

User Manual

IP PDU

Introduction:

LIU-0816-WN is a PDU product designed to provide continuous and stable power supply for servers. LIU-0816-WN monitors the power consumption status and environmental status of the equipment, and provides users with corresponding information and makes corresponding warning and overload power-off measures. Users can access LIU-0816-WN through the network port to obtain the current status of the device and control the opening and closing of each output port, so as to realize the function of remote restart of the server.

Product Features:

8 power output, the total current 16A;

Current and voltage (total input) measurement;

Built in temperature and humidity sensor to monitor the use environment of the equipment;

Embedded technology, support Java, web browsing;

Two level values of warning and overload can be set;

Setting the power on delay time of each circuit can effectively prevent the impact of current surge on the power supply system;

LED indicates the power supply status of each switch;

LED digital display shows the current voltage and current values;

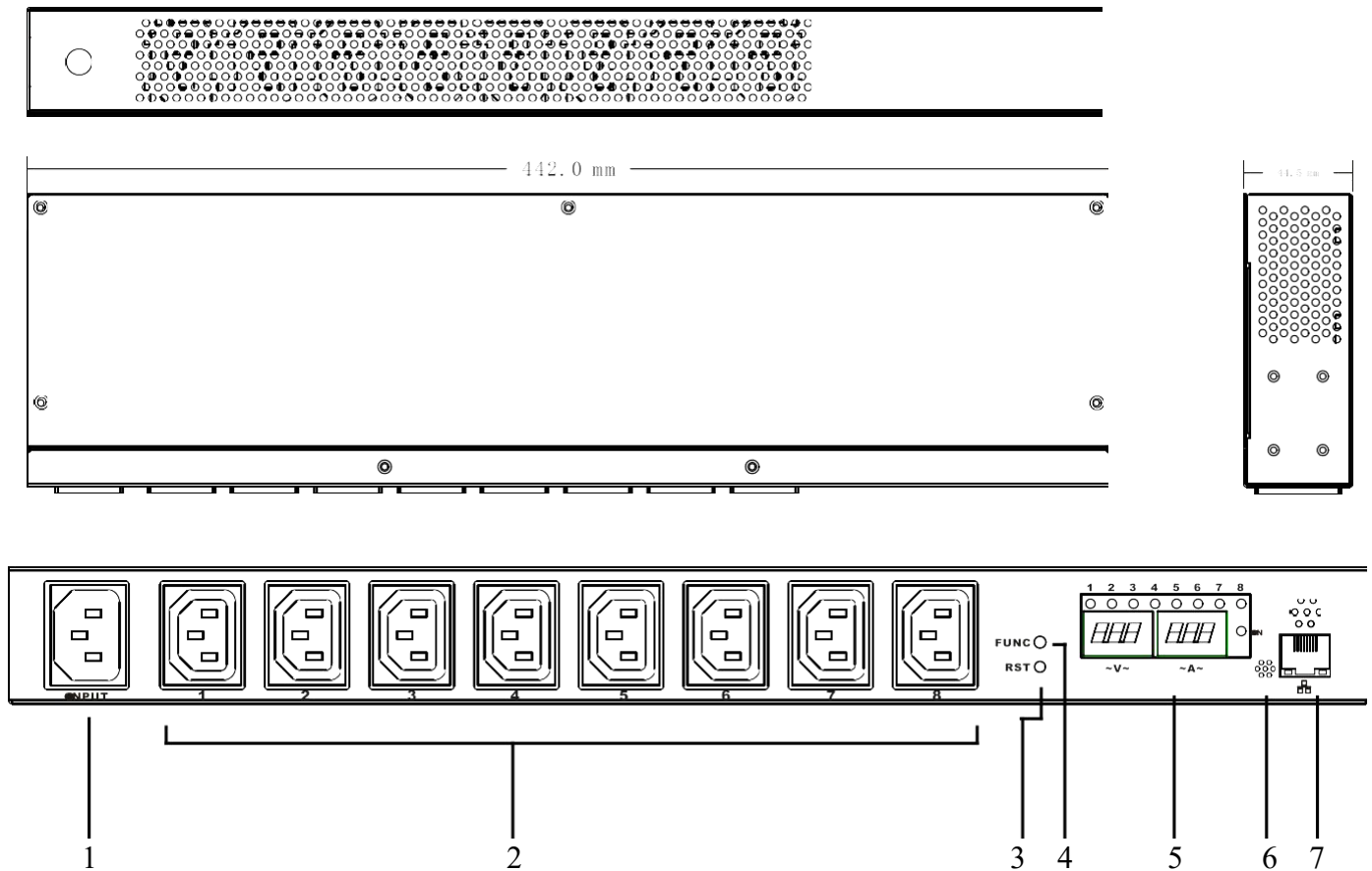
Provide local operation query button of PDU device;

Built in lightning protection circuit, anti voltage surge circuit, effective protection of the server;

Specification:

Type	LIU-0816WN
Input	IEC320 C20*1
Output	IEC320 C13*8
IP port	RJ 45
Voltage input	110-240V 50/60Hz
Voltage output	110-240V 50/60Hz
Protection	16A overload protection, lightning protection
Voltage measurement range	90-264V AC resolution 1 V
Current measurement range	0-20A resolution 0.1 A
Temperature measurement range	0°C~50°C resolution 1°C
Humidity measurement range	20% -90%RH resolution 1%RH
Housing	Metal
Dimensions(L x W x H)	442*119*44.5mm

Product Diagram :



Instructions :

- 1、 Power Input Socket IEC320 C20
- 2、 Output Socket IEC C13
- 3、 Reset Key
- 4、 Function Key, Check the machine IP address
- 5、 Meter Panel, Display voltage, current, temperature, humidity, etc
- 6、 Temperature and humidity sensor
- 7、 Network Port, Connect LAN or WAN

Using Directions:

1. **Equipment connection** Connect LIU - 0816-8 IEC C13 output plug with one side of the output line,

connect 8 output line respectively with the power input end of the server which needs power supply. Connect one side of input line plug with the LIU - 0816 - WN IEC320 C20 input socket, and the other side with the AC power supply socket. After that, LIU - 0816 - WN will start from the first port to the 8th port with interval of 1 second, and supply power for the server. Display panel will show the current supply voltage and total output current of 8 circuits, 8 LED indicator light indicates the state of current 8 output port.

2. Check the IP address The display will show LIU - 0816 - current IP address after pressing the FUNC button when the display shows the voltage and current. The default IP address is 192.168.0.100

3. Check the temperature and humidity The display will show temperature and humidity of LIU - 0816 - WN built-in temperature and humidity sensor after pressing the FUNC button in the state of screen shows the IP address. The left screen shows temperature and the right screen shows humidity.

4. Reset of the equipment Press the LIU - 0816 - WN RST button on the front panel, it will reset.

5. Reset the device to the factory default value. Press the FUNC key for 10-15 seconds and hear the buzzer beep twice, indicating that the device's IP address, username, and password have been restored to the factory default value

6. Network access and control With LIU - 0816 - WN power-on, users can achieve the function that PC host access and control LIU - 0816 - WN in the same LAN by connecting RJ45 socket with network

①. Login control interface Open the IE browser on any PC in LAN host, the address bar: [Http://192.168.0.100](http://192.168.0.100), uses can login LIU - 0816 - WN control interface after inputting user name (admin), password (admin) in the jumped login screen as shown in the picture below.

PDU	
Loading: nullA Temp: null℃ Moisture: null% Status: normal	
Info	PDU
PDU	PDU: Current: 0.0A Status: normal
System	Threshold
Control	Voltage
Socket	Warning 250v
Allocation	Overload 300v
PDU	Current:
Threshold	Warning 17A
User	Overload 17A
Internet	Temperature:
	Warning(≤) 5
	Overload (≥) 50
	Moisture:
	Warning: 80%

②. PDU system information Click the "System" on the left side of the information bar, to indicate the PDU system information as the following picture.

Item No.	IP PDU
Firmware Version	1.0.0
MAC Address	00:04:A3:00:00:00
System Name	IP PDU
Admin	admin
System Address	office

Apply

③. **The power port control** Click "Socket" in the control bar which is on the left side of the interface , display as shown below.

Socket Name	Status	
outlet 1	on	<input type="checkbox"/>
outlet2	on	<input type="checkbox"/>
outlet3	on	<input type="checkbox"/>
outlet4	on	<input type="checkbox"/>
outlet5	on	<input type="checkbox"/>
outlet6	on	<input type="checkbox"/>
outlet7	on	<input type="checkbox"/>
outlet8	on	<input type="checkbox"/>

Operate: On ▼ Apply

Users can start or shut off LIU - 0816 - WN 8-way output in this interface.

Start all: click drop-down box behind the action box, choose "Start", click the "Apply" button

Shut off all : click drop-down box behind the action box, choose "Shut off", click the "Apply" button

Custom start and shut off : illustrate the method of custom start and shut off, if the user needs to start 1, 2, 3, 4 circuit, but shut off 5, 6, 7, 8, **the first method**: click the drop-down box behind the action box, choose "Start". And then, click the small box behind outlet1, outlet2, outlet3, outlet4 respectively, click "Apply" button. **The second method**: click the drop-down box behind the action box, choose "Shut off ". And then, click the small box behind outlet5, outlet6, outlet7, outlet8 respectively, click "Apply" button.

④. **Start and shut off time-delay** Click "PDU" in the configuration box which is on the left side of the interface, display interface as shown below.

Socket Name	Starting-up Delay(sec)	Disconnection Delay(sec)
outlet1	1	1
outlet2	2	2
outlet3	3	3
outlet4	4	4
outlet5	5	5
outlet6	6	6
outlet7	7	7
outlet8	8	8

Users can start or shut off time-delay of LIU - 0816 - WN 8-way output. The picture above is the factory Settings, it means that the 8 circuit of LIU - 0816 - WN will output from the 1st to the 8th port in sequence in the interval of one second after connecting with power. When open the 8 output through the network, the starting delay time will display on the 8 output port. It is important to note that when the user disconnect the input power of LIU - 0816 - WN, shutting off the time-delay function is invalid. Shutting off the time-delay function is only applicable to control 8-way output through a network.

⑤. **Threshold value setting** Click “Threshold value” in the configuration box which is on the left side of the interface, display interface as shown below.

Name	Shreshold				
Current	Warning	5.0	A	Overload	6.0 A
Voltage	Warning	250	V	Overload	300 V
Temperature	Less than	5	℃	more than	50 ℃
Moisture	Warning	80	%		

The picture above is the factory Settings, the meaning is:

Current warning value 5A: When the total current exceeds 5A, the buzzer of LIU-0816-WN emits a "beep beep" alarm with a slightly longer interval

Current overload value 6A: When the total current exceeds 6A, the buzzer of LIU-0816-WN emits a "beep" alarm with a short interval sound

Warning voltage 250V: When the input voltage exceeds 250V, the buzzer of LIU-0816-WN emits a "beep beep" sound alarm

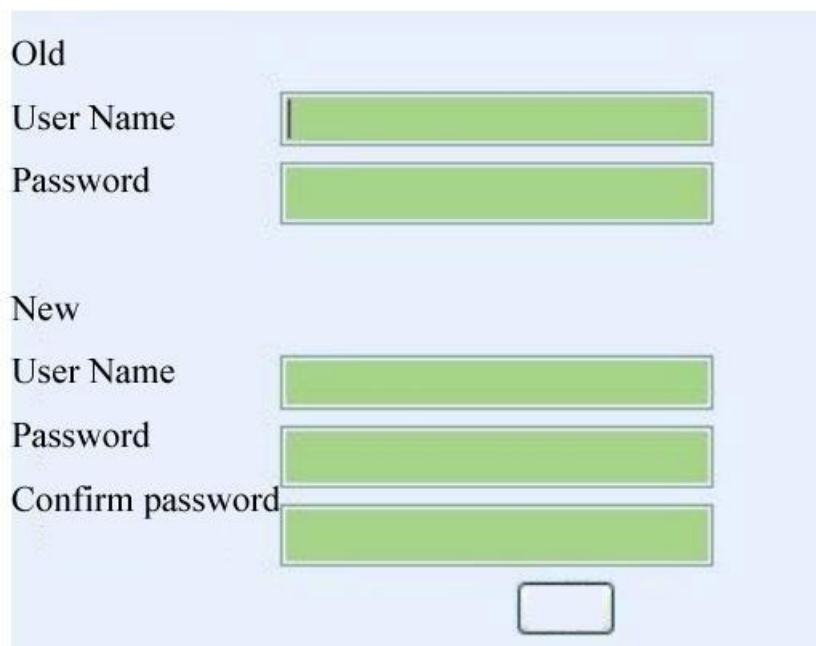
Current overload value 300V: When the input voltage exceeds 300V, the buzzer of LIU-0816-WN emits a short beep interval sound alarm

Temperature is under 5 ℃, or exceed 50 ℃: When LIU - 0816 - WN built-in temperature and humidity sensor sensing the environment temperature is under 5 ℃ or exceed 50 ℃, LIU - 0816 - WN buzzer sends out "beep, beep" sound alarm

Humidity warning value 80%: When LIU - 0816 - WN built-in temperature and humidity sensor sensing environment humidity is more than 80%, LIU - 0816 - WN buzzer sends out "beep, beep" sound alarm

Explanation: The specific threshold setting is set by the user according to the actual usage environment

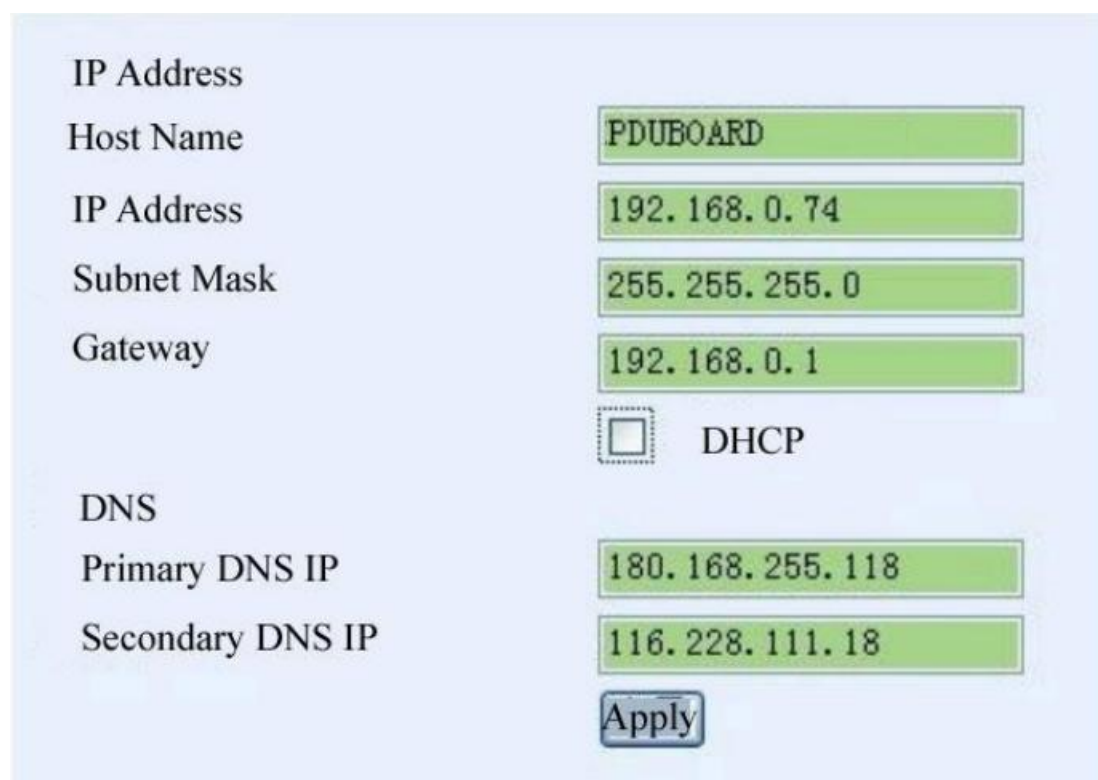
⑥. **The user name and password setting** Click “user” in the configuration box which is on the left side of the interface, display interface as shown below.



The interface for user settings is displayed on a light blue background. It is divided into two sections: 'Old' and 'New'. The 'Old' section contains two text input fields: 'User Name' and 'Password'. The 'New' section contains three text input fields: 'User Name', 'Password', and 'Confirm password'. Below these fields is a single button labeled 'Apply'.

The login user name and password of LIU - 0816 - WN can be modified in this interface. After filling in the original and new user name, password and password confirmation respectively, click apply button, the new user name and password will be used at the next time login LIU - 0816 - WN.

⑦. **IP address and DNS Setting.** Click “network” in the configuration box which is on the left side of the interface, display interface as shown below.



The interface for network settings is displayed on a light blue background. It contains several text input fields for configuration: 'Host Name' (containing 'PDUBOARD'), 'IP Address' (containing '192.168.0.74'), 'Subnet Mask' (containing '255.255.255.0'), and 'Gateway' (containing '192.168.0.1'). Below these fields is a checkbox labeled 'DHCP'. Further down, there are two more text input fields for DNS: 'Primary DNS IP' (containing '180.168.255.118') and 'Secondary DNS IP' (containing '116.228.111.18'). At the bottom of the form is a button labeled 'Apply'.

Host name: The name showed in the LAN, users can set itself

IP address: The current LAN IP address of LIU - 0816 - WN

Subnet mask: The current LAN subnet mask of LIU - 0816 - WN

Gateway: The current gateway of LIU - 0816 - WN

Enable the DHCP: The superior router of the current LAN will distribute network parameters automatically for LIU - 0816 - WN, it will come into force after clicking the apply button

Primary DNS IP refer to the supervisor router setting of current LAN

Secondary DNS IP refer to the supervisor router setting of current LAN