# DIGITUS®

# **Smart Power Distribution Unit**



Manual DN-95640

# Content

1. SMART PDU INTRODUCTION	
1.1. FUNCTION DESCRIPTION	4
1.2 Application range	6
1.3 PRODUCT PICTURE AND DESCRIPTION	7
1.3.1 VERTICAL SMART PDU (OU)	7
1.4 INSTALLATION	8
2. HARDWARE INTRODUCTION	
2.1. System initialization	8
2.2. VIEW SYSTEM INFORMATION	
2.2.1. VIEW SYSTEM INFORMATION (OU)	8
2.2.2. View system information $(1U)$	
2.3. OVERLOAD MONITORING	
2.4. Environment monitoring	
2.5. PDU RESET	
2.6. DISPLAY BACKLIGHT ALWAYS-ON CONFIGURATION	
2.7. Reverse the display	
2.8. RESTORE TO FACTORY SETTINGS	
2.9. MASTER OR SLAVE CONFIGURATION	
2.10. DAISY-CHAIN	
3. SMART PDU SOFTWARE INTRODUCTION	13
3.1. Software overview	
3.2. Access method	
3.2.1 WEB ACCESS	
3.2.1.1 DEVICE INFORMATION	
3.2.1.2. Device Management	
3.2.1.3 USER MANAGEMENT	
3.2.1.4 Network Settings	
3.2.1.6 Logs	
3.2.1.7. System	
3.2 SNMP ACCESS	
3.2.3 Telnet Access	
3.2.3.3 "STATUS" COMMAND	
3.2.3.4 "ON/OFF" command	
3.2.3.5 SET COMMAND:	
3.2.3.6 Network command	
3.2.3.7 REBOOT COMMAND	
3.2.3.8 RESET COMMAND	
3.2.3.9 QUIT COMMAND	
3.2.4 MODBUS Access	

4. FREQUENTLY ASKED QUESTIONS	54
4.1. Forget IP address?	54
A: CHECK ON THE LCD SCREEN, THE FIRST PAGE DISPLAYS THE IP ADDRESS.	54
4.2. Fail to send email?	
4.3. LOST IP	54
5. TECHNOLOGY PARAMETERS	55

# Safety and Grounding:

#### Read the following information before installing or operating your DIGITUS Power Distribution Unit:

- This PDU is intended for indoor use only.
- This PDU must not be must not be operated one behind the other!
- Operation only in dry and closed rooms.
- This PDU may not be operated covered. Always ensure free accessibility.
- The maximum power stated on the rating plate must not be exceeded.
- Plug this PDU into a three-wire, grounded power outlet only. The power outlet must be connected to appropriate branch circuit/ mains protection (fuse or circuit breaker). Connection to any other type of power outlet may result in a shock hazard.
- Use only the supplied brackets of mounting.
- Check that the power cord, plug, and socket are in good condition.
- Voltage free only when the power plug is unplugged.
- Disconnect the PUD from the power outlet before you install or connect equipment to reduce the risk of electric shock when you cannot verify grounding. Reconnect the PDU to the power outlet only after you make all connections.
- Operation under unfavorable environmental conditions must be avoided. (Humidity over 80% relative, wet, ambient temperatures above 50 ° C, solvents, flammable gases, dust, vapors).
- If external damage to this PDU is detected, do not operate this PDU. Take this PDU immediately out of service if external damage is detected.
- Do not pour liquids over the power strip. There is a high risk of fire or life-threatening electric shock.
- When opening the power strip, live parts can be exposed. There is a risk of electric shock. The power strip may only be opened by a specialist.

# **1. Smart PDU Introduction**

The Smart Power Distribution Unit is a network manageable device that provides power monitoring, controlling and managements to many equipments in the rack cabinet of data center all over the world through LAN or WAN. For meeting with the restrictions and requirements in different environment, SMART PDU supplies many connection methods that user can manage it through its Web interface (HTTP or HTTPS), Serial connection, Telnet or SNMP.

## **1.1. Function Description**

- 1. Monitoring function: monitor the current, voltage, power (kW) and energy consumption (kWh), environment status like temperature, humidity, smoke, door and water leakage via IP and local LCD screen.
- 2. Controlling function: switch on/off individual outlet, set the interval of sequential power on/off
- 3. Keeping the former state: keep the former state of each outlet after resetting.
- 4. User-defined alarm: user can set the threshold of current, temperature and humidity.
- 5. System default alarm: receive warning when the total rating current, individual rating current (A&C series not included) are exceeded; when smoke, water or door open was detected.

- 6. Alarm methods: Alarming information will be shown on LCD screen and SMART PDU buzzer beeps. The problem value flashes on web interface and PC buzzer alarms automatically send email to system administrator; SNMP sends Trap alerts.
- 7. Daisy-chain: suggest daisy-chain at most 5 units (Master unit included)
- 8. User management: user rights configurable. Added new user can be distributed into different user groups with different rights. User group rights are editable.
- 9. Access method: Web interface, HTTP, HTTPS, SNMP (v1 / v2c / v3), Telnet and Serial console.
- 10. Support multi-user operation system and software update.

There are four series enable for Smart PDU range. A, B, D function comparison table:

	A series	B series	D series
Input-level Metering	Yes	Yes	Yes
(A/V/VA/kWh/Power factor)			
Individual Outlet Metering	No	Yes	Yes
Individual Outlet Switching	No	No	Yes

A-Serie: DN-95624/ DN-95625/ DN-95640/ DN-95641/ DN-95642

B-Serie: DN-95628

D-Serie: DN-95632/ DN-95634/ DN-95643

No.	Function	Description & Range
1	Monitoring	Monitoring function: Through the local LCD screen user can view the total current and the current of each individual outlet (A&C series not included), the on/off status of each individual outlet (A&B series not included), the environment status like temperature/humidity/smoke/water logging and door
2	Controlling	Controlling function (A&B series not included): Switching On/Off each individual outlet, set up the power on/off delay, Return-to-zero for total or individual power consumption, configure the schedule event, power cut-off settings when overload, quick setup of mass PDUs and back-up, and WIFI settings.

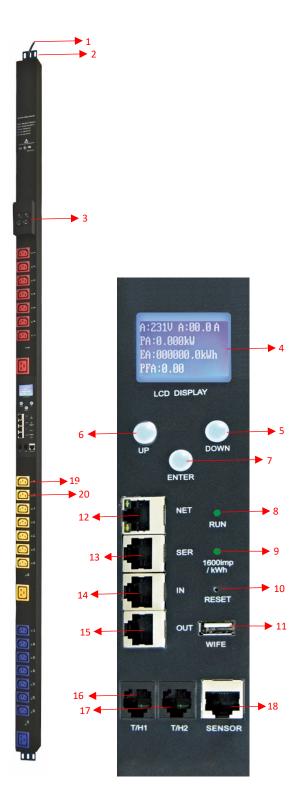
3	Keeping the former state	Keeping the former status (A&B series not included) : keep the former state of each outlet after restart
4	User-defined alarm	User-defined alarm: when thresholds of total current, individual current (A&C series not included), temperature and humidity are exceeded
5	System default alarm	System default alarm: when the total rating current, individual rating current (A&C series not included) are exceeded; when smoke, water or door open was detected

# **1.2 Application range**

- 1. SMART PDU can be applied to server rack, network cabinet and etc.
- 2. Outlet type and number (8, 16, and 24) can be selected according to the actual needs.
- 3. Meets RoHS directive, applicable for 110~220VAC, 380VAC power supply, can meet customers' requirements all over the world.

## **1.3 Product picture and description**

#### 1.3.1 Vertical SMART PDU (0U)



- 1. Input power cord;
- 2. Brackets;
- 3. Hydraulic circuit breaker;
- 4. LCD screen;
- 5. DOWN key: scroll down to the next page;
- 6. UP key: scroll up to the previous page;
- 7. ENTER: OK button;
- 8. RUN indicator
- 9. 1600imp/kWh Energy pulse indicator;
- 10. RESET button;
- 11. USB port for WIFI access or software upgrade;
- 12. NET: 10/100M Ethernet communication port
- SER: Serial communication port (support MODBUS);
- 14. IN: for daisy-chain
- 15. OUT: for daisy-chain
- 16. T/H1: temperature and humidity sensor port 1
- 17. T/H1: temperature and humidity sensor port 2
- 18. SENSOR: extend sensor hub communication port, sensor hub support 2 temperature/humidity sensor, 2 door sensor, 1 water logging sensor and 1 smoke sensor
- 19. LED indicator;
- 20. Outlets

#### **1.4 Installation**

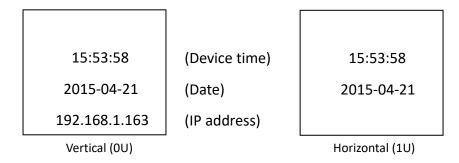
Vertical-mounting (0U)

# 2. Hardware Introduction

#### 2.1. System initialization

The buzzer sounds when the SMART PDU is switched on and it stops after 3 seconds.

Then the LCD screen is lighted after 6 seconds with the following information displayed:





## 2.2. View system information

# 2.2.1. View system information (OU)

Press ENTER to go to the main menu

(The first page on menu)

Information Total Tem/Hum

Sensors

(Device information) (Total power data) (Temperature/Humidity) (Door/water

#### (The second page on menu)

Output	
Group	

(Outlet socket) (Outlet group)

Through the DOWN or UP key to scroll down or up to the next/previous page, turn to the main menu and select the first item **Information**, then press **ENTER** to go to the Information menu and the displayed information are as below:

CPU: ARM926EJ-S	(CPU model)
Version: 1.0.0	(Software version)
M/S: Master	(Master/Slave unit)
Type: 3 phase D	(Device series)

#### Note: the displayed information may differ from device part number.

CPU: ARM926EJ-S means the type of the device CPU chip; Version: 1.0.0 is the software version number; M/S: Master means the Master Unit and Slave 1 means the Slave unit 1(1-4 means the order of Slave unit); Type: 3 phase C means the device is 3 phase C series one.

Through the DOWN or UP key to scroll down or up to the next/previous page, turn to the main menu and select the second item **Total**, then press ENTER to go to the Total menu and the displayed information are as below:

U: 214V I: 00.0A P: 0.000kW E: 000013.1kWh PF: 0.00

Note: the above information is from a single phase device, if it is a 3 phase one, the power date of each phase will be displayed as well. U: 214V means the input voltage, I:00.0A means the total input current, P:0.000KW means the total power, E:000013.1kWh means the total power consumption, PF:0.00 means the power factor

Press **ENTER** to return to the main menu, and then press **DOWN** key to select **Temp/Hum** to view the temperature/humidity as below:

```
      T1: ---
      H1: ---

      T2: ---
      H2: ---

      T3: ---
      H3: ---

      T4: ---
      H4: ---
```

Press **ENTER** to return to the main menu, and then press **DOWN** key to select **Sensors** to view the door, water logging, and smoke sensor status as below:

Door1: None	
Door2: None	
Smoke: None	
Water: None	

Press **ENTER** to return to the main menu, then press **DOWN** key to select **Output** to view each individual outlet current as below:

Output01: 00.0A	
Output02: 00.0A	
Output03: 00.0A	
Output04: 00.0A	

Press DOWN or UP key to view the current of rest outputs:

Note: Press UP button to view the previous page of device information.

Press **ENTER** to return to the main menu, then press **DOWN** key to select **Group** to view each group outlet current as below:

Group1:00.0A	Group5:00.0A
Group2:00.0A	Group6:00.0A
Group3:00.0A	
Group4:00.0A	

# 2.2.2. View system information (1U)

Through the DOWN or UP key to scroll down or up to the next/previous page, turn to the main menu and select the first item Information, then press **ENTER** to go to the Information menu and the displayed information are as below:

Type: SMART PDU (D)	(Device series)
192.168.1.163	(IP address)
Version: 1.0.0	(Software version)
M/S: Master	(Master/Slave unit)

#### Note: the displayed information may differ from device part number.

Type: SMART PDU (D) means the device is Desires; 192.168.1.163 is the IP address, Version: 1.0.0 is the software version number; M/S: Master means the Master Unit and Slave 1 means the Slave unit 1(1-4 means the order of Slave unit);

Through the DOWN or UP key to scroll down or up to the next/previous page, turn to the main menu and select the second item **Total**, then press DOWM to go to the Total menu and the displayed information are as below:

U: 214V I: 00.0A
P: 0.000kW
E: 000013.1kWh
PF: 0.00

# Note: the above information is from a single phase device, if it is a 3 phase one, the power date of each phase will be displayed as well.

U: 214V means the input voltage, I: 00.0A means the total input current, P: 0.000KW means the total power, E: 000013.1kWh means the total power consumption, PF: 0.00 means the power factor Press **DOWN** key to select **Temp/Hum** to view the temperature/humidity as below:

T1:	H1:
T2:	H2:
Т3:	H3:
T4:	H4:

Press **DOWN** key to select **Output** to view each individual outlet current as below:

Output1:00.0A	Output5:00.0A
Output2:00.0A	Output6:00.0A
Output3:00.0A	Output7:00.0A
Output4:00.0A	Output8:00.0A

Note: Press UP button to view the previous page of device information.

## 2.3. Overload Monitoring

When the current of individual outlet exceed the user-defined value, the SMART PDU buzzer sounds; LCD screen will light up and switch automatically to the alarming page and current value flash

When the total current exceed the user-defined value, the SMART PDU buzzer sounds; LCD screen will light up and switch automatically to the alarming page and current value flash

# 2.4. Environment monitoring

When threshold of temperature or humidity is exceeded, the SMART PDU buzzer sounds, LCD screen light up and switch automatically to the alarming page. The current temperature or humidity value flashes.

## 2.5. PDU reset

Press and hold the UP key for 6 second to Reset Note: The configuration of the power on/off delay was required again after reset.

# 2.6. Display backlight always-on configuration

Press and hold the DOWN key around 2 seconds, the buzzer sounds and the display screen always light on, Press and hold the DOWN key for another 2 seconds, the display screen will back to normal mode

## 2.7. Reverse the display

Press UP button twice quickly to reverse the text displayed. (Horizontal no rollover function.)

# 2.8. Restore to factory settings

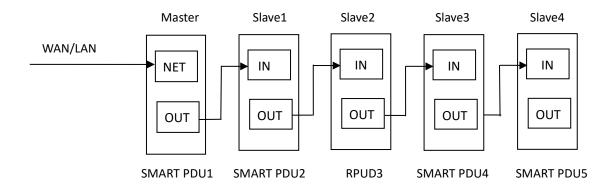
Press and hold the Reset button for 6 seconds and release it till the beep buzzer to restore to factory settings.

# 2.9. Master or Slave configuration

To configure the SMART PDU to be the Master or Slave in the Web interface. The current Master or Slave status will be displayed in the LCD home page, "M/S: Master" means Master, and "M/S: Slave1" means Slave 1

# 2.10. Daisy-Chain

Daisy-chain schema is as following:



How to daisy-chain

Log on to each SMART PDU; configure the **work mode** on *Device Manage* page.

Daisy-chain all devices like above drawing, from OUT to IN, Maximum 5 units including Master.

Access the Master and check all the status of Slaves. If all readable, daisy-chain is successful. Remark:

1. Once system runs normal, about 10s later LCD screen display normal.

2. Device sequential power on, power off interval time about 30s. Do not power on/off device frequently to avoid device damage.

# 3. SMART PDU Software Introduction

## 3.1. Software overview

SMART PDU is equipped with embedded software system which provides a lot of network services like WEB server, SNMP, Telnet, SMTP and NTP. It's easy to do second development and software integration.

#### 3.2. Access method

Web based, can access via browsers like Internet Explorer, Google Chrome and Fire fox; supports WIFI (including the mobile device like smart phone and tablet), SNMP (v1 / v2c / v3), Telnet and Serial console like MODBUS.

#### 3.2.1 Web access

Open a browser and enter the default IP address, the login window will pop up like below, see

figure1-1.

	welcome to RPDU system
Name admin	
Passwor	rd
Login	
20gm	

Figure 1-1

Fill in the correct user name and password (Factory default login name is admin, password is admin) to login the main interface, see figure1-2

_		Overview	Device Settings	User Management	Network	Data Graph	ning Logs	System	Selec
	Device Information	Output Status	Environment Status				Devic	e Select: RPDU1	• -
		Item Name		State	Current(A)	Power(kW)	Power Factor	Critical	Navig
	Device Name:RPDU1	1 Output1		ON	0.0	0.000	0.00	Normal	INAVIG
vice 📕	Device Series:RPDU(D)	2 Output2		ON	0.0	0.000	0.00	Normal	
		3 Output3		ON	0.0	0.000	0.00	Normal	
rmation	Working Status:Normal	4 Output4		ON	0.0	0.000	0.00	Normal	
	Level:Outlet monitoring & controlling	5 Output5		ON	0.0	0.000	0.00	Normal	
		6 Output6		ON	0.0	0.000	0.00	Normal	_
	uptime:0days0hour4minute	7 Output7		ON	0.0	0.000	0.00	Normal	
		8 Output8		ON	0.0	0.000	0.00	Normal	_
	(L1)Output Status	9 Output9		ON	0.0	0.000	0.00	Normal	
		10 Output10		ON	0.0	0.000	0.00	Normal	
	Total Load:0.0A	11 Output11		ON	0.0	0.000	0.00	Normal	
	Total Voltage:245V	12 Output12		ON	0.0	0.000	0.00	Normal	
	Total vonage.245 v	13 Output13		OFF	0.0	0.000	0.00	Normal	
	Power Factor:0.00	14 Output14		OFF	0.0	0.000	0.00	Normal	
	Power:0.000kW	15 Output15		OFF	0.0	0.000	0.00	Normal	
	1 0We1.0.000kW	16 Output16		OFF	0.0	0.000	0.00	Normal	
	Total Energy:0.0kWh	17 Output17		OFF	0.0	0.000	0.00	Normal	
		18 Output18		OFF	0.0	0.000	0.00	Normal	
		19 Output19		OFF	0.0	0.000	0.00	Normal	Outpu
		20 Output20		OFF	0.0	0.000	0.00	Normal	- Cutpe
		21 Output21		OFF	0.0	0.000	0.00	Normal	status
		22 Output22		OFF	0.0	0.000	0.00	Normal	
		23 Output23		OFF	0.0	0.000	0.00	Normal	
		24 Output24		OFF	0.0	0.000	0.00	Normal	



Mainly 3 parts on main interface: Navigation menu, Device information and Output status. Navigation menu: show company logo and function menus and language selector. Device information: display device name, device series, and device status and function level. Output status: display output name, on/off state, individual current, individual power, power factor and environment status. From the drop down menu of device to check the information of Slaves.

# 3.2.1.1 Device information

**Device information** includes device name, device series, device status and function level. Output status includes total load, voltage, power factor, total power (kW) and total energy consumption (kWh).

# 3.2.1.2. Device Management

#### Click Device Management from menu to do basic configuration of the device like Figure 1-3

- A. Basic settings
- a. Work mode setting: set the device as Master or Slave (1-4) from the drop down menu and save.
- b. Device name setting: re-name the devices and save.
- c. **Unitive Power delay**: enable or disable the unitive power delay, when enable the unitive power delay, the outlet will power on or off sequentially according to the unitive interval (range from 0 to 15) set. When the unitive power on/off delay was disabled, the output will power on/off sequentially according to the individual internal, please refer to the outlet settings function on

page 12 (Figure 1-3-2)

d. **Mode setting**: configure the buzzer status, enable or disable the group outlet, enable or disable the LCD screen always light on

								English
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Device Settings	Work Mode Settin	g						
Basic Settings	Work Mode:	Master	¥					
Group Settings								
Outlet Settings	Device Name Settin	Master	•					
Time Switch	Device Name:	RPDU1						
Super Power	Save							
Sensor Settings	-Power Delay-							
Energy Settings	Unify Delay:	Enable	•					
Outlet Control	Power Delay:	1	3					
Ping Control	Save							
	-Mode Setting							
	Buzzer Switch:	ON	•					
	Group Function:	Disable	¥					
	LCD Bright Mode:	Disable	•					
	Save							
								I

Figure 1-3

B. Group outlet setting: when enabled the group outlet from the basic settings, user can tick off any outlet to 6 different groups randomly, save the operation after configuration

	Over	view I	Device Settings	User Management	Network	Da	ta Graphing	Logs	System
Device Settings	Group Set	tings						Device	Select: RPDU1 🔻
	Item Na	ne		Groupl	Group2	Group3	Group4	Group5	Group6
Basic Settings	1 Out	put1							
Group Settings	2 Out	put2							
Group Settings		put3							
Outlet Settings	4 Out	put4							
Time Switch	5 Out	put5							
Time Switch	6 Out	put6							
Super Power	7 Out	put7							
Sensor Settings	8 Out	put8							
oensor oennigs	9 Out	put9							
Energy Settings	10 Out	put10							
Outlet Control	11 Out	put11							
	12 Out	put12							
Ping Control	13 Out	put13							
	14 Out	put14							
	15 Out	put15							
	16 Out	put16							
	17 Out	put17							
	18 Out	put18							
	19 Out	put19							
	20 Out	put20							
	21 Out	put21							
	22 Out	put22							
	23 Out	put23							
	24 Out	put24							
								Save	Cancel

Figure1-3-1

- C. Outlet settings: Click Outlet setting from Device management to enter the following figure 1-3-2
- a. Outlet name: To rename each individual outlet and click save to complete
- b. The threshold of individual outlet setting: enter the user-defined threshold to alarm
- c. The near threshold of individual outlet setting: configure the near overload warning value for individual outlet
- d. Individual power delay setting: when the unitive power delay was disabled, the output will power on/off sequentially according to the individual interval (range from 0 to 15 seconds)set by user

	0	verview	Device Settings	User Management	Network	Data Gi	aphing	Logs	System
Device Settings	- Outlet S	ettings ——						Device Se	elect: RPDU1 🔻
Ŭ	Item I	Name		Current(A)	Min(A)	Lower(A)	upper(A)	Max(A)	Save
Basic Settings	1	Output1		0.0	0.0	0.0	10.0	16.0	Save
Group Settings	2	Output2		0.1	0.0	0.0	10.0	16.0	Save
		Output3		0.0	0.0	0.0	10.0	16.0	Save
Outlet Settings	4	Output4		0.1	0.0	0.0	10.0	16.0	Save
Time Switch	5	Output5		0.0	0.0	0.0	10.0	16.0	Save
	6	Output6		0.0	0.0	0.0	10.0	16.0	Save
Super Power	7	Output7		0.0	0.0	0.0	10.0	16.0	Save
Sensor Settings	8	Output8		0.0	0.0	0.0	10.0	16.0	Save
	9	Output9		0.0	0.0	0.0	10.0	16.0	Save
Energy Settings	10	Output10		0.0	0.0	0.0	10.0	16.0	Save
Outlet Control	11	Output11		0.0	0.0	0.0	10.0	16.0	Save
Ping Control	12	Output12		0.0	0.0	0.0	10.0	16.0	Save
		Output13		0.0	0.0	0.0	10.0	16.0	Save
	14	Output14		0.0	0.0	0.0	10.0	16.0	Save
	15	Output15		0.0	0.0	0.0	10.0	16.0	Save
	16	Output16		0.0	0.0	0.0	10.0	16.0	Save
	17	Output17		0.0	0.0	0.0	10.0	16.0	Save
	18	Output18		0.0	0.0	0.0	10.0	16.0	Save
	19	Output19		0.0	0.0	0.0	10.0	16.0	Save
	20	Output20		0.0	0.0	0.0	10.0	16.0	Save
	21	Output21		0.0	0.0	0.0	10.0	16.0	Save
	22	Output22		0.0	0.0	0.0	10.0	16.0	Save
	23	Output23		0.0	0.0	0.0	10.0	16.0	Save
	24	Output24		0.0	0.0	0.0	10.0	16.0	Save

Figure 1-3-2

D. Schedule Outlet action: Use can schedule a specific time that each individual outlet will power on/off automatically, the time format is year-month-day hour: minutes, for example: 2015-05-27 13:52, tick off the box behind, then the outlet will power on/off according the time set;

#### Note: Please calibration the device time before schedule the outlet action

	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System
Device Settings	Time Switch					Device	e Select: RPDU1
	Item Name		Power on time	Power off tim	e	Cycle	Select
Basic Settings	1 Output1		1970-01-01 00:00	1970-01-01 (	00:00		
Group Settings	2 Output2		1970-01-01 00:00	1970-01-01 (	00:00		
	3 Output3		1970-01-01 00:00	1970-01-01 (	00:00		
Outlet Settings	4 Output4		1970-01-01 00:00	1970-01-01 (	00:00		
Time Switch	5 Output5		1970-01-01 00:00	1970-01-01 (	00:00		
	6 Output6		1970-01-01 00:00	1970-01-01 (	0:00		
Super Power	7 Output7		1970-01-01 00:00	1970-01-01 (	00:00		
Sensor Settings	8 Output8		1970-01-01 00:00	1970-01-01 (	0:00		
	9 Output9		1970-01-01 00:00	1970-01-01 (	00:00		
Energy Settings	10 Output10		1970-01-01 00:00	1970-01-01 (	00:00		
Outlet Control	11 Output11		1970-01-01 00:00	1970-01-01 (	0:00		
Ping Control	12 Output12		1970-01-01 00:00	1970-01-01 (	00:00		
	13 Output13		1970-01-01 00:00	1970-01-01 (	0:00		
	14 Output14		1970-01-01 00:00	1970-01-01 (	00:00		
	15 Output15		1970-01-01 00:00	1970-01-01 (	00:00		
	16 Output16		1970-01-01 00:00	1970-01-01 (	0:00		
	17 Output17		1970-01-01 00:00	1970-01-01 (	00:00		
	18 Output18		1970-01-01 00:00	1970-01-01 (	00:00		
	19 Output19		1970-01-01 00:00	1970-01-01 (	00:00		
	20 Output20		1970-01-01 00:00	1970-01-01 (	00:00		
	21 Output21		1970-01-01 00:00	1970-01-01 (	00:00		
	22 Output22		1970-01-01 00:00	1970-01-01 (	00:00		
	23 Output23		1970-01-01 00:00	1970-01-01 (	00:00		
	24 Output24		1970-01-01 00:00	1970-01-01 (	0:00		

Figure 1-3-3

#### E. Power cut-off when overload

User can enable the power cut-off function accordingly, the PDU will cut off the overload outlet automatically when this function was ticked off, see figure 1-3-4

	Overview	Device Settings	User Management	Network Da	ta Graphing	Logs	System
Device Settings	Super Power					Device	Select: RPDU1 V
	Item Name			Current(A)	Min(A)	Max(A)	select
Basic Settings	1 Output1			0.0	0.0	16.0	
Group Settings	2 Output2			0.1	0.0	16.0	
Group Settings	3 Output3			0.0	0.0	16.0	
Outlet Settings	4 Output4			0.1	0.0	16.0	
Time Switch	5 Output5			0.0	0.0	16.0	
Time Switch	6 Output6			0.0	0.0	16.0	
Super Power	7 Output7			0.0	0.0	16.0	
Sensor Settings	8 Output8			0.0	0.0	16.0	
Sensor Setungs	9 Output9			0.0	0.0	16.0	
Energy Settings	10 Output10			0.0	0.0	16.0	
Outlet Control	11 Output11			0.0	0.0	16.0	
Oullet Control	12 Output12			0.0	0.0	16.0	
Ping Control	13 Output13			0.0	0.0	16.0	
	14 Output14			0.0	0.0	16.0	
	15 Output15			0.0	0.0	16.0	
	16 Output16			0.0	0.0	16.0	
	17 Output17			0.0	0.0	16.0	
	18 Output18			0.0	0.0	16.0	
	19 Output19			0.0	0.0	16.0	
	20 Output20			0.0	0.0	16.0	
	21 Output21			0.0	0.0	16.0	
	22 Output22			0.0	0.0	16.0	
	23 Output23			0.0	0.0	16.0	
	24 Output24			0.0	0.0	16.0	

Figure 1-3-4

Device Settings         Istor Vertical Setting         International Setting <thi< th=""><th></th><th>Overview</th><th>Device Settings</th><th>User Management</th><th>Network</th><th>Data Graphing</th><th>Logs</th><th>System</th></thi<>		Overview	Device Settings	User Management	Network	Data Graphing	Logs	System
Item         Name         Current value         Min         Max         Save           Basic Settings         1         Temperature1         25         0         40         Save           Croup Settings         2         Temperature2         25         0         40         Save           Outlet Settings         3         Temperature3         26         0         40         Save           Outlet Settings         4         Temperature4         0         0         40         Save           Time Switch         5         Humidity1         651         0         99         Save           Super Power         6         Humidity2         653         0         99         Save           Sensor Settings         8         Humidity4         0         0         99         Save           Outlet Control         0         10         Total Load(L1)         0.2         0.0         32.0         Save	Device Settings	Sensor Settings					—— Device S	elect: RPDU1 🔻
Group Settings         2         Temperature2         25         0         40         Save         3           Outlet Settings         3         Temperature3         26         0         40         Save         40         Save         40         Save         40         Save         5         40         Save         65         0         99         Save         66         Humidity1         65         0         99         Save         66         Humidity2         63         0         99         Save         7         Humidity3         65         0         99         Save         9		Item Name			Current value	Min	Max	Save
Group settings         3         Temperature3         26         0         40         Save           Outlet Settings         4         Temperature4         0         0         40         Save           Time Switch         5         Humidity1         65         0         99         Save           Super Power         6         Humidity2         63         0         99         Save           7         Humidity3         65         0         99         Save           Sensor Settings         8         Humidity4         0         0         99         Save           9         Total Load(L1)         0.2         0.0         32.0         Save           0utet Control	Basic Settings	1 Temperature1			25	0	40	Save
3         Temperature3         26         0         40         Save           Outlet Settings         4         Temperature4         0         0         40         Save           Time Switch         5         Humidity1         65         0         99         Save           Super Power         6         Humidity2         63         0         99         Save           7         Humidity3         65         0         99         Save           8         Humidity4         0         0         99         Save           9         Total Load(L1)         0.2         0.0         32.0         Save           0utet Control         U         Total Load(L2)         0.0         0.0         32.0         Save	Group Settings	2 Temperature2			25	0	40	Save
Imperature         Imperat		3 Temperature3			26	0	40	Save
Super Power         6         Humidity2         63         0         99         Save           Sensor Settings         7         Humidity3         65         0         99         Save           Sensor Settings         8         Humidity4         0         0         99         Save           Power         9         Total Load(L1)         0.2         0.0         32.0         Save           Outlet Control	Outlet Settings	4 Temperature4			0	0		Save
Super Power         7         Humidity3         65         0         99         Save           Sensor Settings         8         Humidity4         0         0         99         Save           Energy Settings         9         Total Load(L1)         0.2         0.0         32.0         Save           Outlet Control         10         Total Load(L2)         0.0         0.0         32.0         Save	Time Switch	5 Humidity1			65	0		Save
7         Humidity3         65         0         99         Save           Sensor Settings         8         Humidity4         0         0         99         Save           Energy Settings         9         Total Load(L1)         0.2         0.0         32.0         Save           Outlet Control         0         Total Load(L2)         0.0         0.0         32.0         Save	Super Power							Save
Energy Settings         9         Total Load(L1)         0.2         0.0         32.0         Save           10         Total Load(L2)         0.0         0.0         32.0         Save								
10         Total Load(L2)         0.0         0.0         32.0         Save	Sensor Settings							
Outlet Control	Energy Settings							
	Outlet Control	10 Total Load(L2)			0.0	0.0	32.0	Save

#### F. Sensor settings: set the threshold of temperature, humidity as figure 1-3-5

Figure 1-3-5

G. Energy setting: Click the **Energy setting** form the **Device Management** menu as Figure 1-3-6 User can view the power consumption of each individual and click the Reset button to return the kWh to zero, the total power consumption will take off the outlet consumption as well.

	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System
Device Settings	Energy Settings -					—— Device Se	lect: RPDU1 🔻
	Item Name		I	Energy(kWh)			Reset
Basic Settings	1 Output1		C	0.0			Energy reset
Group Settings	2 Output2		C	0.0			Energy reset
	3 Output3		C	0.0			Energy reset
Dutlet Settings	4 Output4		C	0.0			Energy reset
Time Switch	5 Output5		0	0.0			Energy reset
	6 Output6		C	0.0			Energy reset
Super Power	7 Output7		0	0.0			Energy reset
ensor Settings	8 Output8		C	0.0			Energy reset
	9 Output9		C	0.0			Energy reset
Energy Settings	10 Output10		C	0.0			Energy reset
Outlet Control	11 Output11		Q	0.0			Energy reset
	12 Output12		C	0.0			Energy reset
Ping Control	13 Output13		0	0.0			Energy reset
	14 Output14		C	0.0			Energy reset
	15 Output15		0	0.0			Energy reset
	16 Output16		C	0.0			Energy reset
	17 Output17		C	0.0			Energy reset
	18 Output18		Q	0.0			Energy reset
	19 Output19		Q	0.0			Energy reset
	20 Output20		C	0.0			Energy reset
	21 Output21		0	0.0			Energy reset
	22 Output22		d	0.0			Energy reset
	23 Output23		0	0.0			Energy reset
	24 Output24		Q	0.0			Energy reset
	All Energy						Energy reset

Figure 1-3-6

- H. Outlet control: Click the **Outlet control** form the **Device Management** menu as Figure 1-3-6
- a. User can switch on/off/reboot each individual outlet by click the corresponding on/off/reboot buttons;
- b. Also user can switch on or off all socket at once by click the ALL on/off button

	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System
Device Settings	Outlet Control					Devic	e Select: RPDU1 🔻
-	Item Name			Status	On	Off	Cycle
Basic Settings	1 Output1			ON	On	Off	Cycle
Group Settings	2 Output2			ON	On	Off	Cycle
oroup octangs	3 Output3			ON	On	Off	Cycle
Outlet Settings	4 Output4			ON	On	Off	Cycle
Time Switch	5 Output5			ON	On	Off	Cycle
	6 Output6			ON	On	Off	Cycle
Super Power	7 Output7			ON	On	Off	Cycle
Sensor Settings	8 Output8			ON	On	Off	Cycle
bensor beamgs	9 Output9			ON	On	Off	Cycle
Energy Settings	10 Output10			ON	On	Off	Cycle
Outlet Control	11 Output11			ON	On	Off	Cycle
	12 Output12			ON	On	Off	Cycle
Ping Control	13 Output13			ON	On	Off	Cycle
	14 Output14			ON	On	Off	Cycle
	15 Output15			ON	On	Off	Cycle
	16 Output16			ON	On	Off	Cycle
	17 Output17			ON	On	Off	Cycle
	18 Output18			ON	On	Off	Cycle
	19 Output19			ON	On	Off	Cycle
	20 Output20			ON	On	Off	Cycle
	21 Output21			ON	On	Off	Cycle
	22 Output22			ON	On	Off	Cycle
	23 Output23			ON	On	Off	Cycle
	24 Output24			ON	On	Off	Cycle
	ALL				On	Off	

#### Figure 1-3-7

#### I. Ping Control

Use the PING command to ping the corresponding outlets network device's IP address from the first to eighth outlets, When Ping no answer occurs, by the control of outlets' power up/down so as to realize the power supply operation of network equipment.

- a. Fill in the corresponding input IP address in the IP input box, which is controlled by network device.
- b. Select the drop-down box options of ACTION, the default system command is NONE, PING- no answer, the system does not perform any operation of corresponding outlets; When you select ON / OFF / Once Options, Ping-No answer occurs, the system will perform the corresponding outlets on/off or restart an operation; When you select Cycle option, Ping No answer occurs, the corresponding outlets will repeat restart operation at intervals of time.
- c. The interval time of outlets restart command operation is 3s (system default), the range shouldn't be less than 3s. Click on "Apply" button, Ping function enable, when Ping function is enabled, the logs of the operation of Ping function will be generated.

Note: when Ping running normal, the outlets doesn't carry on any operates commands. The other outlets connect the network device IP couldn't be available this function.

Device Settings	-Ping Control-					
Device Settings	Item Name		Ping IP Address	Ping Status	Action	
Basic Settings	1 Output1			None	None	T
Course Coursiance	2 Output2			 None	None	¥
Group Settings	3 Output3			None	None	T T
Outlet Settings	4 Output4			None	None	T
Time Switch	5 Output5			None	None	T
Time Switch	6 Output6			 None	None	T
Super Power	7 Output7			 None	None	•
	8 Output8			 None	None	•
Sensor Settings	9 Output9			 None	None	•
Energy Settings	10 Output10			None	None	T
Outlet Control	11 Output11			None	None	¥
Outlet Control	12 Output12			 None	None	•
Ping Control	13 Output13			None	None	¥
	14 Output14			 None	None	•
	15 Output15			None	None	T
	16 Output16			 None	None	•
	17 Output17			None	None	T
	18 Output18			None	None	T
	19 Output19			None	None	T
	20 Output20			None	None	•
	21 Output21			None	None	¥
	22 Output22			None	None	T
	23 Output23			 None	None	T
	24 Output24			 None	None	T
	Ping Timeout(s): 3	Apply				

Figure 1-3-8

# 3.2.1.3 User Management

Click the User Management form the navigation bar as Figure 1-4 to manage the user, user group and user access rights

								<u>English</u>   中文
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Administration	Administration —							
	User Select:	admin	T					
User Settings	User Name:	admin						
User Group Settings	Password:	•••••						
	Confirm Password:	•••••						
Outlet Permission	E-mail Address1:							
	E-mail Address2:							
	E-mail Address3:							
	Phone Number:							
	User Group:	admin	T					
								Logout

#### Figure 1-4

- A. User Settings: Click the User settings from the User Management menu as figure 1-4
- 1. Create new account: Click user settings and fill in the new user name and password, click Add to finish
- 2. Edit account: Click User settings, fill in the changed user name and password in the right side, click Modify to finish
- 3. Delete account: Click User settings and select the account from the drop down list, then click **Delete** to finish
- 4. Create new user group: Click User Group Settings, fill in the new user group name and configure the corresponding rights, then click Save to finish, see as figure 1-4-1

								<u>English</u>   <u>中文</u>
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Administration	User Group Config	uration —						
	User Group Select:	admin	*					
User Settings	User Group Name:	admin						
User Group Settings	User Configuration:							
	Device Configuration:							
Outlet Permission	Log Management:							
	System Update:							
	Delete Save							
								Logout

Figure 1-4-1

- 5. Edit the User Group: Click the User Group settings, then fill in the changed user group name and click Save to finish
- 6. Delete user group: Click User Group settings, select the user group from the drop down list and click Delete button to finish
- 7. Edit the User Group rights: Select the User Group from the drop down list and tick off the rights accordingly, click save to finish

User can assign different outlet access rights to different user groups, click Save or Delete to finish. See as figure 1-4-2

	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
	– Outlet Permission					6		
Administration	User Group:	admin	•					
User Settings	Device:	RPDU1	• •					
oser bettings								
User Group Settings	output1 output2	<ul> <li>Image: A state of the state of</li></ul>	output13					
Outlet Permission			output14					
Outlet I chinission	output3		output15	1				
	output4	<b>e</b>	output16					
	output5		output17					
	output6		output18	<ul> <li>Image: A start of the start of</li></ul>				
	output7	<b>e</b>	output19					
	output8	<b>v</b>	output20	<b>e</b>				
	output9		output21	<ul> <li>Image: A start of the start of</li></ul>				
	output10	<b>e</b>	output22					
	output11		output23					
	output12	<b>*</b>	output24	<b>v</b>				
	Delete Save							

Figure 1-4-2

Logout

# 3.2.1.4 Network Settings

# Click the Network Settings from the navigation bar as figure 1-5

Network Mode:         Static           Network Mode:         Static           IP Address:         192.168.1.163           Submet Mask:         255.255.0           Gateway:         192.168.1.1           HTTP         DNS 1:         202.96.128.86           SSH         DNS 2:         202.96.128.86           Swe         Save         Save									Englis
Network Mode:         Static           Network Mode:         Static           IP Address:         192 168 1.163           Subret Mask:         255 255 0           Gateway:         192 168 1.1           HTTP         DNS 1:         202 96 128 .86           SSH         DNS 2:         202 96 128 .86           FTP         Save         Save		Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Network     IP Address:     192 168 1.163       WIFI     Subnet Mask:     255 255 0       Gateway:     192 168 1.1       HTTP     DNS 1:     202 96 128 86       SSH     DNS 2:     202 96 128 86       FTP     Save	Network Settings	Network							
WIFI         265 265 265 0           Gateway:         192 168 1.1           HTTP         DNS 1:         202 96 128 86           SSH         DNS 2:         202 96 128 86           FTP         Save		Network Mode:	Static	T					
Wiri     Gateway:     192 168 1.1       HTTP     DNS 1:     202 96 128 .86       SSH     DNS 2:     202 96 128 .86       FTP     Save    Modbus  SNMP  Telnet  SMTP NTP RADIUS	Network	IP Address:	192.168.1.163						
HTTP     DNS 1:     202 96.128.86       SSH     DNS 2:     202 96.128.86       FTP     Save   Modbus SNMP Telnet SMTP NTP RADIUS	WIFI	Subnet Mask:							
SSH DNS 2: 202.96.128.86 FTP Save Modbus SNMP Telnet SMTP NTP RADIUS									
Solit   FTP   Save     Modbus   SNMP   Telnet   SMTP   NTP   NTP   RADIUS	HIIP								
FTP     Save       Modbus		DNS 2:	202.96.128.86						
SNMP Telnet SMTP NTP RADIUS		Save							
Telnet SMTP NTP RADIUS	Modbus								
SMTP NTP RADIUS	SNMP								
NTP RADIUS	Telnet								
NTP RADIUS									
	RADIUS								
SISLOG	SYSLOG								

Figure 1-5

# Note: the network settings including Network, WIFI, HTTP, SSH, FTP, Modbus, SNMP, Telnet, SMTP, NTP, Radius and SYSOLOG sections

A. Network: User can configure the network by manual or automatic acquisition.

a. Manual setting:
IP: 192.168.1.163 (factory default IP);
Subnet mask: 255.255.255.0
Gateway: 192.168.1.1
DNS: default as 0.0.0.0; should fill in correct DNS to ensure the email send out.

#### Note: please restart the software after the modification of network settings.

b. Automatic acquisition:

Select Automatic acquisition and click "Save", then restart the software, device will get the IP automatically. IP can be viewed on LCD.

B. WIFI Settings:

Insert the wireless network card into the USB port

1. WIFI Signal Searching:

Click "Search Network" to find all the wireless network nearby.

- 2. Enable WIFI: select enable, fill in SSID and password and save.
- 3. WIFI network settings

Network mode can be manual or automatic acquisition Manually settings as below:

IP Address: Set the WIFI IP in the LAN like 192.168.1.191 Subnet Mask: correspond to IP address like 255.255.255.0 Gateway: correspond to IP address like 192.168.1.1 DNS: default DNS is 0.0.0.0 Automatic acquisition

Fill out the WIFI connection settings and save, select the automatic acquisition from the drop-down list of WIFI network settings and save. Then restart the device and system will acquire the IP address within the LAN and the address can be viewed from the LCD screen.

	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
		_	Oser Management	INCLWOIK	Data Graphing	Logs	System	_
Network Settings	WIFI Connection	-						
	Network Mode:	Disable	•					
Network	SSID:	link						
WIFI	Password:	•••••						
HTTP	Save							
SSH	WIFI Network Se	tting						
FTP	Network Mode:	Manual	•					
	IP address:	192.168.1.191						
Modbus	Subnet Mask:	255.255.255.0						
SNMP	Gateway:	192.168.1.1						
	DNS 1:	202.96.128.86						
Telnet	DNS 2:	202.96.128.86						
SMTP								
	Save							
NTP		ching						
RADIUS	to it i bightir bear	g						
	Search Network	]						
SYSLOG								_

Figure 1-6

C. HTTP: fill in the correct HTTP port and save; under normal work mode, the default port is 80. HTTPS (SSL) Mode Port: default as 443.

Note: please restart the software after the modification of HTTP settings. See figure 1-7

	*****							English   1
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Network Settings	HTTP Normal Mode Port:	80						
Network	SSL Mode Port:	443						
WIFI	Work Mode:	Normal Mode	•					
HTTP	Save							
SSH								
FTP								
Modbus								
SNMP								
Telnet								
SMTP								
NTP								
RADIUS								
SYSLOG								

Figure 1-7

D. SSH Setting:

User can enable or disable the SSH, it require restart the device after saving the configuration. The account and password of SSH is the account and password to login to the SSH, the SSH port is 22, see figure 1-8:

								English   中
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Network Settings	SSH							
	SSH Service:	Enable	¥					
Network	SSH Account:	admin						
WIFI	SSH Password:	•••••						
HTTP	SSH Port:	22						
SSH	Save							
FTP								
Modbus								
SNMP								
Telnet								
SMTP								
NTP								
RADIUS								
SYSLOG								
								Lo

Note: SSH command line access, please refer to the Telnet access instruction

Figure 1-8

#### E. FTP

User can enable or disable the FTP, it require restart the device after saving the configuration. The account and password of FTP is the account and password to login to the SSH, the FTP port is 21, see figure 1-9:

#### Note: User can remotely upgrade by enable the FTP service

								<u>English</u>   中文
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Network Settings         WIFI         HITP         SSH         FTP         Modbus         SNMP         Telnet         SMTP         NTP         RADIUS         SYSLOG	Overview FTP FTP Service: FTP Account: FTP Port: Save	Device Settings	User Management	Network	Data Graphing	Logs	System	
						_		Logout

Figure 1-9

F. MODBUS

MODBUS protocol configuration includes MODBUS communication address(1-255), baud rate(9600,19200,38400,57600,115200), data bit(6,7,8), parity (N/A, even number, odd number), stop bit(1,2)

Note: The Master unit collects the data from the SER port; please refer to the MODBUS protocol detail for reference.

The SER interface of horizontal SMART PDU supports either modbus serial port function or external extended sensor box function.

Network Settings Network WIFI HTTP SSH	Modbus         Address:         Baud rate:         Data bits:         Parity:         Stop bits:         Save	Device Settings           1           9600           8           None           1	User Management	Network	Data Graphing	Logs	System	
Network WIFI HTTP	Address: Baud rate: Data bits: Parity: Stop bits:	9600 8 None	<b>T</b>					
WIFI HTTP	Baud rate: Data bits: Parity: Stop bits:	9600 8 None	<b>T</b>					
WIFI HTTP	Data bits: Parity: Stop bits:	8 None	<b>T</b>					
HTTP	Parity: Stop bits:	None	¥					
	Stop bits:							
		1	•					
SSH	Save							
FTP								
	Sensor box							
Modbus	Functional mode	Disable	(The modbus func horizontal PDU!)	tion is disabled when	the function mode is enabled	. And this funct	tion is only for	
SNMP			, ,					
Telnet	Save							
SMTP								
NTP								
RADIUS								
SYSLOG								

Figure 1-10

G. SNMP:

SNMP V1/V2c:

User can decide to Enable or Disable the SNMP access from the Web interface.

Enable SNMP V1 and V2C requires configuration of read community and write community.

And the default "Read community" and "Write community" is public and private.

User can change it accordingly to situation.

Trap address: can set 2 trap addresses. Fill in the trap address of SNMP management platform, Trap information will be sent directly to the addresses.

SNMP server position record the server position information

SNMP v3 settings:

Select "Enable" and fill in account, password, and private key.

#### Note: After save of the SNMP setting, software must be restarted. For SNMP access please refer to page 24.

	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Network Settings	SNMP Agent(v1/v	/2c)Setting						
	SNMP agent:	Enable	•					
Network	Write community:	private						
WIFI	Read community:	public						
w1F1	Trap1 address:	192.168.1.111						
HTTP	Trap2 address:	192.168.1.110						
SSH	System location:	location						
	System contact:	contact						
FTP								
Modbus	Save							
SNMP	SNMP Agent(v3)	Setting						
51VIVIE	SNMP v3:	Disable	•					
Telnet	Account:							
SMTP	Password:							
	Private Key:							
NTP								
RADIUS	Save							
SYSLOG								
515200								

Figure 1-11

#### H. Telnet:

Telnet: select "Enable" or "Disable" and save, make sure to restart the software after modification. Fill in Telnet account and password as shown in figure 1-12, Telnet port is 23.

	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Network Settings	Telnet							
	Telnet Service:	Enable	•					
Network	Telnet account:	admin						
WIFI	Telnet password:							
	Telnet port:	23						
HTTP	Cours.							
SSH	Save							
FTP								
Modbus								
SNMP								
Telnet								
SMTP								
NTP								
RADIUS								
SYSLOG								

Figure 1-12

I. SMTP: Click SMTP from the network setting tap to enter the SMTP setting as figure 1-13. Fill in the parameters of SMTP service including SMTP account, password, SMTP server, port and authentication mode. After save, must restart the software to take effect.

SMTP test: fill in the receiver account, click "Test" and then check the test receiver account. If test email received, SMTP setting is successful; if not received, please reset the SMTP.

	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	Eng
	Overview	Device Settings	User Management	Network	Data Grapning	Logs	System	
Network Settings	SMTP-							
	SMTP account:							
Network	Password:							
WIFI	SMTP Server:							
	Port:	25						
HTTP	Authenticate Mode:	SSL	•					
SSH	Save							
FTP								
	SMTP Test							
Modbus	Receiver Account:							
SNMP	Test							
Telnet	1631							
SMTP								
NTP								
RADIUS								
KADIUS								
SYSLOG								

Figure 1-13

J. NTP Settings: Click NTP as shown figure 1-14 from network setting tap

Local time is the present time of the device server.

To enable or Disable the NTM service and click Save. Then restart the device.

Enable NTP; fill in the NTP server, port and select time zone, click "Save".

Click "Synchronization", device will update to the local system time according to the current time zone and date from the internet

User-defined setting: must disable the NTP firstly and then fill in the date and time.

								Eng
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Network Settings	□							
	Local Time:	2018-02-03 15:59						
Network	NTP:	Enable	<b>T</b>					
WIFI	NTP Server:	clock.via.net						
HTTP	Port: Time Zone Select:	123 (GMT+08:00) Beijing,	Chongq •					
SSH	Save Synch	ronization						
FTP								
Modbus	Date:	ng						
SNMP	Date Format:	Year-Month-Day(2012-07-	12)					
Telnet	Time:							
	Time Format:	Hour:Minute:Second(12:01	:00)					
SMTP	Save Get tir	ne						
NTP								
RADIUS								
SYSLOG								

Figure 1-14

K. RADIUS

User can choose basic authentication or Radius authentication.

Select Radius authentication, device will authenticate the user account from the Radius server. Server address: fill in the Radius server address.

Shared secret: fill in the required public key of the Radius server.

Note: please restart the software after the configuration. Then fill in the requested account and password of Radius server, after authentication, user can access the device.

	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	_
Network Settings	Basic Authenticatio	n Setting						
	Basic Setting:	۲						
Network								
WIFI	Radius Setting							
HTTP	Radius:	$\odot$						
ni ir	Use Basic Setting when can't connect to radius							
SSH	server.							
FTP	Server Address:	192.168.1.191						
	Shared Secret:	admin						
Modbus	Authenticate Port:	1812						
SNMP	Account Port:	1813						
Telnet	Save							
SMTP								
NTP								
RADIUS								
SYSLOG								

Figure 1-15

L. SYSLOG: fill in the SYSLOG server IP address as shown in figure 1-16

								<u>English</u>   中文
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Network Settings	SYSLOG-							
	Server address:	192.168.1.191						
Network	Syslogs Protity:							
WIFI	Sensor Detection:	LOG_INFO	T					
HTTP	Device Settings:	LOG_INFO	*					
SSH	User Adminstor:	LOG_INFO	•					
	Network Settings:	LOG_INFO	•					
FTP	Save							
Modbus								
SNMP								
Telnet								
SMTP								
NTP								
RADIUS								
SYSLOG								
								Logout

Figure 1-16

Note: SYSLOG contain the system start, service mistake during operation and command mistake information. After save the SYSLOG server address, restart the software to take effect.

#### 2.1.5. Data Graphing

Select device and check the relative information in the past 24 hours including total power (kW), current (ampere), voltage, average temperature and humidity as illustrated in figure 1-17

								<u>English</u>   <u>中文</u>
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
Data Graphing	- Total Power Display -					—— Device	Select: RPDU	J1 ▼ ]
Power information			Total Power status	in the past 24	hours			
Load information	0.06kW							-
Voltage information	0.04kW							
emperature information	0.04kW 0.02kW							
Humidity information	0.02kW							_
	F F				Power1 ( <b>0.0</b> kW)			
	0kW	12 13 14 15 1	6 17 18 19 20 21	22 23 0	1 2 3 4 5	6 7	8 9 1	0
			Total Power1 📕 Tota	al Power2 📕 Tota	I Power3			
	1							
								Logout

Figure 1-17

## 3.2.1.6 Logs

Click **Logs** from the navigation bar to enter the logs interface as shown in figure 1-18, it contains events, history data and energy data. See also figure 1-19 and 1-20

Logs Record: show the operation time, log type, user name and log details.

Memory capacity 100M.

To view the data:

Jump: enter the page you want to view and it will switch over to the specific page.

Page turning: by click Next or Previous to view the logs

Delete the logs:

Click the **delete logs**, device will return the confirmation and click OK to delete all the logs.

Logs	-Logs					
2025	Item Time	Туре	Name	Details		
Logs Record	1 2018-02	-03 15:46 User Login	admin	Login Success.		
History Data	2 2018-02	-03 15:45 User Login	admin	Login Success.		
	3 2018-02	-03 15:45 System Comm	admin admin	Restore to default setting		
Energy Record	4 2018-02	-03 15:44 User Login	admin	Login Success.		
	5 2018-02	-03 15:43 User Login	admin	Login Success.		
	6 2018-02	-03 15:43 System Comm	admin admin	Restart Device.		
	7 2018-02	-03 15:43 Device config	uration admin	Network configuration w	as successfully modified.	
	8 2018-02	-03 15:42 User Login	admin	Login Success.		
	9 2018-02	-03 14:34 User Login	admin	Login Success.		
	10 2018-02	-03 14:32 User Login	admin	Login Success.		
	11 2018-02	-02 13:05 Timing switch	admin	RPDU1->Output1Timing	g switch setting.	
	12 2018-02	-02 13:05 Timing switch	admin	RPDU1->Output1Timing	g switch setting.	
	13 2018-02	-02 13:00 Timing switch	admin	RPDU1->Output1Timing	g switch setting.	
	14 2018-02	-02 13:00 Timing switch	admin	RPDU1->Output1Timing	g switch setting.	
	15 2018-02	-02 12:59 Timing switch	admin	RPDU1->Output1Timing	g switch setting.	
	Logs size:12KB	Page 1 of 12 Go to	Previous Next	Delete Expo	ort	
	L					

Figure 1-18

History Data: select the date, device and information type (total power, voltage, power, temperature and humidity) want to view, and then click "View" to see the history data. Figure 1-19 shows the voltage status of 24 hours:

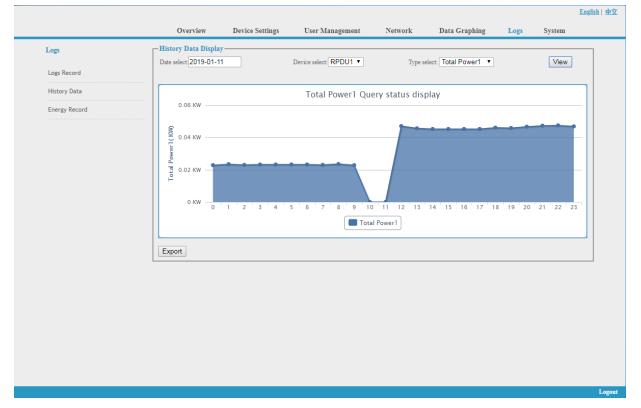


Figure 1-19

Energy Record: select the device, start and end date, and click "View", system will show the accumulated kWh value on the two date and calculate the kWh value during that period as shown in figure 1-20:

		Overview	Device Settings	User Management	Network Data Graphing	Logs System
Logs	□ Energ	y Recording D	isplay			
	Start:	2019-01-11	End:	2019-01-11	Device select: RPDU1 🔻	View Export
Logs Record	Item	Name	Start recording(kWh)	End of record(kWl	ı) Electric energy consumpt	ion(kWh)
History Data	1	Output1	0.0	0.0	0	
	2	Output2	0.0	0.0	0	
Energy Record	3	Output3	0.0	0.0	0	
	4	Output4	0.0	0.0	0	
	5	Output5	0.0	0.0	0	
	6	Output6	0.0	0.0	0	
	7	Output7	0.0	0.0	0	
	8	Output8	0.0	0.0	0	
	9	Output9	0.0	0.0	0	
	10	Output10	0.0	0.0	0	
	11	Output11	0.0	0.0	0	
	12	Output12	0.0	0.0	0	
	13	Output13	0.0	0.0	0	
	14	Output14	0.0	0.0	0	
	15	Output15	0.0	0.0	0	
	16	Output16	0.0	0.0	0	
	17	Output17	0.0	0.0	0	
	18	Output18	0.0	0.0	0	
	19	Output19	0.0	0.0	0	
	20	Output20	0.0	0.0	0	
	21	Output21	0.0	0.0	0	
	22	Output22	0.0	0.0	0	
	23	Output23	0.0	0.0	0	
	24	Output24	0.0	0.0	0	



## 3.2.1.7. System

Click System from the navigation bar to enter the system interface as shown in figure 1-21

- 1. show system information: User can check system version, last update date, flash size and so on ;
- 2. download update tool to remotely update the software provided;
- 3. download user manual and MIB file ;
- 4. Massive data backup and quick setup of mass PDUs: Click Settings to save the devices settings, user settings and network settings through batch download, user can upload all the backup information easily by the upgrade tool.
- 5. User can easily upgrade the software version through the Rootfs.bin file provided by following up the instruction to upload the software.

Note: Please make sure the PDU is directly connected to the PC. Ensure no power off, no network disconnection and no operation during upgrading.

6. Restart the software or restore to factory default configuration from the **System commands**.

								<u>English</u>   中文
	Overview	Device Settings	User Management	Network	Data Graphing	Logs	System	
System Tools	System Informatio	n						
	CPU:	ARM926EJ-S						
System Command Tools	CPU Frequency:	454MHz						
	Memory:	DDR2						
	Memory Frequency:	400MHz						
	Flash Size:	128M						
	System Version:	1.4.1						
	Last Update Time:	2018-12-06						
	Board Version:	0.9 0.9 0.9						
	Update Tool-							
	Update Tool:	RPDU_update						
	MIB:	RPDU.mib						
	Instruction:	user-manual						
	Download Settings:	settings						
	Update							
	选择文件未选择	任何文件						
	Upload							
	opioud							
	-System Command	s						
	Commands Select:	Restart Device	T					
	Community Street.	restart bened						
	Submit							
								Logout

Figure 1-21

## **3.2 SNMP Access**

This software support SNMP V1, V2C and V3, a MIB file can be provided at customer's request. User can view the power information and environment status and receive the alarming from the device.

After enable the SNMP function from Web interface. A SNMP management software is required to be installed (the first device can be the Master unit or Slave unit, and the others are all Slave units). Please refer to the OID table as below:

	OID	Description
SMART PDUSlave X	1.3.6.1.4.1.30966.6.X	Device X
slave X Name	1.3.6.1.4.1.30966.6.X.1.1	Name of device X
slave X Type	1.3.6.1.4.1.30966.6.X.1.2	Type of device X
slave X Line One	1.3.6.1.4.1.30966.6.X.1.3	Phase one of device X
slave X Line One Power	1.3.6.1.4.1.30966.6.X.1.3.1	Power of phase one of device X
		Power factor of the phase one of
slave X Line One PF	1.3.6.1.4.1.30966.6.X.1.3.2	device X
slave X Line One Energy	1.3.6.1.4.1.30966.6.X.1.3.3	Energy of phase one of device X
slave X Line One Current	1.3.6.1.4.1.30966.6.X.1.3.4	Current of phase one of device X
slave X Line One Voltage	1.3.6.1.4.1.30966.6.X.1.3.5	voltage of phase one of device X
		Minimum Current of phase one of
slave X Line One Current Min	1.3.6.1.4.1.30966.6.X.1.3.6	device X

		Maximum Current of phase one of
slave X Line One Current Max	1.3.6.1.4.1.30966.6.X.1.3.7	device X
		Minimum voltage of phase one of
slave X Line One Voltage Min	1.3.6.1.4.1.30966.6.X.1.3.8	device X
		Maximum voltage of phase one of
slave X Line One Voltage Max	1.3.6.1.4.1.30966.6.X.1.3.9	device X
slave X Line Two	1.3.6.1.4.1.30966.6.X.1.4	Phase two of device X
slave X Line Two Power	1.3.6.1.4.1.30966.6.X.1.4.1	Power of phase two of device X
		Power factor of the phase two of
slave X Line Two PF	1.3.6.1.4.1.30966.6.X.1.4.2	device X
slave X Line Two Energy	1.3.6.1.4.1.30966.6.X.1.4.3	Energy of phase two of device X
slave X Line Two Current	1.3.6.1.4.1.30966.6.X.1.4.4	Current of phase two of device X
slave X Line Two Voltage	1.3.6.1.4.1.30966.6.X.1.4.5	voltage of phase two of device X
		Minimum Current of phase two of
slave X Line Two Current Min	1.3.6.1.4.1.30966.6.X.1.4.6	device X
		Maximum Current of phase two of
slave X Line Two Current Max	1.3.6.1.4.1.30966.6.X.1.4.7	device X
		Minimum voltage of phase two of
slave X Line Two Voltage Min	1.3.6.1.4.1.30966.6.X.1.4.8	device X
		Maximum voltage of phase two of
slave X Line Two Voltage Max	1.3.6.1.4.1.30966.6.X.1.4.9	device X
slave X Line Three	1.3.6.1.4.1.30966.6.X.1.5	Phase three of device X
slave X Line Three Power	1.3.6.1.4.1.30966.6.X.1.5.1	Power of phase three of device X
		Power factor of the phase three of
slave X Line Three PF	1.3.6.1.4.1.30966.6.X.1.5.2	device X
slave X Line Three Energy	1.3.6.1.4.1.30966.6.X.1.5.3	Energy of phase three of device X
slave X Line Three Current	1.3.6.1.4.1.30966.6.X.1.5.4	Current of phase three of device X
slave X Line Three Voltage	1.3.6.1.4.1.30966.6.X.1.5.5	voltage of phase three of device X
		Minimum Current of phase three
slave X Line Three Current Min	1.3.6.1.4.1.30966.6.X.1.5.6	of device X
		Maximum Current of phase three
slave X Line Three Current Max	1.3.6.1.4.1.30966.6.X.1.5.7	of device X
		Minimum voltage of phase three
slave X Line Three Voltage Min	1.3.6.1.4.1.30966.6.X.1.5.8	of device X
		Maximum voltage of phase three
slave X Line Three Voltage Max	1.3.6.1.4.1.30966.6.X.1.5.9	of device X
		The temperature and humidity of
slave X Temp Hum	1.3.6.1.4.1.30966.6.X.1.6	device X
slave X Temp One	1.3.6.1.4.1.30966.6.X.1.6.1	The temperature one of device X
slave X Temp Two	1.3.6.1.4.1.30966.6.X.1.6.2	The temperature two of device X
slave X Temp Three	1.3.6.1.4.1.30966.6.X.1.6.3	The temperature three of device X
slave X Temp Four	1.3.6.1.4.1.30966.6.X.1.6.4	The temperature four of device X
slave X Hum One	1.3.6.1.4.1.30966.6.X.1.6.5	The humidity one of device X

slave X Hum Two	1.3.6.1.4.1.30966.6.X.1.6.6	The humidity two of device X
slave X Hum Three	1.3.6.1.4.1.30966.6.X.1.6.7	The humidity three of device X
slave X Hum Four	1.3.6.1.4.1.30966.6.X.1.6.8	The humidity four of device X
slave X Door One	1.3.6.1.4.1.30966.6.X.1.6.9	The door one of device X
slave X Door Two	1.3.6.1.4.1.30966.6.X.1.6.10	The door two of device X
slave X Smoke	1.3.6.1.4.1.30966.6.X.1.6.11	The smoke of device X
slave X Water	1.3.6.1.4.1.30966.6.X.1.6.12	The water of device X
slave X Output Number	1.3.6.1.4.1.30966.6.X.1.7	The outlet quantity of device X
slave X Output Name	1.3.6.1.4.1.30966.6.X.1.8	The outlet name of device X
slave X Output Name One	1.3.6.1.4.1.30966.6.X.1.8.1	The name of outlet 1 of device X
slave X Output Name Two	1.3.6.1.4.1.30966.6.X.1.8.2	The name of outlet 2 of device X
slave X Output Name Three	1.3.6.1.4.1.30966.6.X.1.8.3	The name of outlet 3 of device X
slave X Output Name Four	1.3.6.1.4.1.30966.6.X.1.8.4	The name of outlet 4 of device X
slave X Output Name Five	1.3.6.1.4.1.30966.6.X.1.8.5	The name of outlet 5 of device X
slave X Output Name Six	1.3.6.1.4.1.30966.6.X.1.8.6	The name of outlet 6 of device X
slave X Output Name Seven	1.3.6.1.4.1.30966.6.X.1.8.7	The name of outlet 7 of device X
slave X Output Name Eight	1.3.6.1.4.1.30966.6.X.1.8.8	The name of outlet 8 of device X
slave X Output Name Nine	1.3.6.1.4.1.30966.6.X.1.8.9	The name of outlet 9 of device X
slave X Output Name Ten	1.3.6.1.4.1.30966.6.X.1.8.10	The name of outlet 10 of device X
slave X Output Name Eleven	1.3.6.1.4.1.30966.6.X.1.8.11	The name of outlet 11 of device X
slave X Output Name Twelve	1.3.6.1.4.1.30966.6.X.1.8.12	The name of outlet 12 of device X
slave X Output Name Thirteen	1.3.6.1.4.1.30966.6.X.1.8.13	The name of outlet 13 of device X
slave X Output Name Fourteen	1.3.6.1.4.1.30966.6.X.1.8.14	The name of outlet 14 of device X
slave X Output Name Fifteen	1.3.6.1.4.1.30966.6.X.1.8.15	The name of outlet 15 of device X
slave X Output Name Sixteen	1.3.6.1.4.1.30966.6.X.1.8.16	The name of outlet 16 of device X
slave X Output Name Seventeen	1.3.6.1.4.1.30966.6.X.1.8.17	The name of outlet 17 of device X
slave X Output Name Eighteen	1.3.6.1.4.1.30966.6.X.1.8.18	The name of outlet 18 of device X
slave X Output Name Nineteen	1.3.6.1.4.1.30966.6.X.1.8.19	The name of outlet 19 of device X
slave X Output Name Twenty	1.3.6.1.4.1.30966.6.X.1.8.20	The name of outlet 20 of device X
slave X Output Name Twenty One	1.3.6.1.4.1.30966.6.X.1.8.21	The name of outlet 21 of device X
slave X Output Name Twenty Two	1.3.6.1.4.1.30966.6.X.1.8.22	The name of outlet 22 of device X
slave X Output Name Twenty Three	1.3.6.1.4.1.30966.6.X.1.8.23	The name of outlet 23 of device X
slave X Output Name Twenty Four	1.3.6.1.4.1.30966.6.X.1.8.24	The name of outlet 24 of device X
slave X Output Status	1.3.6.1.4.1.30966.6.X.1.9	The outlet status of device X
slave X Output Status One	1.3.6.1.4.1.30966.6.X.1.9.1	The outlet 1 status of device X
slave X Output Status Two	1.3.6.1.4.1.30966.6.X.1.9.2	The outlet 2 status of device X
slave X Output Status Three	1.3.6.1.4.1.30966.6.X.1.9.3	The outlet 3 status of device X
slave X Output Status Four	1.3.6.1.4.1.30966.6.X.1.9.4	The outlet 4 status of device X
slave X Output Status Five	1.3.6.1.4.1.30966.6.X.1.9.5	The outlet 5 status of device X
slave X Output Status Six	1.3.6.1.4.1.30966.6.X.1.9.6	The outlet 6 status of device X
slave X Output Status Seven	1.3.6.1.4.1.30966.6.X.1.9.7	The outlet 7 status of device X
slave X Output Status Eight	1.3.6.1.4.1.30966.6.X.1.9.8	The outlet 8 status of device X
slave X Output Status Nine	1.3.6.1.4.1.30966.6.X.1.9.9	The outlet 9 status of device X

slave X Output Status Ten	1.3.6.1.4.1.30966.6.X.1.9.10	The outlet 10status of device X
slave X Output Status Eleven	1.3.6.1.4.1.30966.6.X.1.9.11	The outlet 11 status of device X
slave X Output Status Twelve	1.3.6.1.4.1.30966.6.X.1.9.12	The outlet 12 status of device X
slave X Output Status Thirteen	1.3.6.1.4.1.30966.6.X.1.9.13	The outlet 13 status of device X
slave X Output Status Fourteen	1.3.6.1.4.1.30966.6.X.1.9.14	The outlet 14 status of device X
slave X Output Status Fifteen	1.3.6.1.4.1.30966.6.X.1.9.15	The outlet 15 status of device X
slave X Output Status Sixteen	1.3.6.1.4.1.30966.6.X.1.9.16	The outlet 16 status of device X
slave X Output Status Seventeen	1.3.6.1.4.1.30966.6.X.1.9.17	The outlet 17 status of device X
slave X Output Status Eighteen	1.3.6.1.4.1.30966.6.X.1.9.18	The outlet 18 status of device X
slave X Output Status Nineteen	1.3.6.1.4.1.30966.6.X.1.9.19	The outlet 19 status of device X
slave X Output Status Twenty	1.3.6.1.4.1.30966.6.X.1.9.20	The outlet 20 status of device X
slave X Output Status Twenty One	1.3.6.1.4.1.30966.6.X.1.9.21	The outlet 21 status of device X
slave X Output Status Twenty Two	1.3.6.1.4.1.30966.6.X.1.9.22	The outlet 22 status of device X
slave X Output Status Twenty Three	1.3.6.1.4.1.30966.6.X.1.9.23	The outlet 23 status of device X
slave X Output Current	1.3.6.1.4.1.30966.6.X.1.10	The outlet current of device X
slave X Output Current One	1.3.6.1.4.1.30966.6.X.1.10.1	The current of outlet 1 of device X
slave X Output Current Two	1.3.6.1.4.1.30966.6.X.1.10.2	The current of outlet 2 of device X
slave X Output Current Three	1.3.6.1.4.1.30966.6.X.1.10.3	The current of outlet 3 of device X
slave X Output Current Four	1.3.6.1.4.1.30966.6.X.1.10.4	The current of outlet 4 of device X
slave X Output Current Five	1.3.6.1.4.1.30966.6.X.1.10.5	The current of outlet 5 of device X
slave X Output Current Six	1.3.6.1.4.1.30966.6.X.1.10.6	The current of outlet 6 of device X
slave X Output Current Seven	1.3.6.1.4.1.30966.6.X.1.10.7	The current of outlet 7 of device X
slave X Output Current Eight	1.3.6.1.4.1.30966.6.X.1.10.8	The current of outlet 8 of device X
slave X Output Current Nine	1.3.6.1.4.1.30966.6.X.1.10.9	The current of outlet 9 of device X
		The current of outlet 10 of device
slave X Output Current Ten	1.3.6.1.4.1.30966.6.X.1.10.10	х
		The current of outlet 11 of device
slave X Output Current Eleven	1.3.6.1.4.1.30966.6.X.1.10.11	Х
		The current of outlet 12 of device
slave X Output Current Twelve	1.3.6.1.4.1.30966.6.X.1.10.12	x
		The current of outlet 13 of device
slave X Output Current Thirteen	1.3.6.1.4.1.30966.6.X.1.10.13	x
		The current of outlet 14 of device
slave X Output Current Fourteen	1.3.6.1.4.1.30966.6.X.1.10.14	x
		The current of outlet 15 of device
slave X Output Current Fifteen	1.3.6.1.4.1.30966.6.X.1.10.15	x
		The current of outlet 16 of device
slave X Output Current Sixteen	1.3.6.1.4.1.30966.6.X.1.10.16	х
		The current of outlet 17 of device
slave X Output Current Seventeen	1.3.6.1.4.1.30966.6.X.1.10.17	х
		The current of outlet 18 of device
slave X Output Current Eighteen	1.3.6.1.4.1.30966.6.X.1.10.18	x

		The current of outlet 19 of device
slave X Output Current Nineteen	1.3.6.1.4.1.30966.6.X.1.10.19	X
		The current of outlet 20 of device
slave X Output Current Twenty	1.3.6.1.4.1.30966.6.X.1.10.20	X
		The current of outlet 21 of device
slave X Output Current Twenty One	1.3.6.1.4.1.30966.6.X.1.10.21	X
		The current of outlet 22 of device
slave X Output Current Twenty Two	1.3.6.1.4.1.30966.6.X.1.10.22	X
	1.5.0.1.4.1.50500.0.8.1.10.22	The current of outlet 23 of device
slave X Output Current Twenty Three	1.3.6.1.4.1.30966.6.X.1.10.23	X
	1.5.0.1.4.1.50500.0.0.1.110.25	The current of outlet 24 of device
slave X Output Current Twenty Four	1.3.6.1.4.1.30966.6.X.1.10.24	X
	1.3.0.1.4.1.30900.0.7.1.10.24	The outlet Minimum current of
slave X Output Current Min	1.3.6.1.4.1.30966.6.X.1.11	device X
	1.3.0.1.4.1.30900.0.7.1.11	The Minimum current of outlet 1
slave X Output Current Min One	1 2 C 1 4 1 200CC C V 1 11 1	of device X
	1.3.6.1.4.1.30966.6.X.1.11.1	
alays X Outrast Course at Mire Tour		The Minimum current of outlet 2
slave X Output Current Min Two	1.3.6.1.4.1.30966.6.X.1.11.2	of device X
		The Minimum current of outlet 3
slave X Output Current Min Three	1.3.6.1.4.1.30966.6.X.1.11.3	of device X
		The Minimum current of outlet 4
slave X Output Current Min Four	1.3.6.1.4.1.30966.6.X.1.11.4	of device X
		The Minimum current of outlet 5
slave X Output Current Min Five	1.3.6.1.4.1.30966.6.X.1.11.5	of device X
		The Minimum current of outlet 6
slave X Output Current Min Six	1.3.6.1.4.1.30966.6.X.1.11.6	of device X
		The Minimum current of outlet 7
slave X Output Current Min Seven	1.3.6.1.4.1.30966.6.X.1.11.7	of device X
		The Minimum current of outlet 8
slave X Output Current Min Eight	1.3.6.1.4.1.30966.6.X.1.11.8	of device X
		The Minimum current of outlet 9
slave X Output Current Min Nine	1.3.6.1.4.1.30966.6.X.1.11.9	of device X
		The Minimum current of outlet 10
slave X Output Current Min Ten	1.3.6.1.4.1.30966.6.X.1.11.10	of device X
		The Minimum current of outlet 11
slave X Output Current Min Eleven	1.3.6.1.4.1.30966.6.X.1.11.11	of device X
		The Minimum current of outlet 12
slave X Output Current Min Twelve	1.3.6.1.4.1.30966.6.X.1.11.12	of device X
		The Minimum current of outlet 13
slave X Output Current Min Thirteen	1.3.6.1.4.1.30966.6.X.1.11.13	of device X
		The Minimum current of outlet 14
slave X Output Current Min Fourteen	1.3.6.1.4.1.30966.6.X.1.11.14	of device X
		The Minimum current of outlet 15
slave X Output Current Min Fifteen	1.3.6.1.4.1.30966.6.X.1.11.15	of device X

		The Minimum current of outlet 16
slave X Output Current Min Sixteen	1.3.6.1.4.1.30966.6.X.1.11.16	of device X
		The Minimum current of outlet 17
slave X Output Current Min Seventeen	1.3.6.1.4.1.30966.6.X.1.11.17	of device X
		The Minimum current of outlet 18
slave X Output Current Min Eighteen	1.3.6.1.4.1.30966.6.X.1.11.18	of device X
		The Minimum current of outlet 19
slave X Output Current Min Nineteen	1.3.6.1.4.1.30966.6.X.1.11.19	of device X
		The Minimum current of outlet 20
slave X Output Current Min Twenty	1.3.6.1.4.1.30966.6.X.1.11.20	of device X
, ,		The Minimum current of outlet 21
slave X Output Current Min Twenty One	1.3.6.1.4.1.30966.6.X.1.11.21	of device X
		The Minimum current of outlet 22
slave X Output Current Min Twenty Two	1.3.6.1.4.1.30966.6.X.1.11.22	of device X
		The Minimum current of outlet 23
slave X Output Current Min Twenty Three	1.3.6.1.4.1.30966.6.X.1.11.23	of device X
		The Minimum current of outlet 24
slave X Output Current Min Twenty Four	1.3.6.1.4.1.30966.6.X.1.11.24	of device X
		The Minimum outlet current of
slave X Output Current Max	1.3.6.1.4.1.30966.6.X.1.12	device X
		The Maximum current of outlet 1
slave X Output Current Max One	1.3.6.1.4.1.30966.6.X.1.12.1	of device X
		The Maximum current of outlet 2
slave X Output Current Max Two	1.3.6.1.4.1.30966.6.X.1.12.2	of device X
		The Maximum current of outlet 3
slave X Output Current Max Three	1.3.6.1.4.1.30966.6.X.1.12.3	of device X
		The Maximum current of outlet 4
slave X Output Current Max Four	1.3.6.1.4.1.30966.6.X.1.12.4	of device X
· · ·		The Maximum current of outlet 5
slave X Output Current Max Five	1.3.6.1.4.1.30966.6.X.1.12.5	of device X
- · ·		The Maximum current of outlet 6
slave X Output Current Max Six	1.3.6.1.4.1.30966.6.X.1.12.6	of device X
· ·		The Maximum current of outlet 7
slave X Output Current Max Seven	1.3.6.1.4.1.30966.6.X.1.12.7	of device X
		The Maximum current of outlet 8
slave X Output Current Max Eight	1.3.6.1.4.1.30966.6.X.1.12.8	of device X
		The Maximum current of outlet 9
slave X Output Current Max Nine	1.3.6.1.4.1.30966.6.X.1.12.9	of device X
		The Maximum current of outlet 10
slave X Output Current Max Ten	1.3.6.1.4.1.30966.6.X.1.12.10	of device X
		The Maximum current of outlet 11
slave X Output Current Max Eleven	1.3.6.1.4.1.30966.6.X.1.12.11	of device X
		The Maximum current of outlet 12
slave X Output Current Max Twelve	1.3.6.1.4.1.30966.6.X.1.12.12	of device X

		The Maximum current of outlet 13
slave X Output Current Max Thirteen	1.3.6.1.4.1.30966.6.X.1.12.13	of device X
		The Maximum current of outlet 14
slave X Output Current Max Fourteen	1.3.6.1.4.1.30966.6.X.1.12.14	of device X
		The Maximum current of outlet 15
slave X Output Current Max Fifteen	1.3.6.1.4.1.30966.6.X.1.12.15	of device X
· · · · ·		The Maximum current of outlet 16
slave X Output Current Max Sixteen	1.3.6.1.4.1.30966.6.X.1.12.16	of device X
		The Maximum current of outlet 17
slave X Output Current Max Seventeen	1.3.6.1.4.1.30966.6.X.1.12.17	of device X
		The Maximum current of outlet 18
slave X Output Current Max Eighteen	1.3.6.1.4.1.30966.6.X.1.12.18	of device X
		The Maximum current of outlet 19
slave X Output Current Max Nineteen	1.3.6.1.4.1.30966.6.X.1.12.19	of device X
		The Maximum current of outlet 20
slave X Output Current Max Twenty	1.3.6.1.4.1.30966.6.X.1.12.20	of device X
		The Maximum current of outlet 21
slave X Output Current Max Twenty One	1.3.6.1.4.1.30966.6.X.1.12.21	of device X
		The Maximum current of outlet 22
slave X Output Current Max Twenty Two	1.3.6.1.4.1.30966.6.X.1.12.22	of device X
		The Maximum current of outlet 23
slave X Output Current Max Twenty Three	1.3.6.1.4.1.30966.6.X.1.12.23	of device X
		The Maximum current of outlet 24
slave X Output Current Max Twenty Four	1.3.6.1.4.1.30966.6.X.1.12.24	of device X
slave X Output Current Energy	1.3.6.1.4.1.30966.6.X.1.13	The energy of device X
slave X Output Current Energy One	1.3.6.1.4.1.30966.6.X.1.13.1	The energy of outlet 1 of device X
slave X Output Current Energy Two	1.3.6.1.4.1.30966.6.X.1.13.2	The energy of outlet 2 of device X
slave X Output Current Energy Three	1.3.6.1.4.1.30966.6.X.1.13.3	The energy of outlet 3 of device X
slave X Output Current Energy Four	1.3.6.1.4.1.30966.6.X.1.13.4	The energy of outlet 4 of device X
slave X Output Current Energy Five	1.3.6.1.4.1.30966.6.X.1.13.5	The energy of outlet 5 of device X
slave X Output Current Energy Six	1.3.6.1.4.1.30966.6.X.1.13.6	The energy of outlet 6 of device X
slave X Output Current Energy Seven	1.3.6.1.4.1.30966.6.X.1.13.7	The energy of outlet 7 of device X
slave X Output Current Energy Eight	1.3.6.1.4.1.30966.6.X.1.13.8	The energy of outlet 8 of device X
slave X Output Current Energy Nine	1.3.6.1.4.1.30966.6.X.1.13.9	The energy of outlet 9 of device X
slave X Output Current Energy Ten	1.3.6.1.4.1.30966.6.X.1.13.10	The energy of outlet 10 of device X
slave X Output Current Energy Eleven	1.3.6.1.4.1.30966.6.X.1.13.11	The energy of outlet 11 of device X
slave X Output Current Energy Twelve	1.3.6.1.4.1.30966.6.X.1.13.12	The energy of outlet 12 of device X
slave X Output Current Energy Thirteen	1.3.6.1.4.1.30966.6.X.1.13.13	The energy of outlet 13 of device X
slave X Output Current Energy Fourteen	1.3.6.1.4.1.30966.6.X.1.13.14	The energy of outlet 14 of device X
slave X Output Current Energy Fifteen	1.3.6.1.4.1.30966.6.X.1.13.15	The energy of outlet 15 of device X
slave X Output Current Energy Sixteen	1.3.6.1.4.1.30966.6.X.1.13.16	The energy of outlet 16 of device X
slave X Output Current Energy Seventeen	1.3.6.1.4.1.30966.6.X.1.13.17	The energy of outlet 17 of device X
slave X Output Current Energy Eighteen	1.3.6.1.4.1.30966.6.X.1.13.18	The energy of outlet 18 of device X

slave X Output Current Energy Nineteen	1.3.6.1.4.1.30966.6.X.1.13.19	The energy of outlet 19 of device X
slave X Output Current Energy Twenty	1.3.6.1.4.1.30966.6.X.1.13.20	The energy of outlet 20 of device X
slave X Output Current Energy Twenty One	1.3.6.1.4.1.30966.6.X.1.13.21	The energy of outlet 21 of device X
slave X Output Current Energy Twenty Two	1.3.6.1.4.1.30966.6.X.1.13.22	The energy of outlet 22 of device X
slave X Output Current Energy Twenty Three	1.3.6.1.4.1.30966.6.X.1.13.23	The energy of outlet 23 of device X
slave X Output Current Energy Twenty Four	1.3.6.1.4.1.30966.6.X.1.13.24	The energy of outlet 24 of device X

## B. To view the device and sensor status by table format via SNMP software: Table 2-1 The outlet statue information table

Menu	Description
SMART PDU Device xx	Device xx
Slave xx line xx	Phase xx of device xx
Slave xx line xx Power	Power of phase xx of device xx
Slave xx line xx PF	Power Factor of phase xx of device xx
Slave xx line xx Energy	Energy of phase xx of device xx
Slave xx line xx Current	Current of phase xx of device xx
Slave xx line xx Voltage	Voltage of phase xx of device xx
Slave xx line xx Current MIN	The Minimum current of phase xx of device xx
Slave xx line xx Current Max	The Maximum current of phase xx of device xx
Slave xx line xx Voltage Min	The Minimum voltage of phase xx of device xx
Slave xx line xx Voltage Max	The Maximum voltage of phase xx of device xx
Slave xx temp	The temperature of device xx
Slave xx hum	The humidity of device xx
Slave xx temp Min	The Minimum temperature value of device xx
Slave xx temp Max	The Maximum temperature value of device xx
Slave xx hum Min	The Minimum humidity value of device xx
Slave xx hum Max	The Maximum humidity value of device xx
Slave xx output name xx	The outlet name of outlet xx of device xx
Slave xx output status xx	The on/off status of outlet xx of device xx
Slave xx output current xx	The current of outlet xx of device xx
Slave xx output current Min xx	The Minimum current of outlet xx of device xx
Slave xx output current Max xx	The Maximum current of outlet xx of device

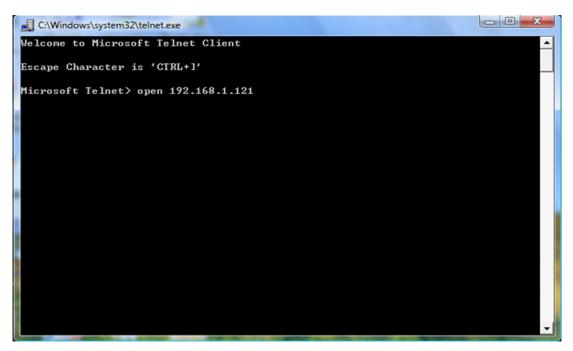
Slave xx output current Energy xx	The energy of outlet xx of device xx
Slave xx name	The name of device xx
Slave xx Type	The type of device xx
Slave xx output number	The outlet quantity of device xx

# 3.2.3 Telnet Access

The device supports Telnet access, after enter the username and password, user can remotely monitor and management the device. Telnet access support daisy-chain as well to enable the user to manage up to 5 devices.

To open the Telnet client  $\bigoplus_{\text{transfit Caper}}$  by Start  $\rightarrow$  Run command  $\rightarrow$  enter "Telnet" in the input box and click OK

Enter the IP address as illustrated in figure 2-4





Enter the username and password, interface as shown in figure 2-5 will pop up

🛃 192.168.1.163 - PuTTY	
Welcome to RPDU cmd!	*
Device Name : RPDU1 System Version : 1.4.1 Last Update Time : 2018-12-06 The Current Time : 2019-01-12 10:52	
login:admin password:	
order list: status on off set network reboot reset quit	
input order:	
	Ŧ

Figure 2-5

## 3.2.3.3 "STATUS" command

Input "STATUS" command to view the individual outlet status (including current, on/off state, Max. and Min. current value, kW and kWh) and the overall status (including total current, voltage, kW and kWh).

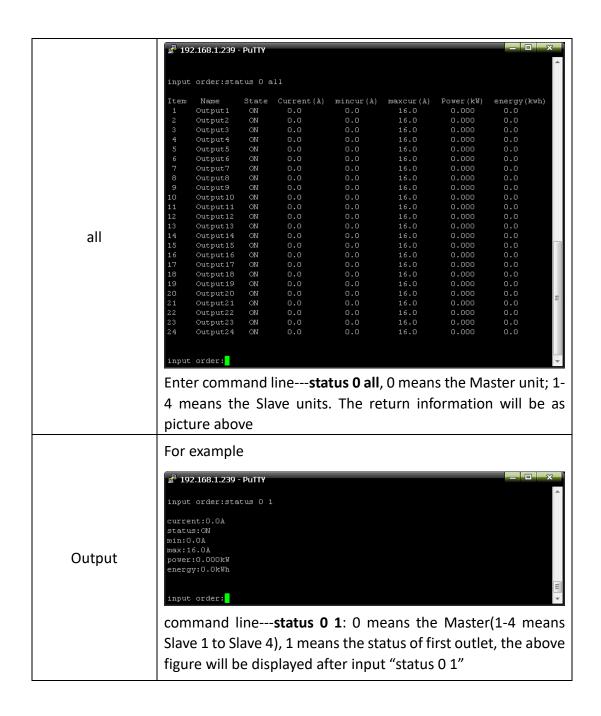
Command line format: STATUS [index] [operation] as illustrated in figure 2-6:

P 192.168.1.163 - PuTTY	
Welcome to RPDU cmd!	-
Device Name : RPDU1 System Version : 1.4.1 Last Update Time : 2018-12-06 The Current Time : 2019-01-12 10:52	
login:admin password:	
order list: status on off set network reboot reset quit	
input order:status	
<pre>status [index] [operation] index:RPDU slave number,'0' is the master, '1' is the slave one operation:'total' is the total status operation:'sensor' is the sensor status operation:'all' To view all the output state operation:'1' is the output1 status</pre>	
input order:	Ŧ

Figure 2-6

【index】: device mode (0-9, 0 is master, 1-4 is slave);
【operation】: view the device information, details as below:

【operation】	Description	
	For example:	
	📽 192.168.1.239 - PuTTY - 🗖 🗙	
	input order:status 0 total	
Total	<pre>Device Series:NPM-V(D) Device output bits:24 Li total current:0.0A L1 total current:0.0A L2 total voltage:225V power:0.000kW energy:0.0kWh L3 total current:0.0A L3 total voltage:0V power:0.000kW energy:0.0kWh input order: Enter command linestatus 0 total: 0 means the Master (1-4 means Slave 1 to Slave 4), total means the overall status,</pre>	
	the above figure shown after input "status 0 total". The return information will be as picture above	
	🖆 192.168.1.239 - PuTTY	
	input order:status O sensor	
sensor	<pre>temperature1: [,]* temperature2: [,]* temperature3: [,]* temperature4: [,]* temperature4: [,]* temperature4: [,]* temperature4: [,]* door1: door2: water: smoke:</pre>	
	Enter command line <b>status 0 sensor</b> : 0 means the Master	
	unit; 1-4 means the Slave units. The return information will be	
	as picture above	



# 3.2.3.4 "ON/OFF" command

"ON/OFF" command enable the user to switch on/off the individual outlet or the complete device Command format: ON/OFF 【index】 【operation】 as shown in figure 2-7

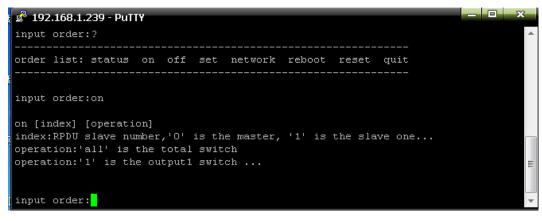


Figure 2-7

【index】:device mode (0-9, 0 is master, 1-4 is slave);
【operation】:view the device information, details as below:

[operation]	Description	
ALL	<pre>     192.168.1.239 - PuTTY     input order:on     on [index] [operation]     index:RPDU slave number, '0' is the master, '1' is the slave one     operation:'all' is the total switch     operation:'l' is the output1 switch     input order:on 0 all     the order is dnoe.     input order:     Command lineon 0 all means to switch on all outlet from the     Master unit</pre>	
Output	<pre>Imput order:off off [index] [operation] index:RPDU slave number, '0' is the master, '1' is the slave one operation:'all' is the total switch operation:'1' is the output1 switch input order:off 0 1 the order is dnoe. input order: Command lineoff 0 1 on means to switch off the first outlet of the Master unit</pre>	

#### 3.2.3.5 Set command:

"set" command enable to Set the current of outlet, temperature and humidity minimum and maximum threshold, changing the IP, mask, gateway, dns, dns1; Command format: set 【index】 【operation】 as shown in figure 2-8

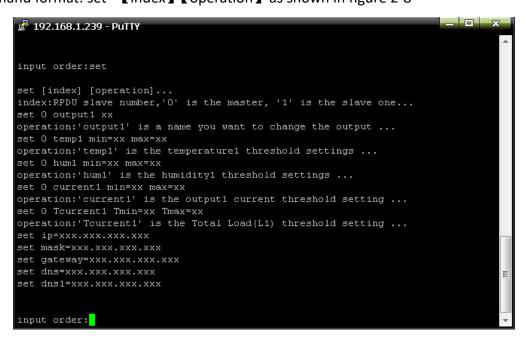


Figure 2-8

(index): device mode (0-9, 0 is master, 1-4 is slave);
(operation): view the device information, details as below:

[operation]	Description	
output	<pre>Imput order:set input order:set input order:set set [index] [operation] index:RPDU slave number,'0' is the master, '1' is the slave one set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperaturel threshold settings set 0 hum1 min=xx max=xx operation:'teurent1' is the output1 current threshold setting set 0 Teurent1 Tmin=xx Tmax=xx operation:'Teurent1' is the Total Load(L1) threshold setting set dns=xxx.xxx.xxx.xxx set gateway=xxx.xxx.xxx set dns=xxx.xxx.xxx xxx input order:set 0 output1 a1 input order:</pre>	

current	<pre>P192.166.1.239 - PullY input order:set set [index] [operation] index:FPDU slave number,'0' is the master, '1' is the slave one set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 fourrent1 min=xx max=xx operation:'temp1' is the output1 current threshold setting set 0 Tourrent1 min=xx max=xx operation:'Tourrent1' is the Total Load(L1) threshold setting set dnsl=xxx.xxx.xxx.xxx set mask=xxx.xxx.xxx set dnsl=xxx.xxx.xxx.xxx set dnsl=xxx.xxx.xxx.xxx set dnsl=xxx.xxx.xxx command line set 0 current1 min=0 max=12 means set up the minimum current as 0 and maximum current as 12 for output 1 from Master unit</pre>
temperature	<pre>input order:set input order:set set [index] [operation] index:RPDU slave number,'0' is the master, '1' is the slave one set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'hum'1 is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'fourrent1' is the output1 current threshold setting set 0 Tourrent1 min=xx max=xx operation:'fourrent1' is the Total Load(L1) threshold setting set gateway=xx1.xxx.xxx set mask=xxx.xxx.xxx input order:set 0 output1 a1 input order:set 0 current1 min=0 max=12 input order:set 0 temp1 min=0 max=60 input order:set 0 temp1 min=0 max=60 minimum temperature as 0 degree and maximum temperature 60 degree for temperature sensor 1 from master unit</pre>

	Image: Putty       Image: Putty         input order:set       Image: Putty         set [index] [operation]       Image: Putty		
	index:RPDU slave number, $^{\prime}\textsc{O}^{\prime}$ is the master, $^{\prime}\textsc{I}^{\prime}$ is the slave one set O output1 xx		
	operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx		
	operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx		
	operation: 'hum1' is the humidity1 threshold settings		
	<pre>set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting</pre>		
	set O Tcurrent1 Tmin=xx Tmax=xx operation:'Tcurrent1' is the Total Load(L1) threshold setting		
	set ip=xxx.xxx.xxx set mask=xxx.xxx.xxx		
	set gateway=xxx.xxx.xxx		
humidity	set dns=xxx.xxx.xxx set dns1=xxx.xxx.xxx		
	input order:set 0 output1 a1		
	input order:set 0 temp1 min=0 max=60		
	input order:set 0 hum1 min=0 max=90		
	input order:set 0 current1 min=0 max=12		
	input order:set 0 Tcurrent1 Tmin=0 Tmax=16		
	input order:		
	Command line <b>set 0 hum1 min=0 max=90</b> means set the minimum		
	humidity as 0% and maximum humidity as 90% for humidity sensor		
	1 from Master unit		
	■ 192.168.1.239 - PuTTY             ■ ■ ×            input order:set		
	set [index] [operation]		
	index:RPDU slave number,'0' is the master, '1' is the slave one		
	set 0 output1 xx operation:'output1' is a name you want to change the output		
	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings</pre>		
	set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx		
	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx</pre>		
	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tcurrent1 Tmin=xx Tmax=xx</pre>		
	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tcurrent1 Tmin=xx Tmax=xx operation:'Tcurrent1' is the Total Load(L1) threshold setting set ip=xxx.xxx.xxx</pre>		
	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tcurrent1 Tmin=xx Tmax=xx operation:'Tcurrent1' is the Total Load(L1) threshold setting set ip=xx.xxx.xxx.xxx set mask=xx.xxx.xxx.xxx set gateway=xxx.xxx.xxx</pre>		
Tcurrent	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tcurrent1 Tmin=xx Tmax=xx operation:'Tcurrent1' is the Total Load(L1) threshold setting set ip=xxx.xxx.xxx.xxx set mask=xxx.xxx.xxx</pre>		
Tcurrent	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tcurrent1 Thin=xx Tmax=xx operation:'Tcurrent1' is the Total Load(L1) threshold setting set 1p=xxx.xxx.xxx.xxx set mask=xxx.xxx.xxx.xxx set gateway=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx</pre>		
Tcurrent	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tcurrent1 Tmin=xx Tmax=xx operation:'Tcurrent1' is the Total Load(L1) threshold setting set ip=xxx.xxx.xxx.xxx set mask=xxx.xxx.xxx.xxx set gateway=xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx</pre>		
Tcurrent	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 crurent1 Tmin=xx Tmax=xx operation:'tcurrent1' is the Total Load(L1) threshold setting set ip=xxx.xxx.xxx set mask=xxx.xxx.xxx set mask=xxx.xxx.xxx set dns=xxx.xxx.xxx set dns=xxx.xxx.xxx set dns=xxx.xxx.xxx input order:set 0 output1 a1</pre>		
Tcurrent	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the hum1dity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tcurrent1 Tmin=xx Tmax=xx operation:'Tcurrent1' is the Total Load(L1) threshold setting set ip=xxx.xxx.xxx.xxx set mask=xxx.xxx.xxx set gateway=xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx input order:set 0 output1 a1 input order:set 0 temp1 min=0 max=60</pre>		
Tcurrent	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 crurent1 Tmin=xx Tmax=xx operation:'tcurrent1' is the Total Load(L1) threshold setting set ip=xxx.xxx.xxx set mask=xxx.xxx.xxx set gateway=xxx.xxx.xxx set dns=xxx.xxx.xxx set dns=xxx.xxx.xxx set dns=xxx.xxx.xxx input order:set 0 output1 a1 input order:set 0 temp1 min=0 max=60 input order:set 0 hum1 min=0 max=90</pre>		
Tcurrent	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'fuurent1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tcurrent1 Tmin=xx Tmax=xx operation:'Tcurrent1' is the Total Load(L1) threshold setting set ip=xxx.xxx.xxx.xxx set gateway=xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx input order:set 0 output1 a1 input order:set 0 temp1 min=0 max=90 input order:set 0 current1 min=0 max=12</pre>		
Tcurrent	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'hum1' is the humidity1 threshold settings set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tcurrent1 min=xx Tmax=xx operation:'trurent1' is the Total Load(L1) threshold setting set ip=xx:.xxx.xxx.xxx set mask=xxx.xxx.xxx set gateway=xxx.xxx.xxx set dns=xxx.xxx.xxx xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx input order:set 0 output1 a1 input order:set 0 temp1 min=0 max=60 input order:set 0 current1 min=0 max=12 input order:set 0 Tcurrent1 Tmin=0 Tmax=16 </pre>		
Tcurrent	<pre>set 0 output1 xx operation:'output1' is a name you want to change the output set 0 temp1 min=xx max=xx operation:'temp1' is the temperature1 threshold settings set 0 hum1 min=xx max=xx operation:'current1' is the humidity1 threshold setting set 0 current1 min=xx max=xx operation:'current1' is the output1 current threshold setting set 0 Tourrent1' is the Total Load(L1) threshold setting set ip=xxx.xxx.xxx.xxx set mask=xxx.xxx.xxx.xxx set gateway=xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx set dns=xxx.xxx.xxx.xxx input order:set 0 temp1 min=0 max=60 input order:set 0 current1 min=0 max=12 input order:set 0 Tourrent1 Tmin=0 Tmax=16 input order:set 0 Tourrent1 Tmin=0 Tmax=16</pre>		

network	<pre>input order:set 0 Tcurrent1 Tmin=0 Tmax=16 input order:set ip=192.168.1.235 Need to reboot the device! input order:set mask=255.255.0 Need to reboot the device! input order:set gateway=192.168.1.1 Need to reboot the device! input order:set dns=202.96.128.86 Need to reboot the device! input order:</pre>
	network IP address as 192.168.1.223

## 3.2.3.6 Network command

Check network configuration information, such as IP address, subnet mask, default gateway, main DNS, spare DNS.



Figure 2-9

## 3.2.3.7 Reboot command

To restart to device as shown in figure 2-10



Figure 2-10

After type Y and press Enter, exit the telnet interface, and restart device system; Type n and press Enter to exit the telnet interface

## 3.2.3.8 RESET command

To restore to factory settings as figure 2-11





## 3.2.3.9 QUIT command

To quit the telnet client as shown in figure 2-12



Figure 2-12

Type y and press Enter to quit the Telnet interface. Type n and press Enter to cancel the operation.

## **3.2.4 MODBUS Access**

Please refer to the 《SMART PDU MODBUS RTU Protocol Instruction》 for the MODBUS access

# 4. Frequently Asked Questions

## 4.1. Forget IP address?

A: check on the LCD screen, the first page displays the IP address.

## 4.2. Fail to send email?

A: 1) Check and confirm the device connected to network and the network works normally.

- 2) Check DNS configuration and confirm whether it is successful.
- 3) Check and confirm POP, SMTP sever is correct and the same as the sender mailbox sever. Please confirm SMTP port is correct.

## 4.3. Lost IP

A. Press and hold the RESET button for 6 seconds, Release the RESET button when the device buzz, the device will restart.

# 5. Technology Parameters

No.	Per	formance parameter	Technical parameter
	Input	Rated input voltage	110/220VAC 50/60 Hz; 380 VAC 50/60 Hz;
		Rated input plug	IEC60309 standard
		Cable specification	16A:3×2.5mm <sup>2</sup> 32A:3×6.0mm <sup>2</sup> ; 3×16A:5×2.5mm <sup>2</sup> 3×32A:5×6.0mm <sup>2</sup>
1		Cable length	2.5M
		Max. load current	16A, 32A 3×16A, 3×32A
		Overload protector	1P circuit breaker 3P circuit breaker
		Socket standard	Standard IEC320 C13, C19
2	Output	Socket quantity	A Series: 8, 16, 24, 36way; B Series: 8, 16, 24way; C Series: 8, 16, 24way; D Series: 8, 16, 24way;
		Output voltage	110/220VAC 50/60 Hz
		Output current	16A, 32A 3*16A,3*32A
		Net port	1×RJ45 port
	Control ports	Daisy chain port	2×RJ45 port
		Software update port	1×RJ45 port
3		Temperature & humidity port	Max 2×RJ11 port (can add more)
		Smoke sensor port	Max 1×RJ11 port (optional)
		Water sensor port	Max 1×RJ11 port (optional)
		Door sensor port	Max 1×RJ11 port (optional)
4	Display	Working state	1×LED
		Power pulse	1×LED
		IP Address, M/S SMART PDU state, measurement value, alarm state	LCD screen (Resolution: 128×64)
5	Load current display	Total current	Full-scale:16A/32A,Accuracy:±1%+0.2 Resolution:200mA, Response:400ms

	technology requirement	Individual load current	Full-scale: 10A/ 16A, Accuracy:±1%+0.1, resolution:100mA, Response:400ms
6 Temperature /humidity Technology requirement		Temperature	Accuracy:±1°C, Response: 400ms
	Humidity	Accuracy:±5%RH, Response: 400ms	
7	Product size	$\label{eq:product_size} Product size~(L \times W \times H)$	X <sup>2</sup> ×56×52mm
		Mounting hole	X <sup>3</sup>
8	Case color	Color	Black
		Installation bracket	1 set
	Fittings	Network connection cable	2M blue network cable*1
9		Daisy-chain connection cable	2M yellow network cable*1
		Serial connection cable	2M Ivory Serial cable*1
		User manual	1 set (CD)
	Optional fittings	Sensor	Temperature/humidity sensor
4.0			Smoke sensor
10			Door sensor
			Water logging sensor
11	Environment	Working Environment	Temperature: 0°C~+45°C
			Relative humidity: 30%~90%
		Storage Enviror	Storage Environment
12	ROHS	Compliance	

This is a Class A product. In home environment, this product may cause radio interference.

In this case, the user may be required to take appropriate measures.

Hereby Assmann Electronic GmbH, declares that the Declaration of Conformity is part of the shipping content. If the Declaration of Conformity is missing, you can request it by post under the below mentioned manufacturer address.

www.assmann.com

Assmann Electronic GmbH Auf dem Schüffel 3 58513 Lüdenscheid Germany

