast transient pulse group immunity test .

GB/T 17626.5-1998 Electromagnetic compatibility test and measurement technology - Surge (impact) immunity test .

GB/T 17626.8-1998 Electromagnetic compatibility test and measurement technology - Power frequency magnetic field immunity test .

MODBUS-RTU communication protocol.

2. Product Introduction

2.1 Product Overview

Single-phase and three-phase smart PDU meters are based on the innovative SUM (sustainable, scalable and maintainable) design concept technology. As a key component of the metering cabinet power distribution unit (PDU), after being installed into the main body of the PDU, it can Provides active metering capabilities for energy optimization and circuit protection. User-set alarm thresholds can effectively reduce risks by warning of potential circuit overloads through real-time local and remote alarms. Metered rack PDUs provide power usage data to support data center managers in making informed decisions about load balancing and proper IT sizing, thereby significantly reducing total cost of ownership. Users can configure metered cabinet PDU via Ethernet access or RS485. This series of products can be widely used in data center rooms such as IDC, banks, securities, governments, and enterprises.

2.2 Function introduction

<table>
<tr><th colspan="4">Performance parameters</th><th>Technical indicators</th></tr>
<tr><td rowspan="7">Electrical parameters</td><td rowspan="4">Input Optional</td><td rowspan="2">Single-Phase</td><td>Input voltage</td><td>176-264V</td></tr>
<tr><td>Maximum total load current</td><td>63A</td></tr>
<tr><td rowspan="2">Three-phase</td><td>Input voltage</td><td>3*220V 50/60HZ</td></tr>
<tr><td>Maximum total load current</td><td>3*32A Optional 63A, 120A, 150A</td></tr>
<tr><td rowspan="3">Output</td><td colspan="2">Output voltage</td><td>176-264V</td></tr>
<tr><td colspan="2">Output current</td><td>8A, optional high current 20A</td></tr>
<tr><td colspan="2">Output port</td><td>Optional, up to 36 ports</td></tr>
<tr><td></td><td colspan="2">Frequency</td><td>50/60HZ</td></tr>
<tr><td colspan="2" rowspan="3">User interface</td><td colspan="2">Display</td><td>TFT color screen</td></tr>
<tr><td colspan="2">Operation buttons</td><td>Up, down, set, reset buttons</td></tr>
<tr><td colspan="2">Communication interface</td><td>One Ethernet,
1-channel RS485(two interfaces)</td></tr>
</table>

	Temperature and humidity interface	2-channel
	Switch input interface	Two interfaces, 4 channels
	Switch output interface	One interface, 2 channels
Electrical parameter measurement	PDU total measurement	Voltage, current, power, electric energy
	Each output measurement	Voltage, current, power, electric energy
	Each output can be remotely turned on/off	Yes
	Customize the power-on/power-off sequence and interval time for each output	Yes
	Administrator permissions can be defined in different levels	Yes
	Customize alarm signal thresholds	Voltage and current adjustable
	Cascade function	Yes, 4 products can be cascaded
Monitoring function	Load current monitoring	
	Load power monitoring	
	Voltage monitoring	
	Power monitoring	
	Ambient temperature and humidity monitoring	
Setting the function	Load current upper and lower limit settings	
	Ambient temperature and humidity upper and lower limit settings	
	Email alert address settings	
	SNMP (V1, V2) settings	
	Network parameter settings (IP, gateway, mask, DNS)	

Alarm function	system Alerts	When the load current exceeds the rated value	
		When the temperature and humidity exceed the limit	
	Custom Alerts	When the load current exceeds the rated value	
		When the temperature and humidity exceed the limit	
	Alerts Way	Buzzer beeps	
		LCD value flashes	
		Automatically send an email to the system administrator	
		SNMP sends Trap alarm status information	
		Serial communication background sends alarm status information	
Access method		WEB access and control through IE	
		SNMP (V1) access and control via standard network management workstation	
User Management		User ID and password settings	
Environment		Operating temperature	-20 ~ 60℃
	Extreme operating temperature		-30 ~ 70℃
	Relative humidity		10 ~ 90%
	Storage and transportation temperature limit		-40 ~ 70℃

2.3 Model selection

- MK-351M stands for Intelligent IPDU.
- MK-351J stands for the expansion module interface module.

- JSY-MK-352AFE stands for three-phase four-wire power supply module .
- JSY-1073 stands for single-phase power supply module .
- JSY-1054 stands for a 4-channel intelligent control module, current specification: 8A(Max. 16A).
- JSY-1084 stands for a 4-channel intelligent control module, current specification: 20A(Max. 50A).

3. Main functions

3.1 Real-time monitoring function

The display screen can view the monitored total load current, total voltage, total power, total electric energy, power factor, and load current parameters of each independent unit: the content displayed on the LCD screen can be viewed on the Web page, and the closed/open state of each independent unit, temperature/humidity sensor data and operating status can be controlled. 4-channel switch input can be configured by the customer, and there are 2-channel switch output.

3.2 Socket unit control

- Control single-channel relay closing and opening, or control multiple channels simultaneously.
- You can set the sequential delay power-on, up to 6 seconds. (This means that when two or more channels are controlled continuously, after the previous channel is completed, you need to wait 6 seconds before the next channel starts to operate.)
- Each relay can be set to start at a fixed time.

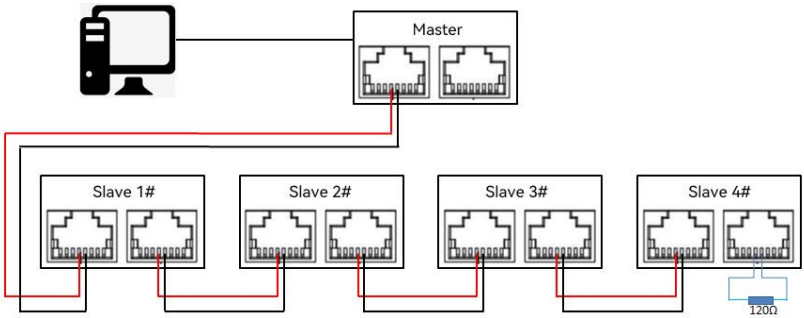
3.3 Customized alerts

- The total load current/voltage over-limit threshold can be customized, the load current over-limit threshold of each socket unit can be customized, and the temperature/humidity over-limit threshold can be customized.
- The buzzer sounds. An email is sent to the system administrator. SNMP sends a trap to warn the system status.

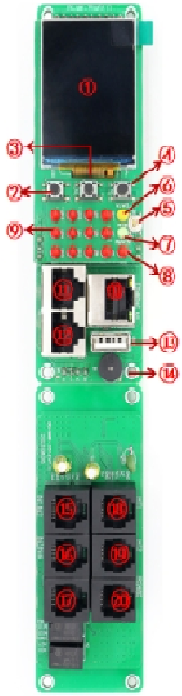
3.4 Master-slave (cascade) communication

The two interfaces are the same RS485 communication bus, providing two interfaces for easy cascading . RS485 communication cascade can connect up to 4 instruments. Communication cables can use ordinary shielded twisted pair cables. When RS485

communication cables are routed outdoors, attention should be paid to the grounding of the cable shielding layer. The total length of the communication cable should not exceed 1200 meters. The positive and negative polarities of the RS-485 ports of each device must be connected correctly. If the shielded twisted pair cable is long, it is recommended to connect a 120 Ω resistor at the end and reduce the transmission rate to improve the reliability of communication.



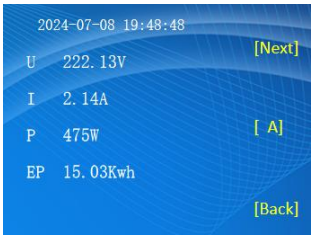
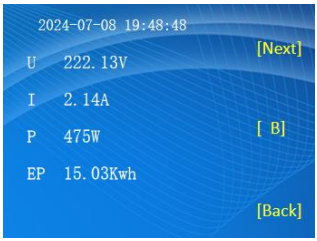
4. Technical parameters and installation

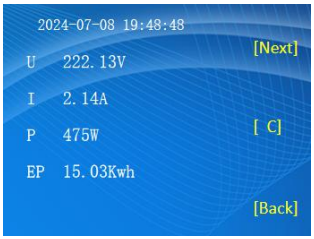
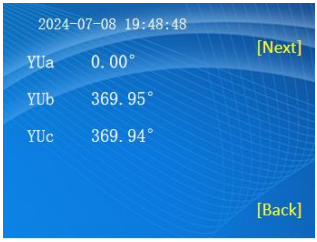
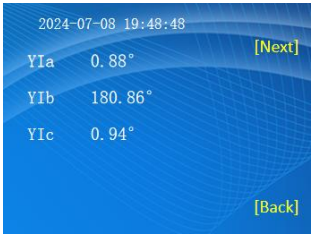
Product Structure Diagram	No.	Item	Parameters	
	①	LCD display	Display Mode	TFT color screen
			Display content	Meter information
			Display direction	Adjustable
			Refresh time	1 second
			The backlight will turn off after 5 minutes of no operation.	
	②	Up key	Page turning, flashing digit right shift, return to measurement page	
	③	Set key	Setting menu, setting item confirmation, saving	
	④	Down key	Display page turning, flashing digit value decreasing	
	⑤	Reset key	Short press to restart	
	⑥	Communication light	Yellow, flashing during cascade communication	
	⑦	Operation light	Emerald green, flashing when the system is running	
	⑧	Warning light	Red, flashing during alarm	
	⑨	Indicator light	12-channel relay output status indicator	
	⑩	Ethernet port	Connect to the network, remote access	
	⑪⑫	RS485	Cascade, parameter configuration	
	⑬	USB	Software upgrade	
	⑭	Buzzer		
	⑮	Switching quantity	1-channel, 2-channel switch input	
	⑯		3-channel, 4-channel switch input	
	⑰		2-channel switch output	
	⑱⑲	Temperature and humidity	2-channel temperature and humidity sensor detection	
	⑳	RS485	Reserved function	

4.1 User interface and parameters

Note: Provide secondary development interface . SNMP (V1/V2c).

4.2 Display interface introduction

LCD display information graphic		Parameter Description
		System main menu Host Information Socket Information Environmental Information System Information
Host Information		
		Hardware version number Software version number Equipment No. IP address
		Voltage Resolution : 0.01V Current Resolution: 0.01A Electricity Resolution: 0.01KWh

<table>
<tr>
<td> 
</td>
<td></td>
<td>power
Resolution: 1W
Accuracy: ±1%
Response time: ≤1 s</td>
</tr>
<tr>
<td> 
</td>
<td> 
</td>
<td></td>
</tr>
<tr>
<td> 
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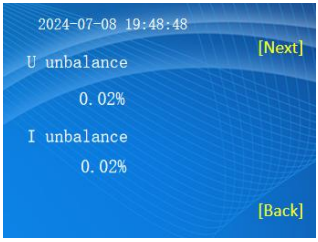
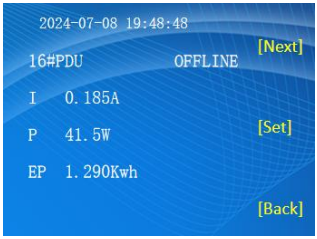
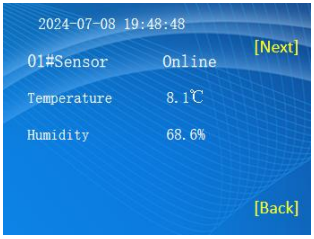
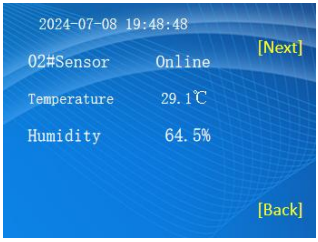
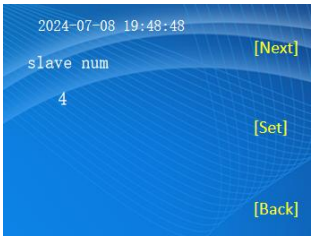
<td> 
</td>
<td></td>
</tr>
<tr>
<td colspan="3">Socket Information</td>
</tr>
<tr>
<td> 
</td>
<td> 
</td>
<td>1 - 16 output parameters,
Up to 36 channels can be connected
Current, power, electrical energy.
Communication abnormality shows offline.
Relay settings .
Password: 8310</td>
</tr>
</table>

<table>
<tr><th colspan="3">Environmental Information</th></tr>
<tr>
<td> 
</td>
<td> 
</td>
<td rowspan="2">1 -channel and 2-channel temperature and humidity, Communication abnormality is displayed as offline
Temperature and humidity resolution 0.1 Accuracy
Temperature: ±0.5℃
Humidity: ± 2%
Response time: ≤1 s</td>
</tr>
<tr>
<td> 
</td>
<td> 
</td>
</tr>
<tr><th colspan="3">System Information</th></tr>
<tr>
<td> 
</td>
<td> 
</td>
<td rowspan="2">Network Settings:
DHCP
Status: ON, OFF
IP address
Subnet Mask
Gateway
MAC Address
Mode settings:
Master/Slave#~4#
Language settings:
[Chinese][English]</td>
</tr>
<tr>
<td> 
</td>
<td> 
</td>
</tr>
</table>

<table>
<tr>
<td> 
</td>
<td> 
</td>
<td rowspan="3">Buzzer settings:
Status: ON, OFF
Setting the number of slave machines:
1-4 cascade up to 4</td>
</tr>
<tr>
<td> 
</td>
<td> 
</td>
</tr>
<tr>
<td> 
</td>
<td></td>
</tr>
</table>

4.3 Terminal Definition

4.3.1 RS485 interface terminal

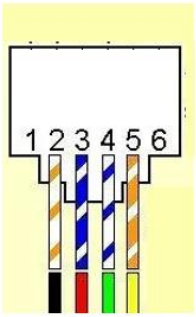
RS485 interface, Pin4 (blue) 485 A, Pin5 (blue and white) 485 B.

Note: The wiring color of RJ45 may be incorrect, please refer to the actual

Color	Functional Description
1 Orange and white	NC
2 Orange	NC
3 Green and white	NC
4 Blue	RS485-A
5 Blue and white	RS485-B
6 Green	NC
7 Brown and white	NC
8 Brown	NC

usage .

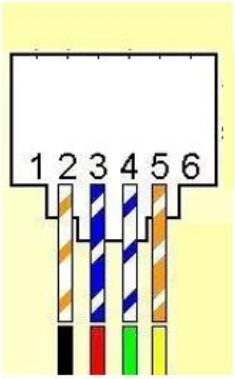
4.3.2 Switch input interface terminal



IN1, IN2 interface	
No.	Functional Description
1	Switch input 1
2	Switch input 2
3	DC 12V
4	DC 12V
5	GND
6	GND

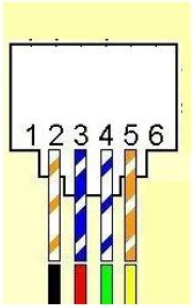
IN3, IN4 interface	
No.	Functional Description
1	Switch input 3
2	Switch input 4
3	DC 12V
4	DC 12V
5	GND
6	GND

4.3.3 Switch output interface terminal



OUT1, IUT2 interface	
No.	Functional Description
1	1st normally open output
2	1st normally closed output
3	COM1
4	2nd normally open outputs
5	2nd normally closed outputs
6	COM2

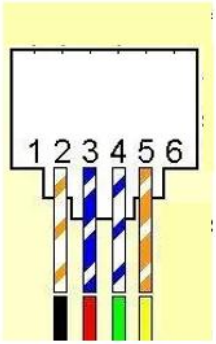
4.3.4 Temperature and humidity interface terminal



HT1 interface	
No.	Functional Description
1	GND
2	NC
3	SCL1
4	SDA1
5	GND
6	DC 5V

HT2 interface	
No.	Functional Description
1	GND
2	NC
3	SCL1
4	SDA1
5	GND
6	DC 5V

4.3.5 RS485 interface terminal (reserved for backup)

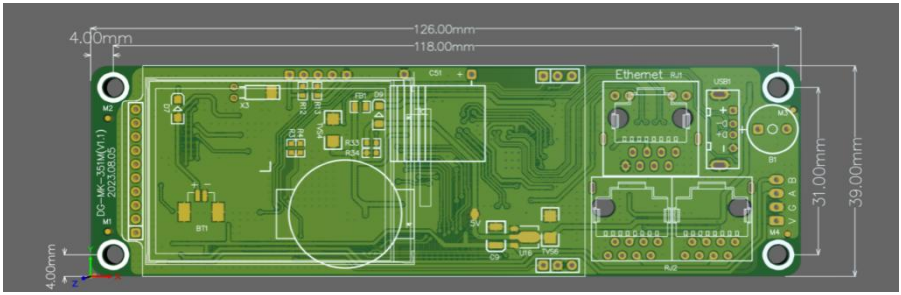


No.	Functional Description
1	RS485-A
2	RS485-B
3	DC 5V
4	DC 5V
5	GND
6	GND

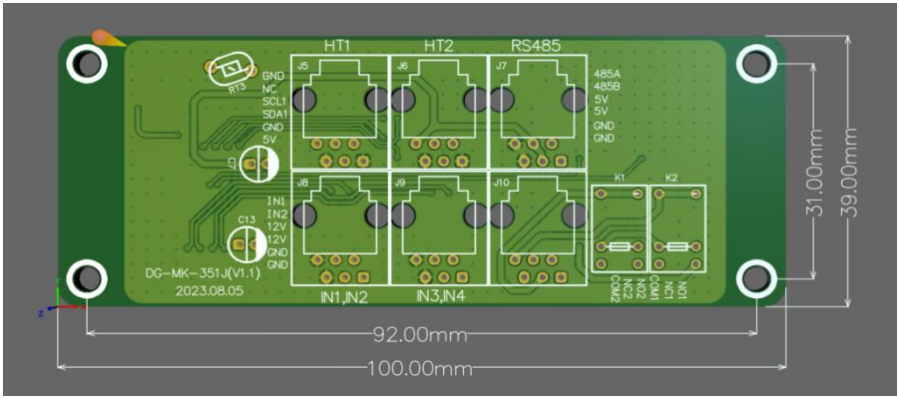
Note: The above wiring colors may be incorrect, please refer to the actual wiring situation .

4.4 Product size

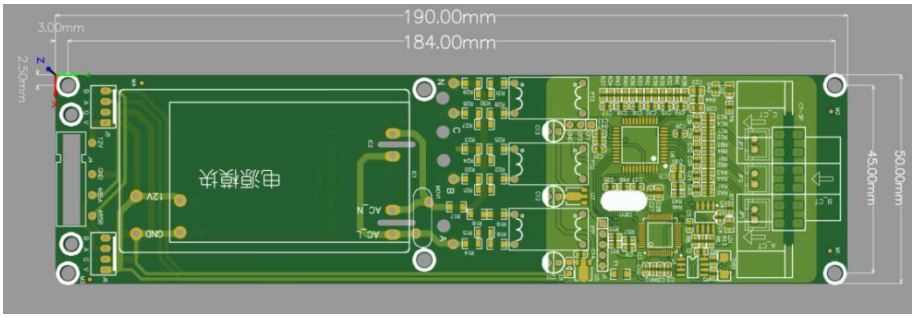
◆ MK-351M Smart PDU Dimensions.



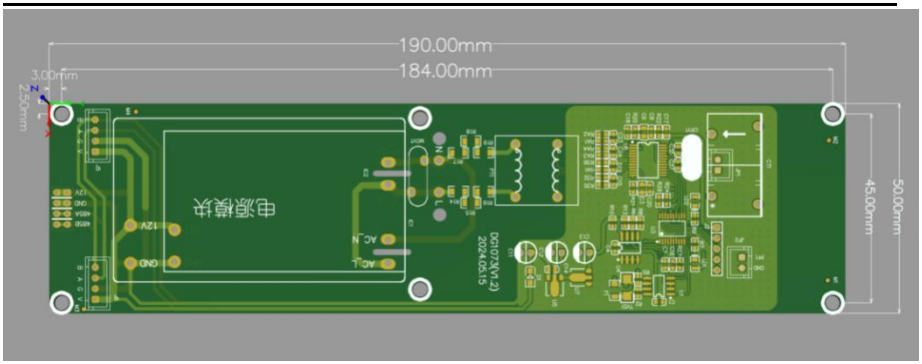
◆ MK-351J Intelligent PDU Expansion Board Dimensions



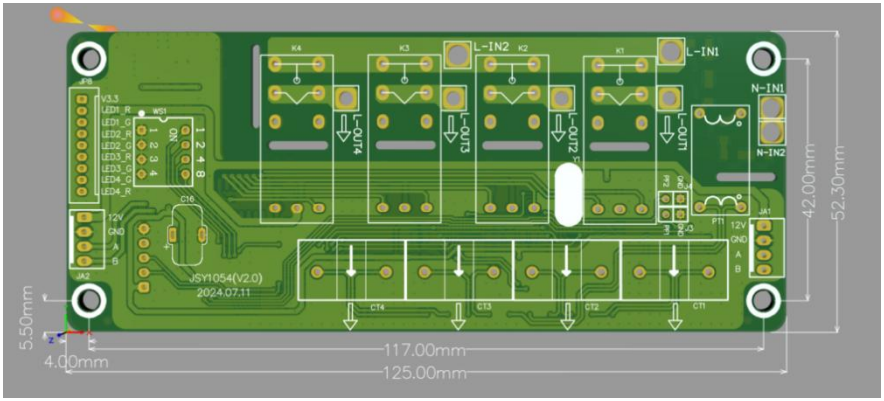
◆ JSY-MK-352AFE three-phase four-wire power module dimensions



◆ JSY-MK-1073 single-phase power module dimensions



◆ JSY-1054 4-channel relay module dimensions



5. Web Network Operation

5.1 Supported browsers

You can access the PDU through its web interface using IE, Google 360, or Microsoft Edge . Other commonly used browsers may work but have not been fully tested.

5.2 Cascade Setting Instructions

◆ You can use the PDU's system IP address as the URL of the web interface and log in

using a case-sensitive username and password.

- The PDU uses a static IP address by default when it leaves the factory. The default address is 192.168.1.192. The current IP address can be queried from the network status page on the LCD display of the display module. If you need to configure a dynamic IP, you need to enable the DHCP function of the device.
- Before using the cascading function, you need to select the master-slave mode for each PDU configuration. The master mode has only one PDU, and the slave mode can be configured with 4 PDUs by default .

5.2.1 Cascade settings

After the PDU is powered on, plug the network cable into its network port. At this time, in the LCD display of the display module, by short pressing the button, you can query the IP address from the host information, as shown in Figure 5.2.1 : 192.168.1.192 .

Figure 5.2.1

5.2.2 Log in

Enter the IP address of the PDU in the URL address field of the web browser (http://192.168.1.192 in the web page)

shown below .

The default username and password for the super administrator are both : " admin", then click Login. As shown in Figure 5.2.2:

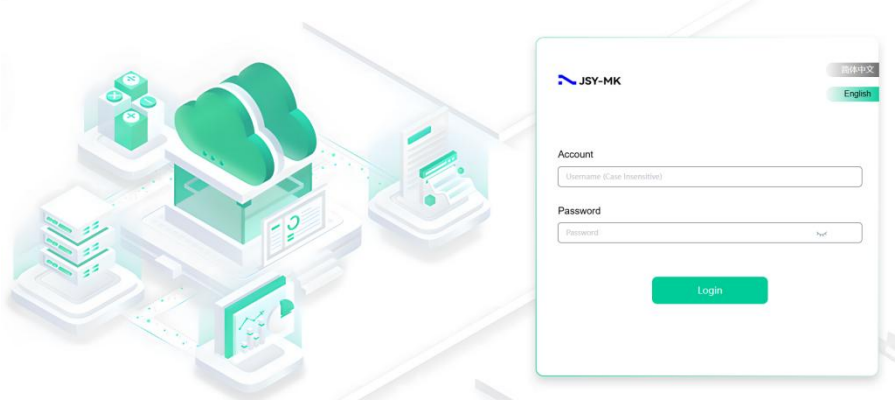


Figure 5.2.2

The main interface consists of three parts: main menu bar, status information, and login status .

Main menu: includes PDU Logo and navigation function menu .

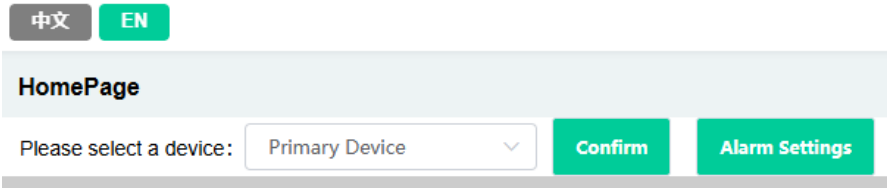
Status information: mainly includes temperature and humidity information, slave/divided relay status and voltage, current, power, power factor, electric energy , PDU voltage , total current, total power and other information.

5.2.3 Host and slave connection method

After one host PDU and four slave PDUs (up to four) are set to the host-slave mode respectively, the network port of the host PDU is connected to the network cable, and the network ports of the four slave PDUs (up to four) are left unconnected . The host and slave, and slave and slave are connected in series through the RS485 interface in turn, so that the host PDU and slave PDU are cascaded. Users only need to log in to the Web interface of the host PDU to control the host PDU and slave PDU through web pages.

5.3 Device Status Description

The device selection includes the device information of the host and slave, power-related data, temperature and humidity information, and alarm status information.



In the Web interface, click on the device selection, the host data is displayed by default, and the host and slave (up to 4) data information can be selected through the drop-down menu. See Figure 5.3.0 below

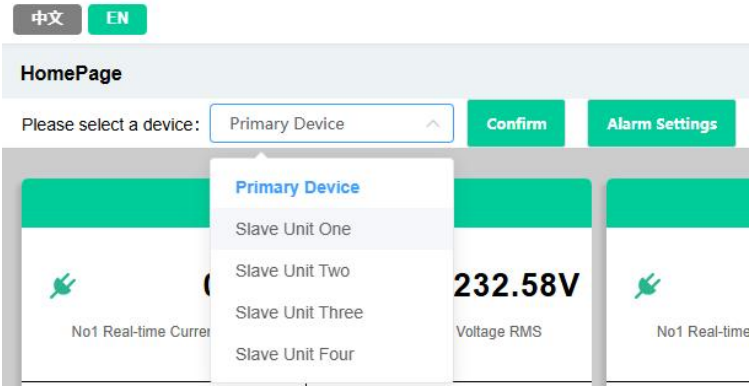


Figure 5.3.0

5.3.1 System Information

PDU system information includes system operation status, device information (product model, version number, etc.), network status and other related information. See Figure 5.3.1

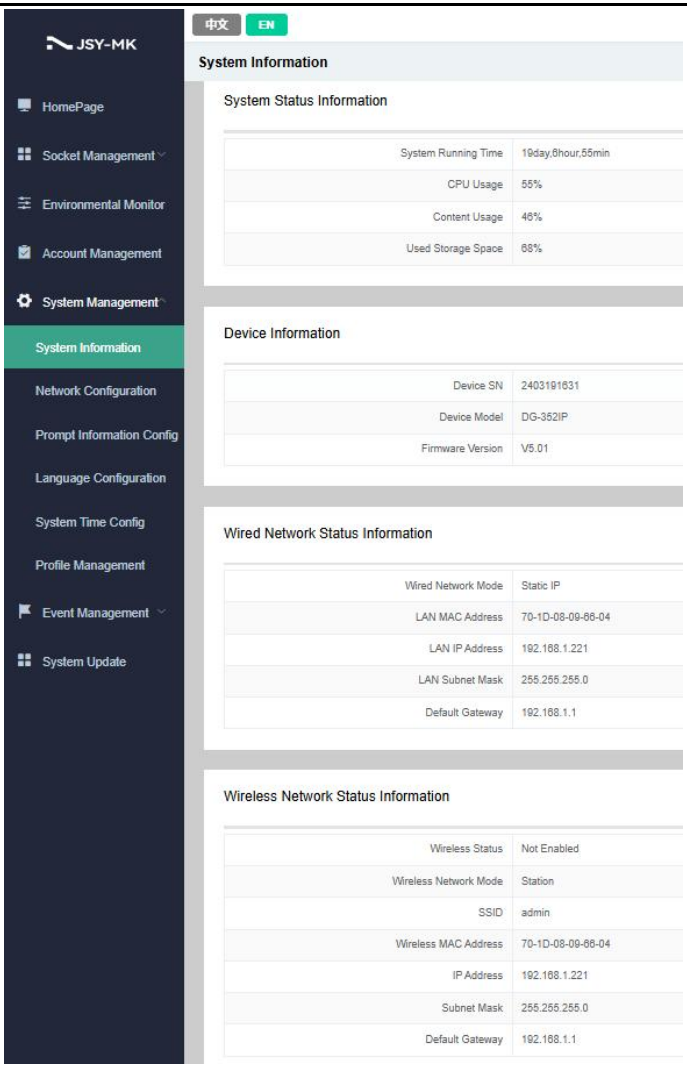
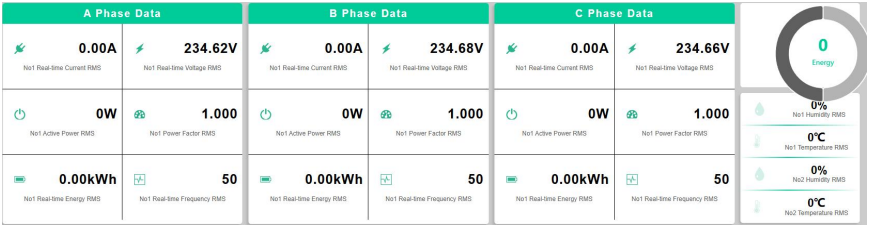


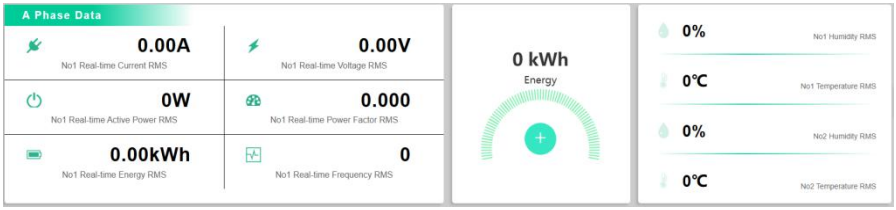
Figure 5.3.1

5.3.2 Electrical parameter information

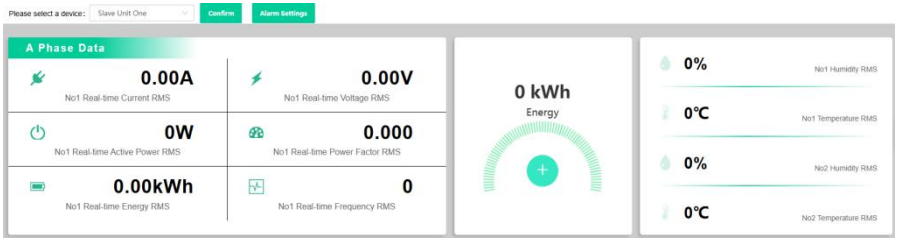
- JSY-351M intelligent IPDU connected to JSY-MK-352AFE three-phase four-wire master intelligent meter electrical parameter information includes: voltage, current, power, power factor, electric energy and other information parameters.



- JSY-351M intelligent IPDU connected to JSY-1073 single-phase master intelligent meter electrical parameter information includes: voltage, current, power, power factor, electric energy and other information parameters. As shown in the figure (For master)



- Slave JSY-351M intelligent IPDU connected to JSY-1073 single-phase master intelligent meter electrical parameter information includes: voltage, current, power, power factor, electric energy and other information parameters.
  As shown below (For slave)



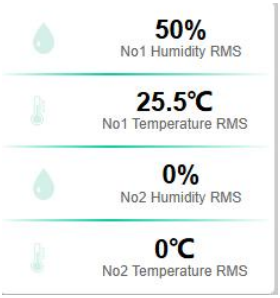
- The output control unit (JSY-1054 4-channel relay control module) electrical parameter information includes: voltage, current, power, power factor, electric energy and other information parameters. Up to 9 control modules can be connected, and up to 36 channels can be connected. (Or optional JSY-1084 high current control module). As shown in the figure

All Socket Basic Information Table

No.	Alias	Status	Type	Effective Voltage	Effective Current	Active Power	Energy Consumption
1		Open	single-phase	232.70V	0.000A	0.0W	0.000kWh
2		Open	single-phase	232.97V	0.000A	0.0W	0.000kWh
3		Open	single-phase	232.86V	0.000A	0.0W	0.000kWh
4		Open	single-phase	232.66V	0.000A	0.0W	0.000kWh
5		Open	three-phase	232.91V	0.000A	0.0W	0.000kWh
6		Open	single-phase	232.67V	0.000A	0.0W	0.000kWh
7		Open	single-phase	232.81V	0.000A	0.0W	0.000kWh
8		Open	single-phase	232.63V	0.000A	0.0W	0.000kWh

5.3.3 Temperature monitoring

The temperature and humidity status of the PDU displays the current temperature and humidity data, as shown in the figure



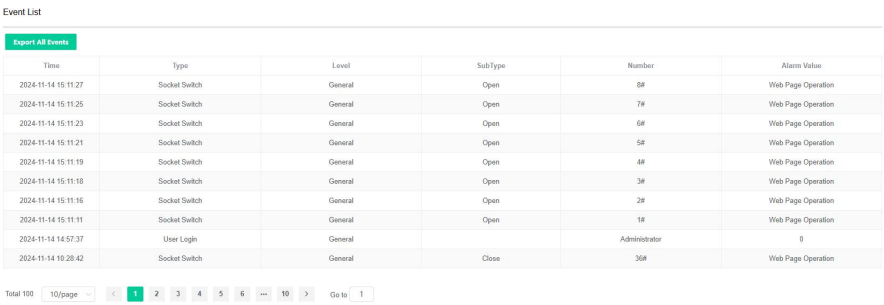
- If the system fails to read information from the temperature and humidity sensor, a " 0 " will be displayed.
- The device has only two temperature and humidity interfaces by default. The device supports expanding the temperature and humidity device interface through the RS485 interface .

5.3.4 Alarm status

PDU displays the voltage, current, temperature and humidity, IO node sensors (access control/water immersion/smoke sensors), time settings, user settings, logs, device information, etc. relative to the corresponding thresholds .

5.3.5 Event Log

The PDU will record two types of logs: event log and alarm log



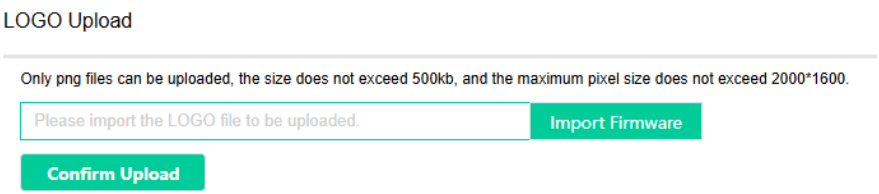
◆ The log information includes: offline alarm from the host/slave, control module, undervoltage alarm, overvoltage alarm, overcurrent alarm, temperature and humidity offline alarm, temperature upper and lower limit alarm, humidity upper and lower limit alarm.

◆ The information content is in the format of: time-type-level-subtype-serial number-alarm value.

◆ 100 alarm messages can be stored , and the latest alarm message will overwrite the previous one.

5.3.6 LOGO upload

Support user-defined uploaded pictures.



LOGO , company abbreviation and full name of the WEB page can be changed according to needs. The LOGO can only upload png files, the file size does not exceed 500KB, and the size is 200 *100 pixels. After filling in, click "Confirm Upload".

5.4 System parameter settings

5.4.1 Account Addition

In the web interface, click Account Management

◆ In account management, used to add, modify or delete users .

◆ The default username and password for the administrator are both "admin". The administrator's username and password can be modified .

◆ Ordinary users do not have output loop control permissions by default. Administrators can add output loop control permissions for ordinary users .

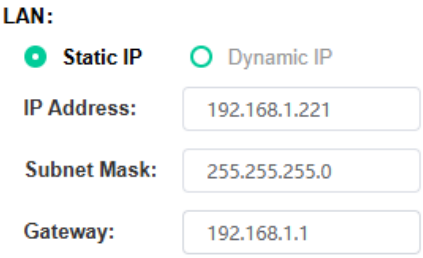
◆ The super user has the highest permissions on the device and can access or modify any options that can be set and modified.

5.4.2 TCP/IP Settings

◆ In TCP/IP settings, DHCP is selected as "ON" by default. The PDU will automatically obtain an IP address assigned from any DHCP server. If DHCPP is "ON", the input in the IP address, mask and gateway boxes will be invalid .

◆ Network settings include IP address settings, SNMP settings, web login settings, email settings, upgrade settings, Telnet settings, etc.

The device supports static IP address or dynamic IP address setting.

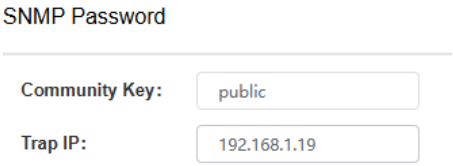


When selecting a static IP address, the user can set a fixed IP address, mask, and gateway according to the existing network environment. If a dynamic IP address is selected, the IP address will be automatically obtained according to the router settings in the LAN where the device is located.

Note: After modifying the network configuration information, you need to restart the system to take effect.

5.4.3 SNMP Settings

PDU supports SNMPv1 and SNMPv2c . When users select SNMPv1 and SNMPv2c, they can operate SNMP by setting the community name and proxy server IP:

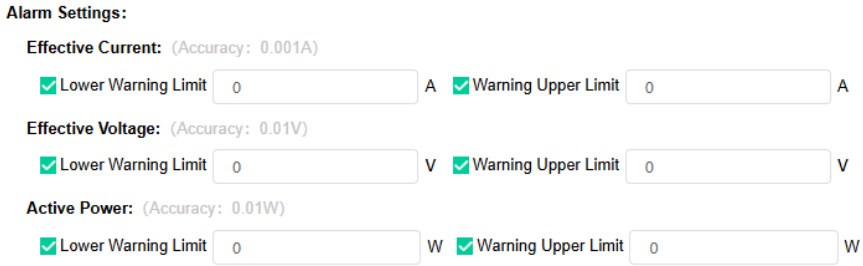


completing the SNMP settings, you need to install the corresponding SNMP management software.

5.4.4 Alarm threshold setting

Note: The alarm contents are overvoltage, undervoltage, and overcurrent. The overvoltage threshold range is 110-300VAC , and the default is 265V . The undervoltage alarm threshold range is 0 -300VAC , and the default is 175V . The overcurrent alarm threshold range is 0 -63A , and the default is 63A (fill in the threshold with an integer)

◆ In the Wed interface, click Alarm Settings to set the main circuit alarm threshold.

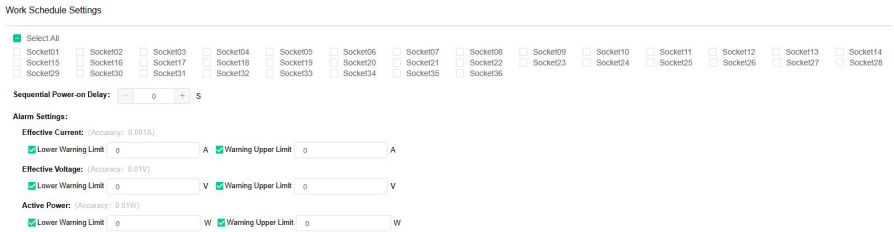


The voltage/current threshold is used to set the upper and lower alarm thresholds of the current voltage/current. When the measured value is within the threshold range, it will display green "normal", and when the measured value exceeds the threshold, it will display red "warning"

◆ Output control unit alarm threshold setting. Single loop setting.

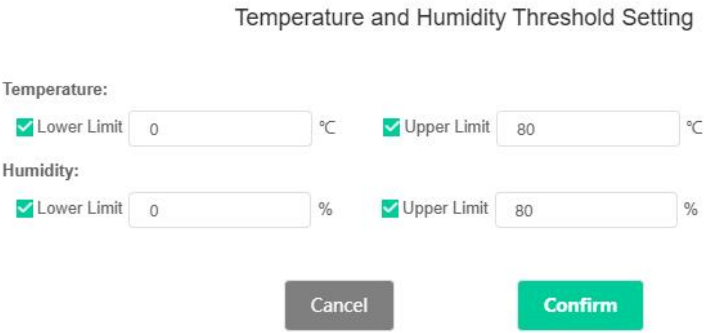
◆ Output control unit alarm threshold setting, batch setting and sequential power-on delay setting.

◆ When the measured value is within the threshold range, it will display green "Normal", and when the measured value exceeds the threshold, it will display red "Warning".



5.4.5 Temperature and humidity alarm threshold settings

◆ Temperature and humidity alarm threshold settings

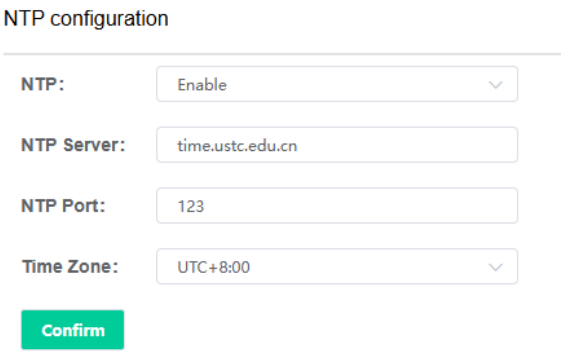


◆ The user can set the upper and lower alarm thresholds of the current temperature and humidity. The current device only supports setting two temperature and humidity interfaces, but the device supports expanding the temperature and humidity device interface through the RS485 interface . Here, the upper and lower alarm thresholds of the sensor temperature and humidity can be set, so that after it exceeds the limit, an alarm can also be issued through the PDU.

5.4.6 NTP Settings

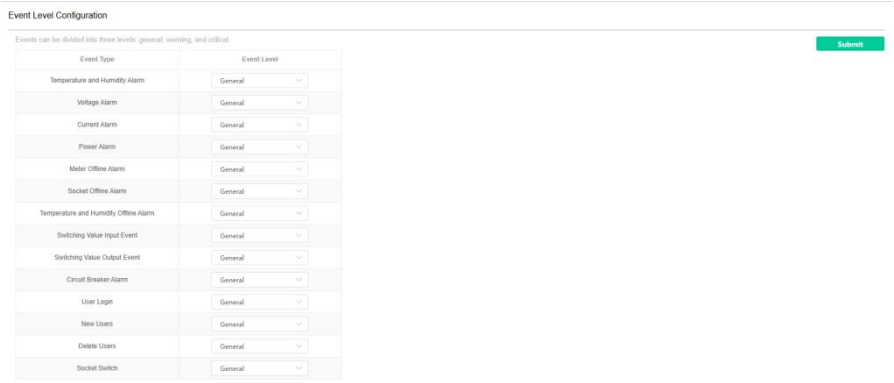
PDU supports NTP settings, and users can enable or disable NTP service according to usage .

Enable: Set and fill in the NTP server and NTP time zone, click the NTP setting button, and the device will obtain the time and date of the currently selected time zone in the network based on the NTP server and time zone filled in by the user, and update the device system time (automatically synchronized every 10 minutes).



5.4.7 Event Configuration Description

◆ Users can set the alarm level, and events can be divided into three levels: general, warning, and critical.



◆ The log supports downloading. Click " Export All Events" and the log will be downloaded to the accessed PC through the browser.

5.4.8 Email Settings

The mailbox supports SMTP to send warning emails to the specified mailbox:

After the user has set up all the functions, the device needs to be restarted to make

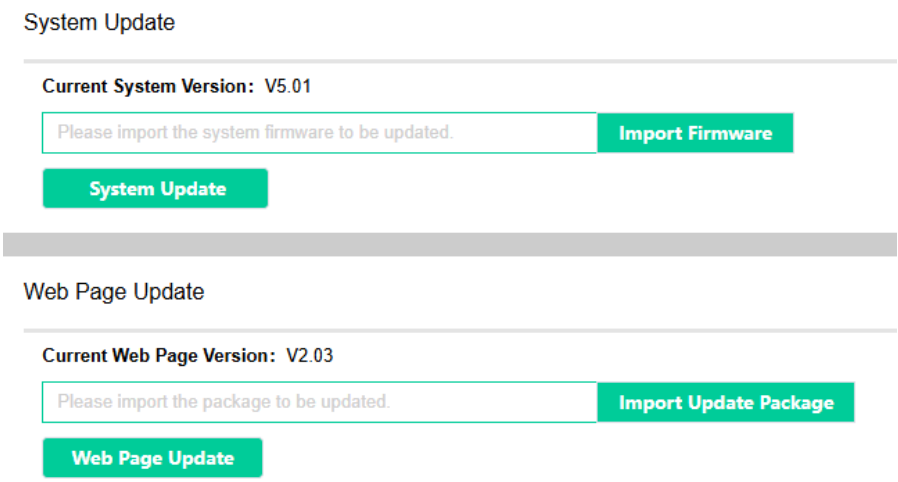
them effective. Then the user can click the "Send Test Email" button to test whether the current configuration is effective .

Enter the email address in the corresponding "Receiving Account" input box. Modify the notification event level: general, warning, critical.

5.4.9 System Upgrade

In the upgrade settings, you can see the system and web page firmware versions , and you can upgrade the current firmware information when new firmware is available.

Import the firmware before upgrading. The firmware is a bin file. After the upgrade is completed, the PDU will automatically restart.

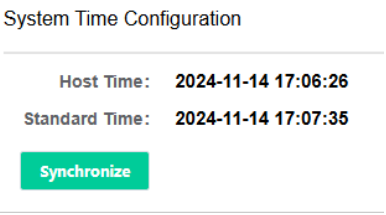


- If the power is cut off during the upgrade process, the device can continue to upgrade normally after it is powered on again .
- The PDU firmware is relatively large, so during the upgrade process, please wait patiently for the upgrade to complete and ensure that the network is unobstructed .
- During the PDU upgrade process, please do not perform other operations, such as clicking buttons, using SNMP, logging into the web page , etc.

5.4.10 System time acquisition

- After the user gets the PDU, it is recommended to set the time once to ensure the accuracy of the system time.

- PDU supports directly obtaining the current PC time as the PDU time, and also supports accessing the NTP server for time synchronization .
- When the user uses the current PC time as the PDU time, he can directly click "Synchronize" .



Note: When users use NGP server for time synchronization, refer to 5.5.3 NTP settings

5.4.11 Switch quantity alias modification

- Supports modification of switch aliases. As shown in the figure

5.5 Other settings instructions

5.5.1 Display column description

There is a current status display bar in the upper right and upper left corners of the interface. It can display the current logged-in user, Chinese and English switching, and the current device time.

- Click the current login user name, you can choose to log out (exit) the current user, switch between different users.
- Click "EN" to switch the device to English interface display.

5.5.2 IP address acquisition

There are several ways for PDU to obtain IP address:

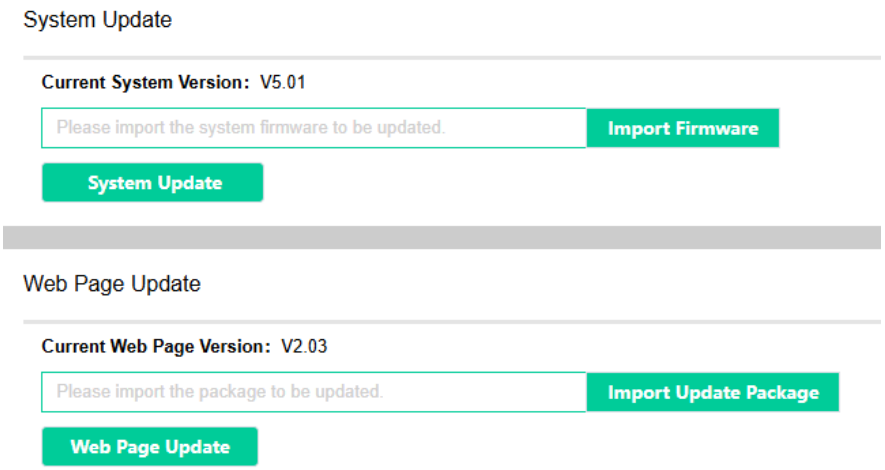
The first method: After the PDU is connected to the router, the IP address assigned by the router is obtained statically or dynamically.

The second method: After the PDU is directly connected to the PC via a network cable, the PC is set to a static IP address. At this time, if the PDU has been set to a static IP address and is in the same network segment as the PC, it can be accessed directly.

The third method: Users can directly set the dynamic or static address of the PDU through the LCD.

5.5.3 System version view

The system updates and records the current PDU firmware version. When the user needs after-sales service for the current device, the user can provide the current screenshot to our company, and our company can provide relevant after-sales service based on the information on the current interface.



6. Troubleshooting

6.1 Frequently Asked Questions

question	Solution
Network disconnection	◆ Check if the LED indicator of the network port is flashing and make sure it is flashing normally. ◆ Check the integrity of the network cable ◆ Verify the PDU network settings
No access Web User Interface	◆ Verify that you can ping the IP address of the PDU ◆ Verify that the browser you are using supports PDU web browsing. See "Supported Browsers" ◆ Verify that the URL is entered correctly ◆ Reset the device
LCD display shows garbled characters	◆ Reset device parameters via LCD ◆ Restart by pressing the Reset button ◆ If the problem is still not solved, please contact our after-sales service

6.2 SNMP Issues

question	Solution
Unable to execute GET or SET	◆ Verify the community and view "SNMP Devices" ◆ Verify that UDP port 161 is open correctly ◆ Check whether the parameters are correct when using SNMP
Unable to receive trap	◆ Verify that the trap proxy server IP address is configured correctly ◆ Verify that UDP port 162 is opened correctly
The trap received by the network management is not recognized	◆ Please refer to the documentation received by your gateway to verify that these traps are correctly integrated into the alert/trap database

Note: The equipment should be operated in a place without explosion, corrosive gas and conductive dust, and without significant shaking, vibration and impact.

7. Transportation and storage

1. The product should not be subject to severe impact during transportation and unpacking, and should be transported and stored in accordance with the national standard GB/T13384-2008 "General Technical Conditions for Packaging of Mechanical and Electrical Products".
2. This product is an electronic device, so you should try to avoid heavy objects hitting and bumping it when handling, picking up and placing it.
3. The ambient temperature of the storage location should be -40 ~ +70 ℃, the relative humidity should not exceed 85 % and there should be no corrosive harmful substances in the air .

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