# User Manual

#### **IP PDU**

#### **Product function:**

LIU - 0816 - WN is a kind of PDU product which can provide a steady power supply better for the server. LIU - 0816 - WN can provide relevant information for users and makes corresponding measures of warning or overload power by monitoring the electricity and environment status. The user can get the equipment's current status and start or shut off each output port by accessing LIU - 0816 - WN through the network port, so as to realize the function of the remote server restart.

#### **Product features:**

- 8 power output, the total current 16A
- current, voltage (total input) measurement
- built-in temperature and humidity sensor to monitor the using environment
- embedded technology, support Java, web browsing
- can set up two level values of warning and overload
- set each circuit delay time to prevent the impact of power surge to the power supply system LED indicates power supply condition of each switch
- LED digital display shows the current value of voltage and current
- provides local query buttons of PDU equipment
- built-in lightning protection circuit and resisting voltage surge circuit can protect the server effectively

#### **Product specifications:**

Voltage input: 110-240V 50/60Hz Voltage output: 110-240V 50/60Hz Input socket type: IEC320 C20 \*1 bit Output socket type: IEC320 C13 \*8 bits

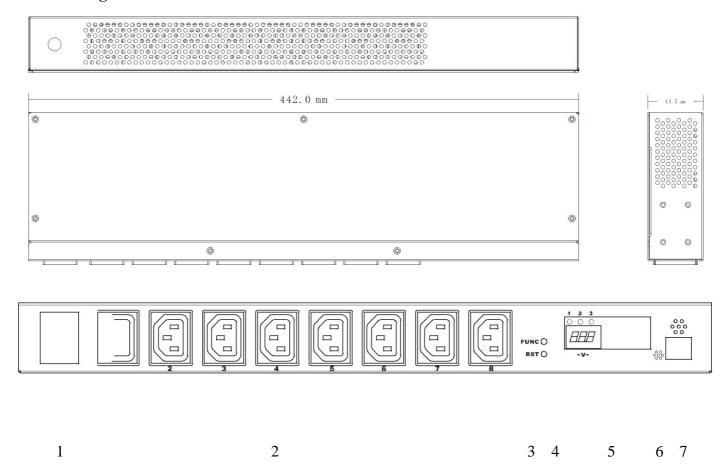
Protection: 16A overload protection lightning protection Voltage measurement range: 90-264VAC resolution 1 V

Current working range: 0-20A resolution 0.1 A

Temperature measurement range: 20% -90%RH resolution 1%RH

Humidity measurement range: 0 °C-50 °C resolution 1 °C

## **Product Diagram**



## Instructions

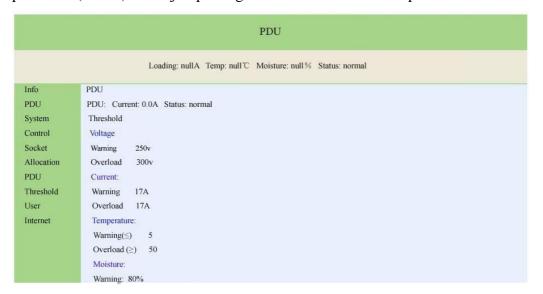
- 1. Power Input Socket IEC320 C20
- 2. Output Socket IEC C13
- 3. Reset Key
- 4、 Function Key, Check the machine IP address
- 5. Meter Panel, Display voltage, current, temperature, humidity,
- etc 6. Temperature and humidity sensor
- 7. Network Port, Connect LAN or WAN

## **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 192.168.0.10
- **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. 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: <a href="http://192.168.0.100"><u>Http://192.168.0.100</u></a>, 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.



**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.



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



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.

**②. 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 1<sup>st</sup> to the 8<sup>th</sup> 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.

Current Warning	17.0	A Overload	17.0	A
Voltage Warning	250	V Overload	300	V
Temperature Less than				
Temperature Less than	5	°C more than	50	j (

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

Current warning value 17A: When the total current exceeds 17A, LIU - 0816 - WN buzzer sends out "beep, beep" sound alarm

Current overload value 17A: When the total current exceeds 17 a, LIU - 0816 - WN will cut off the power supply of all output port

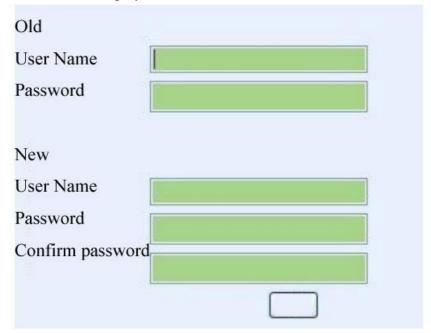
Warning voltage 250V: When the input voltage exceeds 250V, LIU - 0816 - WN buzzer sends out "beep, beep" sound alarm

Current overload value 300V: When the input voltage exceeds 300V, LIU - 0816 - WN cut off the power supply of all output port

Temperature is under 5 °C, or exceed 50 °C: When LIU - 0816 - WN built-in temperature and humidity sensor sensing the environment temperature is under 5 °C or exceed 50 °C, 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

**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 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.

LANBEPDUBOARD	
192.168.0.74	
255. 255. 255. 0	
192. 168. 0. 1	
DHCP	
180. 168. 255. 118	
116. 228. 111. 18	

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

### Reset / change password

Please press and hold the "Function" key for 10 to 15 seconds, you will hear a few buzzers and the password is reset.

The reset default password is admin.