

IPDU IFU

instructions

V1.0

On December 21, 2022



Chapter 1: Product Introduction

1.1 Product Overview

Single-phase and three-phase IPDU intelligent instrument products are based on the innovative SUM (sustainable, upgradable and maintainable) design concept technology. As the key components of the metering cabinet distribution unit (PDU), after loading into the PDU main body, it can provide active metering function to achieve energy optimization and circuit protection. The alarm threshold set by the user can effectively reduce the risk by issuing real-time local and remote alarms. The tered rack PDU provides power usage data to support data center managers to make informed decisions on load balancing and reasonable IT scale, thus significantly reducing total cost of ownership. Users can configure a metering cabinet PDU via Ethernet access or RS485. This series of products can be widely used in IDC, banking, securities, government, enterprises and other data center rooms.

1.2 Function introduction

Functional project	specifications	
Electrical parameters	input voltage	176-264VAC, 1 PH, or 3P
	input current	Max. 63A
	frequency	50/60 Hz
	output voltage	176-264VAC
	Output digits	Optional, up to 48 bits
	Break protection (please indicate brand and quantity)	selectable
structure size	Installation method (vertical or horizontal)	perpendicular
	Width (applicable PDU width series)	1U & 1.5U and above
	The height of the protruding socket surface	22mm
	sheathing material	plastic cement PC,
work environment	working temperature	-10° to +50° C
	Working humidity	5-95%RH
	above sea level	0 - 3 000 m
Safety regulations and certificates	Certificate and Statement	CE

user interface	display screen	TFT color screen
	Operate the key	Top button, bottom button, reset button
	communication interface	One Ethernet, two RS485, and one USB
	Temperature and humidity interface	one
	pilot lamp	Operation, electrical energy, and communication
Electrical parameter measurement and control function	PDU overall measurement	Voltage, current, power, and electrical energy.
	Measurements of each phase	not have
	Each output can be remotely controlled on / off	not have
	The user can customize the power / down timing and interval of each output	not have
	The output unit can be grouped for control	not have
	Administrator rights can be defined by levels	have
	Custom alarm signal threshold	Current, and the voltage can be set
	Cascade function	Yes, and the RS485

1.3 Model selection

IPDU-010063

IPDU-XXXXXX-XXXX

DPDUV3 Represents the smart instrument PDU

-XXXXXX

X: 0 vertical, 1 horizontal

X: 0 DC, 1 single phase, 2 three-phase four wire, 3 three-phase three wire, 4 two-phase three wire

X: 0 means that the branch is not monitored and controlled, 1 means the branch control, 2 means the branch monitoring, and 3 means that the branch is monitored and controlled.

XXX: Specification current

-XXXX: Customer requirements: 1st X, with several temperature and humidity; 2nd X, with several switching devices; 3rd X: 0, without USB, 1, with USB; 4th X, 0 without 485, 1 with 485;

Among them, the standard does not take the "customer requirements" part, the standard is unified with a network, a USB, a temperature and humidity, two 485 mouth.

Technical 2 parameters and installation





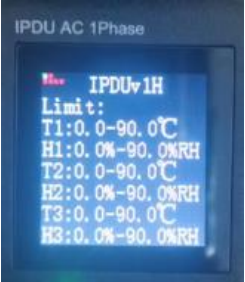
2.1 User interface and parameters







Product structure diagram	order number	project	parameter
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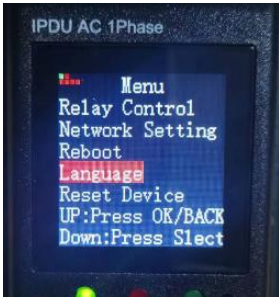


①	liquid crystal display	display mode	TFT color screen
		Display content	Instrument information
		Show direction	horizontal
		refresh time	300ms
②		Run the lamp	
③		Energy indicator light	
④		communication light	
⑤	Uppage button	Short press down to turn the page Short press to cancel the beep	
⑥	Menu button	Set the instrument parameter values	
⑦	Turn down the page button	Short press down to turn the page Short press to cancel the beep	
⑧	humiture	Temperature and humidity sensor detection	
⑨	network port	IP addresses, MAC, DHCP, MASK, and Gateway	
		SNMP (V1/V2c/V3)	
		HTTPS/HTTP	
		SNTP	
		network user	
③④	The RS485 port	Cascading configuration, modbus, baud rate	
⑩⑪	RS485	RS485 Cascade input and output	
⑫	USB	Software upgrade and log export	
⑬	Reset the button	Press long for more than 10 seconds to restart and reset the device parameters	
⑭	failure indication	From top down: network hardware failure; cascade. Green is normal, and red is a fault.	

The LCD display information diagram	Display content	parameter
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	<p>model voltage current power power factor Electric energy</p> <p>voltage: Resolution: 0.1V Precision: $\pm 1\% + 1$ word Response time: 400ms</p>
	<p>Humidity 1 temperature 2 Humidity 2 temperature 3 Humidity 3</p> <p>current: Resolution: 0.001A Precision: $\pm 1\% + 1$ word Response time: 400ms</p> <p>power: Resolution: 0.001KW accuracy: $\pm 1\%$ Response time: 400ms</p>
	<p>temperature 4 Humidity 4</p> <p>power factor: Resolution: 0.001 Response time: 400ms</p>
	<p>IO1 IO2 IO3 IO4</p> <p>Electric energy: Resolution: 0.001 KWh accuracy: $\pm 1\%$ Response time: 400ms</p>
	<p>Temperature 1 alarm value, humidity 1 alarm value, temperature 2 alarm value, humidity 2 alarm value, temperature 3 alarm value, humidity 3 alarm value</p> <p>temperature: Resolution: 0.1°C accuracy: ± 0.5 Response time ³: <10s</p> <p>humidity: Resolution: 0.1 RH accuracy ²: $\pm 3\%$ Response time: ³: <6s</p>

	<p>Temperature 4 alarm value, humidity 4 alarm value</p>	
	<p>port number MAC address DHCP status: ON, OFF IP address</p>	
	<p>Software version, hardware version cascade: host or slave time date Software model performance period</p>	
	<p>Relay setup (without this function) network settings Equipment restart Language setting factory data reset</p>	
	<p>network settings static state DHCP (trends)</p>	
	<p>Equipment restart</p>	

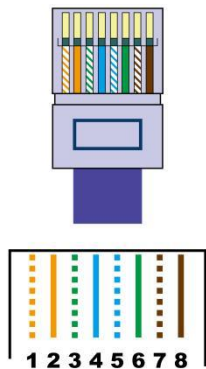
	Language setting the Chinese language English	
	factory data reset	

2.2 Terminal definition

2.2.1 RS485 Interface terminals

RS485 Interface, Pin 4 (blue) 485 B, Pin 5 (blue and white) 485 A.

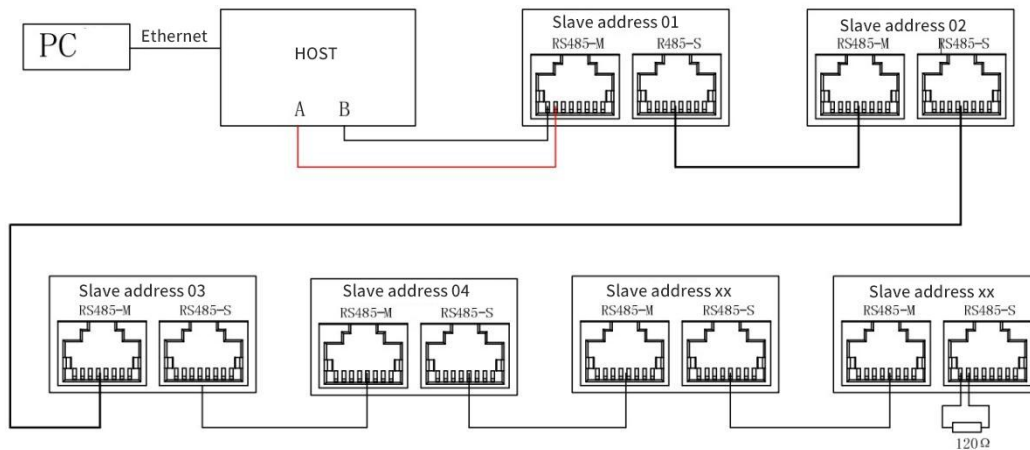
Note: The wiring color of RJ 45 may be wrong, as shown on the drawing. One end is terminal 1.



pigment	function declaration
1 Orange white	NC
2 Orange	NC
3 Green and white	NC
4 Blue	RS485-B
5 Blue and white	RS485-A
6 Green	NC
7 Brown and white	NC
8 Brown	NC

2.2.2 Cascade communication

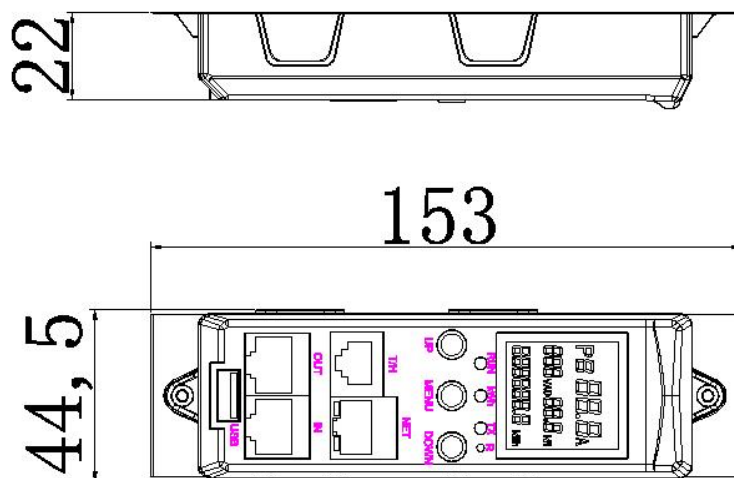
RS485-M and RS485-S are the RS485 communication bus along the same road, providing two interfaces for convenient cascade; RS-485 communication cascade proposes to connect up to 4 meters to ensure the real-time effectiveness of data. Connect to the upper computer computer through the host machine. Communication cable can use ordinary shielded twisted pair, when RS485 communication cable in the outdoor wiring, should pay attention to the cable shielding layer grounding, the total length of communication cable should not exceed 1200 meters. The RS-485 port anode of each device must be correctly connected. If the shielding twisted pair is long, it is recommended to connect it with about 120 Ω and reduce the transmission rate to improve the reliability of communication.



2.3 Installation

2.3.1

Table head size: 153 * 44.5 * 22mm,



2. 3. 2

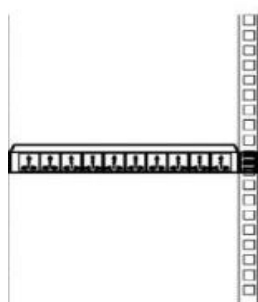
◆ Installation instructions and maintenance

1. Rack-type power socket unit is installed in the 19 " industrial cabinet, Install in the front end of the protected device (or system).
- 2, when the socket is connected to the power system, it can be The rear equipment is electrified to work.
3. The load current of the protected equipment shall be 16A, Not acceptable for overload use.
- 4, this product is strictly prohibited to dismantle privately, otherwise, by All the consequences are this.
5. Please use the fixed bracket when installing.
6. Please connect the wire correctly and pay attention to the safety of electricity use.

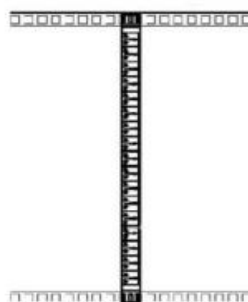
zontal installation

vertical installati

allation



Horizontal (1U, 2U...)



Vertical (0U)

Chapter 3: Network operation

3.1 Supported Browsers

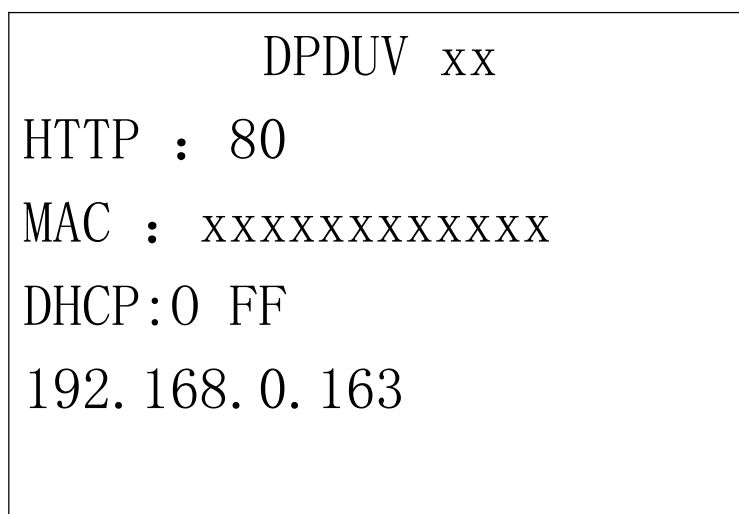
You can access the PDU using either the Google®Chrome® or the Mozilla®Firefox® through its Web interface. Other commonly used browsers may work but haven't been fully tested.

3.2 Description of the cascade setting

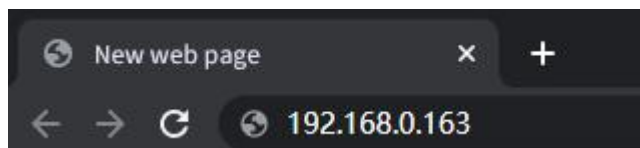
- ◆ You can use the system IP address of the PDU as the URL address of the Web interface and log in with a case-sensitive username and password
- ◆ The static IP address by default is 192.168.0.163. In the LCD display of the display module, you can query the current IP address from the network status page. If a dynamic IP configuration is required, the DHCP function of the device needs to be enabled
- ◆ Before using the cascade function, it is necessary to select the master and slave mode for each IPDU configuration. The host mode has only one PDU in the host mode, and the slave mode can configure 4 PDU by default

3.2.1 Cascade setting

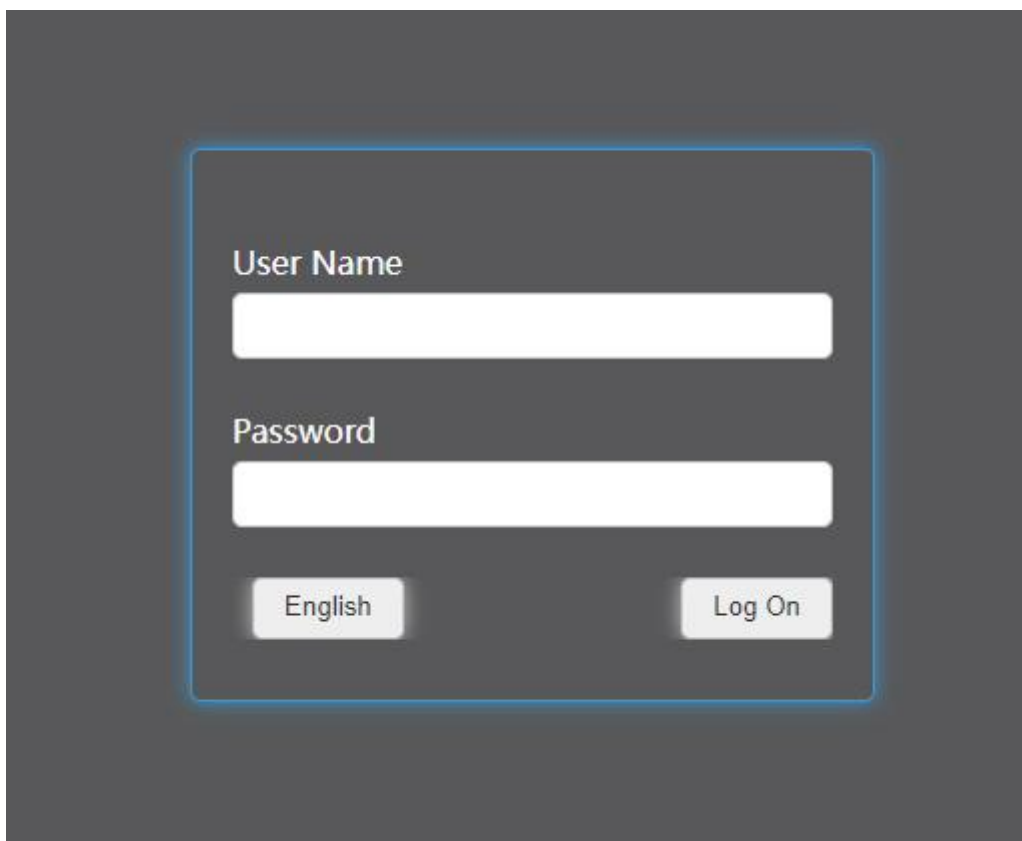
After the PDU power up, plug the Internet cable in its network port. In the LCD display of the display module, the IP address can be found from the network status page by short pressing the button, 192.168.0.163 as shown in the figure below



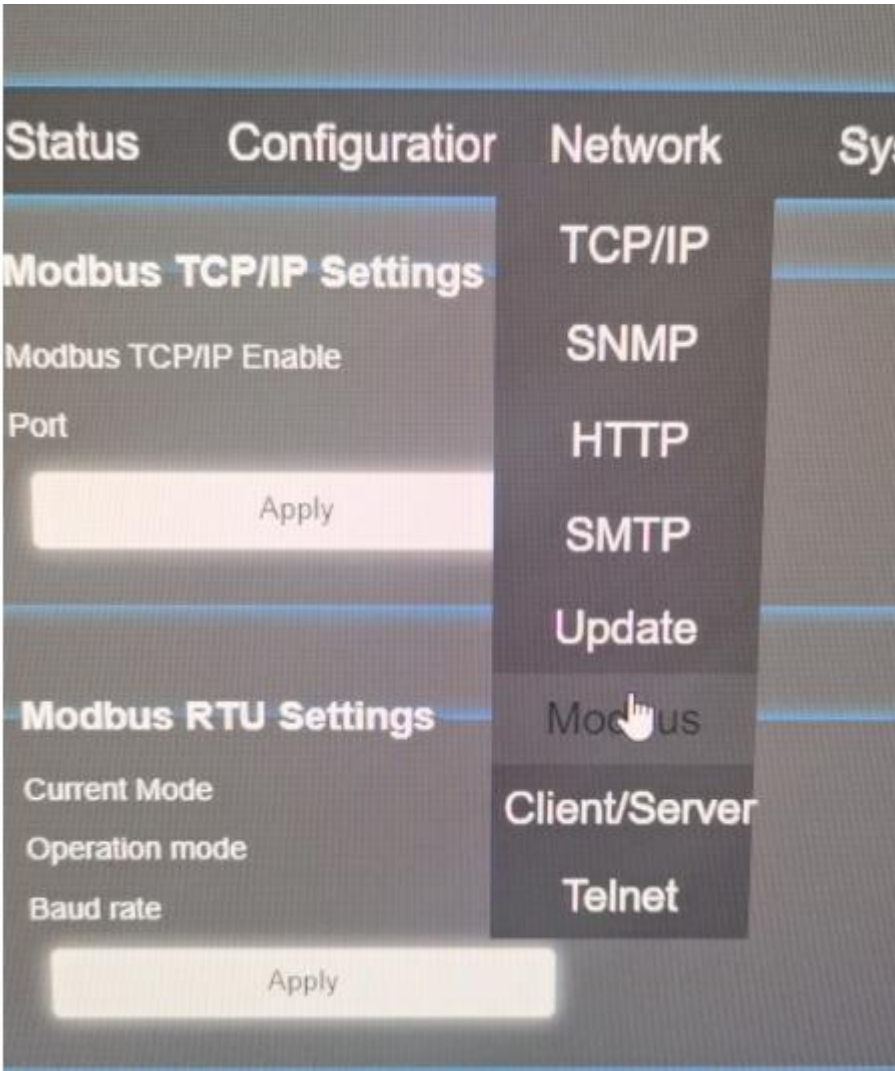
Enter the IP address of PDU in the URL address field of Web browser (http: // 192.168.0.163), as shown in the figure



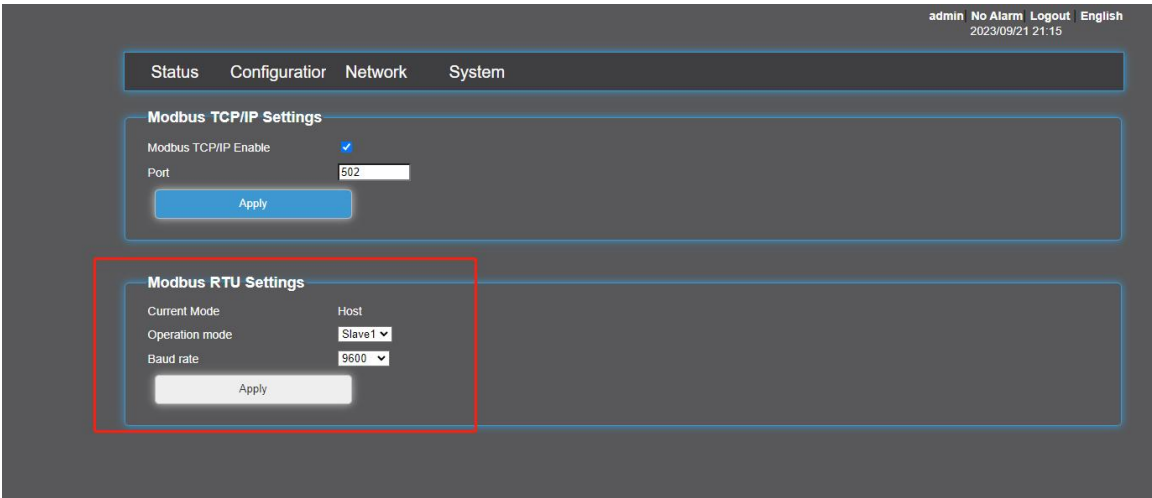
The default user name and password of the super administrator is "admin" and then click login, see figure



In the network settings of the Web interface, click M odbus Settings, as shown in Fig



In the cascade setting, select the current PDU as the host / slave mode, and then click Settings, as shown in the figure



In the upper right corner of the page, click restart PDU to make the working mode setting changes take effect.

View the PDU header. In the LCD display of the display module, the status page cascade bar is the host, indicating that the PDU host mode is set to the slave, then the status page cascade bar is the slave x, as shown in the figure



3.2.2 Connecting mode of the host machine and the slave machine

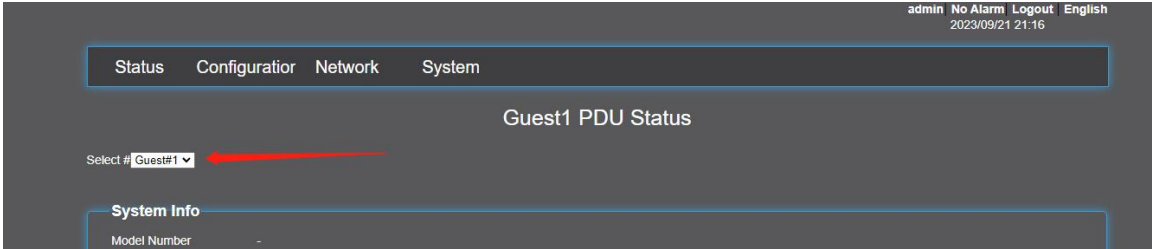
One host PDU and four slave PDU (up to four) respectively select the master and slave mode through the Web configuration, the network ports of the host PDU, the network ports of four slave PDU (up to four) are suspended, and the host and slave are connected through RS485 interface, so that the host PDU and the slave PDU are connected, and the user can control the host IPDU and slave PDU by logging in the Web interface of the host PDU.

3.3 Description of the equipment status

In the state of the equipment, they include the equipment information of the host machine and the four slave machines, electric energy related data, temperature and humidity information and alarm status information

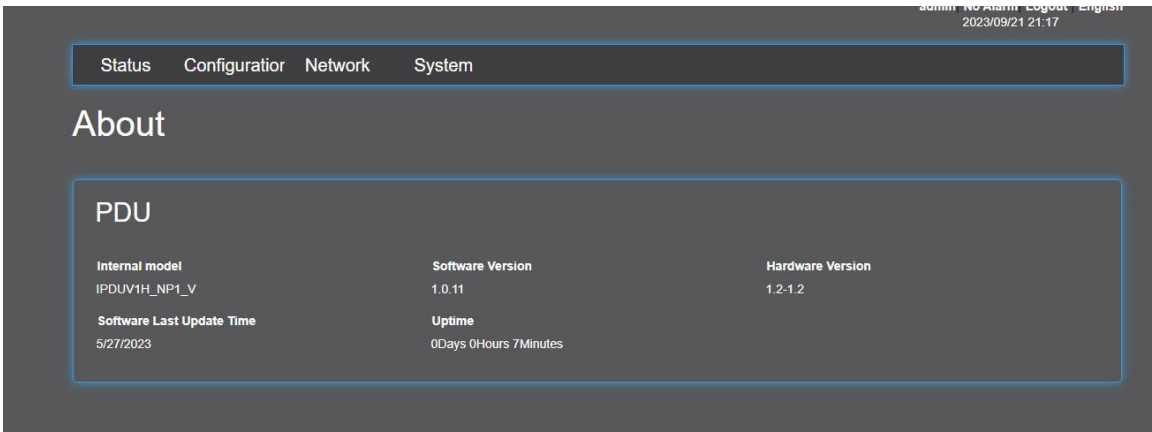


In the Web interface, click the status and display the host data by default. You can select the status data from slave 1 to slave 4 through the drop-down menu, as shown in the figure

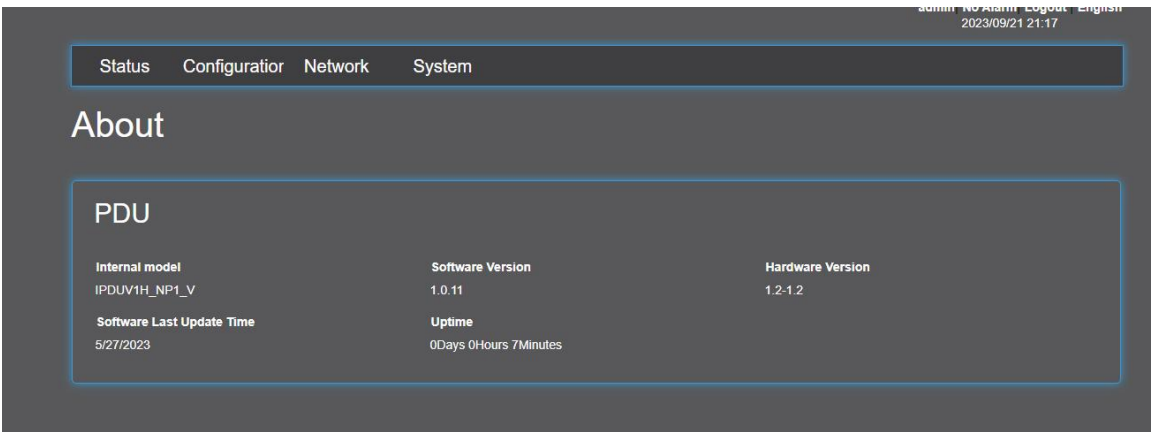


3.3.1 Equipment information

Equipment information of PDU, including product model and version information, as shown in the figure



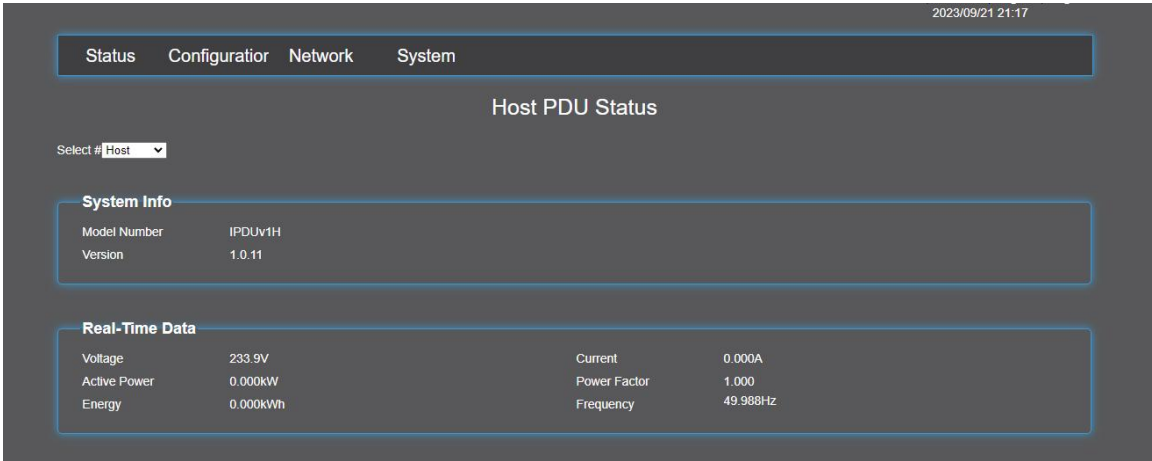
If the slave is not connected, the display is as follows:



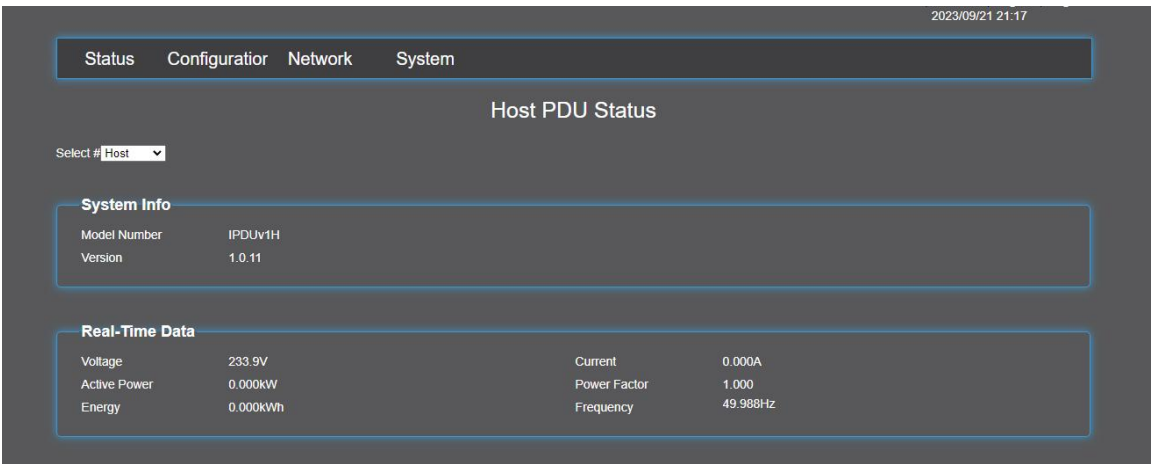
3.3.2 Electric energy status

The electric energy state of the PDU, including voltage, current, active power, power factor, and electric energy, as shown in

Fig



If the slave is not connected, the display is as follows:



3.3.3 Temperature and humidity status

The temperature and humidity state of the PDU, showing the current temperature and humidity data, as shown in Fig



If the system fails to read from the temperature / humidity sensor, a - is displayed.

The device has only one temperature and humidity port by default, but the device

supports the temperature and humidity device expansion through the built-in or external sensor box.

3.3.4 Alarm status

The alarm state of the PDU shows the status of the voltage, current, temperature and humidity, IO node sensor (access control / water immersion / smoke, etc.) relative to the corresponding threshold

alarm status:

- ◆ The current state value is below the corresponding lower limit configured in the alarm threshold column, and the display exceeds the lower limit
- ◆ The current state value is above or equal to the corresponding upper limit configured in the alarm threshold column, exceeding the upper limit
- ◆ Otherwise, the normal state will be displayed
- ◆ If the device is not connected, it is displayed as a “-”

Alarm Status			
Voltage	Normal	Current	Normal
Temperature1	-	Humidity1	-
Temperature2	-	Humidity2	-
Temperature3	-	Humidity3	-
Temperature4	-	Humidity4	-
IO Sensor 1	-	IO Sensor 2	-
IO Sensor 3	-	IO Sensor 4	-

The PDU does not reserve the IO node sensor interface, but supports nodes that extend the sensor using built-in or external sensor boxes.

3.4 Description of the parameter setting

The parameter settings include the device alarm threshold setting of the host / slave, the sensor alarm threshold setting, and the electrical energy clearance setting



.13.4 Setting of equipment alarm threshold

In the Web interface, click the Set menu, as shown in Fig

The image shows a web interface for configuring a Host PDU. At the top, there are tabs for 'Status', 'Configurator', 'Network', and 'System'. The 'Configurator' tab is active. Below the tabs, the title 'Host PDU Configure' is displayed. A dropdown menu labeled 'Select #' shows 'Host'. The main section is titled 'Device Alarm Threshold'. It contains a 'Beep Alarm' dropdown set to 'ON'. Below this, there are two sections for setting thresholds. The first section is for 'Voltage', with 'Upper Limit' set to '300.0 V' and 'Lower Limit' set to '0.0 V'. The second section is for 'Current', with 'Upper Limit' set to '63.00 A' and 'Lower Limit' set to '0.00 A'. An 'Apply' button is located at the bottom left of the configuration area.

among,

Bezzar switch, is in the alarm time, whether to open the buzzer beep.

Voltage / current threshold is to set the alarm upper and lower limit threshold of the current voltage / current.

.2 3.4 Sensor alarm threshold setting

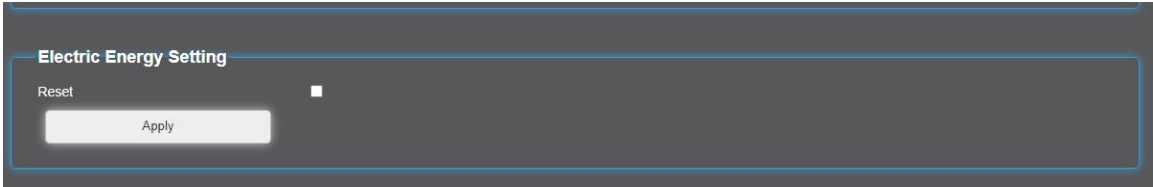
The sensor threshold is set as follows:

The image shows a web interface for configuring sensor alarm thresholds. The title is 'Sensors Alarm Threshold'. It contains a table of settings for multiple sensors. Each sensor has an 'Upper Limit' and a 'Lower Limit' field, both with a unit indicator. The sensors are: Temperature1, Humidity1, Temperature2, Humidity2, Temperature3, Humidity3, Temperature4, and Humidity4. All 'Upper Limit' fields are set to '90.0' and all 'Lower Limit' fields are set to '0.0'. The units are °C for temperature and %RH for humidity. An 'Apply' button is located at the bottom left of the configuration area.

The user can set the alarm upper and lower limit threshold of the current temperature and humidity. Currently, the device only supports setting a temperature and humidity interface, but the device supports expanding the sensor through the built-in or external sensor box. Here, you can set the upper and lower alarm threshold of the temperature and humidity in the sensor box, so that after the limit, the alarm can also be used through the PDU.

3.3.4 Electrical energy setting

In the electrical energy setting, the electrical energy of the host / slave can be emptied, as shown in Fig



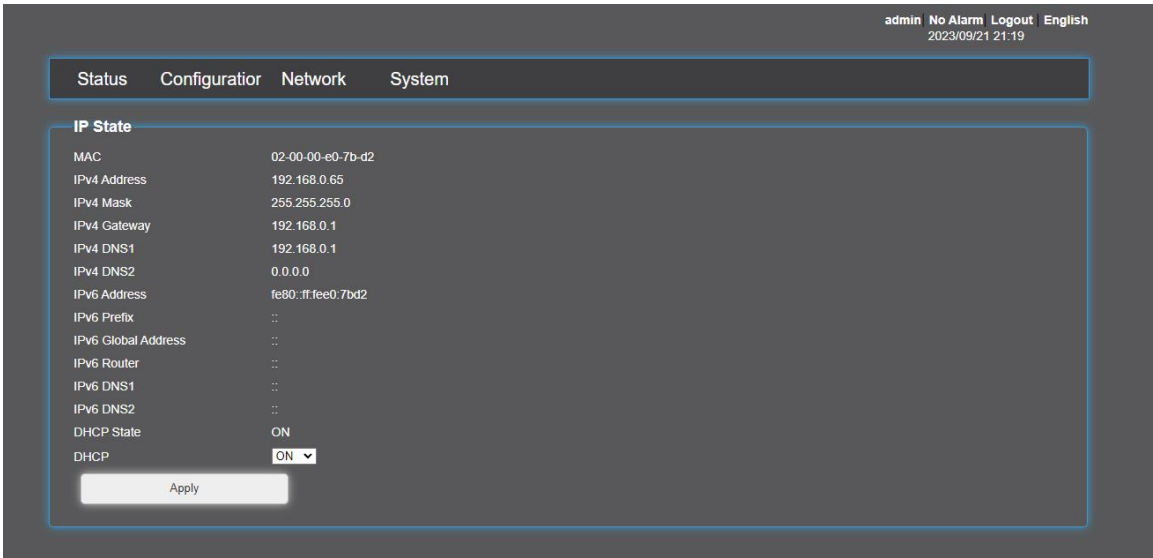
In TCP / IP settings, the DHCP is "ON" by default, and the IPDU will automatically obtain the IP address assigned from any DHCP server. If DHCP is "ON", the input in the IP address, mask and gateway box will be invalid, as shown in the figure

3.5 Network Settings

The network settings include IP address, SNMP, page login mode, mailbox, upgrade, Modbus, client / server, Telnet, etc.

3.5.1 TCP / IP settings

Devices supports static IP addresses, or dynamic IP addresses:



Users can set whether static IP or dynamic IP by turning DHCP on or off:



Select DHCP as Off, and the user customize the static IP address by entering the desired value in the IP address, mask, gateway, DNS server box. If you need to set a dynamic

IP address, select D HCP as Open.

The IPv4 static address settings

IPv4 Settings

IPv4 Address

192.168.0.163

Mask

255.255.255.0

Gateway

192.168.0.1

DNS1

192.168.0.1

DNS2

114.114.114.114

Apply

IPv6 static address settings

IPv6 Settings

IPv6 Address

::FFFF:C0A8:A3

IPv6 Prefix

::

IPv6 Global Address

::

IPv6 Router

::

IPv6 DNS1

::

IPv6 DNS2

::

Apply

3.5.2 SNMP Settings

PDU supports SNMP v 1, S NMP v 2c, S NMP v 3.

When the user selects SNMP v 1 and S NMP v 2c, the user can operate the S NMP by setting the proxy IP of the group name:

admin | Logout | English

Status

Configuration

Network

System

SNMP Settings

Version

☒ V1

☐ V2c

☐ V3

Read Community

public

Write Community

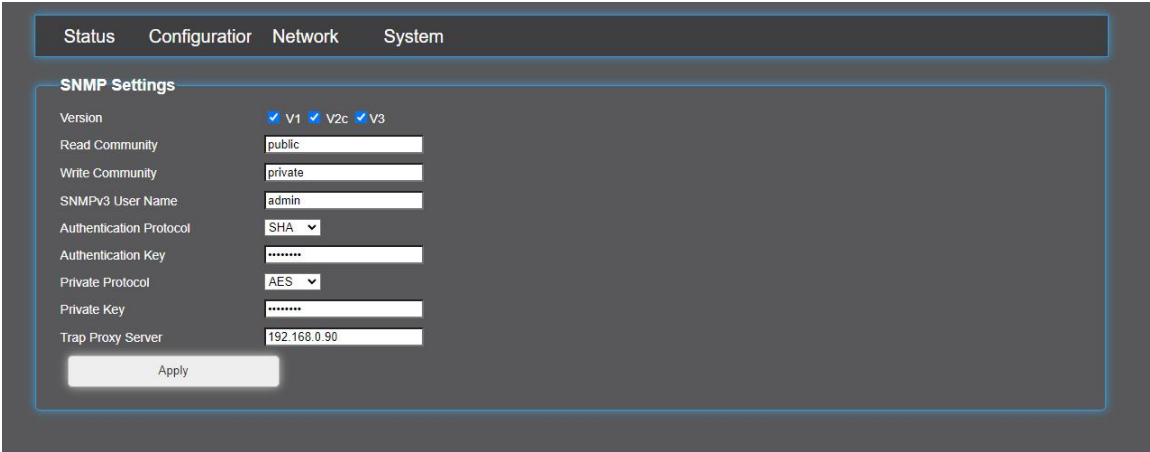
private

Trap Proxy Server

192.168.0.90

Apply

When the user chooses S NMP v 3, the user can set User Name, authentication key, private key, and set up or control the device through S NMP:



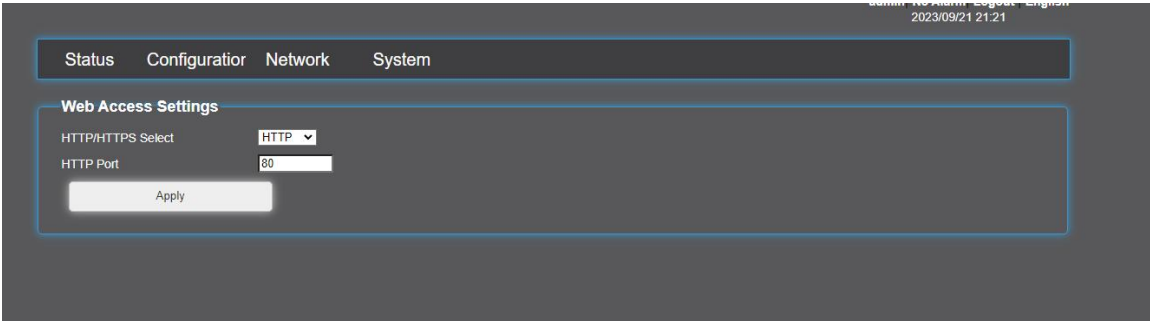
The image shows the 'SNMP Settings' configuration page in a web interface. At the top, there are four tabs: 'Status', 'Configurator', 'Network', and 'System'. The 'Configurator' tab is selected. Below the tabs, the 'SNMP Settings' section is displayed. It includes the following fields: 'Version' with checkboxes for V1, V2c, and V3 (all are checked); 'Read Community' with a text input field containing 'public'; 'Write Community' with a text input field containing 'private'; 'SNMPv3 User Name' with a text input field containing 'admin'; 'Authentication Protocol' with a dropdown menu set to 'SHA'; 'Authentication Key' with a text input field containing '*****'; 'Private Protocol' with a dropdown menu set to 'AES'; 'Private Key' with a text input field containing '*****'; and 'Trap Proxy Server' with a text input field containing '192.168.0.90'. An 'Apply' button is located at the bottom of the settings section.

In S NMP v 3, the default authentication protocol is SHA, the authentication key is "PDUAUTHKEY", the default private key protocol is AES, and the private key key is "PDUPRIVKEY".

.33.5 Web page settings

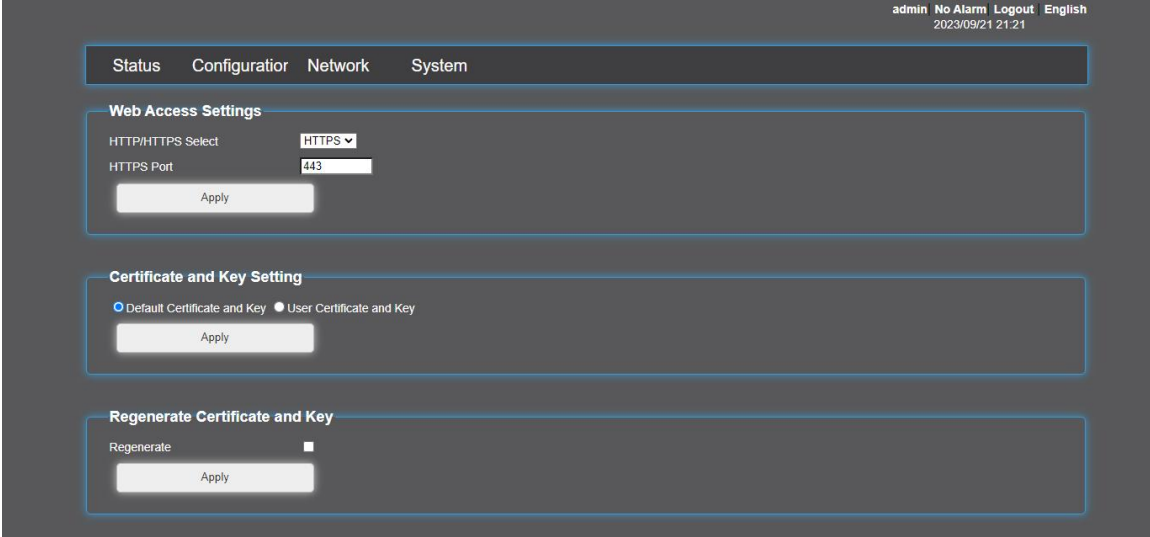
PDU supports access to web data through HTTP or H TTPS, and can be set to access through HTTP or H TTPS through web page Settings.

When the user selects the H TTP option, you can set the access port, default to port 80, and the user can customize:



The image shows the 'Web Access Settings' configuration page in a web interface. At the top, there are four tabs: 'Status', 'Configurator', 'Network', and 'System'. The 'Configurator' tab is selected. Below the tabs, the 'Web Access Settings' section is displayed. It includes the following fields: 'HTTP/HTTPS Select' with a dropdown menu set to 'HTTP'; and 'HTTP Port' with a text input field containing '80'. An 'Apply' button is located at the bottom of the settings section. In the top right corner, there is a status bar with the text 'admin No Alarm Logout English' and the date '2023/09/21 21:21'.

When the user selects the H TTPS option, you can set the access port, certificate type, and certificate reset function:



The image shows two configuration pages in a web interface. The top page is the 'Web Access Settings' configuration page, which is similar to the one above but with the 'HTTP/HTTPS Select' dropdown menu set to 'HTTPS' and the 'HTTPS Port' text input field containing '443'. The bottom page is the 'Certificate and Key Setting' configuration page. It includes the following fields: 'Certificate and Key Setting' with two radio buttons, 'Default Certificate and Key' (selected) and 'User Certificate and Key'; and 'Regenerate Certificate and Key' with a checkbox labeled 'Regenerate' (unchecked). Both pages have an 'Apply' button at the bottom. The top page also has a status bar in the top right corner with the text 'admin No Alarm Logout English' and the date '2023/09/21 21:21'.

Where, port H TTPS will default to port 443.

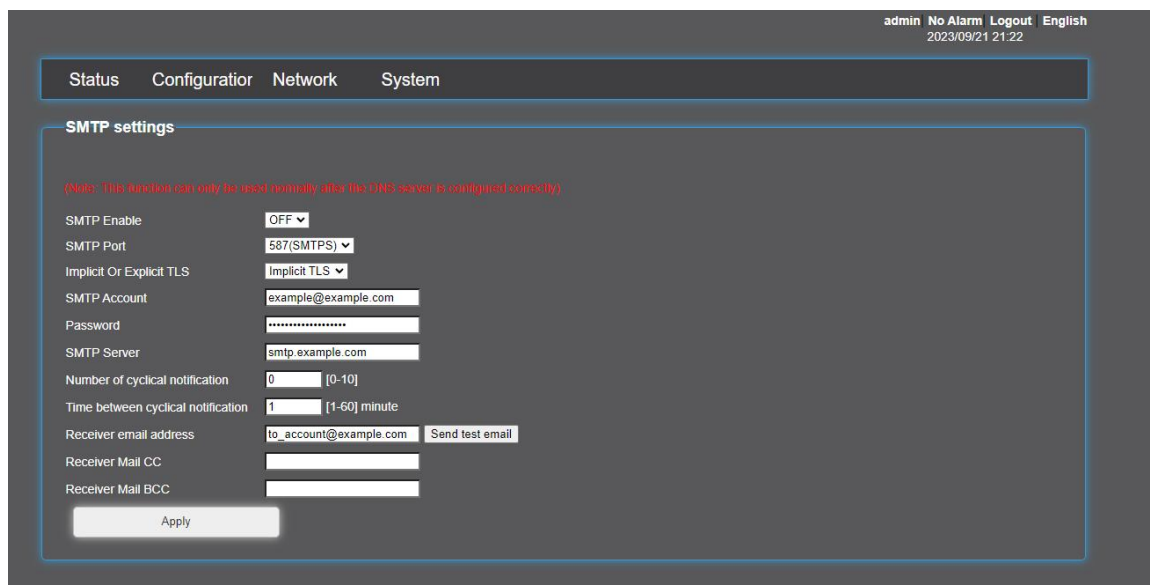
In the certificate and key Settings, it is mainly used for using the certificate automatically generated by the device or the certificate imported by the user to log in the web interface. The default is the certificate automatically generated by the device, and the validity period of the certificate is 10 years

The current device supports the import of ECC certificate or RSA2048 certificate, which well meets the security needs of users.

The purpose of reproducing the default certificate and key is to reset the time of the current device certificate generated by default to the current PDU time to prevent the certificate from expiration or error and cannot log on to the web interface.

.43.5 mailbox settings

Mailbox supports sending alarm messages to a specified mailbox via smtp:



The screenshot shows a web interface for configuring SMTP settings. At the top right, there is a user status bar showing 'admin', 'No Alarm', 'Logout', and 'English', along with the date and time '2023/09/21 21:22'. Below this is a navigation bar with tabs for 'Status', 'Configuration', 'Network', and 'System'. The 'Configuration' tab is selected, and the 'SMTP settings' section is active. A note in red text states: '(Note: This function can only be used normally after the DNS server is configured correctly)'. The settings form includes the following fields: 'SMTP Enable' (a dropdown menu set to 'OFF'), 'SMTP Port' (a dropdown menu set to '587(SMTPS)'), 'Implicit Or Explicit TLS' (a dropdown menu set to 'Implicit TLS'), 'SMTP Account' (a text input field containing 'example@example.com'), 'Password' (a masked text input field), 'SMTP Server' (a text input field containing 'smtp.example.com'), 'Number of cyclical notification' (a text input field set to '0' with a range of '[0-10]'), 'Time between cyclical notification' (a text input field set to '1' with a range of '[1-60] minute'), 'Receiver email address' (a text input field containing 'to_account@example.com' with a 'Send test email' button next to it), 'Receiver Mail CC' (an empty text input field), and 'Receiver Mail BCC' (an empty text input field). At the bottom of the form is an 'Apply' button.

When the user has set up all the functions, you need to restart the device to take effect, and then test the current configuration to work by clicking the "Send Test Mail" button:



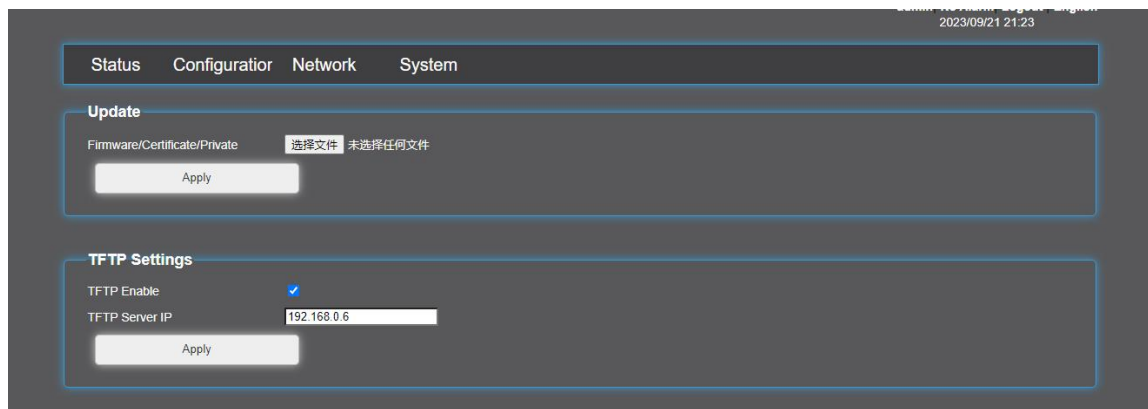
This is a close-up screenshot of the 'Receiver email address' field and the 'Send test email' button. The text input field contains 'to_account@example.com' and the button is labeled 'Send test email'.

When the configuration takes effect, the user can set the "number of periodic notifications" to set the number of messages sent after the alarm occurs, and the interval time of messages sent by setting the "periodic notification interval time".

.53.5 Upgrade Settings

In the upgrade settings, users can import custom certificates and keys or upgrade the

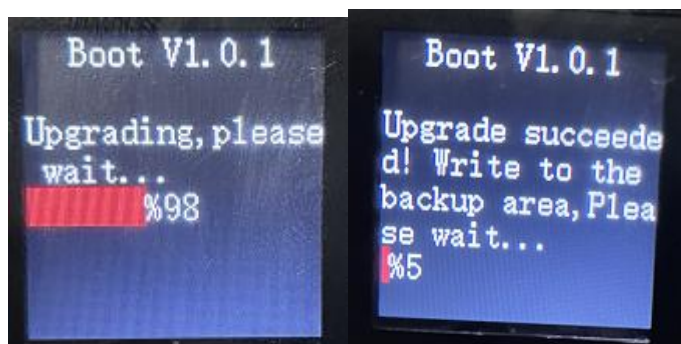
current firmware information.



PDU supports using web to import certificates, keys and device firmware and TFTP to import firmware. If you upgrade the firmware, using the TFTP mode is recommended.

In the process of upgrading the firmware with TFTP, the user can set the IP address of the TFTP server, and in the native machine, open the TFTP software, put the firmware in the corresponding folder, the TFTP task will search the TFTP server every minute interval, and if the server exists, the firmware is then immediately upgraded.

After the firmware upgrade is completed, the LCD will prompt the upgrade, and the LED running light will keep flashing quickly. Please wait patiently for the upgrade to complete:

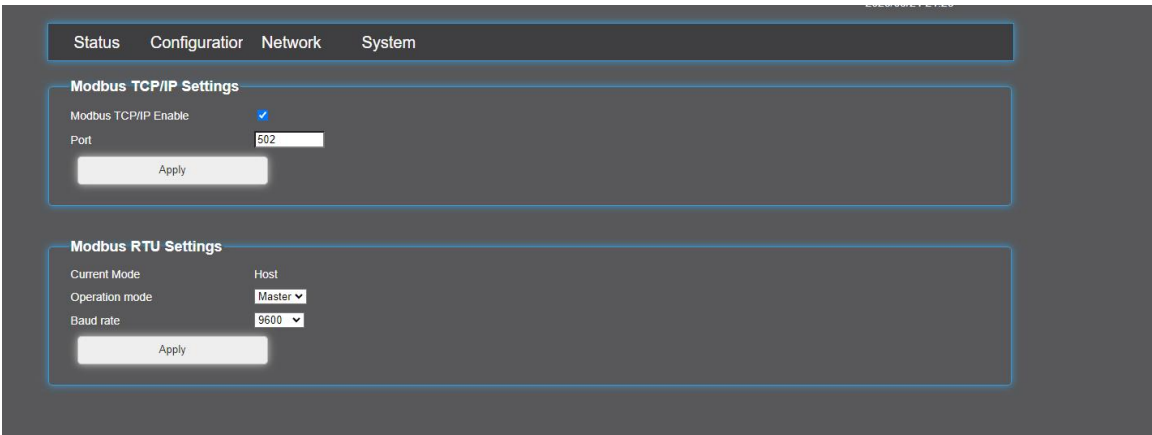


supplementary specification:

- 1, PDU supports PING-PONG upgrade, even if the power is off midway during the upgrade process, the device can continue to upgrade again
- 2, PDU supports mutual exclusion of version and type, so in the process of mass upgrade, it is recommended to use TFTP for mass upgrade. PDU of the same version will automatically refuse to upgrade after obtaining the firmware in TFTP, to ensure that PDU will not repeatedly upgrade the firmware of the same version.
- 3, The PDU firmware is relatively large, so during the upgrade process, please wait patiently for the upgrade to complete, and ensure the smooth network.
- 4, During the PDU upgrade, do not perform other operations, such as clicking the button, using S NMP, logging in the web page, etc.

. 63.5 Modbus setting

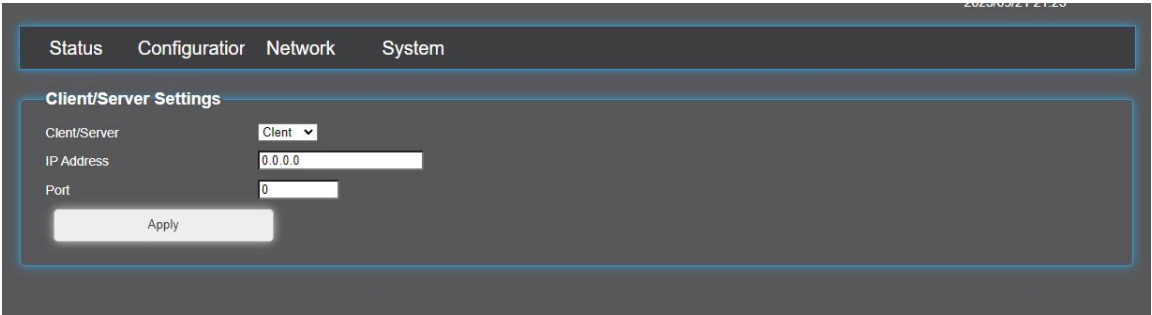
The PDU supports using both Modbus RTU and Modbus TCP to read the data.



Among them, Modbus TCP is mainly convenient for users to read their content and data directly through the network, while Modbus RTU is designed to set up the master and slave mode of the current device (see Section 3).2

.7 3.5 Client / Server settings

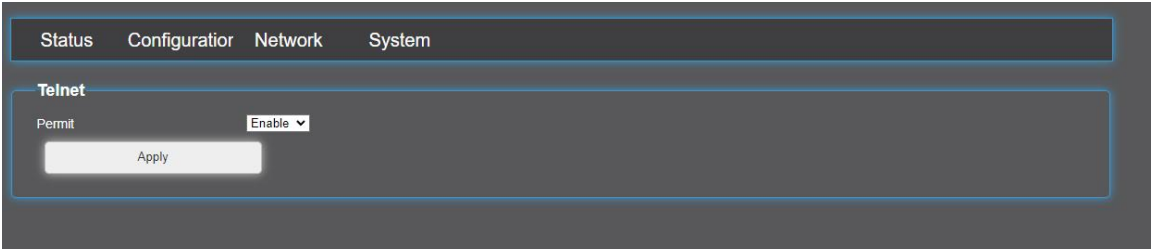
PDU supports users to read data directly through TCP server / client, so as to conduct secondary development:



For the relevant agreement text, you can consult the relevant personnel of the department.

3.5.8 Telnet settings

PDU users only read the device through Telnet or perform secondary development:



T elnet The default user name and password are "admin", and when the user changes the administrator user name and password, the Telnet user name and password are changed together.

3.6 System Settings

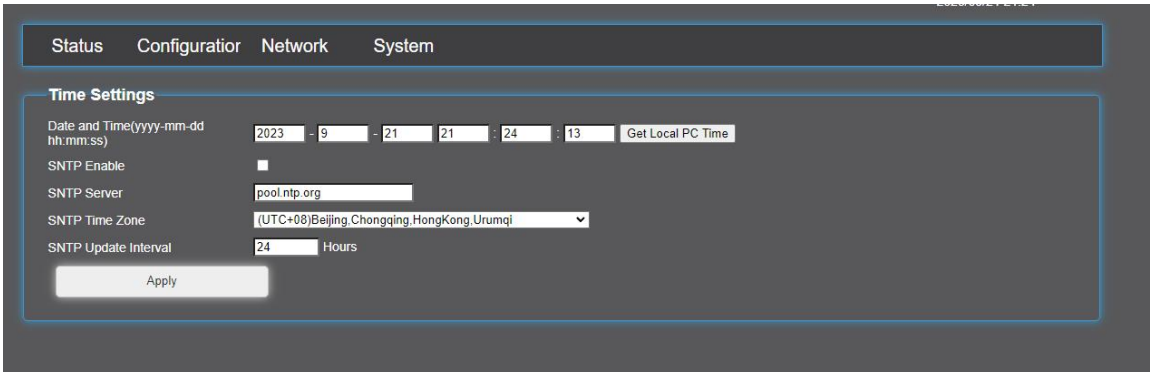
The system settings include relay, sensor, time, user, USB, logs, tools, equipment information, etc.

3.6.1 Time setting

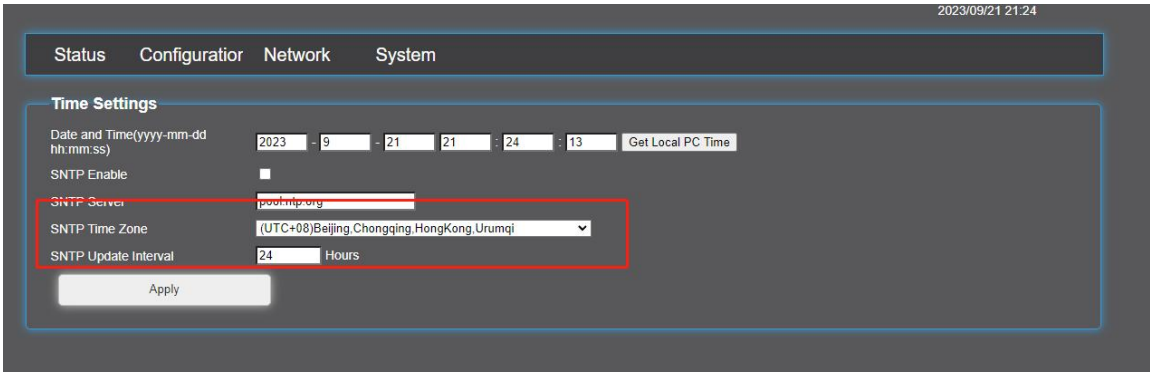
When the user gets the PDU, it is recommended to set the time once to ensure the accuracy of the system time.

The PDU supports directly obtaining the time of the current PC as the PDU time, and also supports the function of accessing the NTP server for matching.

When the user uses the current PC time as the PDU time, you can directly click "Get PC time", and must not check the "S NTP enable" function, otherwise the setting will fail



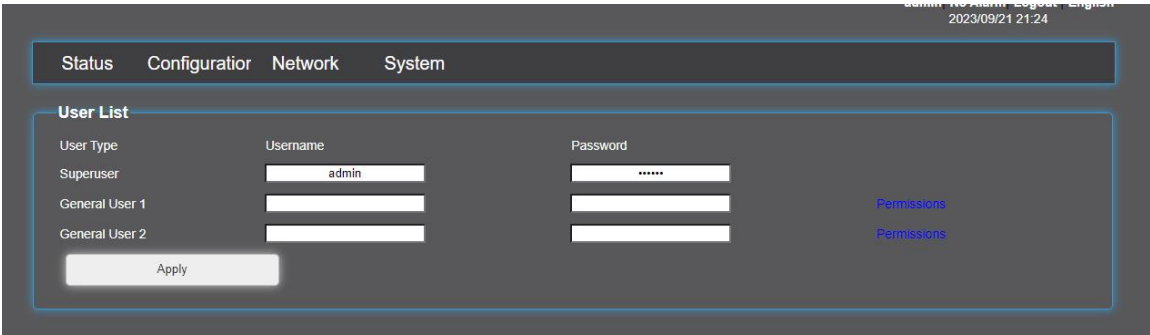
When the user uses the NTP server, the user needs to check the SNTP enable, and set the SNTP server address, the current time zone, and the time interval:



After the setting is complete, restart the PDU and automatically obtain an NTP server time, so as to complete the timing function

3.6.2 User Settings

In the Web interface system Settings, click User Settings.

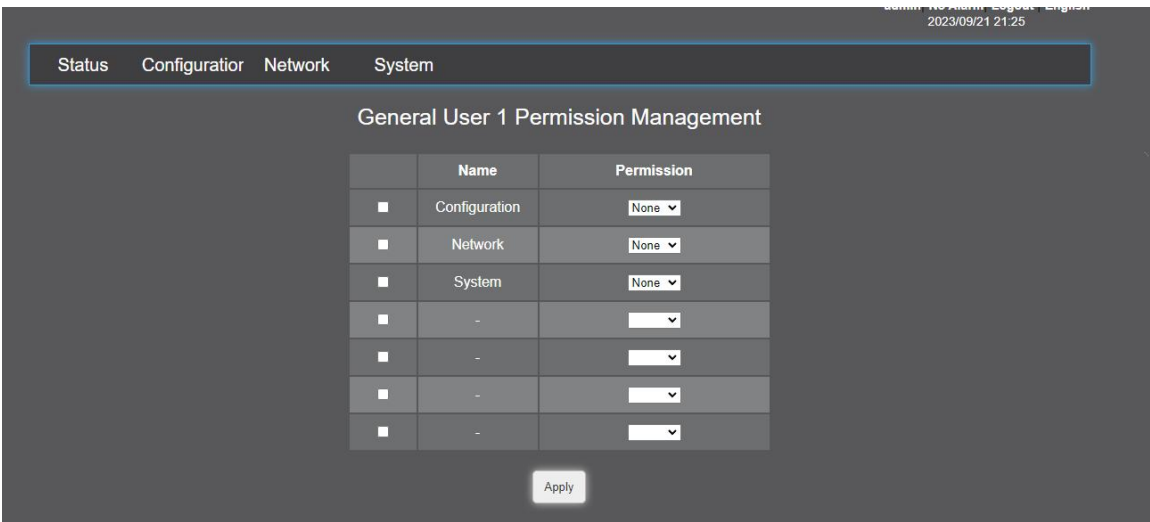


User settings for used to add, modify, or delete users. The device can add three users: super user, user 1 and user 2.

The administrator's default user name and password are both "admin". The administrator username and password is mandatory and you cannot leave either one empty.

The user name and password for user 1 and user 2 are optional. You can close the ordinary user account by keeping the user name and password empty. Ordinary users have no permission set by default. Managers can add access rights for ordinary users and click "permission setting" to set the permission. Administrators can configure privileges for ordinary users, as shown in the figure

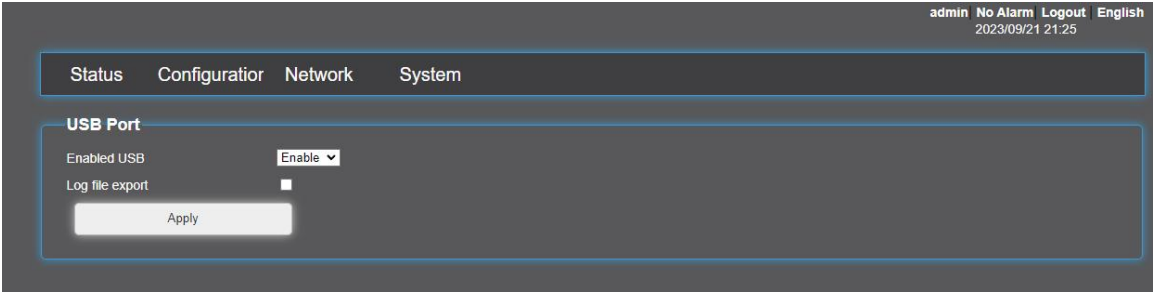
Super users have the highest device privileges and can access or modify any options that can be set and modified. Super users can set three permissions of read / write, read-only and forbidden access for ordinary users to access different interfaces, as shown in the figure



3.6.3 U SB settings

In the Web interface system Settings, click USB Settings.

Users can disable or enable the USB port through the current setting, and they can export the log through the USB setting:



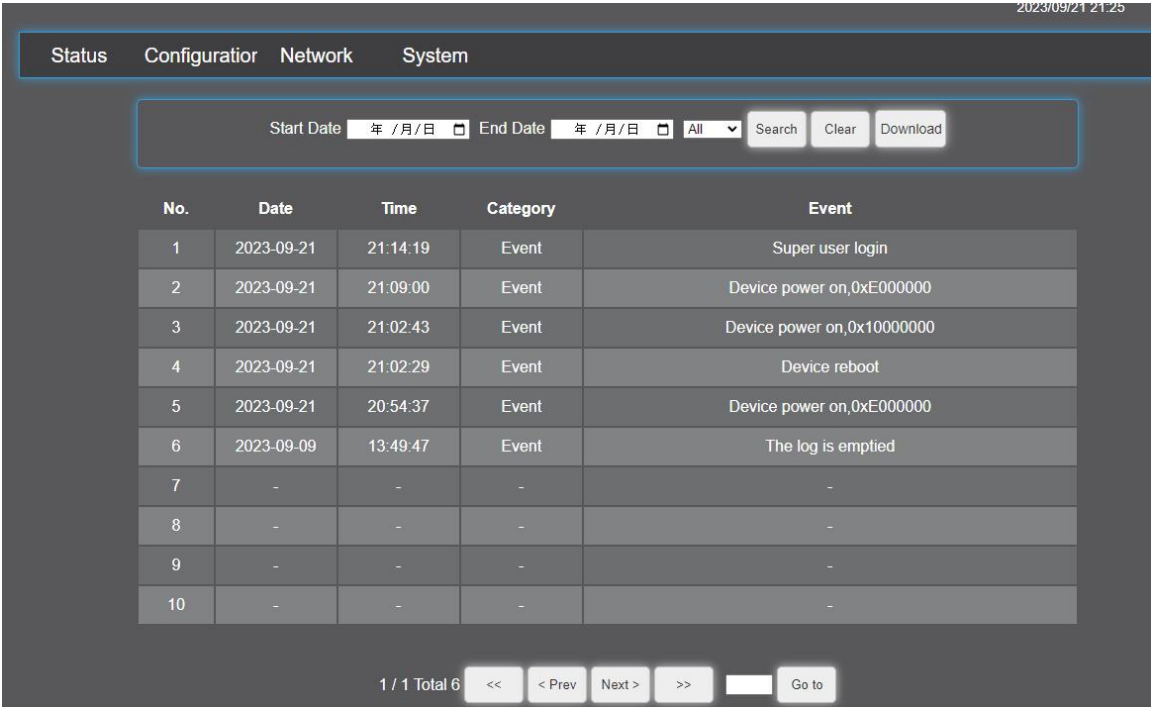
When the user checks "Log Export", the user then inserts the U disk, and the log information in the PDU reaches the U disk everywhere for the user to analyze.

3.6.4 Log query

The PDU records two log types: event log and alarm log:



Users can obtain the log information of the relevant type and the relevant time by selecting the relevant type:

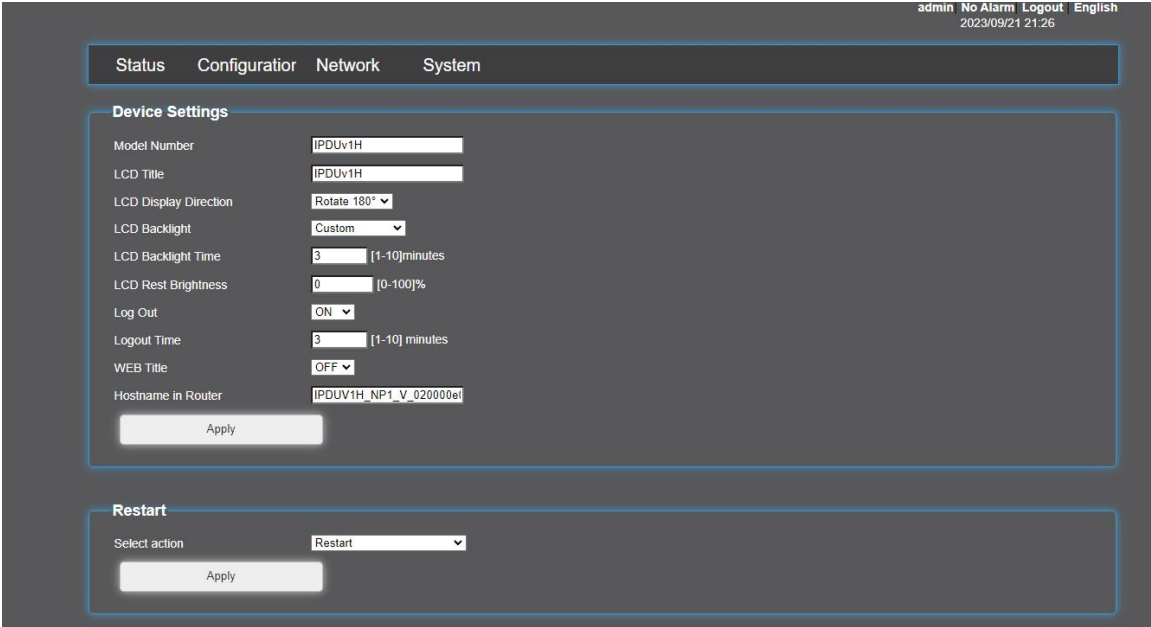


The device supports 1000 log storage by default, and rolls rides when the logs are full

The log also supports download operation. After clicking the download button, the log will be downloaded to the accessed PC through the browser.

3.6.5 Tools

In the toolbar, users can personalize the PDU and can already restart and reset the PDU:



among,

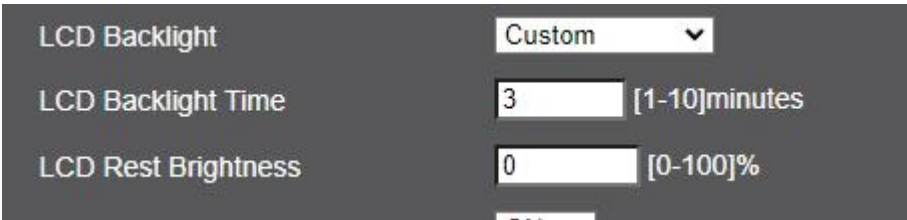
In the Model Settings bar, users can set a personalized name for the current PDU, which is displayed in the S NMP, in the device status.

LCD title and display direction item, can set LCD LCD display title has display direction, support rotation 0 / 90 / 180 / 270 degrees four direction display, factory will be set by default.

LCD backlight supports PWM dimming, which can be set to normal mode and custom modes. In normal mode, the screen brightness can be set to 0~100%, as shown in the figure:



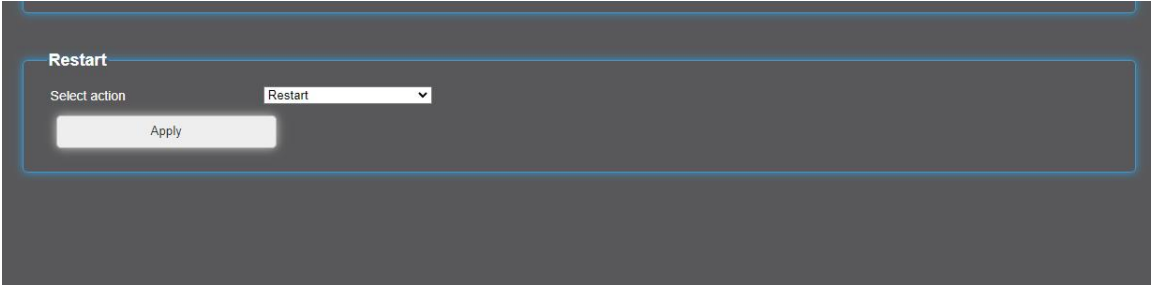
In custom mode, the user can set the backlight time and the screen brightness. As shown in the figure, when the backlight time reaches, the LCD will enter the screen state and keep the set screen brightness. When the user presses a button or an alarm occurs, the screen will return to 100% brightness:



Automatic logout option, is to facilitate users to do not operate the web page,

after how many minutes interval, automatically login to the login interface, the default is 3 minutes, the user how to set to close, then the user login to the web page, will never log out.

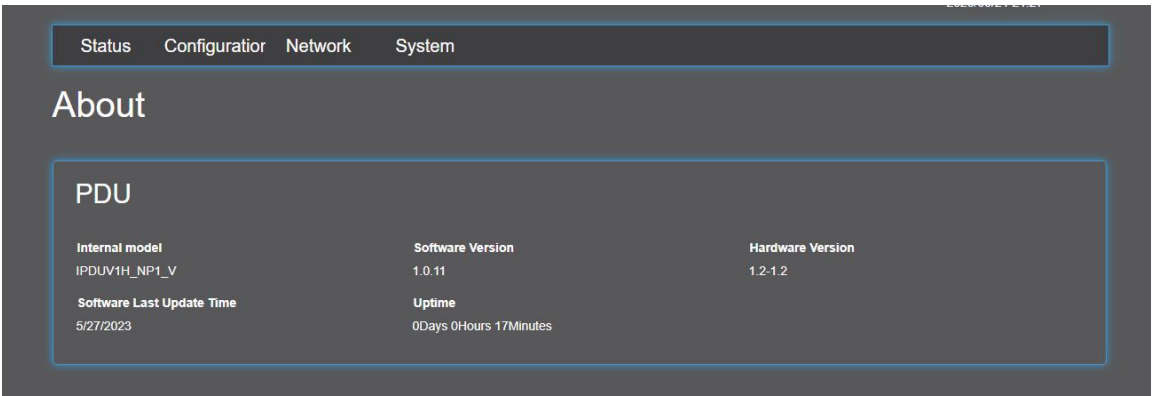
In the restart option, the user can set to restart the PDU or restore the parameters in the PDU:



3.6.6 About the

About the interface, some related parameters that record the current PDU firmware and running time:

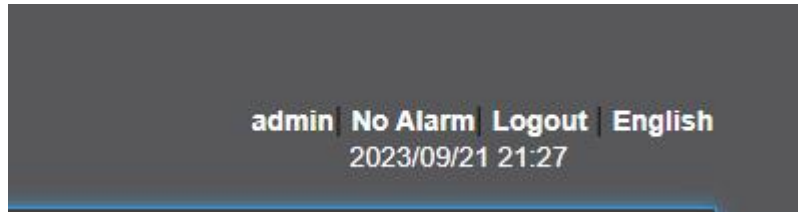
The content user cannot be changed, and when the user needs to provide after-sales service to the current equipment, he can provide the current screenshot to our company, and our company can provide relevant after-sales service according to the information of the current interface



3.7 Other settings description

3.7.1, the description of the display column

In the upper right corner of the interface, there is a bar of the current status display bar. It can display the current login user, alarm status, login, switching in Chinese and English, and the current device time.



Click on the different display content, you can quickly enter into the different interfaces

- 1) Click on the current login user bar to enter the user Settings interface
- 2) Click Alarm to jump to the log view bar
- 3) Click "logout" to exit the system and switch between different users to select login
- 4) After clicking "Chinese", the device will switch to the English interface for display
- 5) Click on the current device time to enter the time setting interface

3.7.2 I P address acquisition

The PDU has many ways to obtain the IP addresses:

First, after the PDU connects to the router, it obtains the IP address assigned by the router in a static or dynamic way.

Second, after the PDU is directly connected to the PC through the network cable, the PC sets the static IP address. At this time, if the PDU has been set to the static IP address and is in the same network segment as the PC, then it can be directly accessed.

Third, after the PDU is directly connected to the PC through the network cable, the PC will set the static IP address. If the PDU has been set to dynamically obtain the IP address, the PC needs to be set to the address of the 192.168.0.xxx network segment. After about 15 seconds, the PDU will automatically obtain a section of the web address in 192.168.0.192.160.160 ~ 192.168.0.169, which can directly access the PDU.


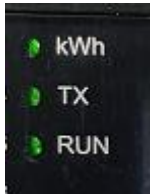
Fourth, the user can set the dynamic or static address of the PDU directly through the LCD LCD.

Chapter 4: Troubleshooting

For persistent problems, or not described here, please contact our customer service center.

4.1 Common Q

question	Rx
The network is disconnected	<ul style="list-style-type: none">◆ Check the LED indicator on the network port and make sure the indicator flashes normally◆ Check the integrity of the connected network cable

	<ul style="list-style-type: none"> ◆ Verify the network settings of the PDU
Unable to access Web user interface	<ul style="list-style-type: none"> ◆ Verify you can ping the IP address of the PDU ◆ Verify that you are using a Web browser that supports PDU, see, Supported Web Browsers ◆ Verify that the website input is correct ◆ Reset the device
	<p>In LCD, the display of the current state, where green indicates connectivity or normal state, and red indicates disconnection or error occurrence</p> <p>The first one in the first line indicates: whether the PDU hardware is normal</p> <p>The first line and the second one indicate: the network connection status of the PDU</p> <p>The four points in the second row are displayed in host mode, indicating whether slave 1 to slave 4 are connected.</p>
The parameter display of the LCD LCD appears is bled	<ul style="list-style-type: none"> ◆ Reset the device parameters through the LCD ◆ Reset the device parameters with the Rest key ◆ Still unresolved, you can contact our post-sale processing
	<p>LED Status Description:</p> <p>kWh indicator: after PDU plus load, the lamp will not flash regularly, so that it can be judged</p> <p>Whether the broken metering function is normal</p> <p>TX indicator: When the PDU is the host, this light indicates that the host sends a letter reading the slave</p> <p>No. When the PDU does the slave, the lamp represents the reading signal of the corresponding host of the slave, so as to judge whether the cascade state is normal</p> <p>RUN indicator: When the PDU is running normally, the light goes off at 1 second interval when the PDU</p> <p>During the firmware upgrade, or the parameter reset, the light will flash quickly and irregularly to indicate that the device is also in normal operation</p>

4.2 As for the SNMP issues

question	Rx
Unable to perform either a GET or a SET	◆ Verify the community and view the SNMP

	<p>Settings</p> <ul style="list-style-type: none"> ◆ Verify that the UDP port 161 opens correctly ◆ Use the SNMP v 3 case to see if the parameter is correct
Cannot receive the trap	<ul style="list-style-type: none"> ◆ Verify that the trap proxy server IP address is configured correctly ◆ Verify that the UDP port 162 opens correctly
The trap received at the Ms was not identified	<ul style="list-style-type: none"> ◆ See the documents received by your gateway to verify that these traps are properly integrated into the alert / trap database