

# RPM-04 PDU Management Software User Manual

UM-RPM-04-1P-3METER-Q218V5



## LEGAL INFORMATION

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First English printing, January 2018

Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. We are not liable for any injury or loss that results from the use of this equipment.

## SAFETY INSTRUCTIONS

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**Please read all of these instructions carefully before you use the device. Save this manual for future reference.**

- Unplug equipment before cleaning. Don't use liquid or spray detergent; use a moist cloth.
- Keep equipment away from excessive humidity and heat. Preferably, keep it in an air-conditioned environment with temperatures not exceeding 40° Celsius (104° Fahrenheit).
- When installing, place the equipment on a sturdy, level surface, to prevent it from accidentally falling and causing damage to other equipment or injury to persons nearby.
- When the equipment is in an open position, do not cover, block or in any way obstruct the gap between it and the power supply. Proper air convection is necessary to keep it from overheating.
- Arrange the equipment's power cord in such a way that others won't trip or fall over it.
- If you are using a power cord that didn't ship with the equipment, ensure that it is rated for the voltage and current labelled on the equipment's electrical ratings label. The voltage rating on the cord should be higher than the one listed on the equipment's ratings label.
- Observe all precautions and warnings attached to the equipment.
- If you don't intend on using the equipment for a long time, disconnect it from the power outlet to prevent being damaged by transient over-voltage.
- Keep all liquids away from the equipment to minimize the risk of accidental spillage. Liquid spilled on to the power supply or on other hardware may cause electrocution, fires, and other damage.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalid date its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

### **What the warranty does not cover**

- Any product, on which the serial number has been defaced, modified or removed.
- Damage, deterioration or malfunction resulting from:
  - Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - Repair or attempted repair by anyone not authorized by us.
  - Any damage of the product due to shipment.
  - Removal or installation of the product.
  - Causes external to the product, such as electric power fluctuation or failure.
  - Use of supplies or parts not meeting our specifications.
  - Normal wear and tear.
  - Any other causes which does not relate to a product defect.
- Removal, installation, and set-up service charges.

### **Regulatory Notices Federal Communications Commission (FCC)**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.


However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:


- Re-position or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

## UNPACKING

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The equipment comes with the standard parts shown on the package contents. Check and make sure they are included and in good condition. If anything is missing, or damage, contact the supplier immediately.

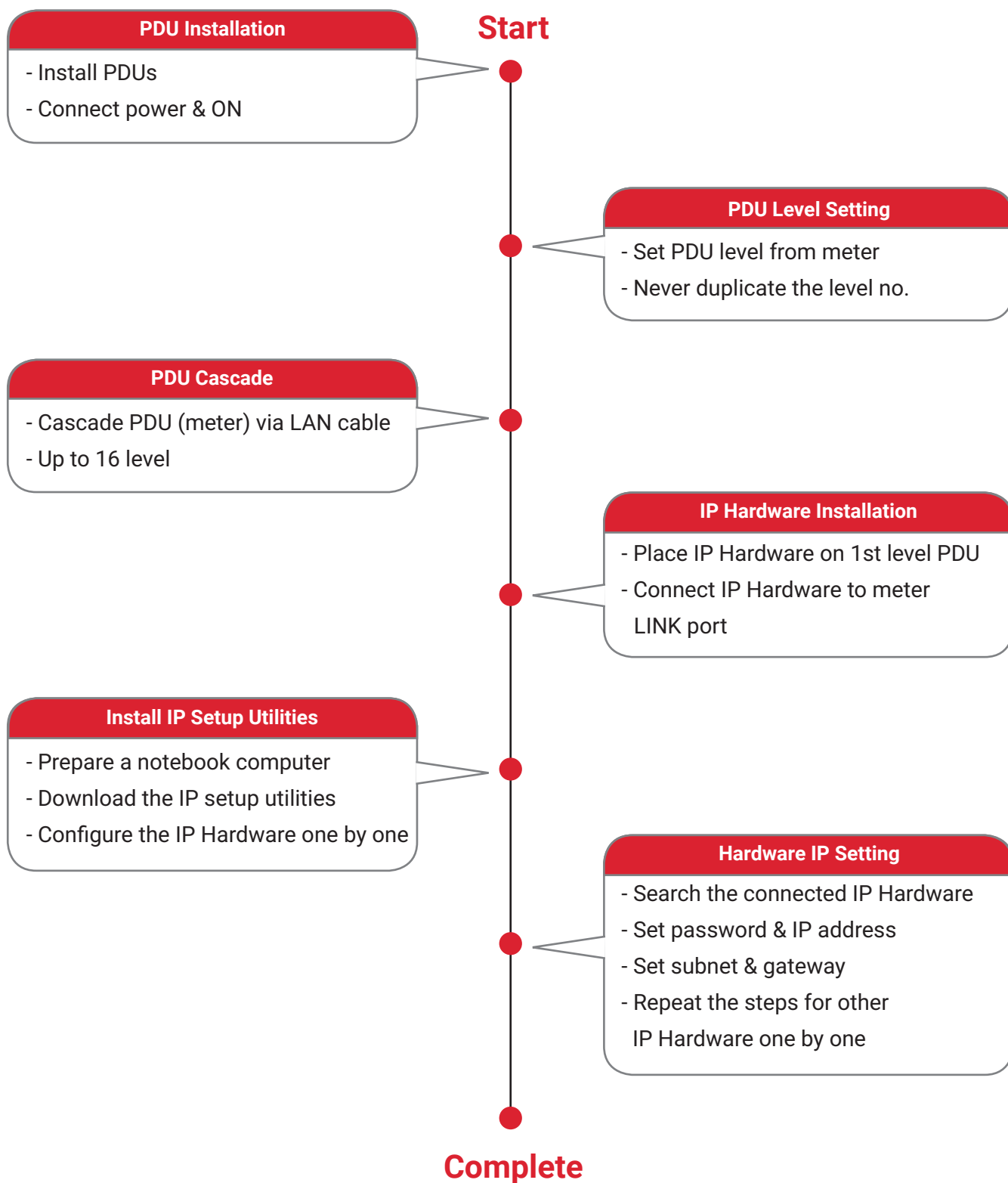
 All electrical power and power control wiring must be installed by a qualified electrician and comply with local and national regulations.

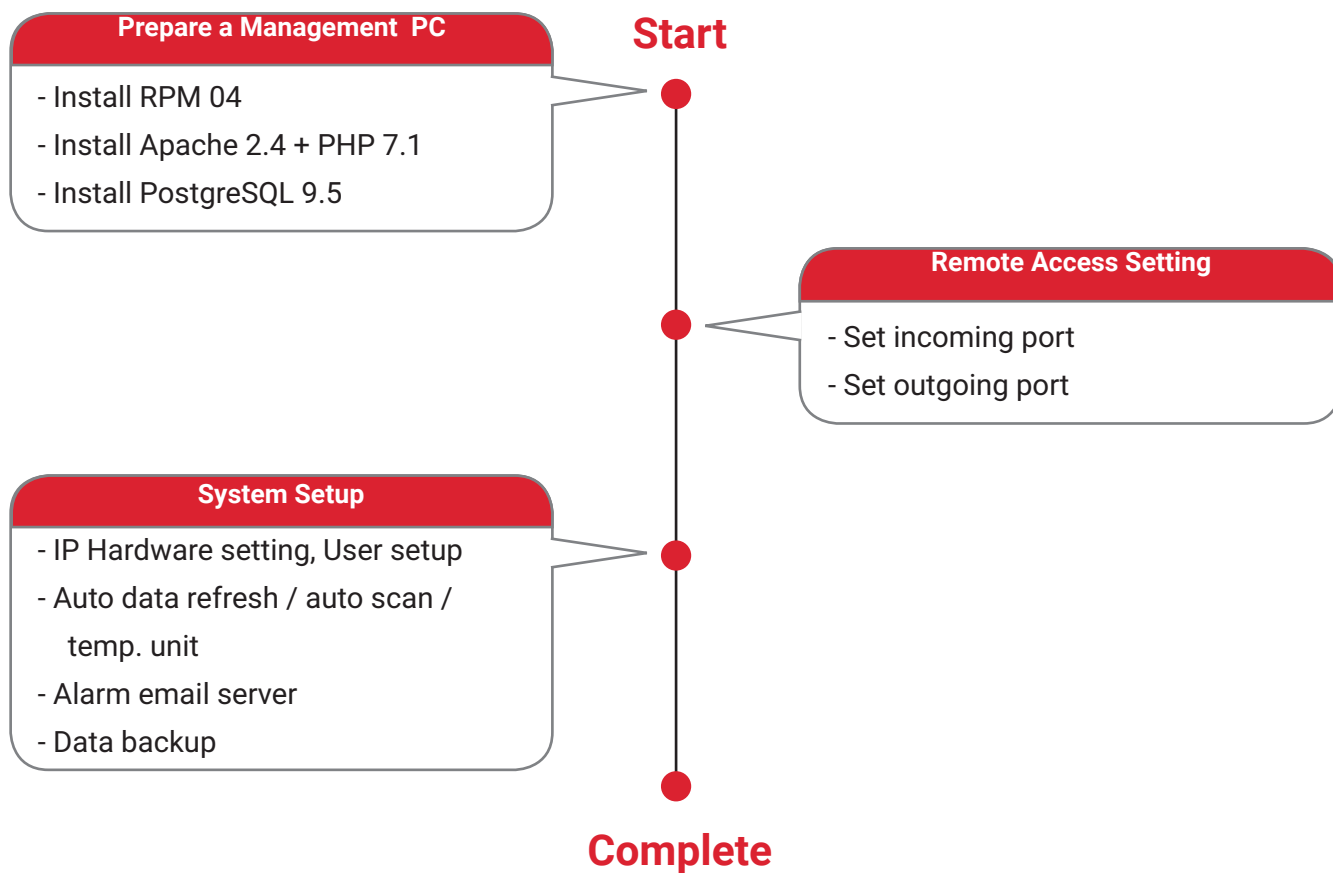
 Don't exceed the outlet, branch or phase limitations

## POWER ON

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- Connect the PDU into an appropriately rated receptacle
- When the PDU is power on, the LED display will light up. That means all outlets are activated
- Keep the equipments in the power off position until it is plugged into the PDU





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# Part I. RP Meter

## 1.1 METER KEY FEATURES

Four intelligent PDU series covering single & three phase equipped with RP Meter:

- Monitored PDU:
- ①

RP1000PDU
- ②

RP1500PDU - Outlet Measurement
- Switched PDU:
- ③

RP1000PDU
- ④

RP3000PDU - Outlet Measurement

RackPower	Monitored PDU		Switched PDU	
	RP1000	RP1500	RP2000	RP3000
Outlet Amp + kWh Measurement				
Outlet Switch ON / OFF				
Field Replaceable Meter				
2.8" Color LCD ( featured w/ Touchscreen )				
Circuit / Phase Amp + kWh Measurement				
Support Single & Three Phase PDU				
Phase Balance % ( 3 Phase PDU only )				
Temp-Humid Sensor port x 2				
16 PDU Levels in Single Daisy Chain				
One IP Access up to 16 PDU Levels				
Tool-less Mounting for Vertical PDU				
SNMP Capability v2 / v3				
Free Management Software ( via PDU IP Hardware, NPDH )				

## RP series PDU is equipped with a highly advanced component - **RP Meter** .

- Single & Three Phase PDU can be inter-cascaded in a single daisy chain.
- Simply connect 1 x IP Hardware to access up to 16 PDUs to save IP network address.
- SNMP Capability v2 / v3 via IP Hardware
- Built-in buzzer will sound when circuit or bank Amp over alarm setting.
- Field replaceable design allows meter replacement without PDU power interruption.

**1 Cascade port** .....  
Up to 16 PDU Level

**2 Sensor port x 2** .....  
- Temp. Sensor  
- Temp. + Humid. Sensor

**3 2.8" color LCD** .....  
Featured w/ Touchscreen

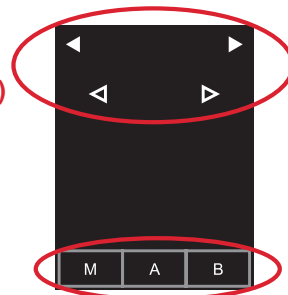
**4 Reset button** .....  
To re-power the meter if necessary, this won't cause any change on settings and memories.



## Reading

- Amp, Voltage & Power Factor
- kWh Energy Consumption
- Active & Apparent Power
- Temp. & Humidity

Touch Button  
( Single & Dual Circuit )



### Single Circuit

1 - 3

◀ Main ▶

Amp 15.9

kW 1.80

Volt 226.2

T1 23.4 T2 24.5 °C

M

4 - 7

◀ Power ▶

Factor 0.50

Active 1.80 kW

Apparent 3.60 kVA

299,678.56 kWh

1 Jan 15 / 23 : 59 : 40

M

◀ PDU ID ▶

Group : 050

Level : 16

M

◀ TH ▶

T1 23.1 °C

T2 24.5

H1 63.4 %

H2 56.5

M

◀ Circuit A ▶

15.9 Amp

Peak Load Amp 16.2

1 Jan 15 / 23 : 59 : 40

M

◀ System ▶

Time 23 : 59 : 40

Date 15 Jan 15

F/W RP3000-1B-V7

Serial no. 20315150589-1120-P001

Model no. V24C13/12C19 -16A-RP3000/CR\_EN/3B-1

M

◀ Outlet ▶

◀ 01 ▶

Amp 10.9

kW 1.23

Page no.5

Touch °C / °F to change temp. unit

Page no.7

RP1500/RP3000

measurement PDU only

### Dual Circuit

1 - 4

◀ Main ▶

Amp 31.7

A 15.9

B 15.8

kW 3.58

Volt 226.2

T1 23.4 T2 24.5 °C

M A B

5 - 8

◀ Power ▶

Factor 0.50

Active 03.58 kW

Apparent 07.16 kVA

299,678.56 kWh

1 Jan 15 / 23 : 59 : 40

M A B

◀ PDU ID ▶

Group : 050

Level : 16

M A B

◀ TH ▶

T1 23.1 °C

T2 24.5

H1 63.4 %

H2 56.5

M A B

◀ Circuit A ▶

15.9 Amp

Peak Load Amp 16.2

1 Jan 15 / 23 : 59 : 40

M A B

◀ System ▶

Time 23 : 59 : 40

Date 15 Jan 15

F/W RP3000-2B-V7

Serial no. 20315150589-1120-P001

Model no. V24C13/12C19 -32A-RP3000/CR\_EN/3B-1

M A B

◀ Circuit B ▶

15.8 Amp

Peak Load Amp 16.2

1 Jan 15 / 23 : 59 : 40

M A B

◀ Outlet ▶

Cir. A

◀ 01 ▶

Amp 10.9

kW 1.23

A B

Page no.6

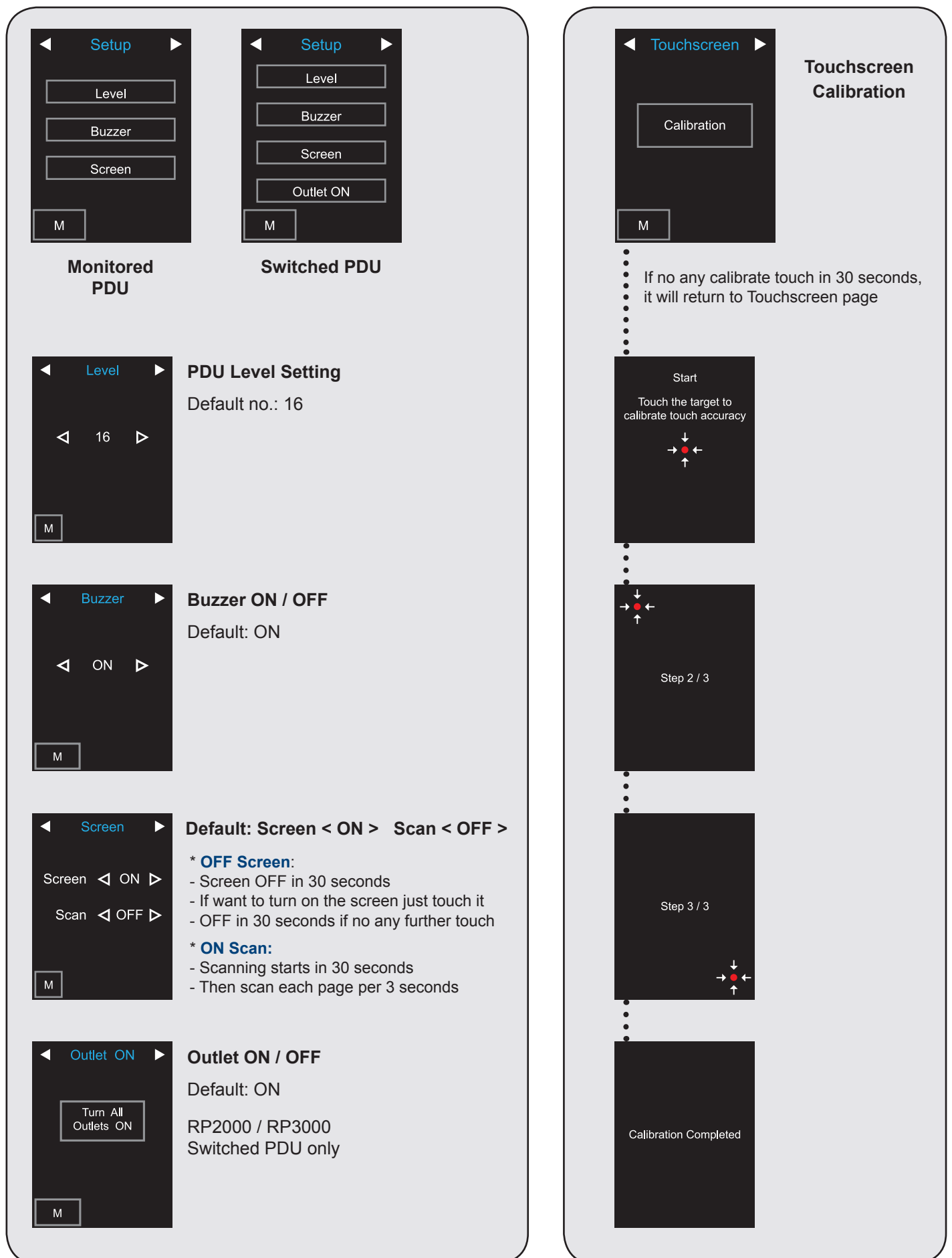
Touch °C / °F to change temp. unit

Page no.8

RP1500/RP3000

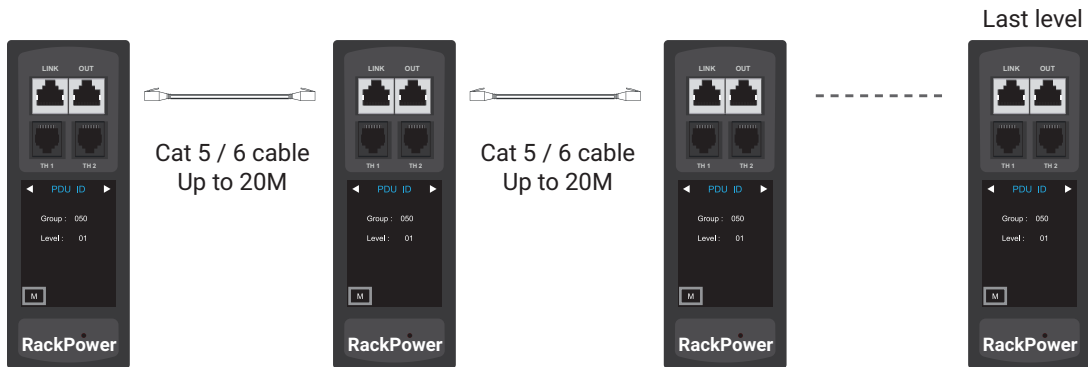
measurement PDU only

## Setting



### 1.3 METER ( PDU ) CASCADE

- The PDU can be cascaded up to 16 levels
- For IP PDU access simply connect 1 x IP Hardware - **NPDV**
- 1 x IP Hardware allows access to 16 levels
- Single & 3 Phase PDU can be inter-cascaded in the single daisy chain



To setup page for **PDU level setting** as below:



## 1.4 IP HARDWARE INSTALLATION

### IP Hardware Access to 16 PDU Levels

Patented IP Hardware provides IP remote access to the PDU's by a true network IP address chain. Only 1 x IP Hardware allows access to max. 16 PDU's in a single daisy chain - which is a highly efficient application for saving not only the IP remote accessories cost, but also the true IP addresses required on the PDU management.

Hot-Pluggable design facilitates the IP Hardware installation. Simply integrate the IP Hardware to the 1st PDU, then the entire daisy chain group can be remote over IP.

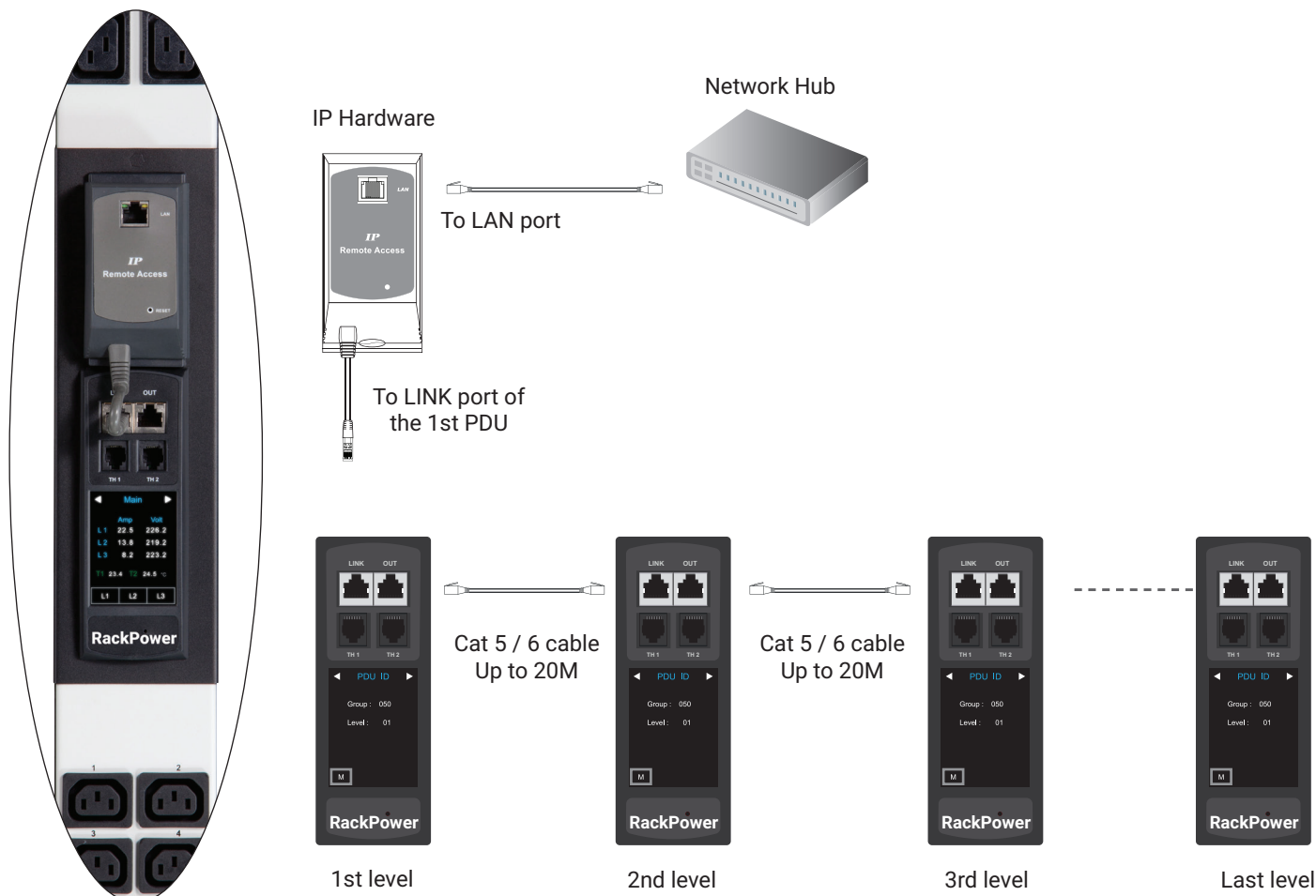


**Part no.**  
**NPDV**

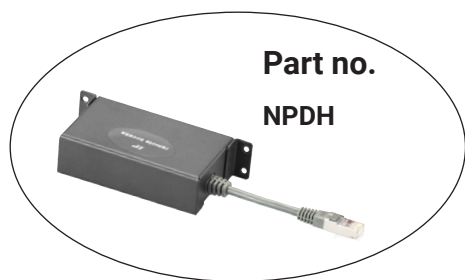
**IP Hardware for vertical PDU**  
- SNMP capability v2 / v3

#### Installation steps:

- Slide and fix the IP Hardware on the plate over the meter
- Plug its RJ-45 connector into the LINK port of the 1st level PDU meter
- Connect IP Hardware to network device via CAT. 5 / 6 cable



## 1.4 IP HARDWARE INSTALLATION

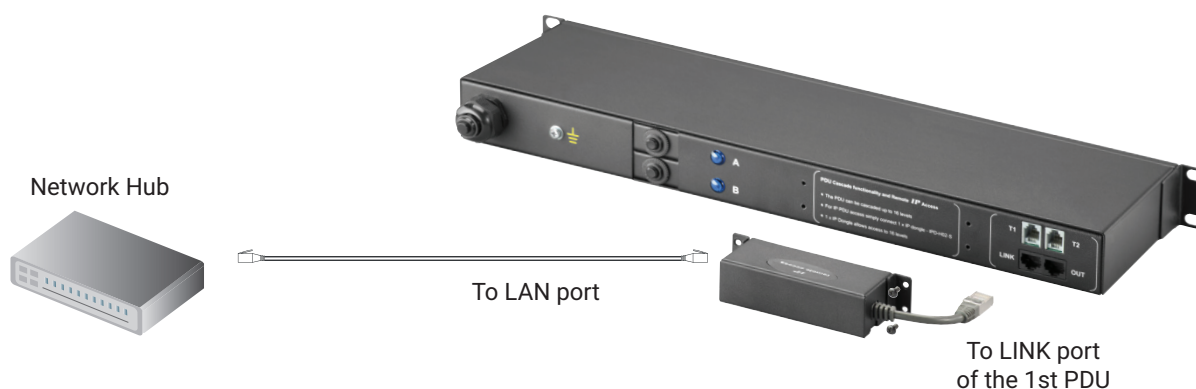


### IP Hardware for rackmount PDU

- SNMP capability v2 / v3

#### Installation steps:

- Fix the IP Hardware on the rear side of rackmount PDU with 4 screws
- Plug its RJ-45 connector into the LINK port of the 1st level PDU meter
- Connect IP Hardware to network device via CAT. 5 / 6 cable



## 1.5 METER SYSTEM TIMER

Each PDU comes with a system timer to show the current date & time.

It will be synchronized with the system time of the management PC under circumstances below:

- When the PDU connected to RPM-04 at the first time
- When the PDU is reconnected to RPM-04 after disconnection
- At 00:00:00 ( hh:mm:ss ) daily



The system timer will be frozen when the PDU is powered OFF.

1.6 OPTIONAL ACCESSORY

Temp. / Temp. + Humidity Sensor

RP Meter provides 2 sensor ports for Temp. & Humidity monitoring. Once sensors connected, the reading will display in the meter.

- Plug n Play
- Sensor with 2M or 4M cord
- Low profile design with magnetic base for easy affixing to the rack



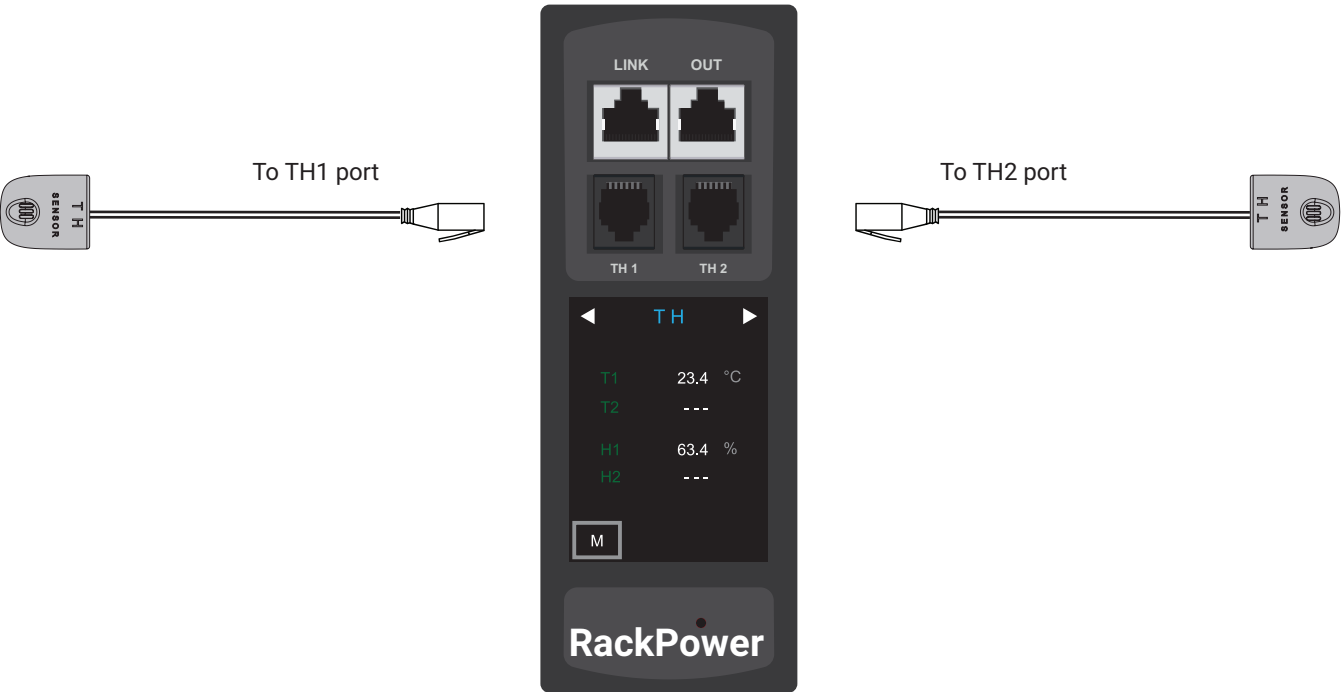
Temp. & Humid. Sensor

Part no.:  
NPS2 ( 2M cord )



Temp. Sensor

Part no.:  
NPS1 ( 2M cord )



## 1.6 OPTIONAL ACCESSORY

### Temp. / Temp. + Humidity Sensor

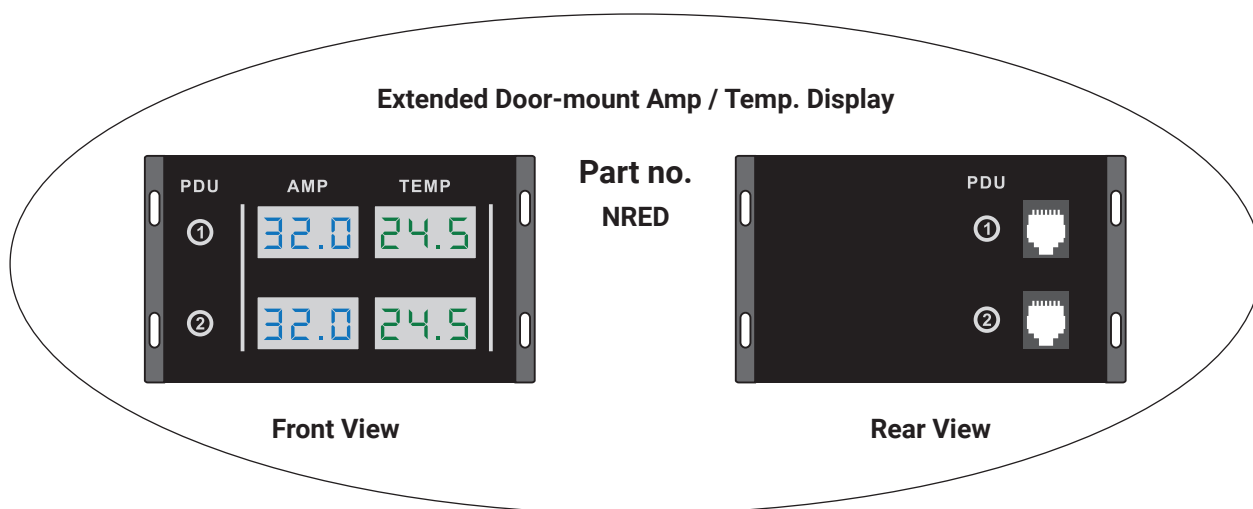


Part no.		Temp. & Humid. Sensor	Temp. Sensor
		IG-TH01= NPS2	IG-T01= NPS1
Temperature Sensitivity	Range	0 to 80°C ( 32 to 176°F )	
	Accuracy	±1.0°C typical ( ±2°F )	±1.5°C ( ±3°F )
	Resolution	0.1°C ( 0.2°F )	
	Response Time	5 to 30 sec	
Relative Humidity Sensitivity	Range	0 to 100% R.H	/
	Accuracy	0 to 100, ±8.0% R.H 20 to 80, ±4.5% R.H.	/
	Resolution	1% R.H.	/
	Response Time	8 sec	/
Power Requirement	Voltage	12VDC, powered by sensor port	
	Current Consumption	20mA	
	Power consumption	0.24 Watt	
	Power on indicator	Red LED	Green LED
Housing	Chassis & Cover	plastic	
	Color	Dark gray	
	Installation	Magnetic base for unrestricted installation	
Cable	Cable Length	TH sensor w/ 2m cable ( standard ) TH sensor w/ 4m cable ( option )	T sensor w/ 2m cable ( standard ) T sensor w/ 4m cable ( option )
	Cable Specification	4-wired 3.5mm to RJ11	
	Cable Color	Black	Beige
Environmental	Operating	0 to 80°C Degree	
	Storage	-5 to 80°C Degree	
	Humidity	0~100%, non-condensing	
Dimensions	Product	30L x 25Wx 18H mm	
Weight	Net	10g	
Compatibility	RackPower	Single & 3 Phase RP1000 / RP2000 / RP1500 / RP3000 series PDU	
	InfraSolution	X-2000 series	
	InfraGuard	Rack sensor system	
Safety Regulatory	FCC & CE certified		
Environmental	RoHS2 & REACH compliant		

### Extended Door-mount Amp / Temp. Display

External Door Mount PDU Display ( NRED ) provides RJ-11 port x 2 for PDU amp. & Temperature monitoring. Once connected, the reading of PDU amp. and the temp. shoRP2000 in the external door mount display.

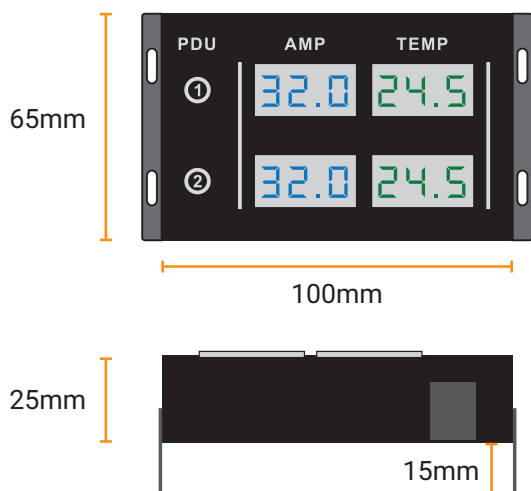
- Plug n Play
- Support two PDU's display amp. and temp.
- Adjustable Mounting Kit for easy installation to rack door
- Bundled 3m RJ-11 cable x 2



#### Package Contents

- Extended Door-mount Amp. / Temp. Display x 1
- Bundled 3m RJ-11 cable x 2
- Screw & tape not provided

#### Product Dimension



#### Packing Dimension

- 350(W) x 165(L) x 35(H) mm

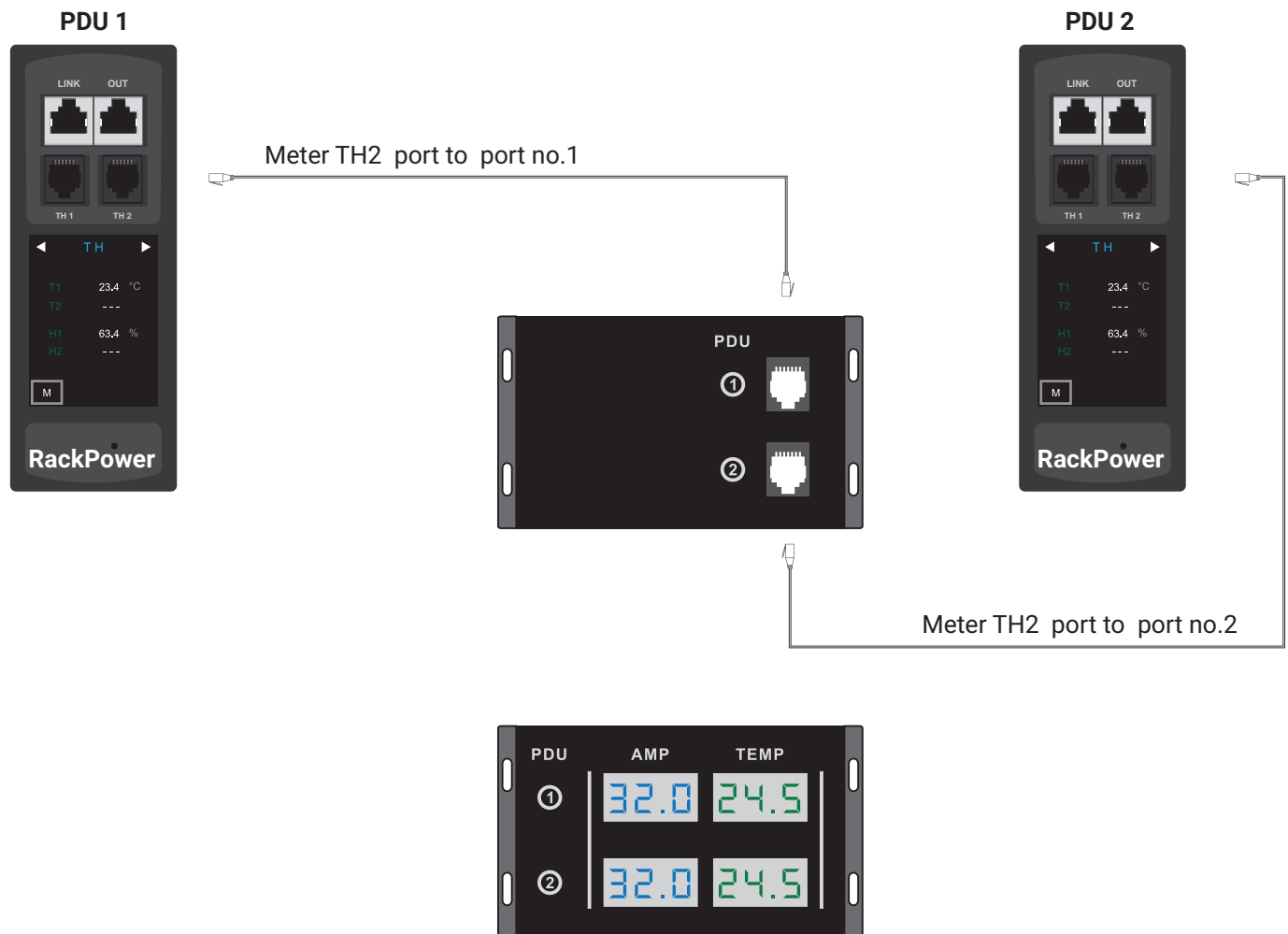
#### Weight

- Net : 0.25kg
- Gross : 0.48kg

### Extended Door-mount Amp / Temp. Display

#### Installation steps:

- Connect the meter and extended door-mount PDU display via a bundled RJ-11 cable
- Only meter TH2 port supports the door-mount PDU display
- The display on the door top corner position is recommended
- Fix the display on the rack door by screw or tape



## Part II. Software

### 2.1 KEY FEATURES

RackPower Manger RPM-04 is a free and powerful user friendly PDU mangement software. The Windows based software consolidates management of max. 800 Dual Feed single phase , single & 3 Phase PDUs via 50 IP Hardwares.

5 concurrent user access are bundled for achieving the demand of multi-user / multi-tasking in nowadays' time-sharing data center operation.

### RackPower RPM-04

Features		
Capacity	IP Hardware Group ( Just 1 for 16 PDU levels )	50
	PDU number	800
	Concurrent Users	5
Enhanced Features	Outlet Level kWh & Amp Measurement	✓
	Outlet Scheduling	✓
	Energy Consumption ( kWh ) Monitoring	✓
	Apparent Power ( kVA ) Monitoring	✓
	Power Factor Measurement	✓
Basic Features	Circuit Breaker ( MCB ) Monitoring	✓
	Aggregate Current ( Amp ) Monitoring	✓
	Individual Outlet Switch ON/OFF	✓
	Temp-Humid Monitoring	✓
	Alarm Threshold Setting	✓
	Rising Alert Threshold Setting	✓
	Remote Access via Web	✓
	Graphic User Interface	✓
	Reporting	✓
	Single & 3 Phase <b>RP1000</b> Monitored PDU	✓
PDU Series Support	Single & 3 Phase <b>RP1500</b> Monitored PDU ( Outlet Measurement )	✓
	Single & 3 Phase <b>RP2000</b> Switched PDU	✓
	Single & 3 Phase <b>RP3000</b> Switched PDU ( Outlet Measurement )	✓
	Single Phase Dual Feed <b>RP1000</b> Monitored PDU	✓
	Single Phase Dual Feed <b>RP1500</b> Monitored PDU ( Outlet Measurement )	✓
	Single Phase Dual Feed <b>RP2000</b> Switched PDU	✓
	Single Phase Dual Feed <b>RP3000</b> Switched PDU ( Outlet Measurement )	✓

## 2.2 IP HARDWARE CONFIGURATION



The following steps show the static IP setting only. For DHCP setting, please refer to < 7.3 > DHCP Setting

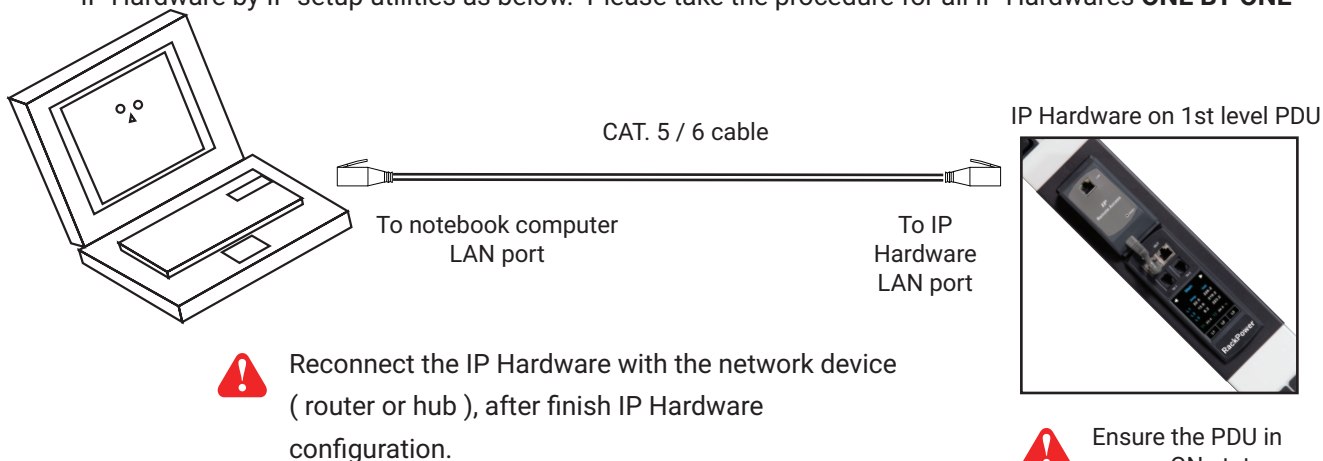
After the completion of IP Hardware connection, please take the following steps to configure the IP Hardware:

**Step 1.** Prepare a notebook computer to download the IP setup utilities from the link:

<https://lp.schroff.nvent.com/en/rackpower-support>

**Step 2.** Double Click the IPHardwareSetup.msi and follow the instruction to complete the installation

**Step 3.** Go to each first level PDU with the notebook computer & a piece of CAT. 5 / 6 cable to configure the IP Hardware by IP setup utilities as below. Please take the procedure for all IP Hardwares **ONE BY ONE**



Write down the new IP address & password for < Setup > purpose, refer to < 3.1 > System Setup

**Step 4.** Click " Scan " to search the connected IP Hardware

**Step 5.** Enter device name in " Name " ( min. 4 char. / max. 16 char. ). Default is " Name "

**Step 6.** Enter device location in " Location " ( min. 4 char. / max. 16 char. ). Default is " Rack\_001 "

**Step 7.** Enter password in " Password " for authentication ( min. 8 char. / max. 16 char. ) Default is " 00000000 "

**Step 8.** Enter new password in " New password " ( min. 8 char. / max. 16 char. )

**Step 9.** Re-enter new password in " Confirm new password "

**Step 10.** Input the desired " IP address " / " Subnet mask " / " Gateway ", then Click " Save " to confirm the input

The default IP setting is as below:

IP address:	192.168.0.1
Subnet mask:	255.255.255.0
Gateway:	192.168.0.254

## 2.3 HARDWARE REQUIREMENTS OF THE MANAGEMENT PC

Please prepare a management PC with the hardware requirements as below for RackPower Manager - RPM-04

### Recommended hardware requirements:

- Processor: Dual Core 2GHz or above
- Memory: 4GB RAM
- Available Disk Space: 500GB
- Display: For the best view, display resolution 1920 x 1080 recommended



- **The default service port of web server is 80.**
  - **A dedicated PC to run RackPower Manager - RPM-04 is recommended.**
  - **Make sure the management PC is POWER ON & RPM-04 is under operation.**
- Otherwise, daily data backup will NOT be proceeded.**

## 2.4 SUPPORTED OS PLATFORM & LANGUAGE

RackPower Manager – RPM-04 supports the OS platforms & languages as below:

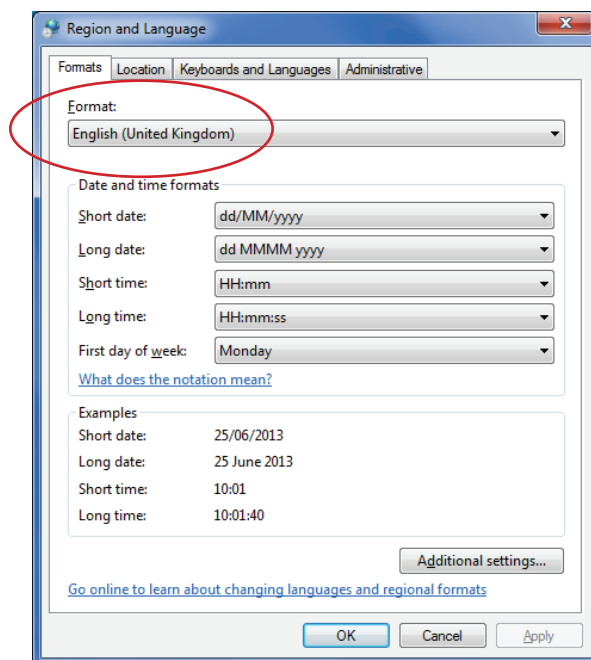
- MS Windows 10 Pro
- MS Windows 7 Professional with SP1
- MS Windows Server 2012 R2 Standard Edition
- MS Windows Server 2008 Standard Edition SP2
- MS Windows Server 2008 R2 Standard Edition SP1
- MS Windows Server 2003 R2 Standard Edition with SP2



**Ensure the user logs in the management PC as a member of “Administrators” Group before RPM-04 Installation and execution.**

User can select the following languages under Control Panel > Region and Language in English Edition OS:

- 1) Arabic (Saudi Arabia)
- 2) Chinese (Traditional, Hong Kong S.A.R.)
- 3) Dutch (Netherlands)
- 4) English (Australia)
- 5) English (United Kingdom)
- 6) English (United States)
- 7) French (France)
- 8) German (Germany)
- 9) German (Switzerland)
- 10) Italian (Italy)
- 11) Japanese (Japan)
- 12) Korean (Korea)
- 13) Norwegian (Norway)
- 14) Portuguese (Portugal)
- 15) Russian (Russia)
- 16) Spanish (Spain)
- 17) Turkish (Turkey)



## 2.5 SOFTWARE DOWNLOAD

RackPower Manager, RPM-04, is a **PDU** management software to enhance the features and benefits of all Dual Feed single phase , single & 3 Phase PDUs by providing a centralized and remote management platform, and total reporting with detailed logs & event occurrences.

**RPM-04** supports max. 5 concurrent login users and manage multi- IP Hardware groups max. 50, hence the concurrent login users can access & remote PDUs max. 800 ( 50 IP Hardwares x 16 level PDUs ).

### Software download

Please download the RackPower Manager - RPM-04 to the management PC  
from the link <https://lp.schroff.nvent.com/en/rackpower-support>

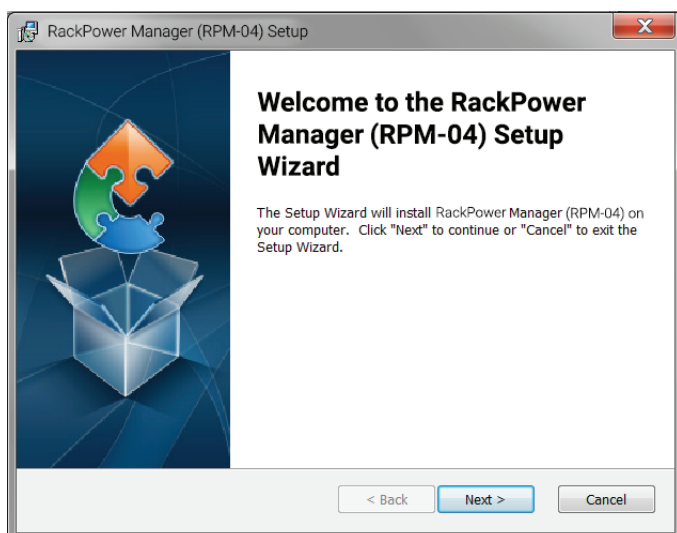


**You must have the administrator right of the management PC to install the RPM-04.**

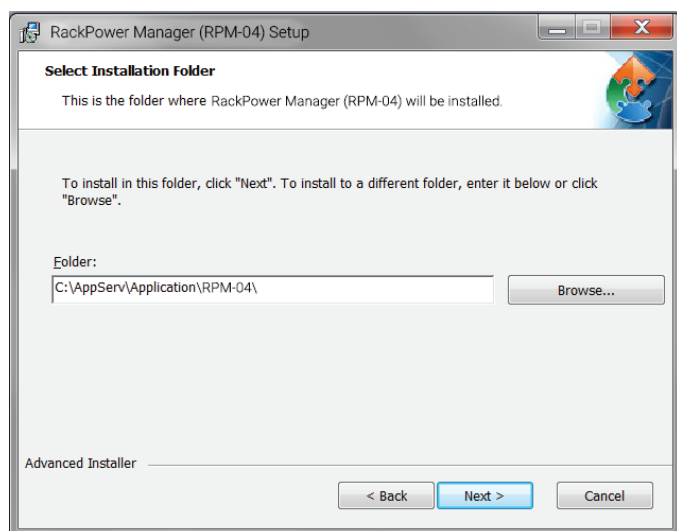
Double click the RPM-04.msi and follow the instruction to complete the installation.



RPM-04.msi



click “Next”



click “Install”

2.5 SOFTWARE DOWNLOAD



↓  
click " Finish "

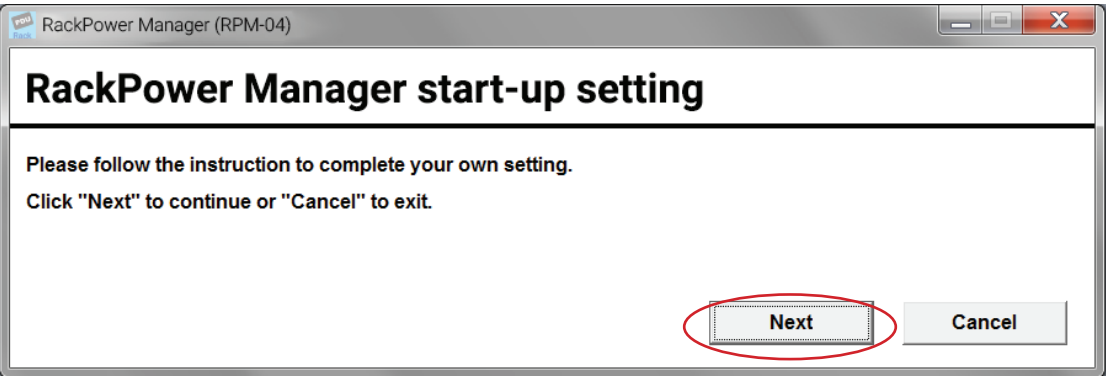
..... Complete

< 2.6 > FIRST TIME START-UP SETTING

Step 1. Double Click the RackPower Manager - RPM-04  
and follow the instruction to complete start-up setting.



Step 2. Click " Next " in " RackPower Manager start-up setting " box



## 2.6 FIRST TIME START-UP SETTING


### Step 3. Apache 2.4 + PHP 7.1 installation

RackPower Manager (RPM-04)

### Software component(s) configuration & installation


The following 2 software component(s) are required to run **InfraPower Manager**.

( 1 ) Apache 2.4 + PHP 7.1 ✖ Ver. ---

Folder :  

Listen port :

( 2 ) PostgreSQL 9.5 ✖ Ver. ---

Folder :  

PostgreSQL login :

PostgreSQL password :

PostgreSQL port :

Database initialization : ☒ Create new ☐ Use existing


RPM-04 database name :

RPM-04 database user :

RPM-04 database password :

Verifying PostgreSQL configuration ... failed

Ver. Q417V6 ( build 4.217.39 )

- Input the Apache 2.4 +PHP 7.1 installation path in “ **Folder** ” ( Default: **C:\AppServ\Apache2.4\** )
- Input the port no. in “ **Listen port** ” ( Default: **80** )
- Click  install Apache 2.4 + PHP 7.1

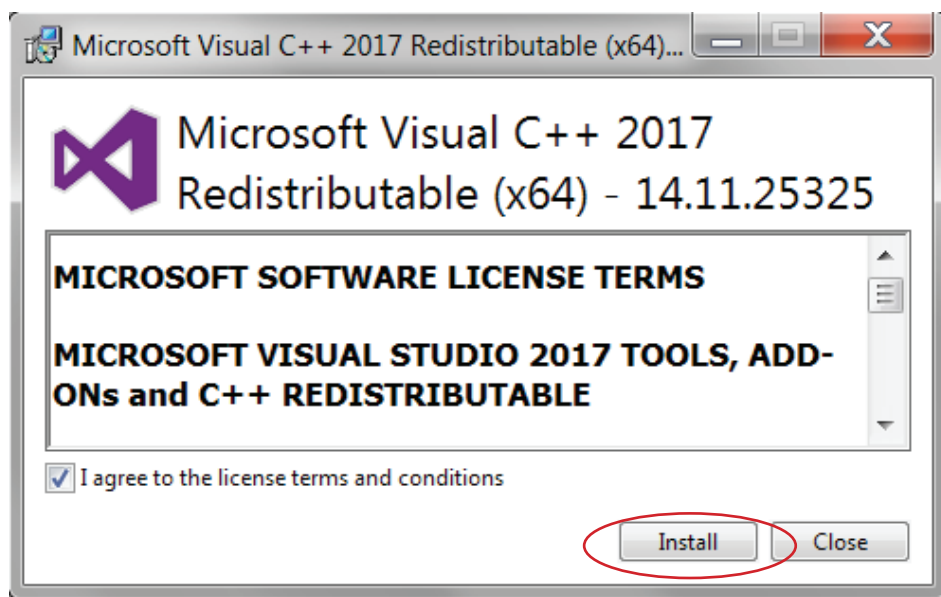
### Step 4. Click “ Yes ” to start the installation

Install Apache + PHP

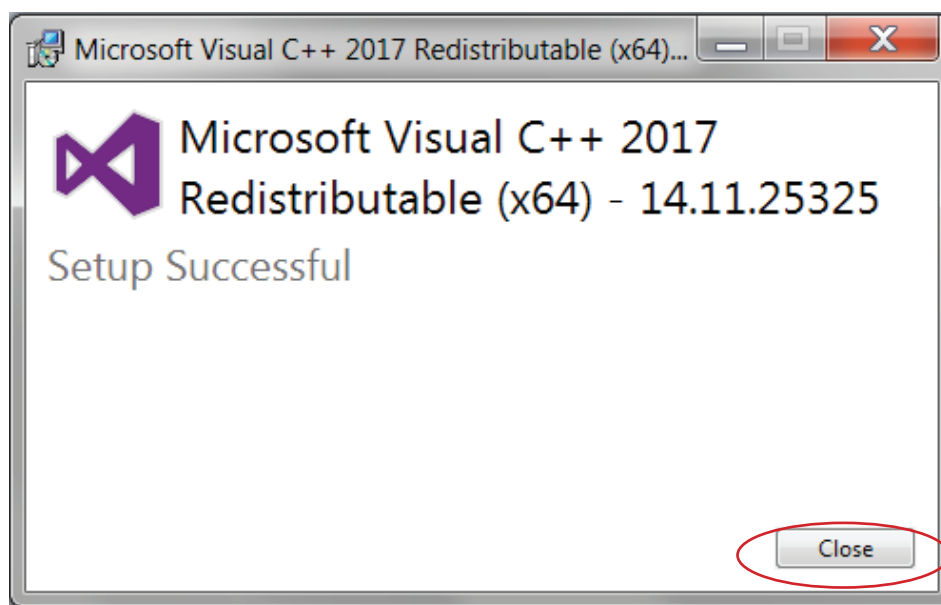
Are you sure to install Apache and PHP modules?

## 2.6 FIRST TIME START-UP SETTING

**Step 5.** Click “Install” to install the Microsoft Visual C++ 2017 Redistributable package.



**Step 6.** Click “Close” to complete the installation.




## 2.6 FIRST TIME START-UP SETTING

### Step 7. PostgreSQL 9.5 installation

RackPower Manager (RPM-04)


### Software component(s) configuration & installation


The following 2 software component(s) are required to run InfraPower Manager .

( 1 ) Apache 2.4 + PHP 7.1  Running Ver. 2.4.29.0

Folder : C:\AppServ\Apache2.4\

Listen port : 80

( 2 ) PostgreSQL 9.5  Ver: ---

Folder : C:\AppServ\PostgreSQL9.5\ 

PostgreSQL login : postgres

PostgreSQL password : 1qaz2WSX

PostgreSQL port : 5432

Database initialization : ☒ Create new ☐ Use existing

RPM-04 database name : db\_rpm-04

RPM-04 database user : rpm-04

RPM-04 database password : rpm-04

Verifying PostgreSQL configuration ... failed

Apply Cancel

Ver. Q417V6 (build 4.217.39)

- Input the PostgreSQL 9.5 Installation path in " **Folder** " ( Default: **C:\AppServ\PostgreSQL9.5\** )
- Input the PostgreSQL login name in " **PostgreSQL login** " ( Default: **postgres** )
- Input the PostgreSQL password in " **PostgreSQL password** " ( Default: **1qaz2WSX** )
- Input the PostgreSQL port in " **PostgreSQL port** " ( Default: **5432** )
- Select " **Create new** " in " **Database initialization** " for first time installation
- Input RPM-04 database name in " **RPM-04 database name** " ( Default: **RPM-04** )
- Input RPM-04 database user in " **RPM-04 database user** " ( Default: **RPM-04** )
- Input RPM-04 database password in " **RPM-04 database password** " ( Default: **RPM-04** )



The password **MUST** contain at least three of the following four character groups:

- English uppercase characters ( A through Z )
- English lowercase characters ( a through z )
- Numerals ( 0 through 9 )
- Non-alphabetic characters ( such as !, \$, #, % )

- Click  install PostgreSQL 9.5

## 2.6 FIRST TIME START-UP SETTING

**Step 8.** Click “ **Apply** ” to complete the first time start-up setting

RackPower Manager (RPM-04)

### Software component(s) configuration & installation

The following 2 software component(s) are required to run InfraPower Manager .

**( 1 ) Apache 2.4 + PHP 7.1** ✔ Running  
Ver. 2.4.29.0

Folder :

Listen port :

**( 2 ) PostgreSQL 9.5** ✔ Running  
Ver. 9.5.3.16130

Folder :

PostgreSQL login :

PostgreSQL password :

PostgreSQL port :

Database initialization : ☒ Create new ☐ Use existing

RPM-04 database name :

RPM-04 database user :

RPM-04 database password :

Verifying Apache configuration ... success

Ver. Q417V6 ( build 4.217.39 )

..... **Complete**



### Web server port no. change

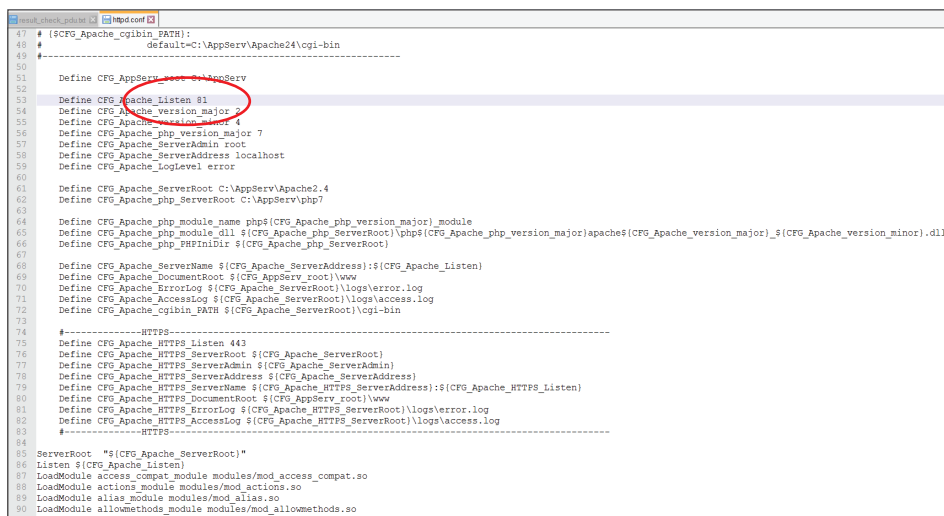
If users want to use another port no. instead of 80, please take the following steps after

**RackPower Manager RPM-04** “ **First time start-up setting** ” is completed.

**Step 1.** Go to the path of web server being installed. ( Default: **C:\AppServ\Apache2.4\conf\** )

**Step 2.** Open “ **httpd.conf** ” & change “ **Listen 80** ” to “ **Listen xx** ” where xx means that the port no. will be selected by the user

**Step 3.** Save the change of “ **httpd.conf** ”

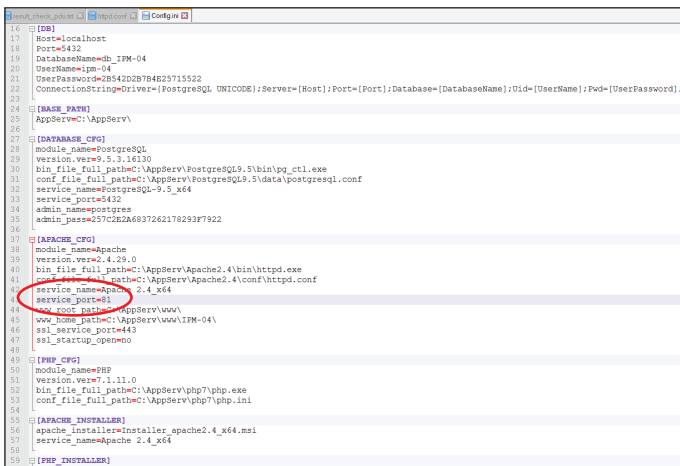


```
47 # {CFG_Apache_cgibin_PATH}
48 # default=C:\AppServ\Apache24\cgi-bin
49 #
50 -----
51 Define CFG_Apache_ServerRoot C:\AppServ
52
53 Define CFG_Apache_Listen 80
54 Define CFG_Apache_version_major 2
55 Define CFG_Apache_version_minor 4
56 Define CFG_Apache_php_version_major 7
57 Define CFG_Apache_ServerAdmin root
58 Define CFG_Apache_ServerAddress localhost
59 Define CFG_Apache_LogLevel error
60
61 Define CFG_Apache_ServerRoot C:\AppServ\Apache2.4
62 Define CFG_Apache_php_ServerRoot C:\AppServ\php7
63
64 Define CFG_Apache_php_module_name php${CFG_Apache_php_version_major}_module
65 Define CFG_Apache_php_module_dll ${CFG_Apache_php_ServerRoot}\php${CFG_Apache_php_version_major}apache${CFG_Apache_version_major}_${CFG_Apache_version_minor}.dll
66 Define CFG_Apache_php_PHPIniDir ${CFG_Apache_php_ServerRoot}
67
68 Define CFG_Apache_ServerName ${CFG_Apache_ServerAddress}:${CFG_Apache_Listen}
69 Define CFG_Apache_DocumentRoot ${CFG_Apache_ServerRoot}\www
70 Define CFG_Apache_ErrorLog ${CFG_Apache_ServerRoot}\logs\error.log
71 Define CFG_Apache_AccessLog ${CFG_Apache_ServerRoot}\logs\access.log
72 Define CFG_Apache_cgibin_PATH ${CFG_Apache_ServerRoot}\cgi-bin
73
74 #-----HTTPS-----
75 Define CFG_Apache_HTTPS_Listen 443
76 Define CFG_Apache_HTTPS_ServerRoot ${CFG_Apache_ServerRoot}
77 Define CFG_Apache_HTTPS_ServerAdmin ${CFG_Apache_ServerAdmin}
78 Define CFG_Apache_HTTPS_ServerAddress ${CFG_Apache_ServerAddress}
79 Define CFG_Apache_HTTPS_ServerName ${CFG_Apache_HTTPS_ServerAddress}:${CFG_Apache_HTTPS_Listen}
80 Define CFG_Apache_HTTPS_DocumentRoot ${CFG_Apache_ServerRoot}\www
81 Define CFG_Apache_HTTPS_ErrorLog ${CFG_Apache_HTTPS_ServerRoot}\logs\error.log
82 Define CFG_Apache_HTTPS_AccessLog ${CFG_Apache_HTTPS_ServerRoot}\logs\access.log
83 #-----
84
85 ServerRoot "${CFG_Apache_ServerRoot}"
86 Listen ${CFG_Apache_Listen}
87 LoadModule access_compat_module modules/mod_access_compat.so
88 LoadModule actions_module modules/mod_actions.so
89 LoadModule alias_module modules/mod_alias.so
90 LoadModule allowMethods_module modules/mod_allowmethods.so
```

**Step 4.** Open the config.ini of RPM-04 installation path.  
( Default: **C:\AppServ\Application\RPM-04\** )

**Step 5.** Change “ **service\_port=80** ” to “ **service\_port=xx** ” where xx must be the same as the one changed in httpd.conf

**Step 6.** Save the change of “ **config.ini** ”



```
14 [DB]
15 Host=localhost
16 Port=5432
17 DatabaseName=db_IPM-04
18 UserName=ipm-04
19 UserPassword=2B542D2B7B4E25715522
20 ConnectionString=Driver={PostgreSQL UNICODE};Server=[Host];Port=[Port];Database=[DatabaseName];Uid=[UserName];Pwd=[UserPassword];
21
22 [BASE_PATH]
23 AppServ=C:\AppServ\
24
25 [DATABASE_CFG]
26 module_name=PostgreSQL
27 version.ver=9.5.3.16130
28 bin_file_full_path=C:\AppServ\PostgreSQL9.5\bin\pg_ctl.exe
29 conf_file_full_path=C:\AppServ\PostgreSQL9.5\data\postgresql.conf
30 service_name=PostgreSQL-9.5_x64
31 service_port=5432
32 admin_name=postgres
33 admin_pass=257C2E2A6937262178293F7922
34
35 [APACHE_CFG]
36 module_name=Apache
37 version.ver=2.4.29.0
38 bin_file_full_path=C:\AppServ\Apache2.4\bin\httpd.exe
39 conf_file_full_path=C:\AppServ\Apache2.4\conf\httpd.conf
40 service_name=Apache 2.4_x64
41 service_port=80
42 www_root_path=C:\AppServ\www\
43 www_home_path=C:\AppServ\www\IPM-04\
44 ssl_service_port=443
45 ssl_startup_openssl
46
47 [PHP_CFG]
48 module_name=PHP
49 version.ver=7.2.11.0
50 bin_file_full_path=C:\AppServ\php7\php.exe
51 conf_file_full_path=C:\AppServ\php7\php.ini
52
53 [APACHE_INSTALLER]
54 apache_installer=installer_apache2.4_x64.msi
55 service_name=Apache 2.4_x64
56
57 [PHP_INSTALLER]
58 php_installer=php7_x64.msi
```

**Step 7.** Restart Apache services.

Go to **Control Panel > Administrative Tools > Services > Apache2.4** & Click “ **Restart** ”

## Part III. System Setup & Remote Access

### 3.1 SYSTEM SETUP

Users can follow below step 1 - 3 to access the management PC and RackPower Manager RPM-04

**Step 1.** Open Internet Explorer ( I.E. ), version 11.0

**Step 2.** Enter the URL of management PC into the address bar

! ( If fail to access, please ask MIS to check if the port for web server is enable.

Default port: 80 )

e.g. <http://192.168.0.1/RPM-04/>

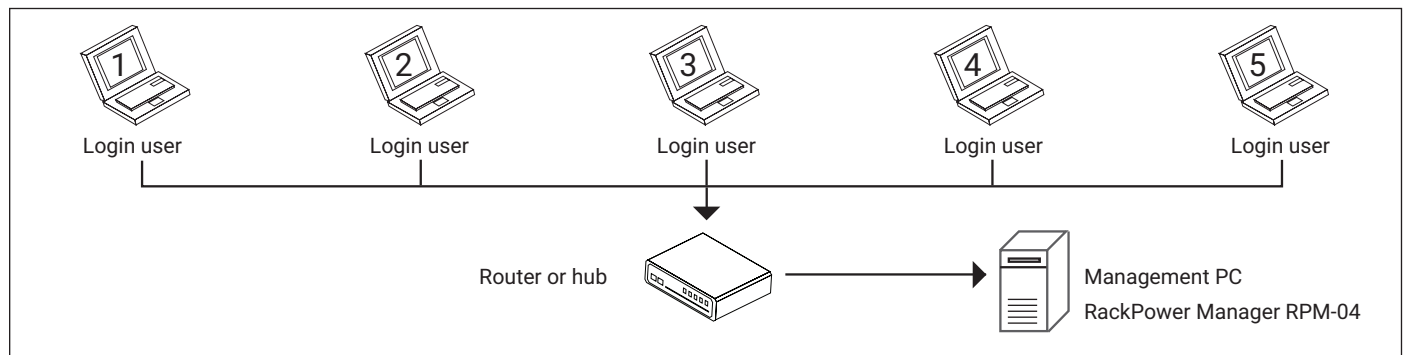
**Step 3.** Enter " **User name** ". Default is " **admin** "

Enter " **Password** ". Default is " **00000000** "

System authentication

User name

Password



Only one administrator among 5 concurrent users

Only Administrator is authorised to access:

< **User** >, < **Setup** >, < **Alarm** >, < **General** >, < **Backup** > & < **Global** >

### 3.1 SYSTEM SETUP

In < **User** >, administrator can create 4 more operators ( concurrent users ).

**Step 1.** Tick “ **Operator 1:** ”

**Step 2.** Input “ **User name** ” & “ **User login password** ”

**Step 3.** Input user login password in “ **Confirm password** ” again

**Step 4.** Repeat Step 1 to 3 for other operators

**Step 5.** Click “ **Apply** ” to finish the user setup

**User setup**

	Activate	User name	User login password	Confirm password
Administrator :	<input checked="" type="checkbox"/>	admin	*****	*****
<ul style="list-style-type: none"><li>• Only administrator is authorised to access SYSTEM SETTING.</li><li>• Only administrator is authorised to set and change all users' password.</li><li>• Min. 4 char. and max. 16 char. for user name.</li><li>• Min. 8 char. and max. 16 char. for user login password.</li><li>• If there is any change of user name, system will automatically delete the original operator and create a new one. A new user login password is required.</li></ul>				
Operator 01 :	<input checked="" type="checkbox"/>	Kenny.Wong	*****	*****
Operator 02 :	<input checked="" type="checkbox"/>	William.Wong	*****	*****
Operator 03 :	<input type="checkbox"/>			
Operator 04 :	<input type="checkbox"/>			

Apply

Cancel

### 3.1 SYSTEM SETUP

In < **Setup** >, administrator can activate max. 50 IP Hardware groups & set the group command password

**Step 1.** “ **Activate** ” IP Hardware group 01

**Step 2.** Input “ **IP address** ” & “ **password** ” of the IP Hardware

**Step 3.** “ **Enable** ” Command password

**Step 4.** Input “ **New command password** ”. Default is “ **00000000** ”

**Step 5.** Input new command password in “ **Confirm new password** ” again.

**Step 6.** Click “ **Apply** ” to finish the IP Hardware group setup

**Step 7.** Repeat step 1 to 6 for other IP Hardware groups

\* Initially, please setup the IP Hardware one by one.

<p>IP Hardware group <b>01</b> : <input checked="" type="checkbox"/> <b>Activate</b> <input type="checkbox"/> <b>Deactivate</b></p> <p><b>IP Hardware setting</b></p> <p>IP Hardware address: <input type="text" value="192.168.1.10"/></p> <p>IP Hardware password: <input type="password"/></p> <p><b>IP Hardware group</b></p> <p>Command password : <input type="checkbox"/> <b>Disable</b> <input checked="" type="checkbox"/> <b>Enable</b></p> <p>New command password: <input type="password"/></p> <p>Confirm new password: <input type="password"/></p> <p><input type="button" value="Apply"/> <input type="button" value="Cancel"/></p>	<ul style="list-style-type: none"><li>• IP Hardware address: IP group of IP Hardware group IP address and IP address</li><li>• Each IP device group consists of one IP device and one IP address</li><li>• If the administrator wants to change IP device address and password, the steps are required.</li><li>• Firstly, enter the IP Setup window to make the change (see the User Manual's IP Device Configuration).</li><li>• Secondly, return to this page to make the same change on IP address and password.</li><li>• Administrator needs to set command password for IP device groups one by one.</li><li>• Command password is required for any PDU configuration and control.</li><li>• Administrator can set different command password for different IP device group or all IP device groups share the same password.</li></ul>
---	---

## 3.1 SYSTEM SETUP

In < **Alarm** >, administrator can configure the alarm email server & max. 5 email recipients to receive alarm notifications from the software

Default is “Disable”.

**Step 1.** “ Enable ” alarm email

**Step 2.** Input “ SMTP server ” and “ SMTP port ”

**Step 3.** Input “ User email ”

**Step 4.** “ Enable ” or “ Disable ” the “ SMTP authentication ”

**Step 5.** Input “ User name ” and “ Password ”

**Step 6.** Select the “ SMTP secure ” ( None / SSL / TLS )

**Step 7.** Input the “ Alarm interval ”

**Step 8.** Input the alarm recipient email account in “ Alarm mail recipient 01 ”

**Step 9.** Repeat step 8 for other alarm recipients

**Step 10.** Click “ Apply ” to finish the alarm email server setting

### Alarm email server setting

Alarm email :

☒ Enable ☐ Disable

SMTP server :

SMTP port :

User email :

SMTP authentication :

☒ Enable ☐ Disable

User name :

Password :

SMTP secure :

SSL

▼

Alarm interval :

( Min. 10, Max. 60 minutes )

• This alarm setting is for all IP Hardware PDU groups.

### Alarm email to

Alarm mail recipient 01 :

×

Alarm mail recipient 02 :

Alarm mail recipient 03 :

Alarm mail recipient 04 :

Alarm mail recipient 05 :

Apply

Cancel

3.1 SYSTEM SETUP

In < **General** >, administrator can change the “ **Refresh rate** ”, “ **Scan rate** ” & “ **Temperature unit** ” across all IP Hardware groups

Auto data refresh

Refresh rate :  ( Min. 10, Max. 60 seconds )

- Auto data refresh rate on the page of **PDU STATUS**, **PDU DETAILS**, **OUTLET SCHEDULE OVERVIEW** and **TH STATUS**.

IP Hardware groups auto scan

Scan rate :  ( Min. 5, Max. 60 seconds )

- Auto scan rate on the page of **PDU STATUS**, **OUTLET SCHEDULE OVERVIEW** and **TH STATUS**.

Temperature unit

Unit : ☒ °C ☐ °F

Apply

Cancel

In < **Backup** >  
Default is “ **Enable** ”  
Default Backup Path: “ **C:\AppServ\Application\RPM-04\** ”

Data backup setting

Daily backup : ☒ Enable ☐ Disable

Backup to :   
C:\Program Files\RPM-04\

- Daily backup proceeded at 00:00 for last 24 hours data.
- The backup data for **PDU**, **Inline Meter**, **TH SENSOR LOG**, **EVENT** saved in CSV file format.
- Folder  will be automatically created under the path you entered.

Apply

Cancel

### 3.1 SYSTEM SETUP

In **< Global >** , you can configure the settings of all the connected PDU's.

- Edit the PDU bank / circuit level alarm amp. , rising alert amp. & low alert amp. threshold
- Edit the PDU outlet level alarm amp. , rising alert amp. & low alert amp. threshold  
( Outlet Measurement PDU only )
- Activate / Deactivate the TH1 & TH2 sensor. When activated, you can edit the Temp. / Humid alarm & rising alert threshold.



Before you do the PDU global setting , please search the connected PDU's of each IP Hardware group first.

**PDU global setting**  
  

☐ **Bank amp. setting (Max. 6 banks)**  
Alarm :   
Rising alert :   
Low alert :

☐ **Outlet amp. setting (Max. 48 outlets)**  
Alarm :   
Rising alert :   
Low alert :

☐ **TH1 setting**  

☐ **Activate**  
Temp. ( °C )  
Alarm :   
Rising alert :

☐ **Deactivate**  
Humid. ( % )

☐ **TH2 setting**  

☐ **Activate**  
Temp. ( °C )  
Alarm :   
Rising alert :

☐ **Deactivate**  
Humid. ( % )



## 3.2 REMOTE ACCESS

After the completion of < **System Setup** > administrator and 4 concurrent users can access the management PC remotely. All of them can follow the steps below to access management PC & RPM-04

**Step 1.** Add the port of web server in the firewall settings of the management PC.

- Open “ **Control Panel** ”
- Select “ **Windows Firewall** ”
- Select “ **Advanced settings** ”
- Right Click “ **Inbound Rules** ” & select “ **New Rule...** ”
- Select “ **Port** ” & Click “ **Next>** ”
- Select “ **TCP** ” then “ **All local ports** ” & Click “ **Next>** ”
- Select “ **Allow the connection** ” & Click “ **Next>** ”
- Tick all three options & Click “ **Next>** ”
- Input the “ **Name** ” & “ **Description** ” of the port & Click “ **Finish** ”

**Step 2.** Open the web browser of remote client PC

**Step 3.** Input the URL of RackPower Manager RPM-04 in the address bar

e.g. <http://192.168.0.1/RPM-04/>

If the port no. of web server is not 80, please enter the appropriate port no. follow the IP address e.g. <http://192.168.0.1:81/RPM-04/>



**Step 4.** System authentication page pops up automatically.

Input “ **User name** ”, “ **Password** ” & Click “ **Login** ”

**System authentication**

User name

Password

LoginCancel

Part IV. Software Usage & Operation

4.1 STATUS

< Status > provides

- Search function to search new installed PDUs in each IP Hardware group.

During searching process, the PDU system timer will be synchronized from the management PC

- Scan function to monitor the PDUs' status of each IP Hardware group **ONE by ONE**

PDU status

IP Hardware name: Default\_ipd\_name

IP address : 192.168.0.1

Page : 1 2 3

Level	Name	Location	Amp				kWh	kVA	Amp				kWh	kVA	Total			TH 1		TH 2	
			Max.	Load	Alarm	R. alert / L. alert			Max.	Load	Alarm	R. alert / L. alert			Amp Load	kWh	kVA	°C	%	°C	%
01	3PRP300036-32A	Server_Rack_001R	L1 - B1	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.00	0.00	L1 - B2	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.00	0.00	0.0	0.00	0.00	27.9	51.6	28.7	48.2
			L2 - B3	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00			L2 - B4	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00									
			L3 - B5	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00			L3 - B6	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00									
02	3PRP300036-32A	Server_Rack_001L	L1 - B1	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.00	0.00	L1 - B2	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.00	0.00	0.0	0.00	0.00	-	-	-	-
			L2 - B3	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00			L2 - B4	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00									
			L3 - B5	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00			L3 - B6	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00									
03	3PRP300036-32A	Server_Rack_002R	L1 - B1	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.00	0.00	L1 - B2	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.00	0.00	0.0	0.00	0.00	-	-	-	-
			L2 - B3	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00			L2 - B4	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00									
			L3 - B5	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00			L3 - B6	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00									
04	3PRP300036-32A	Server_Rack_002L	L1 - B1	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.00	0.00	L1 - B2	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.00	0.00	0.0	136.75	0.00	-	-	-	-
			L2 - B3	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00			L2 - B4	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00									
			L3 - B5	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	136.75			L3 - B6	16 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00									
05	3PW36-32A	Server_Rack_003R	L1 - B1	16 / 0.0 / 12.8 / 0.0 / 0.0	0.05	0.00	0.05	0.00	L1 - B2	16 / 0.0 / 12.8 / 0.0 / 0.0	0.03	0.00	0.03	0.00	0.0	0.19	0.00	-	-	-	-
			L2 - B3	16 / 0.0 / 12.8 / 0.0 / 0.0	0.02	0.00			L2 - B4	16 / 0.0 / 12.8 / 0.0 / 0.0	0.03	0.00									
			L3 - B5	16 / 0.0 / 12.8 / 0.0 / 0.0	0.03	0.00			L3 - B6	16 / 0.0 / 12.8 / 0.0 / 0.0	0.03	0.00									

☒ Auto data refresh :  Unlock during data input

Search

 Search new installed PDUs

\* Press F11 to enlarge or diminish the screen

## 4.2 DETAILS

In **< Details >**,

- Change “ **Name** ” and “ **Location** ” of PDU & Click “ **Apply** ”
- Change “ **Alarm amp.** ” . “ **Rising alert amp.** ” & “ **Low alert amp.** ” of PDU’s banks or circuits & Click “ **Apply** ”
- Click “ **Reset** ” to reset peak amp. and kWh of PDU’s banks or circuits if necessary
- Click “ **ON / OFF** ” to switch ON / OFF outlet ( Switched PDU only )
- View On / OFF status of each PDU’s outlet
- View aggregated current on the PDU
- View latest loading & energy consumption of each PDU outlet ( Outlet Measurement PDU only )
- View latest Voltage of each PDU bank or circuit

**PDU details**

Level :  VP24C13/12C19-32A-RP3000      Name :       kWh :       Power factor :   
Status :       Location :       Load amp :       kVA :

Outlet	Name	Amp	kWh	kVA	Status	Switch
01	outlet_name_01	0.0	0.00	0.00	ON	OFF
03	outlet_name_03	0.0	0.00	0.00	ON	OFF
05	outlet_name_05	0.0	0.00	0.00	ON	OFF
07	outlet_name_07	0.0	0.00	0.00	ON	OFF
C01	outlet_name_09	0.0	0.00	0.00	ON	OFF
C03	outlet_name_11	0.0	0.00	0.00	ON	OFF
02	outlet_name_02	0.0	0.00	0.00	ON	OFF
04	outlet_name_04	0.0	0.00	0.00	ON	OFF
06	outlet_name_06	0.0	0.00	0.00	ON	OFF
08	outlet_name_08	0.0	0.00	0.00	ON	OFF
C02	outlet_name_10	0.0	0.00	0.00	ON	OFF
C04	outlet_name_12	0.0	0.00	0.00	ON	OFF

Click outlet icon for setting

Outlet	Name	Amp	kWh	kVA	Status	Switch
01	outlet_name_13	0.0	0.00	0.00	ON	OFF
03	outlet_name_15	0.0	0.00	0.00	ON	OFF
05	outlet_name_17	0.0	0.00	0.00	ON	OFF
07	outlet_name_19	0.0	0.00	0.00	ON	OFF
C01	outlet_name_21	0.0	0.00	0.00	ON	OFF
C03	outlet_name_23	0.0	0.00	0.00	ON	OFF
02	outlet_name_14	0.0	0.00	0.00	ON	OFF
04	outlet_name_16	0.0	0.00	0.00	ON	OFF
06	outlet_name_18	0.0	0.00	0.00	ON	OFF
08	outlet_name_20	0.0	0.00	0.00	ON	OFF
C02	outlet_name_22	0.0	0.00	0.00	ON	OFF
C04	outlet_name_24	0.0	0.00	0.00	ON	OFF

Click outlet icon for setting

Outlet	Name	Amp	kWh	kVA	Status	Switch
01	outlet_name_25	0.0	0.00	0.00	ON	OFF
03	outlet_name_27	0.0	0.00	0.00	ON	OFF
05	outlet_name_29	0.0	0.00	0.00	ON	OFF
07	outlet_name_31	0.0	0.00	0.00	ON	OFF
C01	outlet_name_33	0.0	0.00	0.00	ON	OFF
C03	outlet_name_35	0.0	0.00	0.00	ON	OFF
02	outlet_name_26	0.0	0.00	0.00	ON	OFF
04	outlet_name_28	0.0	0.00	0.00	ON	OFF
06	outlet_name_30	0.0	0.00	0.00	ON	OFF
08	outlet_name_32	0.0	0.00	0.00	ON	OFF
C02	outlet_name_34	0.0	0.00	0.00	ON	OFF
C04	outlet_name_36	0.0	0.00	0.00	ON	OFF

Click outlet icon for setting

☒ Auto data refresh :  ms            All IPMI communication to and from the PDU is stopped, notification to the user is stopped, and the PDU readings are "-".

### 4.3 OUTLET SETTING

In < **Outlet setting** > ,

- Change PDU's outlet name
- Change "**Power up sequence delay**" of PDU's outlet ( Switched PDU only )
- Change "**Alarm amp.** ", "**Rising alert amp.** " & "**Low alert amp.** " of PDU's outlet  
( Outlet Measurement PDU only )



Click "**Apply**" to finish the above settings

- Click "**Reset**" to reset peak amp. or kWh of PDU's outlet ( Outlet Measurement PDU only )

**Outlet setting**


PDU level :  VP24C13/12C19-32A-RP3000

Status : Connected

Name : 3PRP300036-32A

Location : Server\_Rack\_001R

**L1 - B1**

Outlet :  

Name :

Status : ON

Power up sequence delay :  ( Min. 1, Max. 10 seconds )

Load amp : 0.0

Alarm amp :

Rising alert amp :

Low alert amp :

Peak amp : 0.0 2015/01/01 00:00:00

kWh : 0.00 2015/01/01 00:00:00

kVA : 0.00

Save new data  Return to PDU DETAILS

Cancel new data input

## 4.4 SENSOR STATUS

In < **TH status** > ,

- View status, location, latest reading & alarm setting of Temp. & Humid sensors



The GUI will not show the readings if the TH sensors are **NOT** installed & activated.

### Sensor status

IP Hardware name : Default\_lpd\_name  
IP address : 192.168.0.1

PDU		Setting	Location	TH 1		TH 2		
				°C	%	°C	%	
Level	Name			Temp. / Alarm / R. alert	Humid. / Alarm / R. alert		Temp. / Alarm / R. alert	Humid. / Alarm / R. alert
01	3PRP300036-32A		Front_Top	27.8 / 35.0 / 0.0	51.5 / 65.0 / 0.0	Rear_Top	28.5 / 35.0 / 0.0	48.1 / 65.0 / 0.0
02	3PRP300036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
03	3PRP300036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
04	3PRP300036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
05	3PRP100036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
06	3PRP100036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
07	3PRP100036-32A		Front_Top	25.0 / 40.0 / 0.0	58.9 / 90.0 / 0.0	Rear_Top	24.9 / 45.0 / 0.0	57.8 / 95.0 / 0.0
08	3PRP100036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
09	3PRP100036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
10	3PRP100036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
11	3PRP200036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
12	3PRP200036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
13	3PRP200036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
14	3PRP200036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
15	3PRP200036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -
16	3PRP200036-32A		-	- / - / -	- / - / -	-	- / - / -	- / - / -

☒ Auto data refresh : ■■■■■■■■ ☐ Untick during data input  
 Search new Installed PDUs  

\* Press F11 to enlarge or diminish the screen

## 4.5 SENSOR SETTING

In < TH setting > ,

- Default TH setting:
- “ **Activate** ” Temp. & Humid sensors ONLY when they are connected
- Change “ **Location** ” , “ **Rising alert Setting** ” & “ **Alarm Setting** ” of Temp. & Humid sensors
- Click “ **Apply** ” to finish the above settings



If no any TH sensor connected, NEVER activate.

**Sensor setting** RP3000

PDU level :  VP24C13/12C19-32A-RP3000

Status : Connected

Name : 3PRP300036-32A

Location : Server\_Rack\_001R

**TH 1** ☒ Activate ☐ Deactivate

Location :

	Alarm	Rising alert	
	Setting		Reading
Temp. ( °C ) :	<input type="text" value="35.0"/>	<input type="text" value="0.0"/>	27.8
Humid. ( % ) :	<input type="text" value="65.0"/>	<input type="text" value="0.0"/>	51.5

**TH 2** ☒ Activate ☐ Deactivate

Location :

	Alarm	Rising alert	
	Setting		Reading
Temp. ( °C ) :	<input type="text" value="35.0"/>	<input type="text" value="0.0"/>	28.5
Humid. ( % ) :	<input type="text" value="65.0"/>	<input type="text" value="0.0"/>	48.2

- DO NOT activate T or TH sensor if no sensor installed.
- When Install T or TH sensor, please tick activate. Otherwise, no reading display.

Save new data

Return to TH STATUS









Cancel new data input


## 4.6 OUTLET SCHEDULE OVERVIEW

< **Outlet Schedule Overview** > provides an overview on outlet schedule setting of PDUs, and scan the page by IP Hardware group one by one.

**Outlet schedule overview**  
IP Hardware Name : default\_ipd\_name  
IP address : 192.168.0.1

Page : 1 2

PDU Level	Name	Setting	Outlet Schedule # 1 - 2		Outlet Schedule # 3 - 4		Outlet Schedule # 5 - 6	
			Name	Action	Name	Action	Name	Action
01	3PRP300048-50A		-	Disabled	-	Disabled	-	Disabled
			-	Disabled	-	Disabled	-	Disabled
02	SPRP300024-32A		-	Disabled	-	Disabled	-	Disabled
			-	Disabled	-	Disabled	-	Disabled
03	sPRP300024-32A		ScheduleName_01	Daily - On	-	Disabled	-	Disabled
			-	Disabled	-	Disabled	-	Disabled
04	3PRP300036-32A		-	Disabled	-	Disabled	-	Disabled
			-	Disabled	-	Disabled	-	Disabled
05	SPRP100023-32A		-	Disabled	-	Disabled	-	Disabled
			-	Disabled	-	Disabled	-	Disabled
06	SPRP300012-32A		-	Disabled	-	Disabled	-	Disabled
			-	Disabled	-	Disabled	-	Disabled
07	SPRP100023-32A		-	Disabled	-	Disabled	-	Disabled
			-	Disabled	-	Disabled	-	Disabled
08	3PRP200036-32A		-	Disabled	-	Disabled	-	Disabled
			-	Disabled	-	Disabled	-	Disabled

☒ Auto data refresh :  Untick during data input

Search

Search new installed PDUs

\* Press F11 to enlarge or diminish the screen

4.7 OUTLET SCHEDULE SETTING

In < **Outlet Schedule Setting** >, user can set max. 6 outlet On / Off schedules in each PDU. The outlet schedule can be set on one-time, daily or weekly basis. ( Switched PDU with 1.8" LCD meter only )

Outlet schedule setting

PDU level : 08H8C13-32A-RP3000

Stausts : Connected

Name : SPRP30008-32A

Location : Server\_Rack\_004R

Outlet schedule : 01☐ Disable☒ Enable

Name : ScheduleName\_01

Action : ☐ OFF☐ ON

Time : ☐ Daily☐ Weekly☐ One-Time

01 / 01 ( MM / DD date format )

Sun

00 : 00 ( 24 hours format )

Outlet schedule

PDU

A

☐ 01 Dell\_Server\_001

☐ 02 outlet\_name\_02

☐ 03 outlet\_name\_03

☐ 04 outlet\_name\_04

B

☐ 05 Dell\_Server\_002

☐ 06 outlet\_name\_06

☐ 07 outlet\_name\_07

☐ 08 outlet\_name\_08

Apply

Save new data

Exit

Return to OUTLET SCHEDULE

Cancel

Cancel new data input

## 4.7 OUTLET SCHEDULE SETTING

PDU outlet schedule is a function allowing users to set a specific time to turn the outlets ON or OFF on a daily, weekly, or one-time basis.









Each PDU provides **6 schedule tasks**. Users can follow the steps below to enable the PDU outlet schedule

**Step 1.** Go to < **Outlet Schedule Overview** > page, Click “ **Setting** ”

### Outlet schedule overview

IP Hardware Name : default\_ipd\_name  
IP address : 192.168.0.1

Page : 1 2

PDU		Setting	Outlet Schedule # 1 - 2		Outlet Schedule # 3 - 4		Outlet Schedule # 5 - 6	
Level	Name		Name	Action	Name	Action	Name	Action
01	3PRP300048-50A		-	Disabled	-	Disabled	-	Disabled
02	SPRP300024-32A		-	Disabled	-	Disabled	-	Disabled
03	sPRP300024-32A		ScheduleName_01	Daily - On	-	Disabled	-	Disabled
04	3PRP300036-32A		-	Disabled	-	Disabled	-	Disabled
05	SPRP100023-32A		-	Disabled	-	Disabled	-	Disabled
06	SPRP300012-32A		-	Disabled	-	Disabled	-	Disabled
07	SPRP100023-32A		-	Disabled	-	Disabled	-	Disabled
08	3PRP200036-32A		-	Disabled	-	Disabled	-	Disabled

☒ Auto data refresh : ■■■■■■■■ Untick during data input

Search new installed PDUs

\* Press F11 to enlarge or diminish the screen

## 4.7 OUTLET SCHEDULE SETTING

**Step 2.** In < **Outlet Schedule Setting** > page, Select “ **Outlet schedule 1** ” & Tick “ **Enable** ”

**Step 3.** Provide the name of the outlet schedule

**Step 4.** Select the action ( either ON or OFF )

**Step 5.** Select the time for outlet schedule.

Outlet schedule : 1 ☐ Disable ☒ Enable  
Name : OutletSchedule01  
Action : ☒ OFF ☐ ON  
Time : ☒ Daily ☐ Weekly ☐ One-Time  
00 : 00 ( 24 hours format )

**Daily ON / OFF Schedule**

Outlet schedule : 1 ☐ Disable ☒ Enable  
Name : OutletSchedule01  
Action : ☒ OFF ☐ ON  
Time : ☐ Daily ☒ Weekly ☐ One-Time  
Sun  
00 : 00 ( 24 hours format )

**Weekly ON / OFF Schedule**

Outlet schedule : 1 ☐ Disable ☒ Enable  
Name : OutletSchedule01  
Action : ☒ OFF ☐ ON  
Time : ☐ Daily ☐ Weekly ☒ One-Time  
01 / 01 ( MM / DD date format )  
00 : 00 ( 24 hours format )

**One-time ON / OFF Schedule**





## 4.7 OUTLET SCHEDULE SETTING

**Step 6.** Tick the outlets to switch ON / OFF





Outlet schedule

PDU

**A**

<input checked="" type="checkbox"/>	01		Dell_Server_001
<input type="checkbox"/>	02		outlet_name_02
<input type="checkbox"/>	03		outlet_name_03
<input type="checkbox"/>	04		outlet_name_04

**B**

<input checked="" type="checkbox"/>	05		Dell_Server_002
<input type="checkbox"/>	06		outlet_name_06
<input type="checkbox"/>	07		outlet_name_07
<input type="checkbox"/>	08		outlet_name_08

**Apply** Save new data Exit Return to OUTLET SCHEDULE

Cancel Cancel new data input

**Step 7.** Click “ **Apply** ” to save the settings

**Step 8.** Repeat step 2 to 7 for Outlet Schedule no.2 to 6 if necessary



If the outlet schedule task is “ **One-Time** ”, the setting will return to “ **Disable** ” once the task is completed.

To cancel the outlet schedule, tick “ **Disable** ” & Click “ **Apply** ” to finish the change.

Part V. Log & Events

5.1 SINGLE PHASE PDU / OUTLET LOG

< Single Phase PDU Log >

provides past 2000 log records of each Single Phase PDU.  
The software will record a PDU log every 10 mins.

Single Feed > Single Phase > PDU log

PDU level : 06

Date	Time	Model	Name	Location	Status	Circuit A			Circuit B			Total						
						Amp			kWh	kVA	Amp			kWh	kVA	Amp Load	kWh	kVA
						Max.	/ Load	/ Alarm / R. alert / L. alert			Max.	/ Load	/ Alarm / R. alert / L. alert					
2017/12/20	10:38:16	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.27	0.04	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.58	0.05
2017/12/20	10:28:15	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.27	0.04	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.58	0.05
2017/12/20	10:18:14	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.04	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	10:08:12	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	09:58:11	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	09:48:10	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	09:38:08	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	09:28:07	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	09:18:06	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	09:08:05	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	08:58:04	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	08:48:03	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.26	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.57	0.05
2017/12/20	08:38:02	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.25	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.56	0.05
2017/12/20	08:28:01	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.25	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.56	0.05
2017/12/20	08:17:59	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.25	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.56	0.05
2017/12/20	08:07:58	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.25	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.56	0.05
2017/12/20	07:57:56	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.25	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.56	0.05
2017/12/20	07:47:55	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.24	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.55	0.05
2017/12/20	07:37:54	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.24	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.55	0.05
2017/12/20	07:27:52	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.24	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.55	0.05
2017/12/20	07:17:50	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.24	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.55	0.05
2017/12/20	07:07:48	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.24	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.55	0.05
2017/12/20	06:57:47	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.24	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.55	0.05
2017/12/20	06:47:46	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.24	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.55	0.05
2017/12/20	06:37:44	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	Server_Rack_005L	Connected	16	/ 0.2	/ 10.0 / 0.0 / 0.0	257.24	0.05	16	/ 0.0	/ 10.0 / 0.0 / 0.0	0.31	0.00	0.2	257.55	0.05

First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last

Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

< Single Phase PDU Outlet Log >

provides past 2000 log records of each Single Phase PDU's Outlet.

The software will record a PDU log every 10 mins.

Single Feed > Single Phase > Outlet Log - PDU

PDU level : 06

Outlet : 02

Date	Time	PDU Model	PDU Name	Outlet Name	Status	Amp			kWh	kVA
						Load	/ Alarm / R. alert / L. alert			
2017/12/20	10:48:19	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		300.01	-
2017/12/20	10:38:17	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		300.00	-
2017/12/20	10:28:16	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		300.00	-
2017/12/20	10:18:14	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		300.00	-
2017/12/20	10:08:12	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		300.00	-
2017/12/20	09:58:11	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		300.00	-
2017/12/20	09:48:10	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		300.00	-
2017/12/20	09:38:08	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.99	-
2017/12/20	09:28:07	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.99	-
2017/12/20	09:18:06	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.99	-
2017/12/20	09:08:05	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.99	-
2017/12/20	08:58:04	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.99	-
2017/12/20	08:48:03	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.98	-
2017/12/20	08:38:02	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.98	-
2017/12/20	08:28:01	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.98	-
2017/12/20	08:17:59	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.98	-
2017/12/20	08:07:58	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.98	-
2017/12/20	07:57:57	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.98	-
2017/12/20	07:47:56	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.97	-
2017/12/20	07:37:54	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.97	-
2017/12/20	07:27:53	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.97	-
2017/12/20	07:17:51	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.97	-
2017/12/20	07:07:50	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.97	-
2017/12/20	06:57:48	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.96	-
2017/12/20	06:47:47	V1UK7C13/4C19-32A-RP3000	SPRP300012-32A	outlet_name__02	ON	0.2	/ 3.0 / 0.0 / 0.0		299.96	-

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

## 5.1 SINGLE PHASE PDU / OUTLET LOG

### < Single Phase Daily kWh Log - PDU >

provides past 2000 daily energy consumption log records of each Single Phase PDU.

The record is logged at 00:00 everyday ( +/- 5 mins. )

Single Feed > Single Phase > kWh Log - PDU

PDU level : 06

Date	Time	Model	Status	Circuit A kWh	Circuit B kWh	Total kWh
2017/12/20	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	0.23	0.00	0.23
2017/12/19	00:00:01	V1UK/7C13/4C19-32A-RP3000	Connected	0.22	0.00	0.22
2017/12/18	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	0.22	0.00	0.22
2017/12/17	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	0.22	0.00	0.22
2017/12/16	00:00:01	V1UK/7C13/4C19-32A-RP3000	Connected	0.22	0.00	0.22
2017/12/15	00:00:01	V1UK/7C13/4C19-32A-RP3000	Connected	0.23	0.00	0.23
2017/12/14	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	0.22	0.00	0.22
2017/12/13	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	0.22	0.00	0.22
2017/12/12	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	0.25	0.00	0.25
2017/12/11	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	0.22	0.00	0.22
2017/12/10	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	0.22	0.00	0.22
2017/12/09	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	0.12	0.00	0.12

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

### < Single Phase Daily kWh Log - Outlet >

provides past 2000 daily energy consumption log records of each Single Phase PDU's Outlet.

The record is logged at 00:00 everyday ( +/- 5 mins. ) .

( Single Phase Outlet Measurement PDU only )

Single Feed > Single Phase > kWh Log - Outlet

PDU level : 06

Outlet : 02

Date	Time	Model	Status	Outlet Name	Outlet kWh
2017/12/20	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.23
2017/12/19	00:00:01	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.24
2017/12/18	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.22
2017/12/17	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.22
2017/12/16	00:00:01	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.23
2017/12/15	00:00:01	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.22
2017/12/14	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.23
2017/12/13	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.22
2017/12/12	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.24
2017/12/11	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.23
2017/12/10	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.22
2017/12/09	00:00:00	V1UK/7C13/4C19-32A-RP3000	Connected	outlet_name__02	0.13

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

## 5.1 SINGLE PHASE DUAL FEED PDU / OUTLET LOG

### < Single Phase Dual Feed PDU Log >

provides past 2000 log records of each Single Phase PDU.  
The software will record a PDU log every 10 mins.

							I - A			II - B			II - Total		
Date	Time	Model	Name	Location	Status		Amp			kWh			kVA		
							Max. / Load / Alarm / R. alert / L. alert								
2017/12/19	01:50:05	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	01:40:03	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	01:30:02	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	01:20:00	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	01:09:59	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	00:59:58	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	00:49:57	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	00:39:56	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	00:29:54	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	00:19:53	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/19	00:09:52	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	23:59:51	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	23:49:50	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	23:39:49	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	23:29:48	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	23:19:47	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	23:09:46	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	22:59:45	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	22:49:43	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	22:39:42	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	22:29:41	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	22:19:40	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	22:09:39	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	21:59:38	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						
2017/12/18	21:49:37	DV32C13/8C19-32A-RP3000	default_pdu_name	default_pdu_loc.	Connected		16 / 0.0 / 10.0 / 0.0 / 0.0	0.18	0.00						

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

### < Single Phase Dual Feed PDU Outlet Log >

provides past 2000 log records of each Single Phase PDU's **Outlet.**

The software will record a PDU log every 10 mins.

					Amp			kWh	kVA
Date	Time	Model	Name	Outlet Name	Status	Load / Alarm / R. alert / L. alert			
2017/12/20	11:25:46	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	2.04	0.09	
2017/12/20	11:15:45	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	2.03	0.09	
2017/12/20	11:05:43	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	2.01	0.10	
2017/12/20	10:55:42	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	2.00	0.08	
2017/12/20	10:45:40	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.98	0.08	
2017/12/20	10:35:39	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.97	0.09	
2017/12/20	10:25:38	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.95	0.08	
2017/12/20	10:15:36	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.94	0.08	
2017/12/20	10:05:35	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.93	0.08	
2017/12/20	09:55:34	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.91	0.09	
2017/12/20	09:45:32	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.90	0.09	
2017/12/20	09:35:30	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.88	0.09	
2017/12/20	09:25:28	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.87	0.09	
2017/12/20	09:15:26	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.85	0.09	
2017/12/20	09:05:24	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.84	0.09	
2017/12/20	08:55:22	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.82	0.09	
2017/12/20	08:45:21	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.81	0.09	
2017/12/20	08:35:19	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.80	0.09	
2017/12/20	08:25:17	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.78	0.09	
2017/12/20	08:15:15	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.76	0.09	
2017/12/20	08:05:14	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.75	0.10	
2017/12/20	07:55:13	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.73	0.09	
2017/12/20	07:45:12	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.72	0.09	
2017/12/20	07:35:11	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.71	0.09	
2017/12/20	07:25:09	DV32C13/8C19-16A-RP3000	DSRP300040-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.69	0.09	

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

5.1 SINGLE PHASE PDU / OUTLET LOG

< Single Phase Dual Feed Daily kWh Log - PDU >

provides past 2000 daily energy consumption log records of each Single Phase PDU.  
The record is logged at 00:00 everyday ( +/- 5 mins. )

rackPower ManagerRPM-04Version : Q417V6

IP Hardware groups

01020304050607080910111213141516171819202122232425

26272829303132333435363738394041424344454647484950

Dual Feed > Single Phase > kWh Log - Outlet

PDU level :

09

Outlet :

39

Date	Time	Model	Status	Outlet Name	Outlet kWh
2017/12/20	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.75
2017/12/19	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.00
2017/12/18	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.00
2017/12/17	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.00
2017/12/16	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.00

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

< Single Phase Dual Feed Daily kWh Log - Outlet >

provides past 2000 daily energy consumption log records of each Single Phase PDU's Outlet.

The record is logged at 00:00 everyday ( +/- 5 mins. ) .

( Single Phase Outlet Measurement PDU only )

Dual Feed > Single Phase > kWh Log - Outlet

PDU level :

09

Outlet :

39

Date	Time	Model	Status	Outlet Name	Outlet kWh
2017/12/20	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.75
2017/12/19	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.00
2017/12/18	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.00
2017/12/17	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.00
2017/12/16	00:00:00	DV32C13/8C19-16A-RP3000	Connected	outlet_name_39	0.00

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

## 5.1 SINGLE PHASE PDU / OUTLET LOG

### < 63A PDU Log >

provides past 2000 log records of each 63A PDU.  
The software will record a PDU log every 10 mins.

Single Feed > 63A > PDU Log

PDU level : 13

Date	Time	Model	Name	Location	Status	Bank1			Bank4				Total		
						Max. / Load / Alarm / R. alert / L. alert	kWh		x. / Load / Alarm / R. alert / L. alert	kWh	kVA	Amp / Load	kWh	kVA	
2017/12/21	10:42:48	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82		0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.52	0.10	
2017/12/21	10:32:47	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.1	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.50	0.10	
2017/12/21	10:22:45	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.49	0.10	
2017/12/21	10:12:43	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.47	0.10	
2017/12/21	10:02:42	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.45	0.10	
2017/12/21	09:52:40	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.44	0.10	
2017/12/21	09:42:39	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.42	0.10	
2017/12/21	09:32:38	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.0	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.40	0.10	
2017/12/21	09:22:36	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.39	0.10	
2017/12/21	09:12:34	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82		0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.37	0.10	
2017/12/21	09:02:33	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82		0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.35	0.10	
2017/12/21	08:52:32	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82		0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.34	0.10	
2017/12/21	08:42:31	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82		0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.32	0.10	
2017/12/21	08:32:29	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	L	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.31	0.10	
2017/12/21	08:22:27	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.29	0.10	
2017/12/21	08:12:26	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.0	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.27	0.10	
2017/12/21	08:02:24	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.28	0.10	
2017/12/21	07:52:23	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.24	0.10	
2017/12/21	07:42:22	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.22	0.10	
2017/12/21	07:32:20	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.21	0.10	
2017/12/21	07:22:19	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.19	0.10	
2017/12/21	07:12:18	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.17	0.10	
2017/12/21	07:02:16	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.0	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.15	0.10	
2017/12/21	06:52:14	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0	0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.14	0.10	
2017/12/21	06:42:13	V24C13/8C19-63A-RP3000	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82		0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.12	0.10	

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

### < 63A PDU Outlet Log >

provides past 2000 log records of each Single Phase PDU's Outlet.  
The software will record a PDU log every 10 mins.

Single Feed > 63A > Outlet Log - PDU

PDU level : 13

Outlet : 05

Date	Time	Model	Name	Outlet Name	Status	Amp	kWh	kVA
						Load / Alarm / R. alert / L. alert		
2017/12/21	10:53:07	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	10:43:06	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	10:33:05	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	10:23:04	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	10:13:03	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	10:03:02	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	09:53:01	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	09:43:00	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	09:32:59	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	09:22:58	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	09:12:57	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	07:32:47	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	07:22:46	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	07:12:45	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	07:02:44	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00
2017/12/21	06:52:43	V24C13/8C19-63A-RP3000	default_pdu_name	outlet_name_05	ON	0.0 / 3.0 / 0.0 / 0.0	0.00	0.00

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

## 5.1 SINGLE PHASE PDU / OUTLET LOG

### < 63A Daily kWh Log - PDU >

provides past 2000 daily energy consumption log records of each 63A PDU. The record is logged at 00:00 everyday ( +/- 5 mins. )

Single Feed > 63A > kWh Log - Outlet

PDU level :

Outlet :

Date	Time	Model	Status	Outlet Name	Outlet kWh
2017/12/21	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/20	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/19	00:00:01	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/18	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/17	00:00:01	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/16	00:00:01	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/15	00:00:01	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/14	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/13	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/12	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/11	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/10	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/09	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00

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Last 2000 log records.

Press F11 to enlarge or diminish the screen

### < 63A Daily kWh log - Outlet >

provides past 2000 daily energy consumption log records of each 63A PDU's

Outlet .

The record is logged at 00:00 everyday ( +/- 5 mins. ).

( 63A Outlet measurement PDU only )

Single Feed > 63A > kWh Log - Outlet

PDU level :

Outlet :

Date	Time	Model	Status	Outlet Name	Outlet kWh
2017/12/21	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/20	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/19	00:00:01	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/18	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/17	00:00:01	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/16	00:00:01	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/15	00:00:01	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/14	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/13	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/12	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/11	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/10	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00
2017/12/09	00:00:00	V24C13/8C19-83A-RP3000	Connected	outlet_name_05	0.00

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Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

## 5.2 THREE PHASE PDU / OUTLET LOG

< **Three Phase PDU Log** > provides past 2000 log records of each Three Phase Phase PDU.  
The software will record a PDU log every 10 mins.

Three Phase PDU log																						
PDU level : 01																						
Date	Time	Model	Name	Location	Status		Amp			kWh	Amp			kWh	kVA	Total						
							Max.	Load	Alarm / R. alert / L. alert		Max.	Load	Alarm / R. alert / L. alert			Amp	kWh	kVA				
2017/12/20	11:01:57	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	- B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.34	0.17			
2017/12/20	10:51:55	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.31	0.17			
2017/12/20	10:41:54	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.28	0.17			
2017/12/20	10:31:53	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.25	0.17			
2017/12/20	10:21:52	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	0.0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.23	0.17			
2017/12/20	10:11:51	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.20	0.17			
2017/12/20	10:01:50	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.17	0.17			
2017/12/20	09:51:49	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	- B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.14	0.17			
2017/12/20	09:41:48	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	- B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	79.11	0.17			
2017/12/20	09:31:47	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	- B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.08	0.17			
2017/12/20	09:21:46	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.8	13.0 / 0.0 / 0.0	16.90	L3 - B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.8	79.06	0.17			
2017/12/20	09:11:45	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	L3 - B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	79.03	0.17			
2017/12/20	09:01:44	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	L3 - B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	79.00	0.17			
2017/12/20	08:51:43	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	3 - B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.97	0.17			
2017/12/20	08:41:42	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	1 - B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.95	0.17			
2017/12/20	08:31:41	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	- B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.92	0.17			
2017/12/20	08:21:40	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	- B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.89	0.17			
2017/12/20	08:11:39	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.86	0.17			
2017/12/20	08:01:38	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.83	0.17			
2017/12/20	07:51:37	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.81	0.17			
2017/12/20	07:41:36	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.78	0.17			
2017/12/20	07:31:35	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.75	0.17			
2017/12/20	07:21:34	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	0	0	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.72	0.17			
2017/12/20	07:11:33	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.70	0.17			
2017/12/20	07:01:32	VP24C13/12C19-32A-RP3000	Box_06_PDU1	Box_06_PDU1_loc	Connected	L1 - B1	16	0.7	13.0 / 0.0 / 0.0	16.90	- B6	16	0.0	13.0 / 0.0 / 0.0	0.00	0.00	0.7	78.67	0.17			
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last							Last 2000 log records.															
* Press F11 to enlarge or diminish the screen																						

< **Three Phase PDU Outlet Log** > provides past 2000 log records of each Three Phase Phase PDU's **Outlet** .  
The software will record a PDU log every 10 mins.

Single Feed > Three Phase > Outlet Log - PDU

PDU level : 14

Outlet : 05

Date	Time	PDU Model	PDU Name	Outlet Name	Status	Amp	kWh	kVA
						Load / Alarm / R. alert / L. alert		
2017/12/20	11:02:04	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.7 / 3.0 / 0.0 / 0.0	6.51	0.37
2017/12/20	10:52:03	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.7 / 3.0 / 0.0 / 0.0	6.45	0.37
2017/12/20	10:42:02	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.7 / 3.0 / 0.0 / 0.0	6.38	0.36
2017/12/20	10:32:01	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.7 / 3.0 / 0.0 / 0.0	6.32	0.37
2017/12/20	10:22:00	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.7 / 3.0 / 0.0 / 0.0	6.27	0.37
2017/12/20	10:11:59	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.7 / 3.0 / 0.0 / 0.0	6.20	0.37
2017/12/20	10:01:58	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	6.14	0.37
2017/12/20	09:51:57	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	6.08	0.37
2017/12/20	09:41:56	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	6.02	0.37
2017/12/20	09:31:55	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.96	0.37
2017/12/20	09:21:54	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.90	0.37
2017/12/20	09:11:53	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.84	0.37
2017/12/20	09:01:52	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.77	0.37
2017/12/20	08:51:51	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.71	0.37
2017/12/20	08:41:50	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.65	0.37
2017/12/20	08:31:49	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.59	0.37
2017/12/20	08:21:48	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.53	0.37
2017/12/20	08:11:46	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.47	0.37
2017/12/20	08:01:45	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.40	0.37
2017/12/20	07:51:43	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.34	0.37
2017/12/20	07:41:41	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.29	0.37
2017/12/20	07:31:40	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.22	0.37
2017/12/20	07:21:39	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.16	0.37
2017/12/20	07:11:38	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.10	0.37
2017/12/20	07:01:37	VP24C13/12C19-32A-RP3000	Box_06_PDU1	outlet_name_05	ON	1.6 / 3.0 / 0.0 / 0.0	5.03	0.37

First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last

Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

5.2 THREE PHASE PDU / OUTLET LOG

< Three Phase Daily kWh Log - PDU >

provides past 2000 daily energy consumption log records of each Three Phase PDU. The record is logged at 00:00 everyday ( +/- 5 mins. )

Single Feed > Three Phase > kWh Log - PDU

PDU level : 14

Date	Time	Model	Status	kWh		kWh		kWh		kWh		kWh		kWh		Total kWh
2017/12/20	00:00:00	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	1.12	L1 - B2	2.80	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.72
2017/12/19	00:00:01	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.59	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.59
2017/12/18	00:00:00	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.80	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.80
2017/12/17	00:00:01	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.59	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.59
2017/12/16	00:00:01	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.80	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.80
2017/12/15	00:00:01	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.80	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.80
2017/12/14	00:00:00	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.59	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.59
2017/12/13	00:00:00	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.59	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.59
2017/12/12	00:00:00	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.58	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.58
2017/12/11	00:00:00	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.80	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.80
2017/12/10	00:00:00	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	3.59	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	3.59
2017/12/09	00:00:00	VP24C13/12C19-32A-RP3000	Connected	L1 - B1	0.00	L1 - B2	1.35	L2 - B3	0.00	L2 - B4	0.00	L3 - B5	0.00	L3 - B6	0.00	1.35

First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last

Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

< Three Phase Daily kWh Log - Outlet >

provides past 2000 daily energy consumption log records of each Three Phase PDU's Outlet .

The record is logged at 00:00 everyday ( +/- 5 mins. ).

( 3 Phase Outlet measurement PDU only )

Single Feed > Three Phase > kWh Log - Outlet

PDU level : 14

Outlet : 05

Date	Time	Model	Status	Outlet Name	Outlet kWh
2017/12/20	00:00:00	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	2.46
2017/12/19	00:00:01	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/18	00:00:00	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/17	00:00:01	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/16	00:00:01	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/15	00:00:01	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/14	00:00:00	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/13	00:00:00	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/12	00:00:00	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/11	00:00:00	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/10	00:00:00	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00
2017/12/09	00:00:00	VP24C13/12C19-32A-RP3000	Connected	outlet_name_05	0.00

First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last

Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

## 5.3 SENSOR LOG

< TH log > provides past 2000 TH log records of each PDU.  
The software will record a TH log every 10 mins.

TH log

PDU level : 01

Date	Time	Model	Status	Location	TH 1		Location	TH 2	
					°C	%		°C	%
					Temp. / Alarm / R. Alert	Humid./ Alarm / R. Alert		Temp. / Alarm / R. Alert	Humid./ Alarm / R. Alert
2018/04/25	10:11:19	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.5 / 35.0 / 0.0	52.8 / 65.0 / 0.0	Rear_Top	30.3 / 35.0 / 0.0	49.5 / 65.0 / 0.0
2018/04/25	10:01:18	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	55.0 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	51.6 / 65.0 / 0.0
2018/04/25	09:51:17	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.8 / 35.0 / 0.0	57.9 / 65.0 / 0.0	Rear_Top	30.7 / 35.0 / 0.0	53.8 / 65.0 / 0.0
2018/04/25	09:41:16	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.8 / 35.0 / 0.0	58.1 / 65.0 / 0.0	Rear_Top	30.7 / 35.0 / 0.0	53.9 / 65.0 / 0.0
2018/04/25	09:31:15	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.8 / 35.0 / 0.0	58.6 / 65.0 / 0.0	Rear_Top	30.7 / 35.0 / 0.0	54.6 / 65.0 / 0.0
2018/04/25	09:21:14	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.8 / 35.0 / 0.0	59.2 / 65.0 / 0.0	Rear_Top	30.6 / 35.0 / 0.0	55.3 / 65.0 / 0.0
2018/04/25	09:11:13	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.8 / 35.0 / 0.0	59.8 / 65.0 / 0.0	Rear_Top	30.6 / 35.0 / 0.0	55.9 / 65.0 / 0.0
2018/04/25	09:01:12	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.8 / 35.0 / 0.0	59.7 / 65.0 / 0.0	Rear_Top	30.6 / 35.0 / 0.0	56.0 / 65.0 / 0.0
2018/04/25	08:51:11	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.8 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.6 / 35.0 / 0.0	55.9 / 65.0 / 0.0
2018/04/25	08:41:10	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.8 / 35.0 / 0.0	59.5 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	55.9 / 65.0 / 0.0
2018/04/25	08:31:09	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	56.0 / 65.0 / 0.0
2018/04/25	08:21:08	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.7 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	56.0 / 65.0 / 0.0
2018/04/25	08:11:07	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.7 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	56.1 / 65.0 / 0.0
2018/04/25	08:01:06	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	56.1 / 65.0 / 0.0
2018/04/25	07:51:05	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	56.1 / 65.0 / 0.0
2018/04/25	07:41:04	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.7 / 65.0 / 0.0	Rear_Top	30.3 / 35.0 / 0.0	56.3 / 65.0 / 0.0
2018/04/25	07:31:03	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.3 / 35.0 / 0.0	56.3 / 65.0 / 0.0
2018/04/25	07:21:02	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.4 / 35.0 / 0.0	56.2 / 65.0 / 0.0
2018/04/25	07:11:01	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.7 / 65.0 / 0.0	Rear_Top	30.4 / 35.0 / 0.0	56.3 / 65.0 / 0.0
2018/04/25	07:01:00	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.7 / 65.0 / 0.0	Rear_Top	30.4 / 35.0 / 0.0	56.2 / 65.0 / 0.0
2018/04/25	06:50:59	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.7 / 65.0 / 0.0	Rear_Top	30.4 / 35.0 / 0.0	56.1 / 65.0 / 0.0
2018/04/25	06:40:58	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.7 / 65.0 / 0.0	Rear_Top	30.4 / 35.0 / 0.0	56.2 / 65.0 / 0.0
2018/04/25	06:30:57	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.4 / 35.0 / 0.0	56.2 / 65.0 / 0.0
2018/04/25	06:20:56	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.3 / 35.0 / 0.0	56.2 / 65.0 / 0.0
2018/04/25	06:10:55	VP24C13/12C19-32A-RP3000	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.3 / 35.0 / 0.0	56.2 / 65.0 / 0.0

First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last

Last 2000 log records.

\* Press F11 to enlarge or diminish the screen

## 5.4 EVENT LOG

< **Event** > based on IP Hardware group one by one to provide records of the past 2000 events

- IP Hardware connection
- PDU connection
- TH sensor connection
- PDU configuration
- Outlet configuration
- TH sensor configuration
- Scheduling configuration

2014/09/16	18:48:09	IP Hardware connection	[ - ] : IP Hardware disconnection
2014/09/16	18:34:02	IP Hardware connection	[ - ] : IP Hardware disconnection
2014/09/12	09:52:40	IP Hardware connection	[ - ] : IP Hardware disconnection
2014/09/12	02:06:07	PDU configuration	[ - ] : PDU amp. normal - PDU level 03 - Circuit 01
2014/09/12	02:06:07	PDU configuration	[ - ] : PDU amp. normal - PDU level 03 - Circuit 02
2014/09/12	02:05:54	PDU configuration	[ - ] : PDU amp. rising alert - PDU level 03 - Circuit 02

### Events

- IP dongle connection	( 1 ) Disconnection ( 2 ) Reconnection	- Outlet configuration	( 1 ) Switch outlet on / off ( 2 ) Change outlet name ( 3 ) Change power up sequence delay ( 4 ) Change alarm amp. ( 5 ) Change rising alert amp. ( 6 ) Change low alert amp. ( 7 ) Reset peak amp /w date and time ( 8 ) Reset kWh /w date and time ( 9 ) Amp. alarm ( 10 ) Amp. rising alert ( 11 ) Amp. low alert ( 12 ) Amp. normal
- PDU connection	( 1 ) Disconnection ( 2 ) Reconnection		
- TH connection	( 1 ) Disconnection ( 2 ) Reconnection		
- PDU configuration	( 1 ) Change alarm amp. ( 2 ) Change rising alert amp. ( 3 ) Change low alert amp. ( 4 ) Reset peak amp /w date and time ( 5 ) Reset kWh /w date and time ( 6 ) Change PDU name ( 7 ) Change PDU location ( 8 ) Amp. alarm ( 9 ) Amp. rising alert ( 10 ) Amp. low alert ( 11 ) Amp. normal ( 12 ) Circuit Breaker tripped / return to normal ( 13 ) Set PDU to maintenance ( 14 ) Remove PDU from maintenance ( 15 ) Disable monitoring	- TH configuration	( 1 ) Activate / Deactivate TH Sensor ( 2 ) Change temp. alarm ( 3 ) Change temp. alert ( 4 ) Change humid. alarm ( 5 ) Change humid. alert ( 6 ) Change TH location ( 7 ) Temp. alarm ( 8 ) Temp. alert ( 9 ) Humid. alarm ( 10 ) Humid. alert
- Scheduling configuration	( 1 ) Enable / Disable outlet schedule ( 2 ) Change outlet schedule conf. ( 3 ) Change outlet schedule name		

## Part VI. Report

< Report > provides monthly report for **PDU log** , **Inline meter log** , **outlet log** , **TH sensor log** , **Daily kWh log** & **Event log** which can be exported in CSV format.

Please follow the steps below to export the log category you want:

### Step 1. Select “ Report Category ” , “ Period ” & “ Target ”

Report Category

☒ PDU ☐ Single Feed ☒ Single phase PDU log

☐ Inline Meter ☒ Dual Feed ☐ Single phase PDU daily kWh log

☐ Sensor log ☐ Single phase outlet log

☐ Event ☐ Single phase outlet daily kWh log

Period (Year / Month)

From 2017 / 12 To 2017 / 12

Target

IP Hardware group 01

PDU level : ☒ 01 ☒ 05 ☒ 09 ☒ 13 ☒ all

☒ 02 ☒ 06 ☒ 10 ☒ 14

☒ 03 ☒ 07 ☒ 11 ☒ 15

☒ 04 ☒ 08 ☒ 12 ☒ 16

Apply Cancel

### Step 2. Click “ Apply ” & Click “ OK ” from the pop up window

### Step 3. Right Click the file name below & Select “ Save target as ” to download the log file

Report Category

☐ PDU

☐ Inline Meter

☐ Sensor log

☐ Event

Apply Cancel

Open

Open in new tab

Open in new window

**Save target as...**

Print target

Cut

Copy

Copy shortcut

Paste

E-mail with Windows Live

Translate with Bing

All Accelerators

Inspect element

Add to favorites...

傳送至 OneNote(N)

Properties

**To download the file, please:**

( 1 ) Right click the file link below

( 2 ) Select **Save target as** to download the file

[-DualFeedPDU Log IPHardwareGroup01.csv](#)

### Step 4. Click “ Close ” to complete or “ Open ” to view the content of log file

## Part VII. SNMP & IP Hardware

### 7.1 SNMP SETUP

---

The IP Hardware can manage the connected dual feed single phase, single & three phase intelligent PDUs in a single daisy chain up to 16 levels via SNMP v1/v2 or v3 ( Simple Network Management Protocol )

Only IP Hardware model: **NPDV or NPDH** can support SNMP



#### ( I ). Accessing MIB Files

**Step 1.** Click the following link to go to the mangement software download page:

<https://lp.schroff.nvent.com/en/rackpower-support>

**Step 2.** Select the appropriate MIB file of the PDU series

#### ( II ). Enabling SNMP Support

i. The following steps summarize how to enable the IP Hardware for SNMP v1 / v2 support.

**Step 1.** Connect the IP Hardware to a computer. ( Please refer to < 2.2 > IP Hardware Configuration )

**Step 2.** Open the Internet Explorer ( I.E. ) version 11.0

**Step 3.** Enter the configured IP Hardware address into the I.E. address bar.

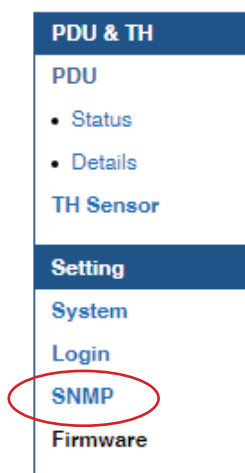
Default IP address is “ **192.168.0.1** ”

**Step 4.** Enter “ **Login name** ” & “ **Password** “. Default login name & password are “ **00000000** ”

Login name	<input type="text"/>
Password	<input type="password"/>
<input type="button" value="Login"/> <input type="button" value="Cancel"/>	

## 7.1 SNMP SETUP

**Step 5.** Select the **SNMP** from the left navigation pane



**Step 6.** The **SNMP** Settings window appears as below:

The screenshot shows the 'SNMP' configuration window. It has a title bar 'SNMP'. Under 'SNMP agent', there are radio buttons for 'Enable' and 'Disable' (selected). Below are 'SNMP version' (dropdown set to 'v1/v2') and 'SNMP port' (text box with '161'). Under 'SNMP configuration', there are 'Read community' (text box with 'public') and 'Write community' (text box with 'private'). Below are three sections for 'Station 1', 'Station 2', and 'Station 3'. Each section has radio buttons for 'Deactivate' (selected) and 'Activate'. Below each section are 'Trap Station IP', 'Trap port', and 'Trap community' text boxes. For Station 1, the values are '192.168.0.254', '162', and 'private'. For Station 2 and Station 3, the values are '192.168.0.254', '162', and 'private'. At the bottom are 'Apply' and 'Cancel' buttons.

**Step 7.** Click “ **Enable** ” in “ **SNMP agent** ” to start the SNMP agent service

**Step 8.** Select “ **v1/v2** ” in “ **SNMP version** ”

**Step 9.** Input “ **SNMP port** “. Default is 161.

**Step 10.** Input “ **Read Community** “. Default is “ public ”

**Step 11.** Input “ **Write Community** “. Default is “ private ”

**Step 12.** Click “ **Activate** ” in Station 1 to enable the trap service

**Step 13.** Input “ **Trap Station IP** ”, “ **Trap Port** ” & “ **Trap Community** ” of Station 1

**Step 14.** Repeat Step 12 & 13 for Station 2 & 3.

**Step 15.** Click “ **Apply** ” to finish the SNMP v1 / v2 settings

## 7.1 SNMP SETUP

ii. The following steps summarize how to enable the IP Hardware for SNMP v3 support.

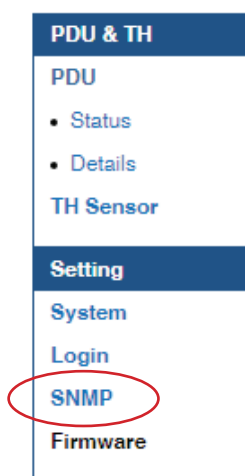
**Step 1.** Connect the IP Hardware to a computer. ( Please refer to < 2.2 > IP Hardware Configuration )

**Step 2.** Open Internet Explorer ( I.E. ) version 11.0

**Step 3.** Enter the configured IP Hardware address into the I.E. address bar  
Default IP address is “ **192.168.0.1** ”

**Step 4.** Enter “ **Login name** ” & “ **Password** “. Default login name & password are “ **00000000** ”

**Step 5.** Select SNMP from the left navigation pane



**Step 6.** The **SNMP** Settings window appears as below:

A screenshot of the 'SNMP' configuration window. At the top, it has a title 'SNMP'. Below this, there are fields for 'SNMP agent' (radio buttons for 'Enable' and 'Disable', with 'Disable' selected), 'SNMP version' (a dropdown menu showing 'v1/v2'), and 'SNMP port' (a text box with '161'). Below these is a section titled 'SNMP configuration' with 'Read community' (text box with 'public') and 'Write community' (text box with 'private'). At the bottom, there are three columns for 'Station 1', 'Station 2', and 'Station 3'. Each column has a 'Deactivate' (selected) and 'Activate' radio button, and three text boxes for 'Trap Station IP', 'Trap port', and 'Trap community'. All three stations have the same values: IP '192.168.0.254', port '162', and community 'private'. At the very bottom are 'Apply' and 'Cancel' buttons.

## 7.1 SNMP SETUP

**Step 7.** Click “ **Enable** ” in “ **SNMP agent** ” to start the SNMP agent service

**Step 8.** Select “ **v3** ” in “ **SNMP version** ” & the SNMP v3 settings window appears as below:

The image shows the 'SNMP' configuration window. At the top, 'SNMP agent' is set to 'Enable' (radio button selected), 'SNMP version' is set to 'v3' (dropdown), and 'SNMP port' is set to '161' (text field). Below this is the 'SNMP configuration' section, which is divided into three columns for 'User 1', 'User 2', and 'User 3'. Each user configuration includes a 'Deactivate' (selected) or 'Activate' radio button, a 'User role' dropdown (set to 'read only'), a 'USM user' text field (set to 'usm\_user1', 'usm\_user2', and 'usm\_user3' respectively), an 'Auth algorithm' dropdown (set to 'None' for User 1 and User 3, and 'MD5' for User 2), an 'Auth password' text field (masked with dots), a 'Privacy algorithm' dropdown (set to 'None'), and a 'Privacy password' text field (masked with dots). At the bottom of each user section, there is an 'SNMP trap' dropdown (set to 'Disabled'), a 'Trap Station IP' text field (set to '192.168.1.113', '192.168.1.39', and '192.168.0.254' respectively), and a 'Trap port' text field (set to '162'). At the very bottom of the window are 'Apply' and 'Cancel' buttons.

**Step 9.** Input “ **SNMP port** “. Default is 161.

**Step 10.** Click “ **Activate** ” in User 1.

**Step 11.** Select “ **Read Only** ” or “ **Read & Write** ” in User role:

**Step 12.** Input the name of “ **USM user** ”. Default is usm\_user1

**Step 13.** Select “ **None / MD5 / SHA** ” in “ **Auth algorithm** ”.  
If you select “ **Read & Write** ” in “ **User role:** ”,  
you MUST select “ **MD5 / SHA** ” in “ **Auth algorithm** ”

**Step 14.** Input the “ **Auth password:** ” Default is “ 00000000 ”

**Step 15.** Select “ **None / DES / AES** ” in “ **Privacy algorithm** ”.  
If the Auth algorithm is “ **NONE** ”, NO privacy algorithm can be selected.

**Step 16.** Input the “ **Privacy password** ”

**Step 17.** If you want to receive trap message, select “ **Enable** ” in **SNMP trap**

**Step 18.** Input the “ **Trap Station IP** ” & “ **Trap port** ”

**Step 19.** Repeat step 10 to 18 for User 2 & 3.

**Step 20.** Click “ **Apply** ” to finish the SNMP v3 settings.

## 7.2 IP HARDWARE FIRMWARE UPGRADE

### < Firmware Upgrade >

For function enhancement of IP Hardware WEB UI or fail to search the PDU, please take the following steps to remotely upgrade the IP Hardware firmware:

**Step 1.** Click the following link to go to the mangement software download page:

<https://lp.schroff.nvent.com/en/rackpower-support>

**Step 2.** Select the appropriate IP Hardware firmware file of the PDU series

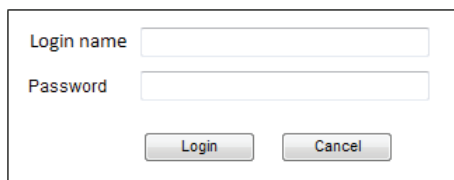
**Step 3.** Connect the IP Hardware to the computer. ( Please refer to < 2.2 > IP Hardware Configuration )

**Step 4.** Open the Internet Explorer ( I.E. ) version 11.0

**Step 5.** Enter the configured IP Hardware address into the I.E. address bar.

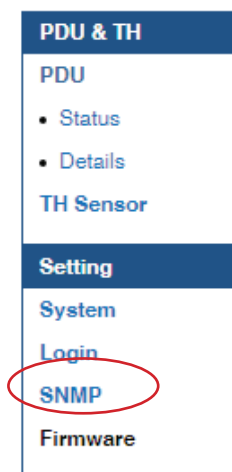
Default IP address is " **192.168.0.1** "

**Step 6.** Enter " **Login name** " & " **Password** ". Default login name & password are " **00000000** "



A login form with two input fields: "Login name" and "Password". Below the fields are two buttons: "Login" and "Cancel".

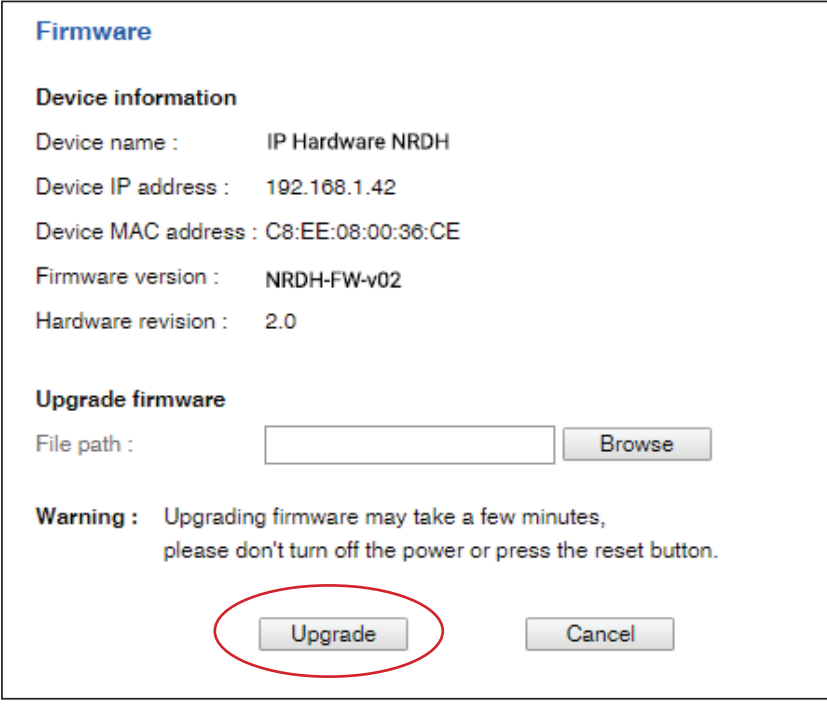
**Step 7.** Select the Firmware from the left navigation pane



## 7.2 IP HARDWARE FIRMWARE UPGRADE

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**Step 8.** The firmware upgrade window appears as below:



The screenshot shows a 'Firmware' upgrade window. It contains a 'Device information' section with fields for Device name (IP Hardware NRDH), Device IP address (192.168.1.42), Device MAC address (C8:EE:08:00:36:CE), Firmware version (NRDH-FW-v02), and Hardware revision (2.0). Below this is an 'Upgrade firmware' section with a 'File path' input field and a 'Browse' button. A 'Warning' message states: 'Upgrading firmware may take a few minutes, please don't turn off the power or press the reset button.' At the bottom, there are two buttons: 'Upgrade' (circled in red) and 'Cancel'.

**Firmware**

**Device information**

Device name : IP Hardware NRDH

Device IP address : 192.168.1.42

Device MAC address : C8:EE:08:00:36:CE

Firmware version : NRDH-FW-v02

Hardware revision : 2.0

**Upgrade firmware**

File path :

**Warning :** Upgrading firmware may take a few minutes,  
please don't turn off the power or press the reset button.

**Step 9.** Click “ **Browse** ” and select the firmware file ( xxx.img ) from the specific path in the pop up window and Click “ **Open** ”

**Step 10.** Click “ **Upgrade** ” to start the upgrade process. It takes a few minutes to complete.

**Step 11.** Once complete, UI will return to the login page.

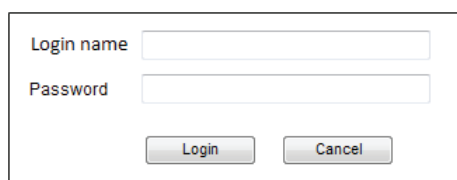
## 7.3 DHCP SETTING

**Step 1.** Connect the IP Hardware to the computer ( Please refer to < 2.2 > IP Hardware Configuration )

**Step 2.** Open the Internet Explorer ( I.E. ) version 11.0

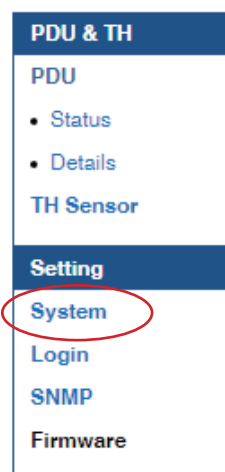
**Step 3.** Enter the default IP address of the IP Hardware into the I.E. address bar.  
Default IP address is " **192.168.0.1** "

**Step 4.** Enter the " **Login name** " & " **Password** ". Default login name & password are " **00000000** "

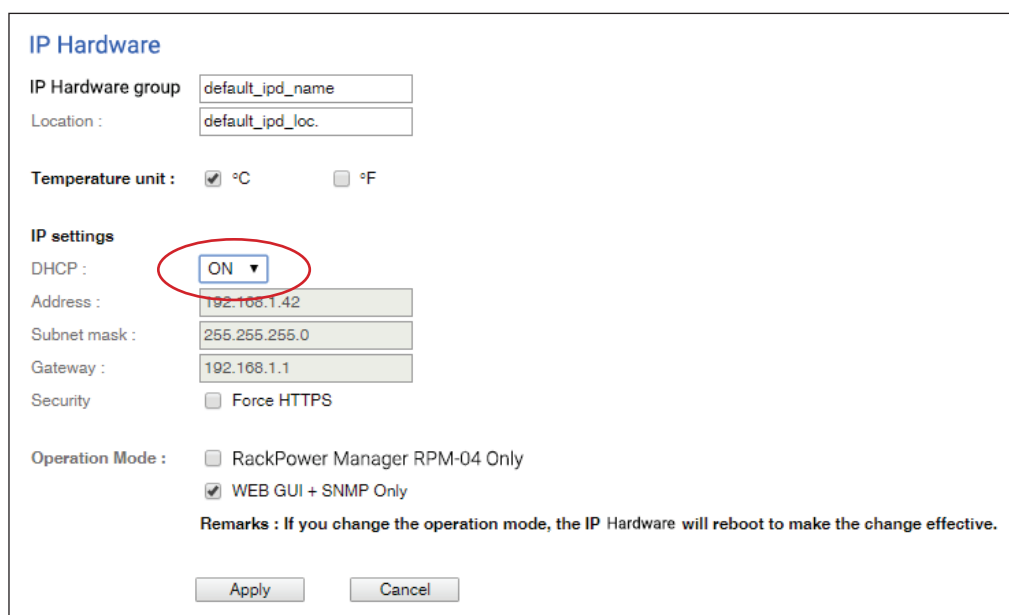


A login dialog box with two input fields: "Login name" and "Password". Below the fields are two buttons: "Login" and "Cancel".

**Step 5.** Select " **System** " from the left navigation pane



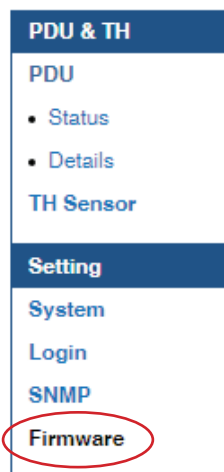
**Step 6.** Select " **ON** " from " **DHCP** " & click " **Apply** " to save the settings



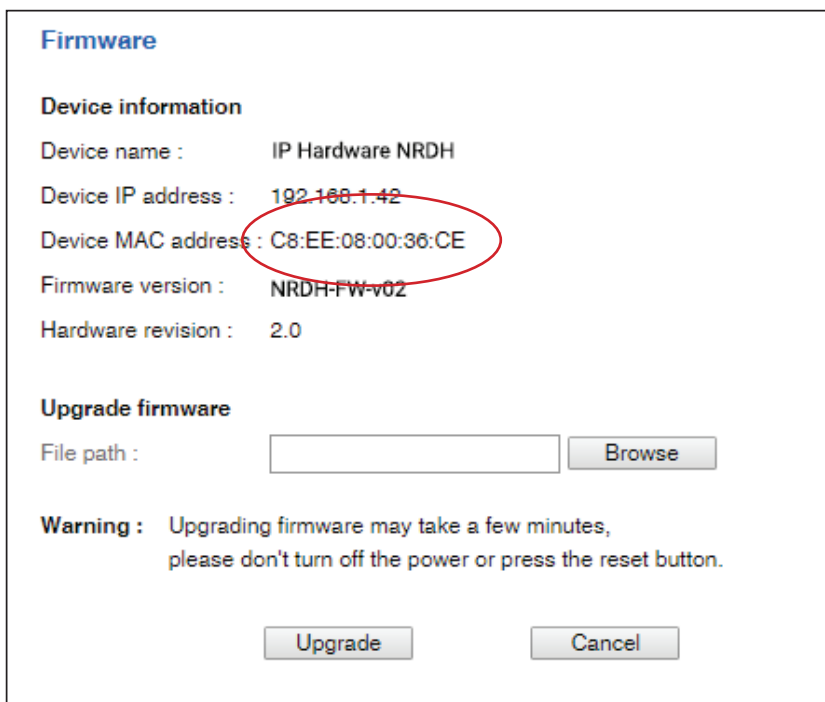
The "IP Hardware" settings page. It includes fields for "IP Hardware group" (default\_ipd\_name) and "Location" (default\_ipd\_loc). Under "Temperature unit", the "°C" checkbox is checked. In the "IP settings" section, the "DHCP" dropdown menu is set to "ON" and is circled in red. Below it are fields for "Address" (192.168.1.42), "Subnet mask" (255.255.255.0), and "Gateway" (192.168.1.1). A "Security" section has a "Force HTTPS" checkbox. The "Operation Mode" section has two options: "RackPower Manager RPM-04 Only" (unchecked) and "WEB GUI + SNMP Only" (checked). A "Remarks" note states: "If you change the operation mode, the IP Hardware will reboot to make the change effective." At the bottom are "Apply" and "Cancel" buttons.

## 7.3 DHCP SETTING

**Step 7.** Select “ **Firmware** ” from the left navigation pane



**Step 8.** Record the “ **Device MAC address** ”

A screenshot of the 'Firmware' configuration page. At the top is the title 'Firmware'. Below it is a section titled 'Device information' containing the following details: 'Device name : IP Hardware NRDH', 'Device IP address : 192.168.1.42', 'Device MAC address : C8:EE:08:00:36:CE' (this line is circled in red), 'Firmware version : NRDH-FW-v02', and 'Hardware revision : 2.0'. Below this is an 'Upgrade firmware' section with a 'File path :' label, an empty text input box, and a 'Browse' button. At the bottom, there is a 'Warning :' message: 'Upgrading firmware may take a few minutes, please don't turn off the power or press the reset button.' Below the warning are two buttons: 'Upgrade' and 'Cancel'.

**Step 9.** Assign an IP address to the IP Hardware from your DHCP server.

..... • **Complete**

## Part VIII. FAQ

### 8.1 MANAGEMENT SOFTWARE



**1. Is RPM-04 management software free of charge?**

Yes.

**2. What is RackPower Manager?**

The RackPower Manager RPM-04 is a Windows based system to consolidate management of max. **800 PDUs** via **50 IP Hardware**s, using a simple web interface which monitors and controls dual feed single phase , single & 3 Phase RP series PDUs.

- SNMP Capability v2 / v3 via IP Hardware
- Outlet switch On/Off and scheduling
- Outlet level kWh & amp measurement
- Temp-Humid monitoring
- Graphic user interface
- PDU & outlet reporting ( kWh / Amp / Event / Temp & Humid )

**3. Which OS platform does RPM-04 support?**

- MS Windows 10 Pro
- MS Windows 7 Professional with SP1
- MS Windows Server 2012 R2 Standard Edition
- MS Windows Server 2008 Standard Edition SP2
- MS Windows Server 2008 R2 Standard Edition SP1
- MS Windows Server 2003 R2 Standard Edition with SP2



**Ensure the user logs in as a member of "Administrators" Group before RPM-04 Installation and execution.**

**4. What are the default ports used in the RPM-04?**

- UTP port: 8890 for searching IP Hardware
- TCP port: 4000 for IP Hardware communication
- TCP port: 80 for HTTP
- TCP port: 25 for email alarm service ( can be changed by user )

**5. Why can't I access the login page?**

- If the web service is started & the port of web server is open in firewall setting

**6. Why can't I login remotely?**

- If the login name & password is correct

**7. Which database does the RPM-04 support?**

PostgreSQL

**8. What is the PostgreSQL default password for RPM-04?**

1qaz2WSX

**9. How can I receive alarm email and get a full log report?**

Ensure that RPM-04 is executed and the alarm server is configured properly and being enabled.

**10. What is the default user name & login password of RPM-04?**

Default user name " admin " / Default login password " 00000000 "

**11. What is the command password of RPM-04?**

- Each IP Hardware group has its command password ( Default " 00000000 " ) .
- For security, it will be requested for any PDU configuration and control.
- Only administrator can set command password.
- The passwords are disabled or enabled, same or different subject to the administrator's management.

**12. Is it possible to increase PDU from 800 & IP Hardware group from 50?**

Yes, but custom management software & service charges required.

**13. Is it possible to increase the concurrent user from 5?**

Yes, but custom management software & service charges are required.

**14. Can I manage RP series PDUs from different workstations?**

Yes, max. 5 concurrent login users from different workstations.

**15. Why UI shows PDU / PDUs disconnection?**

- The PDU is power OFF or
- Duplicate the PDU level no. or
- Cable loose / defective
  
- The IP Hardware fails  
Refer to < 8.2 > IP Hardware
  
- The RP Meter fails  
Refer to < 8.3 > RP Meter
  
- The power module fails  
Refer to < 8.4 > Power Module

**16. Why UI shows Temp. / Temp. + Humid sensor disconnection?**

- Temp. / Temp. + humid sensor is NOT connected
- Temp. / Temp. + humid sensor in BAD contact
- Temp. / Temp. + humid sensor is defective



**1. What is the IP Hardware?**

The IP Hardware, with patented hot-plug & field replaceable design and SNMP function, provides a simple and economical way to consolidate management of max. 16 pcs of Dual Feed single phase , single & 3 Phase PDUs via a single network IP address to save IP address cost.

**2. Does IP Hardware have a built-in UI?**

Yes, a built-in UI provides a general remote monitoring & control for cascaded PDUs. However, this built-in UI can only manage up to 16 PDUs in a daisy chain, without any reporting, event, & log. The free RPM-04 PDU management software will allow you to monitor, control, and log if that is necessary.

**3. Can I use the built-in Hardware UI and RPM-04 management software simultaneously?**

No, only either one.

**4. Is the IP Hardware essential to RPM-04 management software?**

Yes, the software can't run without IP Hardware

**5. Is the IP Hardware essential to SNMP function?**

Yes, absolutely.

**6. Does the IP Hardware support SNMP v2 and v3?**

Yes.

**7. What is default setting of IP Hardware?**

The default IP setting is as below:

IP address:	192.168.0.1
Subnet mask:	255.255.255.0
Gateway:	192.168.0.254

**8. What is the IP setup utilities?**

This is a windows application used to assign the IP address of IP Hardware. Please find the link below: <https://ip.schroff.nvent.com/en/rackpower-support>

**9. What are the default ports used in IP setup utilities?**

- UTP port: 8880, 8881, 8882, 8883, 8884, 8888, 8889, 8890 & 8891

**10. Does the IP Hardware support DHCP (Dynamic Host Configuration Protocol)?**

Yes.

## 8.2 IP HARDWARE

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**11. Will the reset of IP Hardware affect the power to the outlets?**

No, the IP Hardware operates on a separate circuit, so the power to the outlets will remain unchanged.

**12. What are the symptoms if the IP Hardware fails?**

- UI shows IP Hardware disconnection and users fail to access the whole cascaded PDUs
- Green LED off of IP Hardware

**13. Why does the IP Hardware fail to work?**

- The IP Hardware itself fails or
- The 1st level RP Meter fails or
- The 1st level Power Module fails or
- Cable loose or defective between IP Hardware and the network device

**14. How can I replace a failed IP Hardware?**

Download the guide below to replace the IP Hardware: <https://lp.schroff.nvent.com/en/rackpower-support>

**15. Does the IP Hardware have firmware built-in?**

Yes

**16. How can I get the updated IP Hardware firmware?**

Please find the link below: <https://lp.schroff.nvent.com/en/rackpower-support>

**17. Can I remotely update the IP Hardware firmware?**

Yes.

Download the guide below to update the firmware accordingly: <https://lp.schroff.nvent.com/en/rackpower-support>

## 8.3 RP METER

### 1. What are features of the RP Meter?

- Support Dual Feed single phase , single & 3 Phase PDU and they can be inter-cascaded in a single daisy chain
- Support switched PDU and outlet amp + kWh measurement
- Simply connect 1 x IP Hardware to access up to 16 PDUs to save IP network address
- SNMP Capability v2 / v3 via IP Hardware
- Sensor port x 2
- 2.8" color LCD featured w/ touchscreen
- Built-in buzzer will sound when circuit or bank Amp over alarm setting
- Field replaceable design allows meter replacement without PDU power interruption



### 2. What is the default PDU level?

Level 16

### 3. What is the default outlet status of Switched PDU?

ON

### 4. If one of the cascaded PDU RP Meter fails, will it affect the data transmission among PDUs in the same daisy chain?

No , the meter design prevents this from happening.

### 5. If one of the cascaded RP series PDU ( meter ) loses power, will it affect the data transmission among PDUs in the same daisy chain?

Yes, if the 1st level PDU loses power.

No , if NOT the 1st level PDU loses power.

### 6. What is the maximum cabling distance between two cascaded RP series PDUs?

Up to 20 meter (66 feet) via CAT. 5 / 6 cable.

### 7. What are the symptoms if the RP Meter fails?

- If the RP Meter PDU is one of that among the 2nd to last level, UI shows PDU disconnection and users fail to access this PDU
- If the RP Meter PDU is the 1st level, UI shows IP Hardware disconnection and users fail to access the whole cascaded PDUs
- RP Meter no display

### 8. Why the RP Meter fail to work?


- The RP Meter itself fails or
- The Power Module fails and can't supply power to RP Meter so the RP Meter fails to work or
- The Power Module IC defective and causes RP Meter has no data return or
- The LAN cable loose or defective

### 9. How can I replace a failed RP Meter?

Download the guide below to replace the RP Meter: <https://lp.schroff.nvent.com/en/rackpower-support>

10. How accurate is the energy measurement on RP Meter?

The RP Meter have an accuracy of +/- 1% of reading across the entire power and outlets energy measurement compliant with IEC 62053/ANSI C12.20 Standards

- 
- Ampere - squelched to 0A under 0.3A
  - Accuracy is not defined below 0.3A.

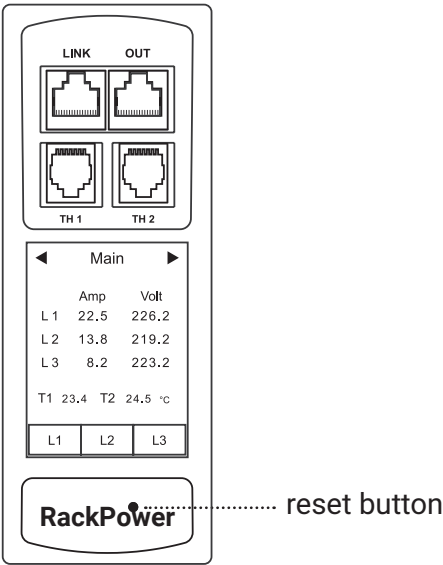
Functional Specifications - Metering	
Input Metering Range	0.3 to Rated Input Current
Outlet Metering Range	0.3 to 16.0A
Ampere Accuracy (A)	+/- 1%
Voltage Accuracy (V)	+/- 1%
Power Accuracy (kW)	+/- 1%
Energy Accuracy (kWh)	+/- (1%)*hours

11. Does the RP Meter have firmware built-in?

Yes

12. What can I do if the RP Meter turns white?

- Use a pin to press the reset button
- If the symptom still persists, call your dealer for support



## 8.4 POWER MODULE

### 1. What is feature of the Power Module?

- Convert AC to DC for RP Meter, IP Hardware & outlet control module
- Field replaceable design allows quick replacement

### 2. How affect the RP Meter if the Power Module fails?

It will cause the meter fails to work as below:

- If the RP Meter PDU is one of level among the 2nd to the last, UI shows PDU disconnection and users fail to access this PDU
- If the RP Meter PDU is the 1st level, UI shows IP Hardware disconnection and users fail to access the whole cascaded PDUs
- RP Meter no display and / or no data return



### 3. How is the switched & measurement RP2000 / RP3000 / RP1500 PDU affected if the Power Module fails?

- Lose outlet On/Off control and outlet amp & kWh measurement
- But outlet can still supply power to device

### 4. Why the Power Module fails to work?

- The power module itself fails

### 5. How can I replace a failed Power Module?

For safety, please follow the Power Module replacement guide.

Download the guide below to replace the Power Module: <https://lp.schroff.nvent.com/en/rackpower-support>

## 8.5 OUTLET CONTROL MODULE

### 1. How many types of Outlet Control Module?

The outlet control module is a built-in PCB and NOT a hot-swapped & field replaceable design.

- Switched & measurement module for RP3000 switched & outlet level measurement PDU
- Outlet measurement module for RP1500 outlet level measurement PDU
- Switched module for RP2000 switched PDU

### 2. How is the switched & measurement RP2000 / RP3000 / RP1500 PDU affected if the Outlet Module fails?

- Lose outlet On/Off control and outlet level measurement
- But outlet can still supply power to device

### 3. Why the outlet control module fails to work?

- The outlet control module itself fails

### 4. How can I replace a failed Outlet Control Module?

No, not like RP Meter & Power Module, Outlet Control Module is NOT hot-swapped & field replaceable design. You have to replace the whole PDU.

### 5. How can I replace a failed PDU?

Download the guide below to replace the PDU: <https://lp.schroff.nvent.com/en/rackpower-support>

## < 8.5 > OUTLET CONTROL MODULE

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6. **What does the outlet LED mean for RP2000 / RP3000 switched PDU?**  
LED in Solid Blue: Outlet ON  
LED Not lit : Outlet OFF
7. **How do the outlets react when the user powers up the RP2000 / RP3000 switched PDU?**  
First, all outlets will return to power OFF status within 5 seconds.  
Then, all outlets power ON sequentially.
8. **Why is the outlet LED not lit but the outlets still ON power status?**  
The outlet LED is defective.

## < 8.6 > TH SENSORS & OTHERS

---

### TH sensors

1. **How accurate is the Temp. & Humid. sensor?**  
 $\pm 1^{\circ}\text{C}$  ( typical ) &  $\pm 4.5\%$  RH ( typical )
2. **How accurate is the Temp. sensor?**  
 $\pm 1.5^{\circ}\text{C}$  ( typical )
3. **What is the default TH setting?**  
Default: Deactivate
4. **Is the TH sensor plug-n-play?**  
Yes, but only for the local meter display.  
No, for management software UI. You have to activate the sensor in < TH Sensor >.  
Note: never activate if no sensor connection

Others

**1. Will the PDU settings remain unchanged after power OFF?**

Yes, the settings will remain unchanged such as PDU & Outlet Name, Location, Alarm amp., Low alert amp. ....

**2. Does the RackPower PDU have the over ampere protection?**

Yes, the optional resettable fuse and circuit breaker available.

**3. What is the standard inlet cable length of RackPower PDU?**

3 meter ( 9.9 feet )

**4. Where can I find the Catalogue / User manual / Model list / Wire diagram of RackPower PDUs?**

Please visit the [www.nVent.com](http://www.nVent.com)

**5. How can we get a further support?**

Please send the email to <https://lp.schroff.nvent.com/en/rackpower-support>





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