# RPM-04 PDU Management Software User Manual

nVent SCHROFF

UM-RPM-04-3P-400V-Q218V5

**RP series PDU: Three  Phase 400V**


FC CE RoHS REACH

## LEGAL INFORMATION

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

**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 40º Celsius (104º 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 the equipment 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 fire, electrocution, and other damage.
- Only qualified service personnel should open the chassis. Opening it yourself could damage the equipment and invalidate is one word 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 do 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

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 damaged, contact the supplier immediately.

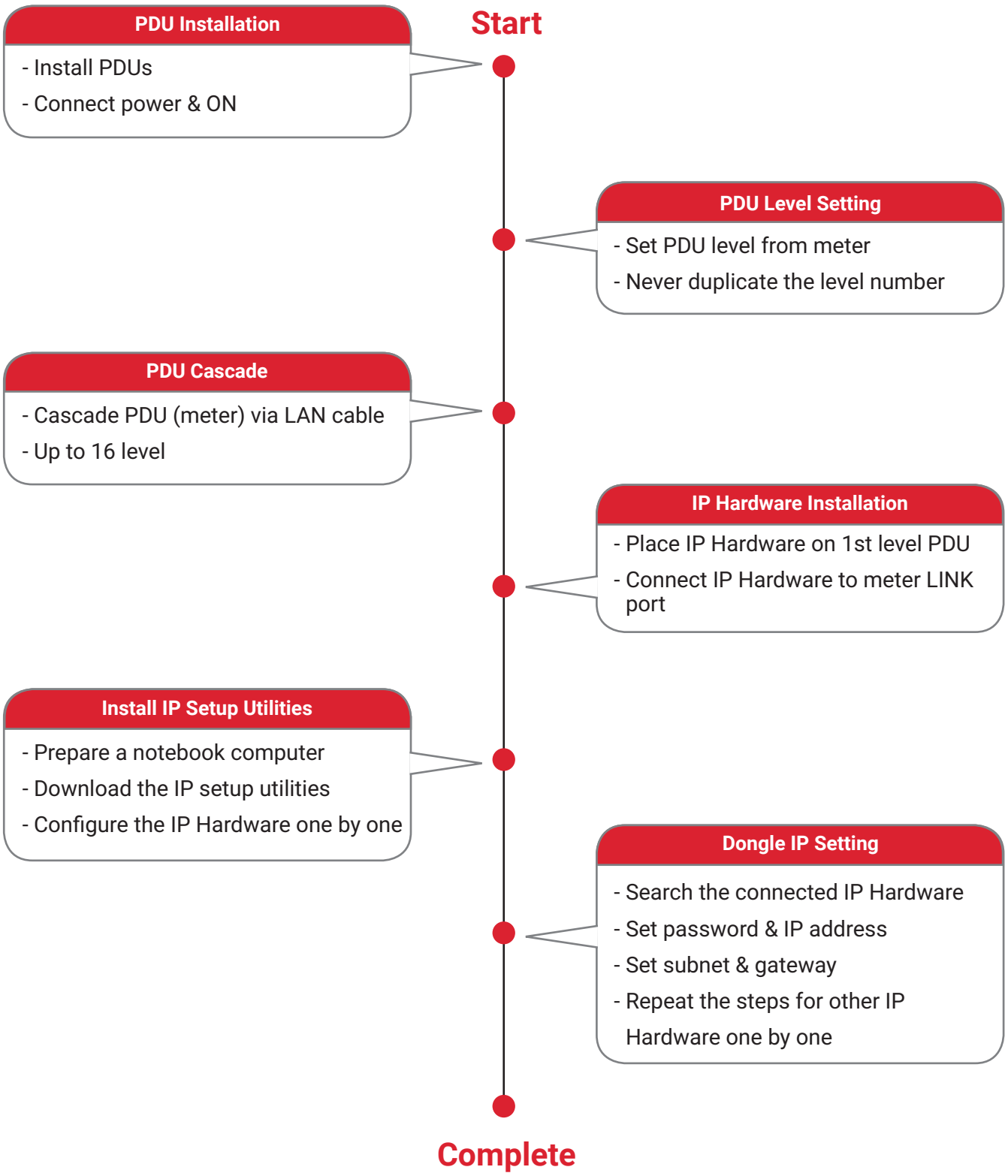
⚠ All electrical power and power control wiring must be installed by a qualified electrician and comply with local and national regulations.

⚠ Don’t exceed the outlet, branch or phase limitations

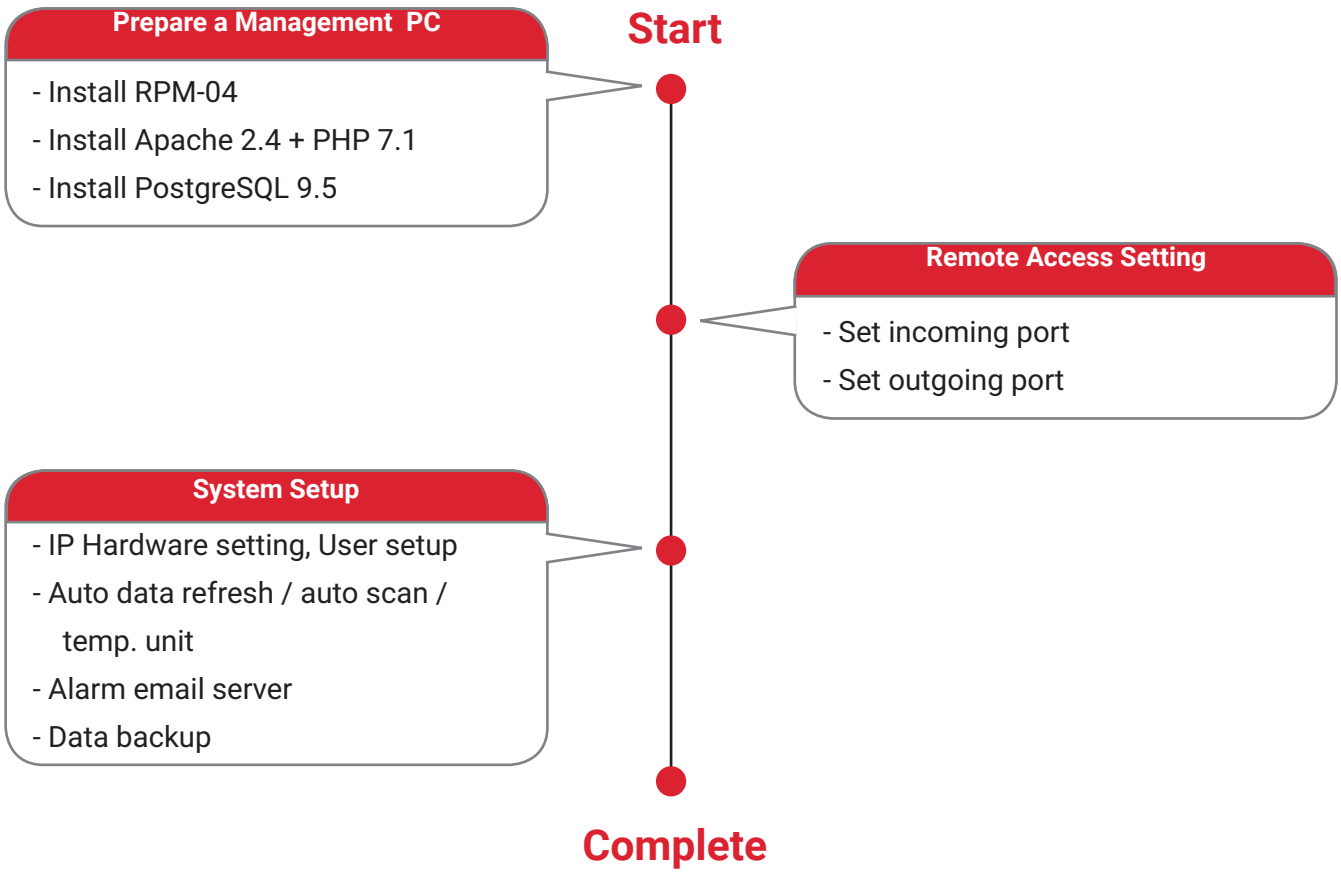
## POWER ON

- 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

## TIPS FOR HARDWARE INSTALLATION



## TIPS FOR SYSTEM SETUP



# CONTENT

## CONTENT

# Part I. RP Meter

## 1.1 METER KEY FEATURES

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

**Monitored PDU**:
① RP1000 PDU
② RP1500 PDU - Outlet Measurement

**Switched PDU**:
③ RP1000 PDU
④ RP3000 PDU - 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

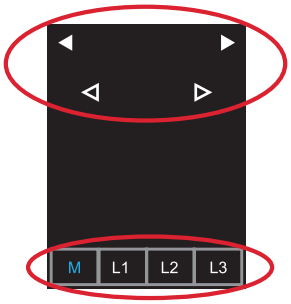
To re-power the meter if necessary this won't cause any change on settings and memories.

## 1.2 METER READING & SETTING

### Reading

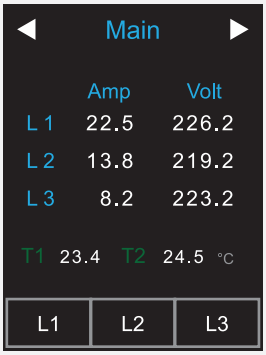
- Amp, Voltage & Power Factor
- kWh Energy Consumption
- Active & Apparent Power
- Phase Balance
- Temp. & Humidity

**Touch Button**



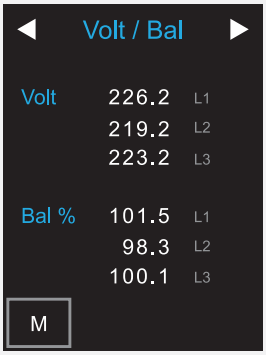

### Three Phase 16A / 32A

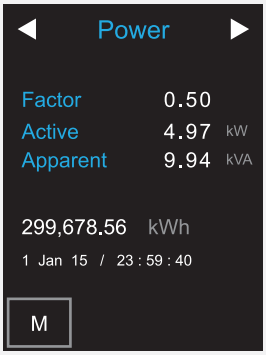
**1 - 3**



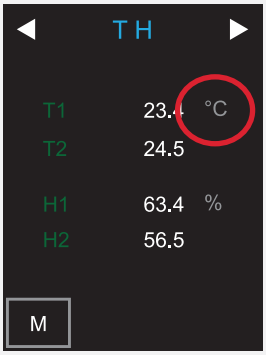


**4-5**



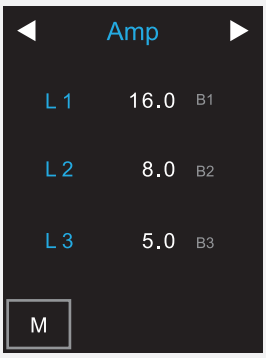

**6 - 8**



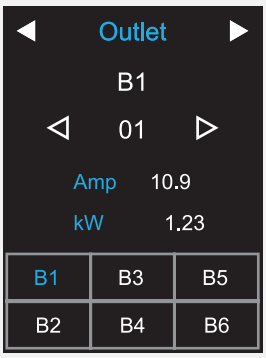

**Page no.6**
Touch °C / °F to change temp. unit


**32A Bank x 6**

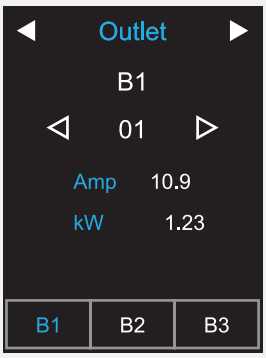

**16A Bank x 3**




**32A Bank x 6**

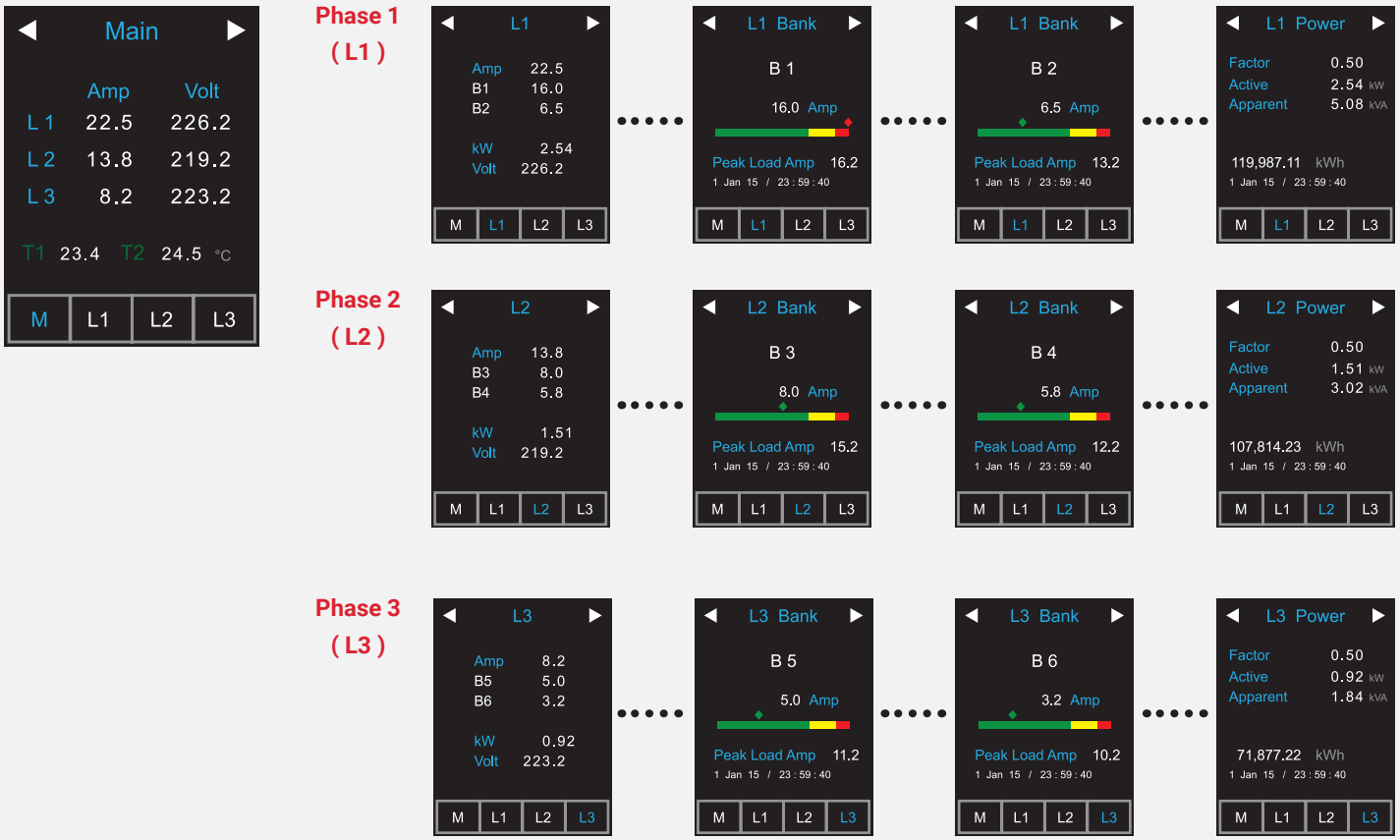



**16A Bank x 3**

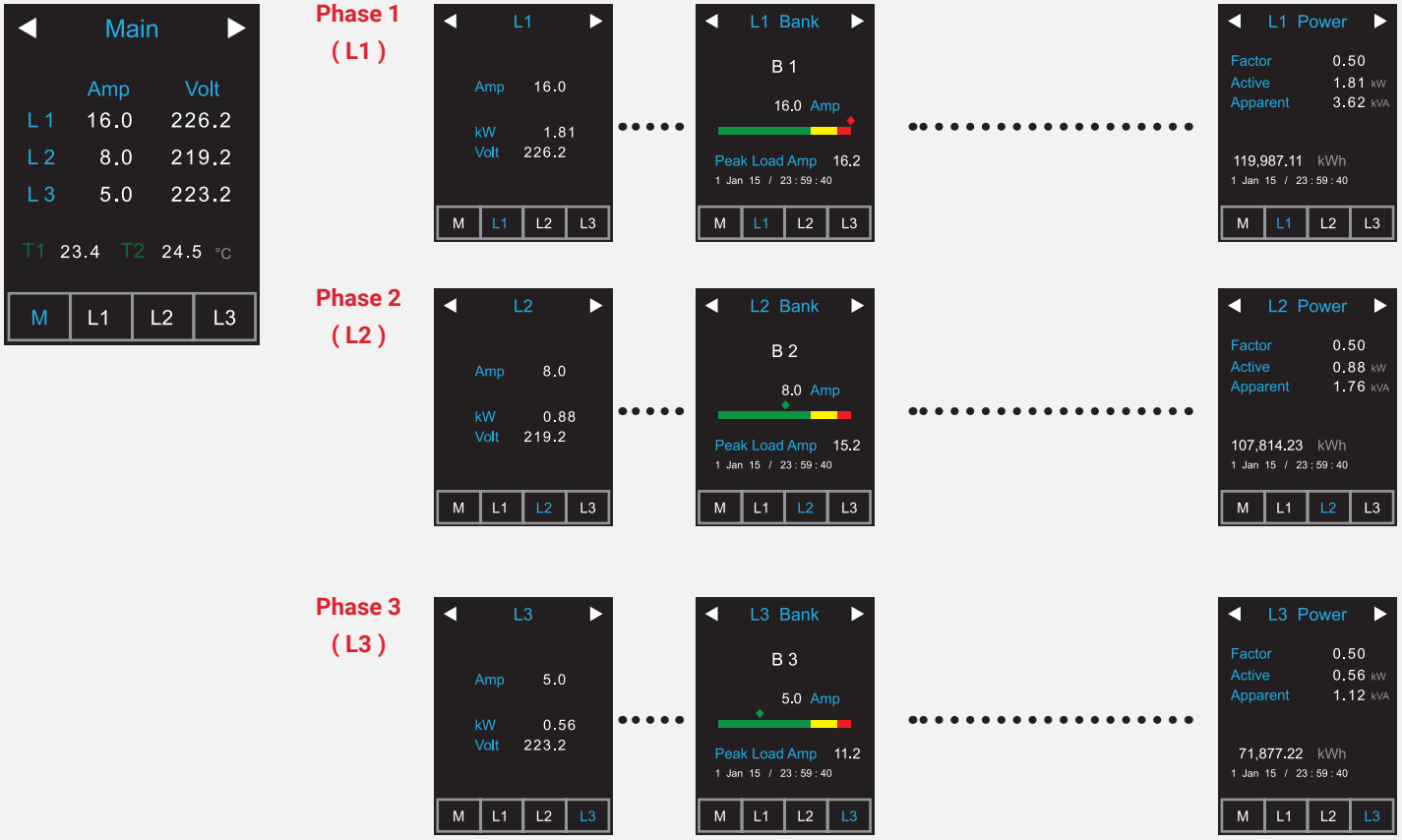



**Page no.8**
RP1500 / RP3000 outlet measurement PDU only

## Phase Reading ( 400V, 32A, Bank x 6 )




## Phase Reading ( 400V, 16A, Bank x 3 )

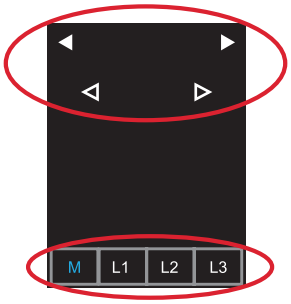


## 1.2 METER READING & SETTING

### Reading

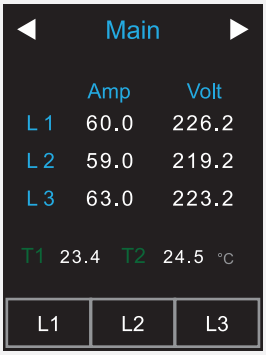
No switched model for Three phase 63A PDU.

**Touch Button**

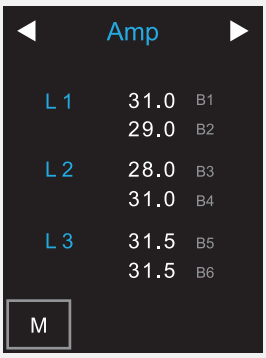



### Three Phase 63A

**1 - 3**





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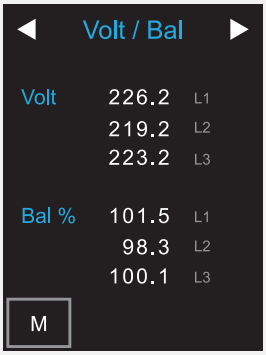
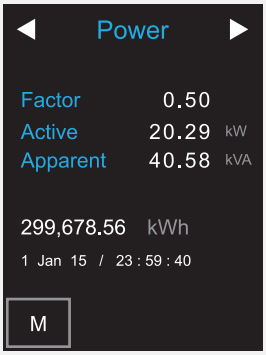
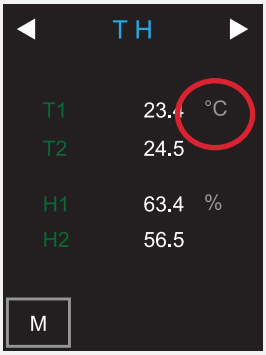
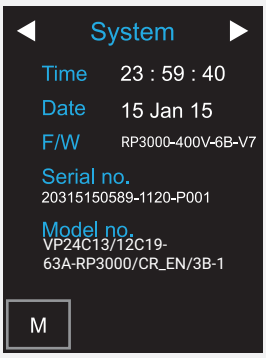



**5 - 7**

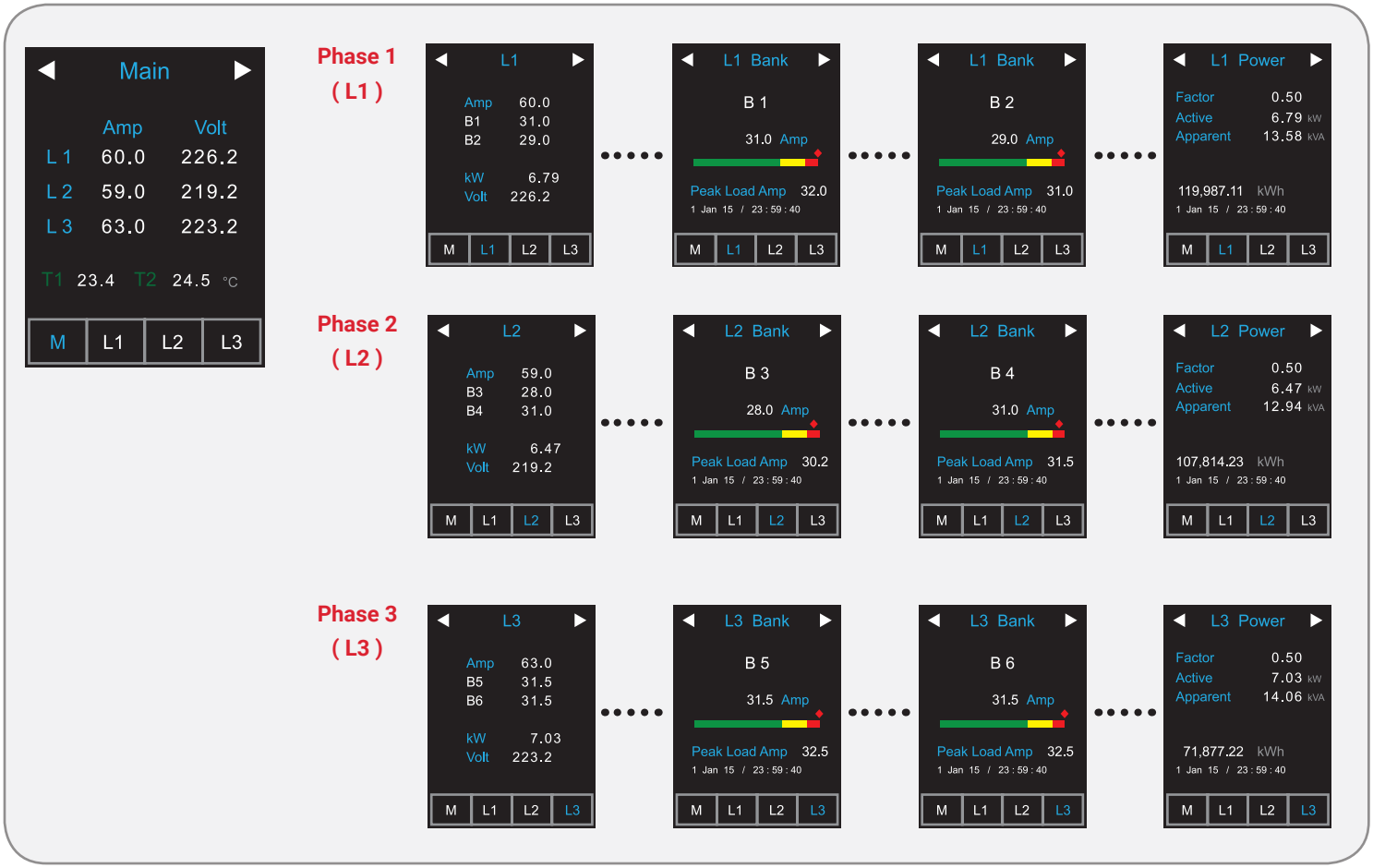



**Page no.6**
Touch °C / °F to change temp. unit

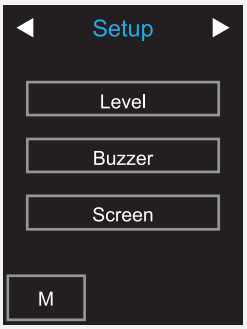


## Phase Reading ( 400V, 63A, Bank x 6 )

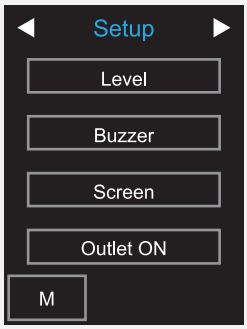


## 1.2 METER READING & SETTING

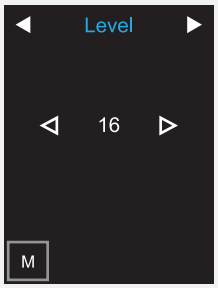
### Setting




Monitored PDU

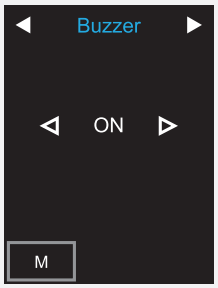



Switched PDU



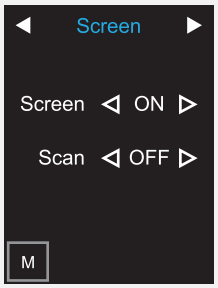

**PDU Level Setting**

Default no.: 16




**Buzzer ON / OFF**

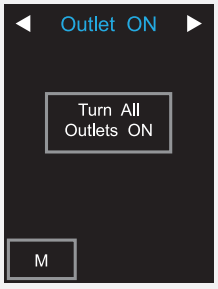
Default: ON




**Default: Screen < ON > Scan < OFF >**

* **OFF Screen**:
- Screen OFF in 30 seconds
- To turn the screen on, just touch it
- If not touched for 30 seconds, screen will turn off

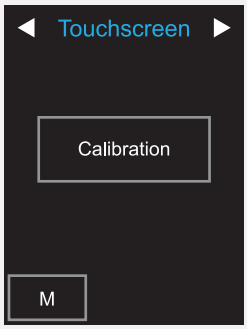
* **ON Scan:**
- Scanning starts in 30 seconds
- Then scan each page per 3 seconds




**Outlet ON / OFF**

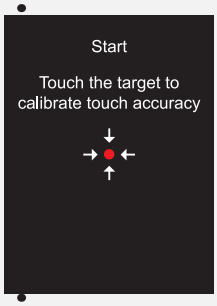
Default: ON

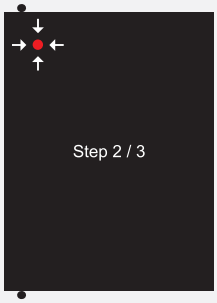
RP2000 / RP3000 Switched PDU only

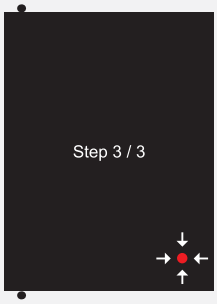


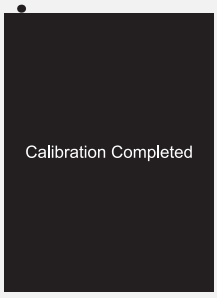

**Touchscreen Calibration**

If no any calibrate touch in 30 seconds, it will return to Touchscreen page



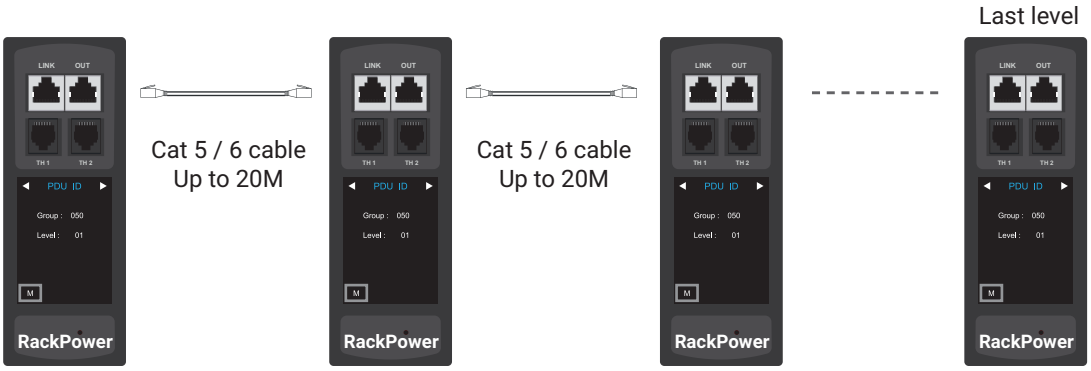
## 1.3 METER ( PDU ) CASCADE

• The PDU can be cascaded up to 16 levels

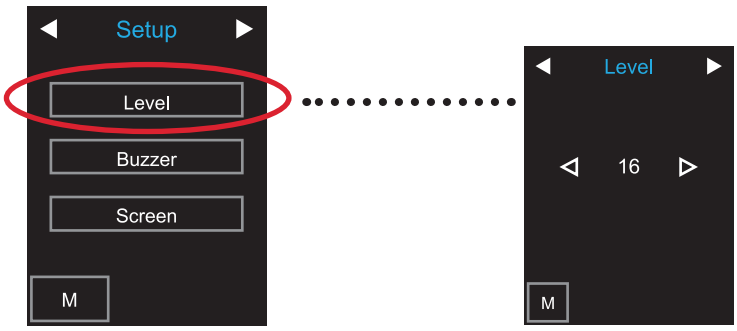
• For IP PDU access simply connect 1 x IP Hardware - **NPDV**

• 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 PDUs by a true network IP address chain.
Only 1 x IP Hardware allows access to max. 16 PDUs 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.

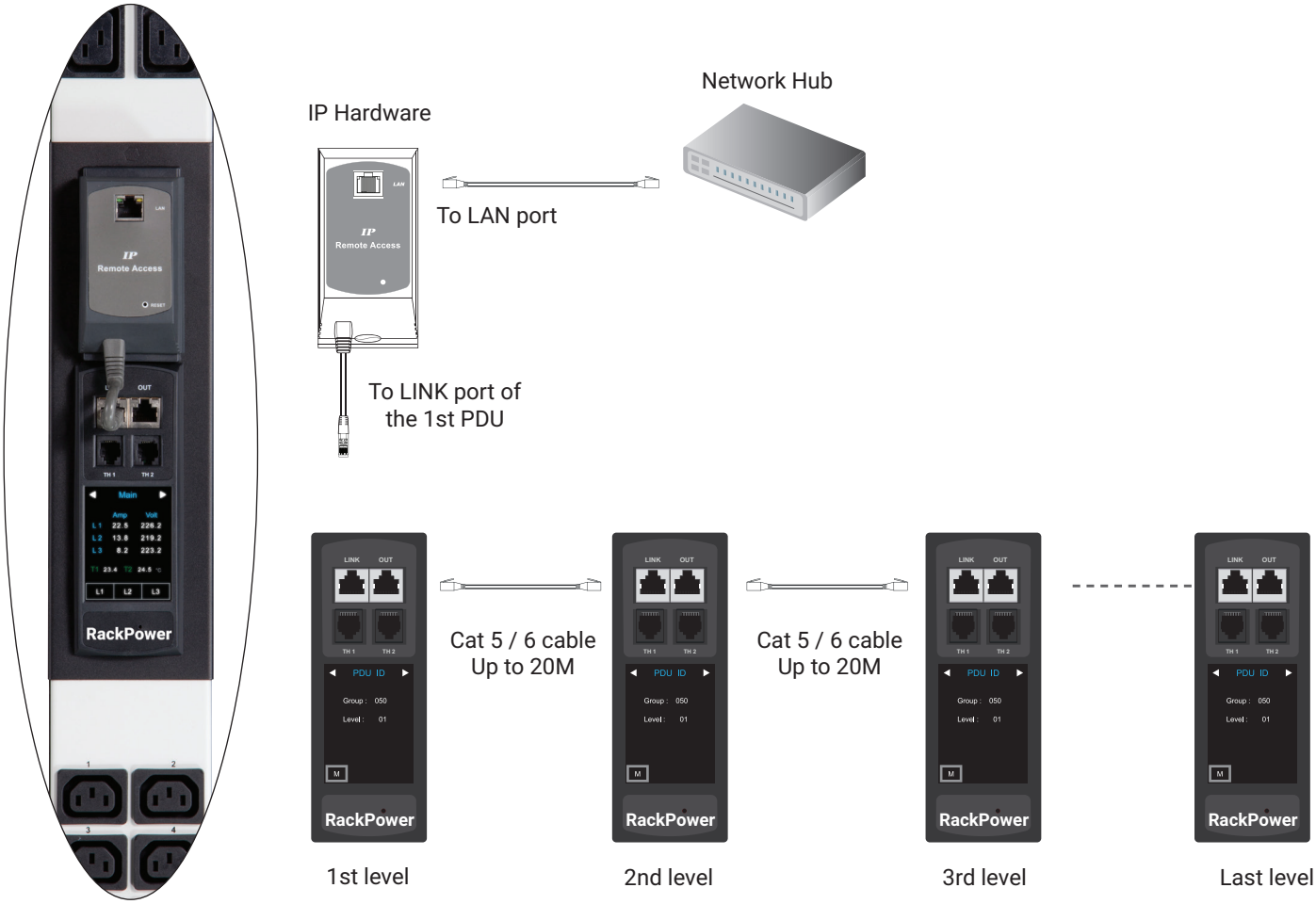
Hot-Pluggable design facilitates the IP Hardware installation. Simply integrate the IP Hardware to the 1st PDU, then the entire daisy chain group can be remote over IP.


**IP Hardware for vertical PDU**

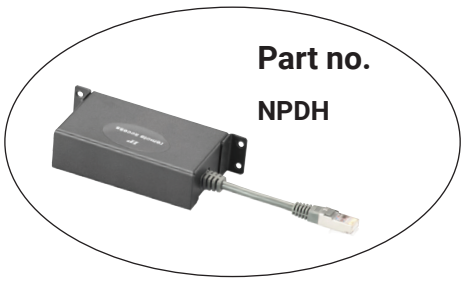
- SNMP capability v2 / v3

**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

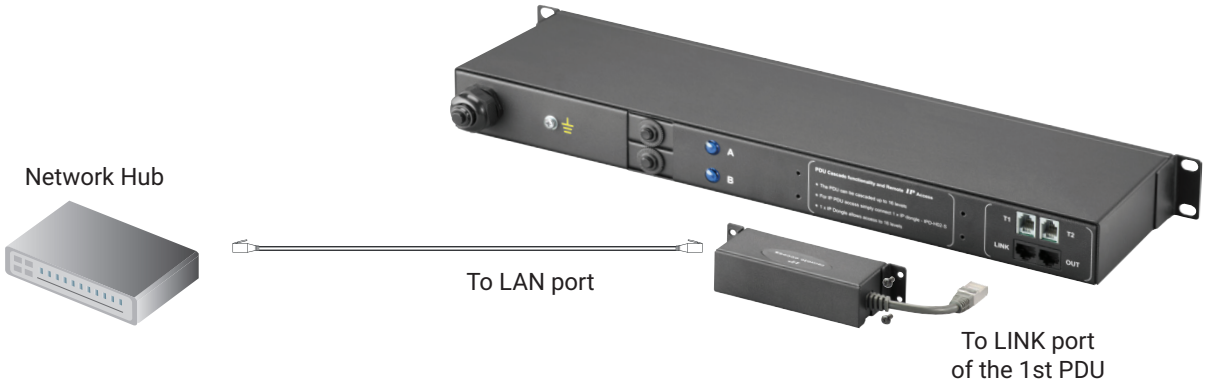



**IP Hardware for rackmount PDU**

- 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.

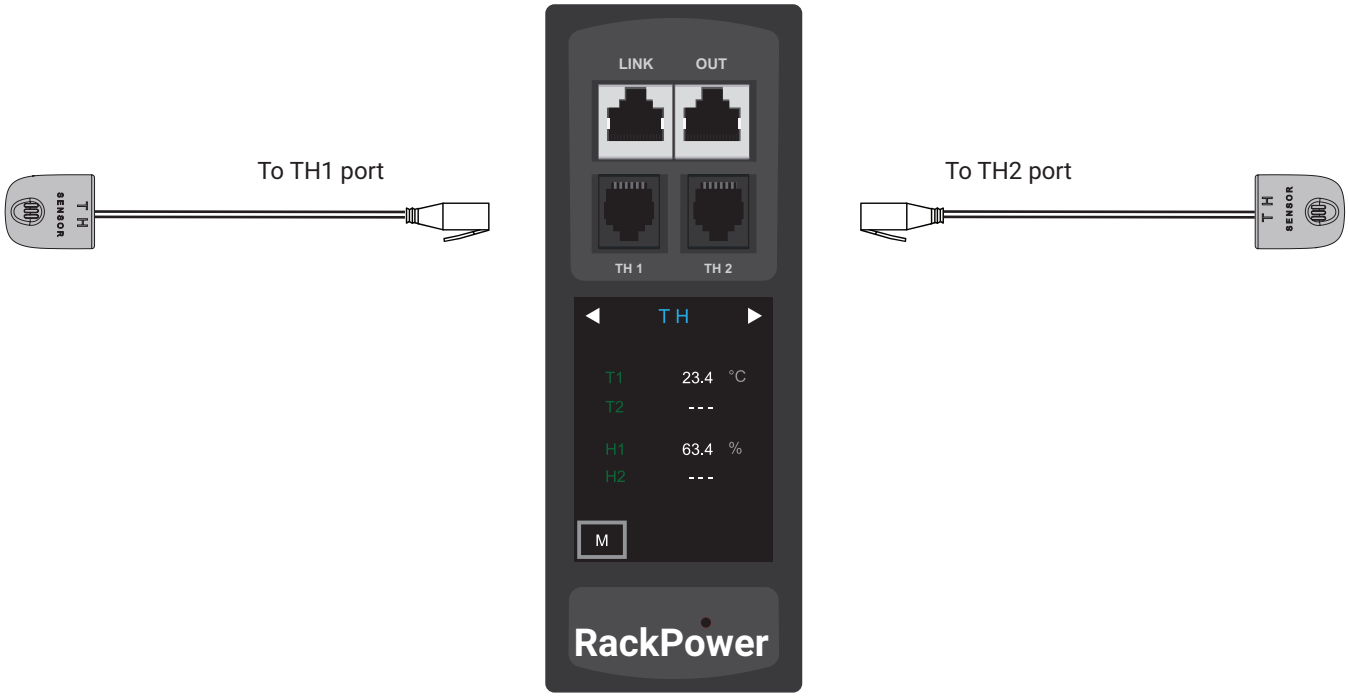
- Plug n Play
- Sensor with 2M or 4M cord
- Low profile design with magnetic base for easy affixing to the rack

**Temp. & Humid. Sensor**

Part no.:
**NPS2** ( 2M cord )

**Temp. Sensor**

Part no.:
**NPS1** ( 2M cord )



## 1.6 OPTIONAL ACCESSORY

### Temp. / Temp. + Humidity Sensor

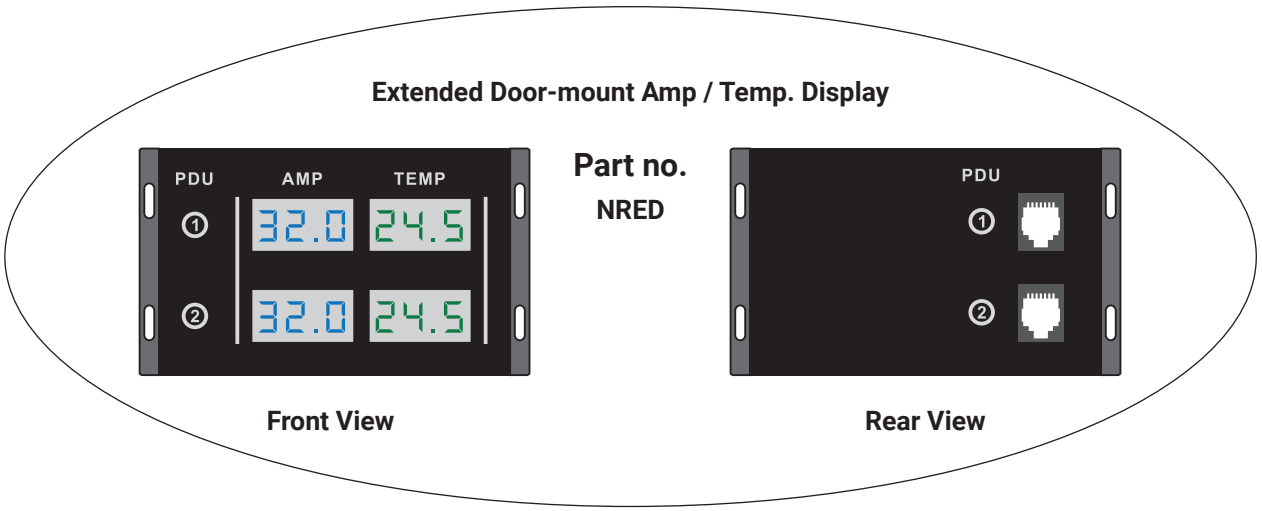
| Part no. | | Temp. & Humid. Sensor<br>IG - TH01 | Temp. Sensor<br>IG - T01 |
|---|---|---|---|
| **Temperature Sensitivity** | Range | 0 to 80°C ( 32 to 176°F ) | |
| | Accuracy | ±1.0°C typical ( ±2°F ) | ±1.5°C ( ±3°F) |
| | Resolution | 0.1°C ( 0.2°F ) | |
| | Response Time | 5 to 30 sec | |
| **Relative Humidity Sensitivity** | Range | 0 to 100% R.H | / |
| | Accuracy | 0 to 100, ±8.0% R.H<br>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 )<br>TH sensor w/ 4m cable ( option ) | T sensor w/ 2m cable ( standard )<br>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 | |

## 1.6 OPTIONAL ACCESSORY

### 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.

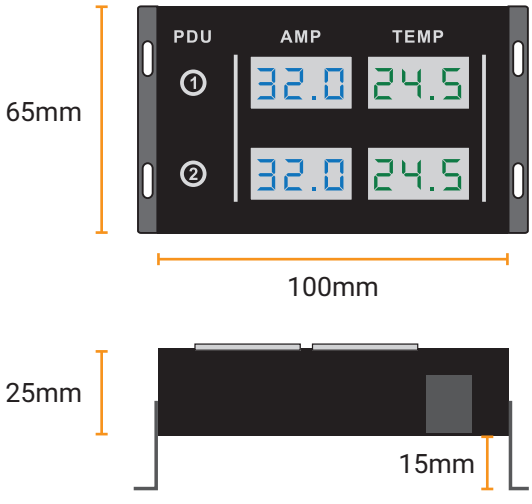
- Plug n Play
- Support two PDUs display amp. and temp.
- Adjustable Mounting Kit for easy installation to rack door
- Bundled 3m RJ-11 cable x 2




**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**

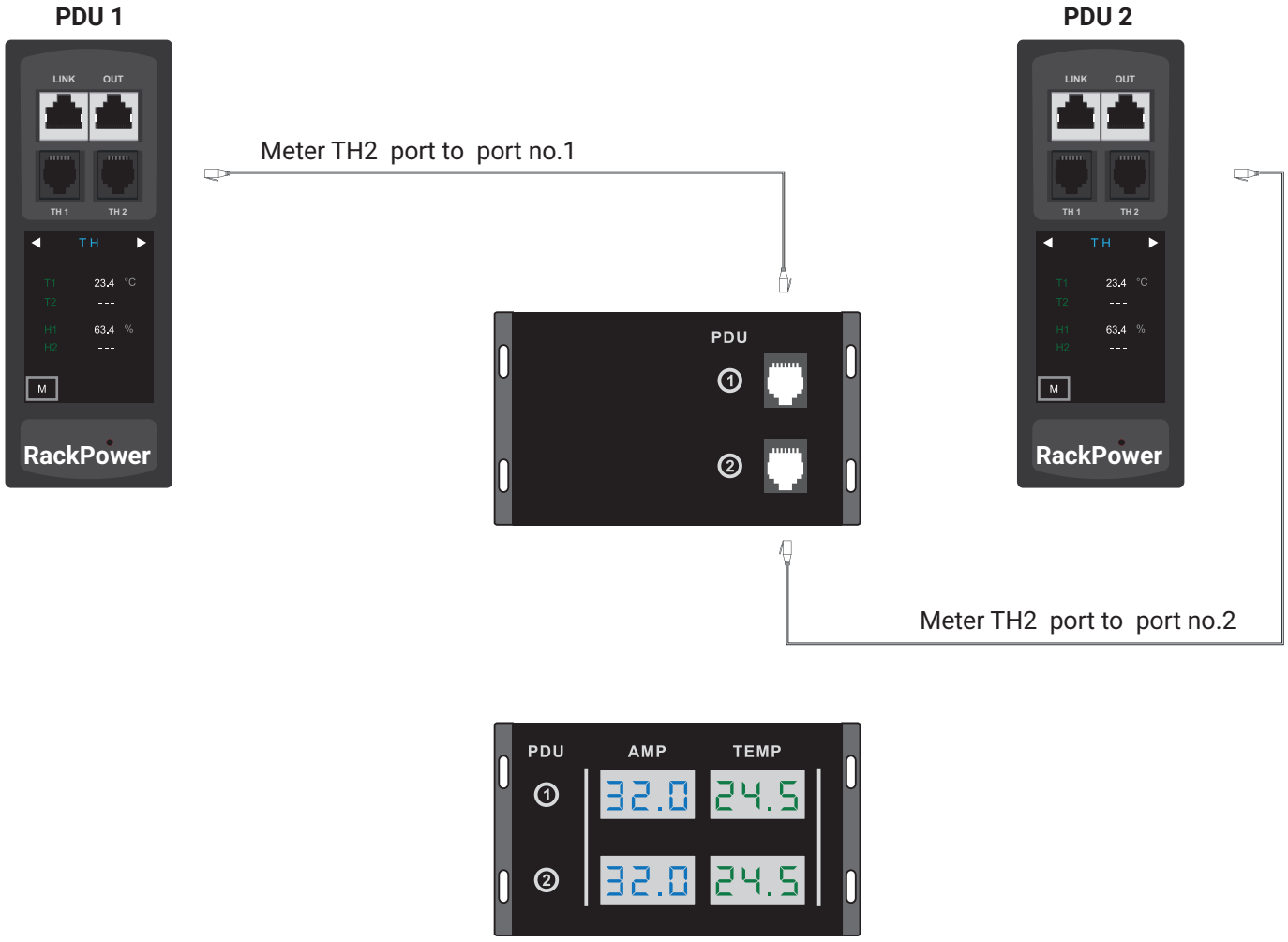
- Net : 0.25kg
- Gross : 0.48kg

## 1.6 OPTIONAL ACCESSORY

### 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 | ✔ |
| | Circuit Breaker ( MCB ) Monitoring | ✔ |
| **Basic Features** | Aggregate Current ( Amp ) Monitoring | ✔ |
| | Individual Outlet Switch ON/OFF | ✔ |
| | Temp-Humid Monitoring | ✔ |
| | Alarm Threhold Setting | ✔ |
| | Rising Alert Threshold Setting | ✔ |
| | Remote Access via Web | ✔ |
| | Graphic User Interface | ✔ |
| | Reporting | ✔ |
| **PDU Series Support** | Single & 3 Phase **RP1000** Monitored PDU | ✔ |
| | Single & 3 Phase **RP1500** Monitored PDU ( Outlet Measurement ) | ✔ |
| | Single & 3 Phase **RP2000** Switched PDU | ✔ |
| | Single & 3 Phase **RP3000** Switched PDU ( Outlet Measurement ) | ✔ |
| | Single Phase Dual Feed **RP1000** Monitored PDU | ✔ |
| | Single Phase Dual Feed **RP1500** Monitored PDU ( Outlet Measurement ) | ✔ |
| | Single Phase Dual Feed **RP2000** Switched PDU | ✔ |
| | Single Phase Dual Feed **RP3000** Switched PDU ( Outlet Measurement ) | ✔ |

## 2.2 IP HARDWARE CONFIGURATION

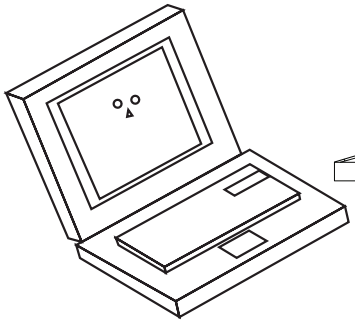
The following steps show the static IP setting only. For DHCP setting, please refer to < **7.3** > DHCP Setting

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**



CAT. 5 / 6 cable

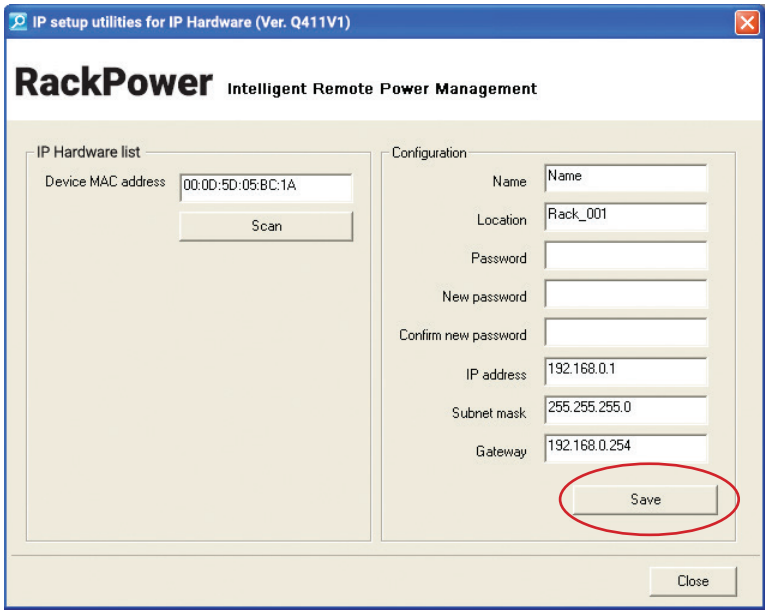
To notebook computer LAN port

To IP Hardware LAN port

IP Hardware on 1st level PDU

Reconnect the IP Hardware with the network device ( router or hub ), after finishing IP Hardware configuration.

Ensure the PDU in power ON status




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

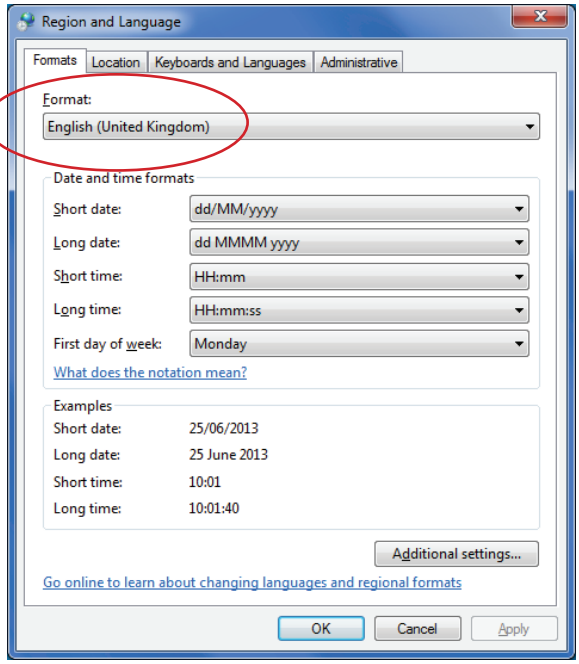
RackPower Manager – RPM-04 supports the OS platforms & languages as below:

- 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 logins 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 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

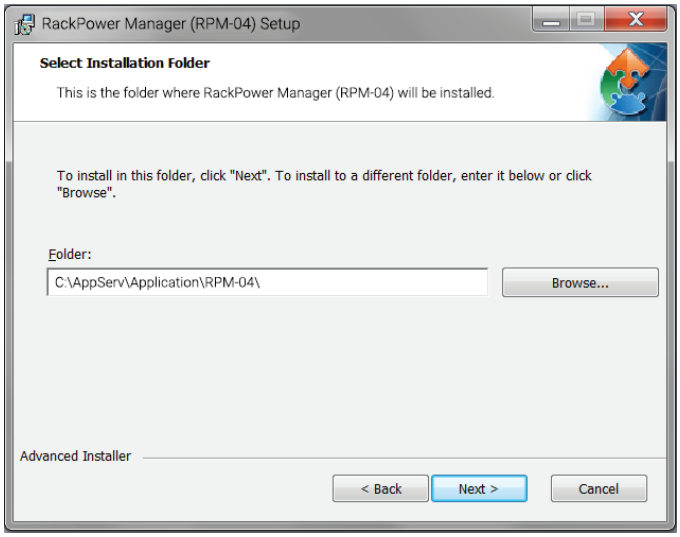
Please download the RackPower Manager - RPM-04 to the management PC
from the link https://lp.schroff.nvent.com/en/rackpower-support

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

RPM-04.msi

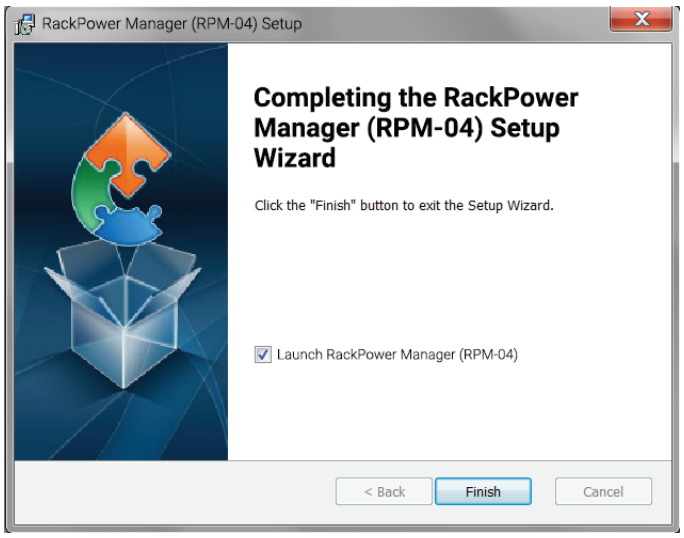
Double click the RPM-04.msi and follow the instruction to complete the installation.


click " **Next** "




click " **Install** "

## 2.5 SOFTWARE DOWNLOAD




click " **Finish** "

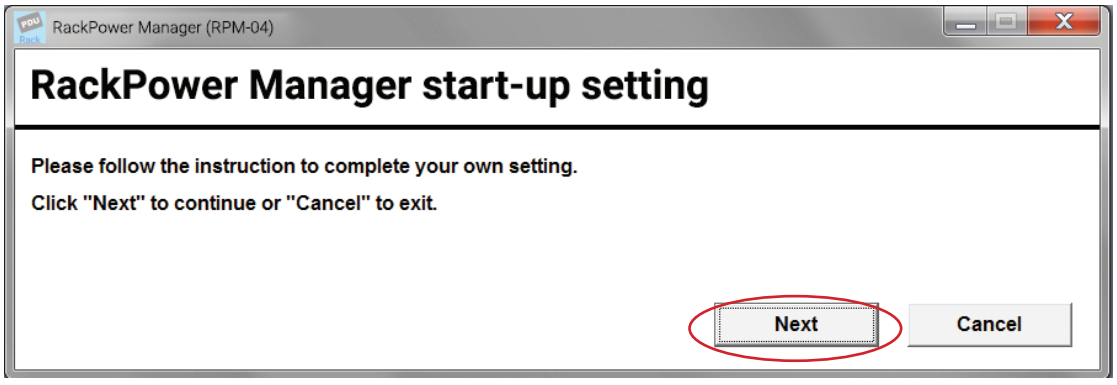
**Complete**

## < 2.6 > FIRST TIME START-UP SETTING

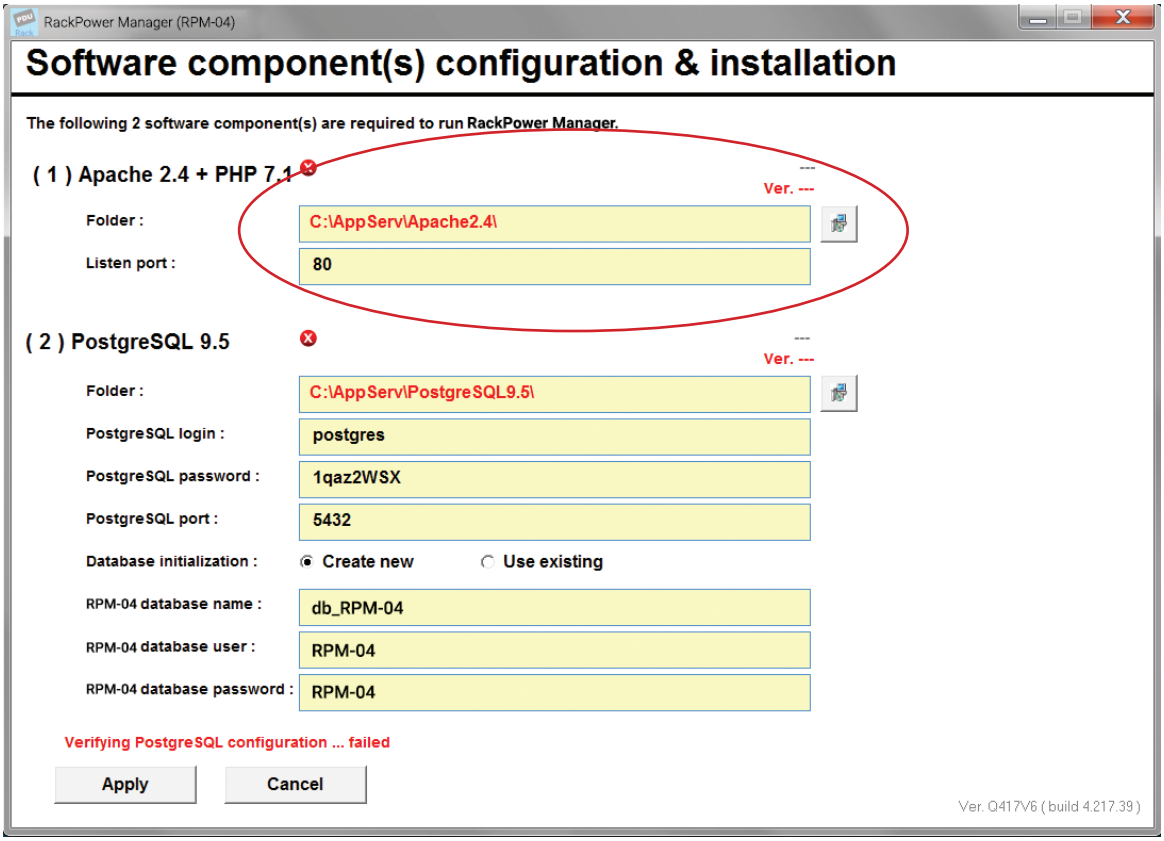
**Step 1.** Double Click the RackPower Manager - RPM-04 and follow the instruction to complete start-up setting.


RPM-04
RackPower Manager

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

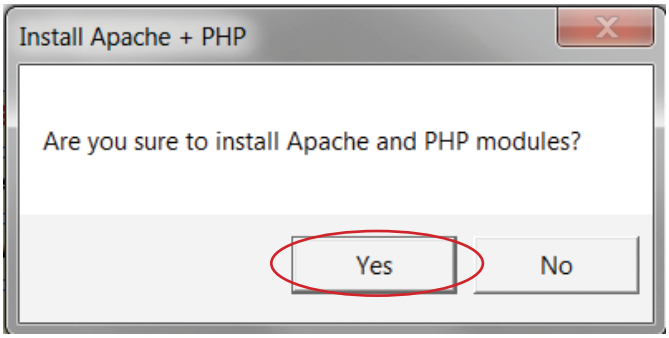


**Step 3.** Apache 2.4 + PHP 7.1 installation

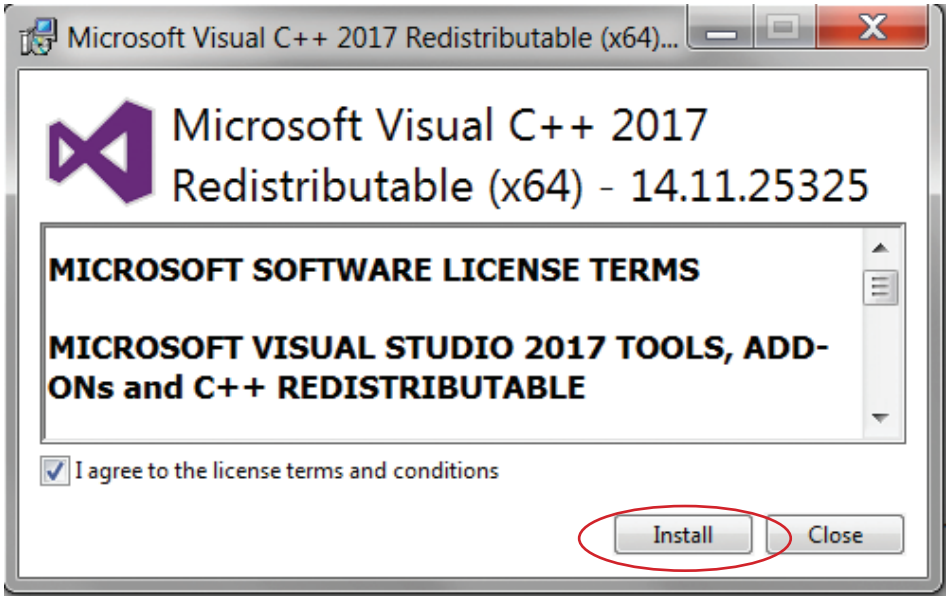



- Input the Apache 2.4 +PHP 7.1 installation path in " **Folder** " ( Default: **C:\AppServ\Apache2.4** )
- Input the port no. in " **Listen port** " ( Default: **80** )
- Click  install Apache 2.4 + PHP 7.1

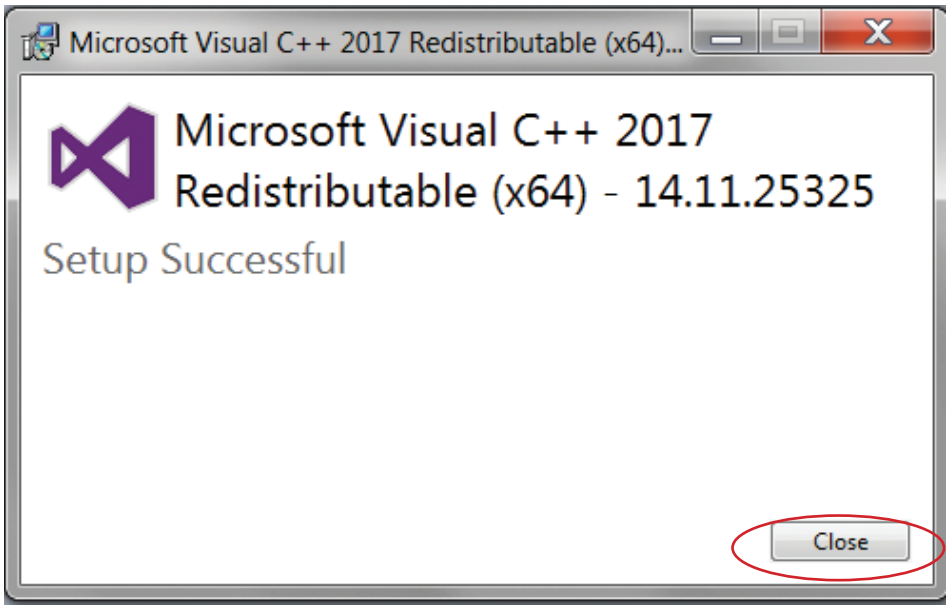
**Step 4.** Click " Yes " to start the installation



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

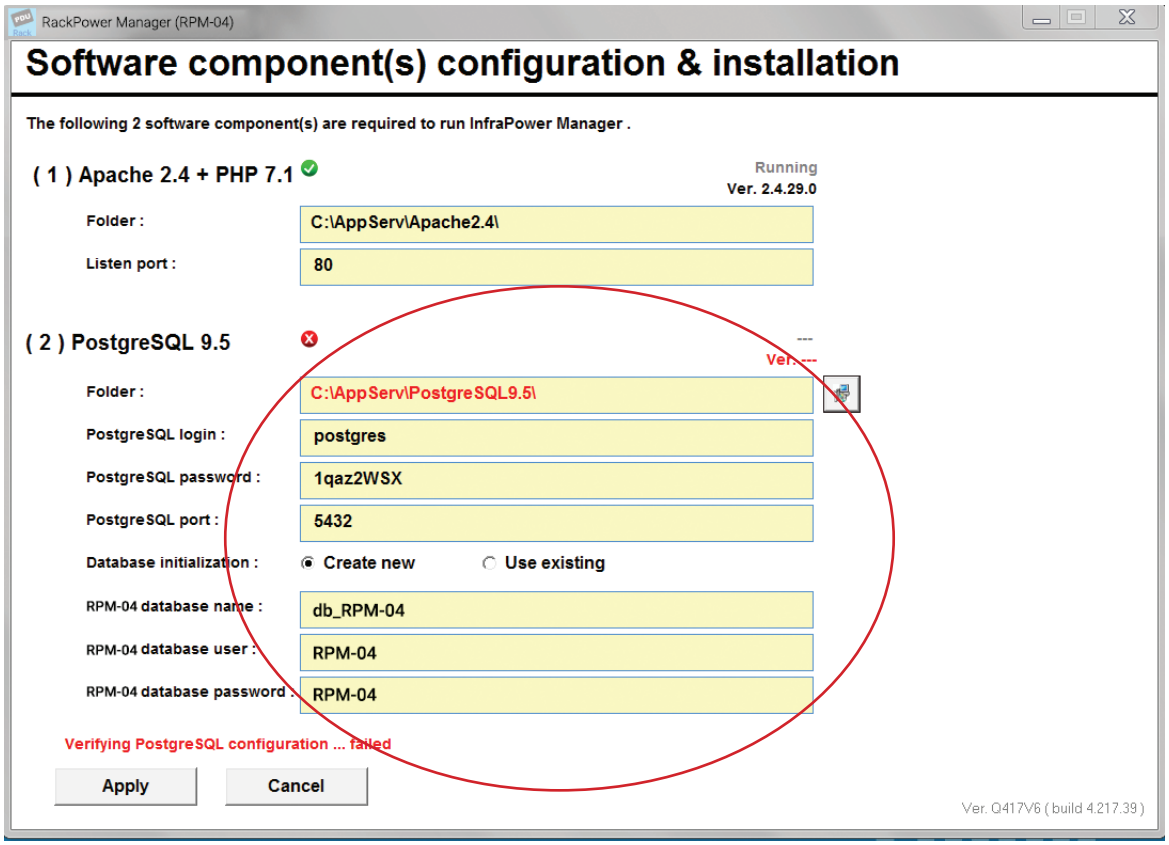



**Step 6.** Click " Close " to complete the installation.



## 2.6 FIRST TIME START-UP SETTING

**Step 7.** PostgreSQL 9.5 installation




- 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** )

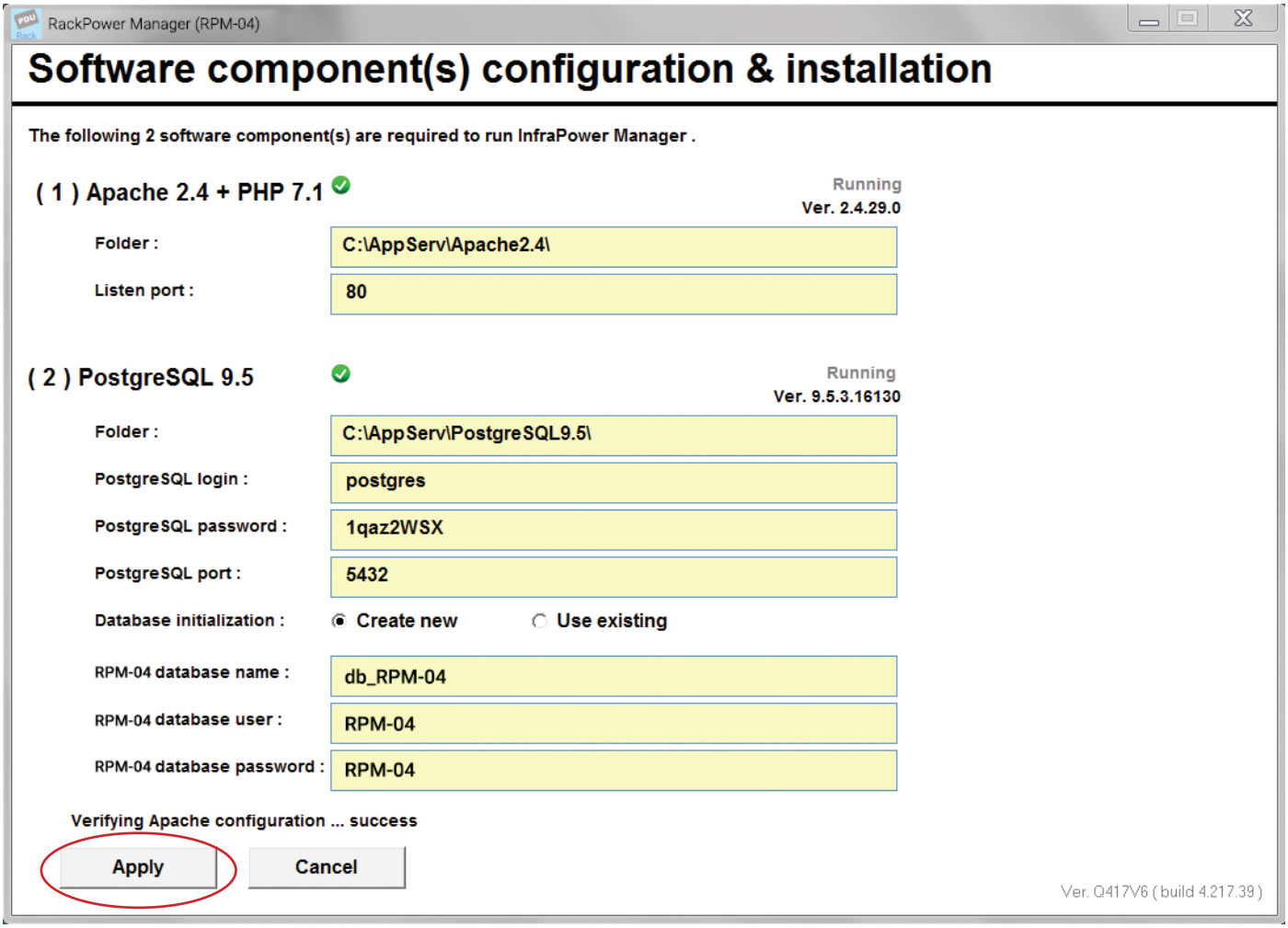
- Input RPM-04 database password in " **RPM-04 database password** " ( Default: **RPM-04** )

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




**Complete**

## 2.7 WEB SERVER PORT NO. CHANGE

**Web server port no. change**

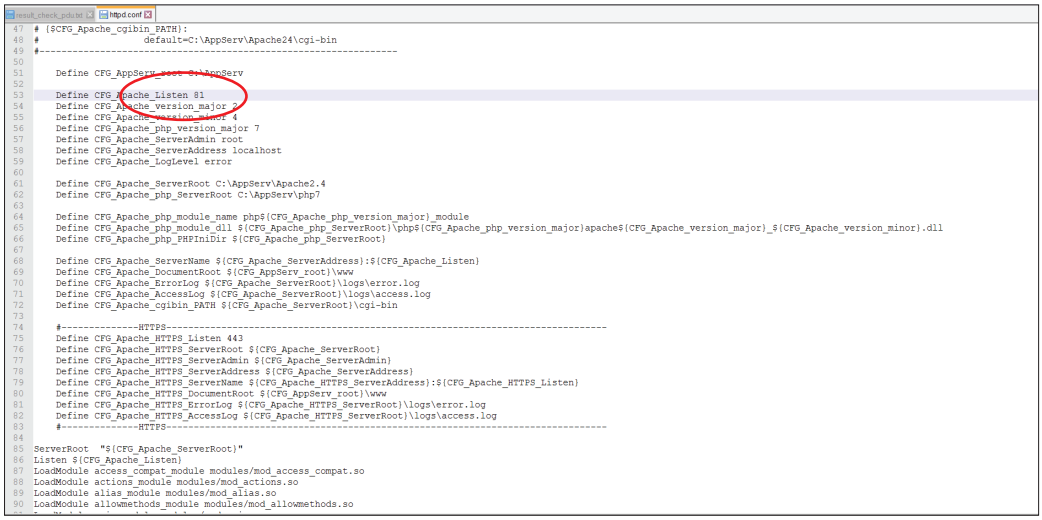
If users want to use another port no. instead of 80, please take the following steps after

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** "




**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** "


**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

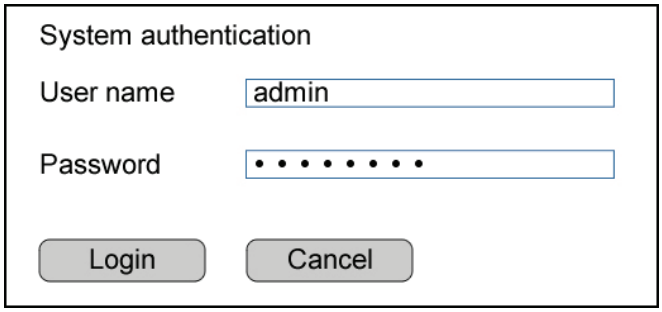
**Step 2.** Enter the URL of management PC into the address bar

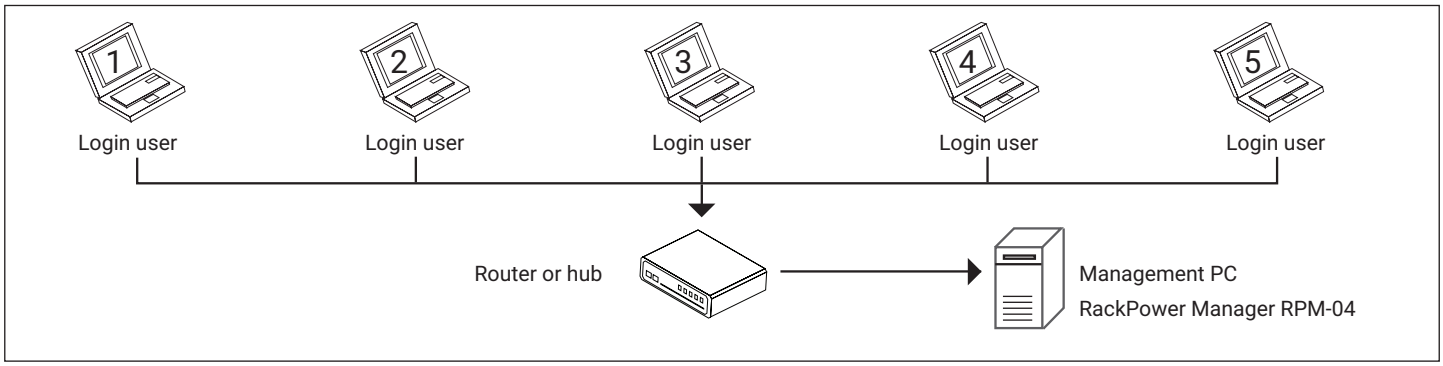
( If fail to access, please ask MIS to check if the port for web server is enable.
Default port: 80 )

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

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

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




Only one administrator among 5 concurrent users

Only Administrator is authorized to access:

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

## 3.1 SYSTEM SETUP

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

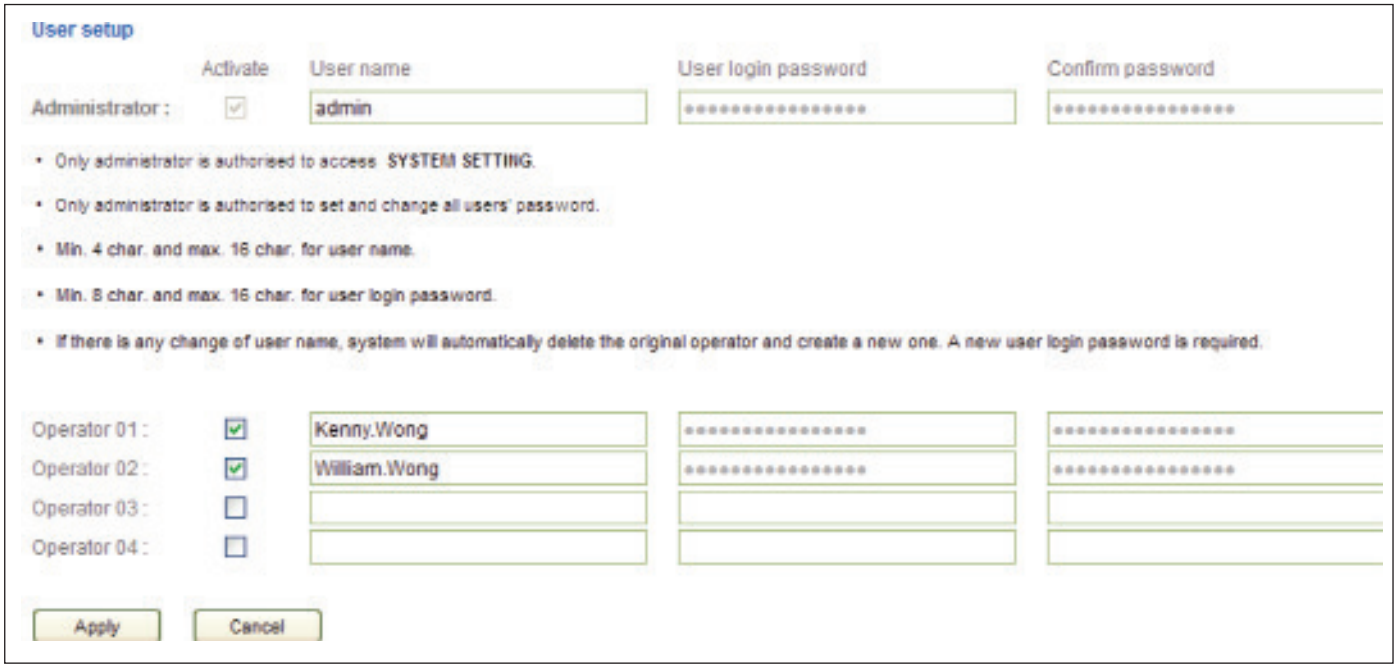
**Step 1.** Tick " **Operator 1:** "

**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



## 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

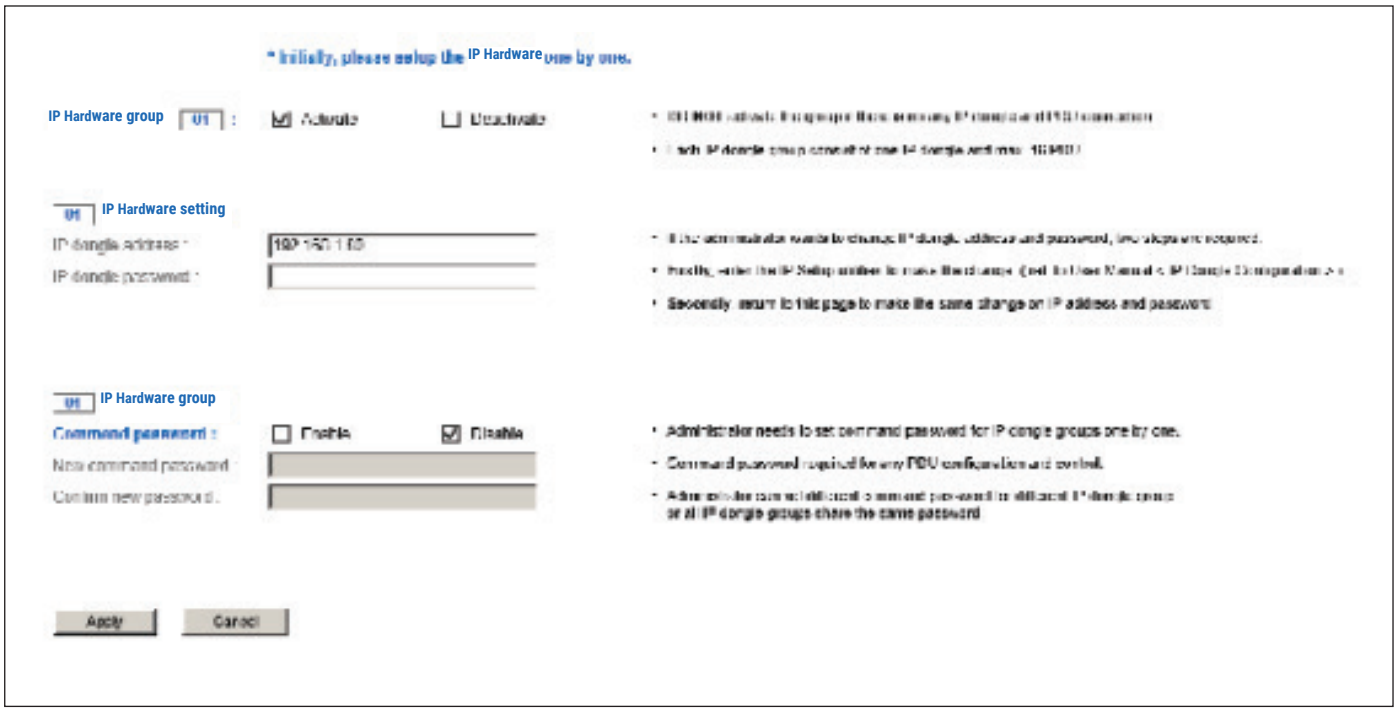
**Step 3.** " **Enable** " Command password

**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



## 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 "**

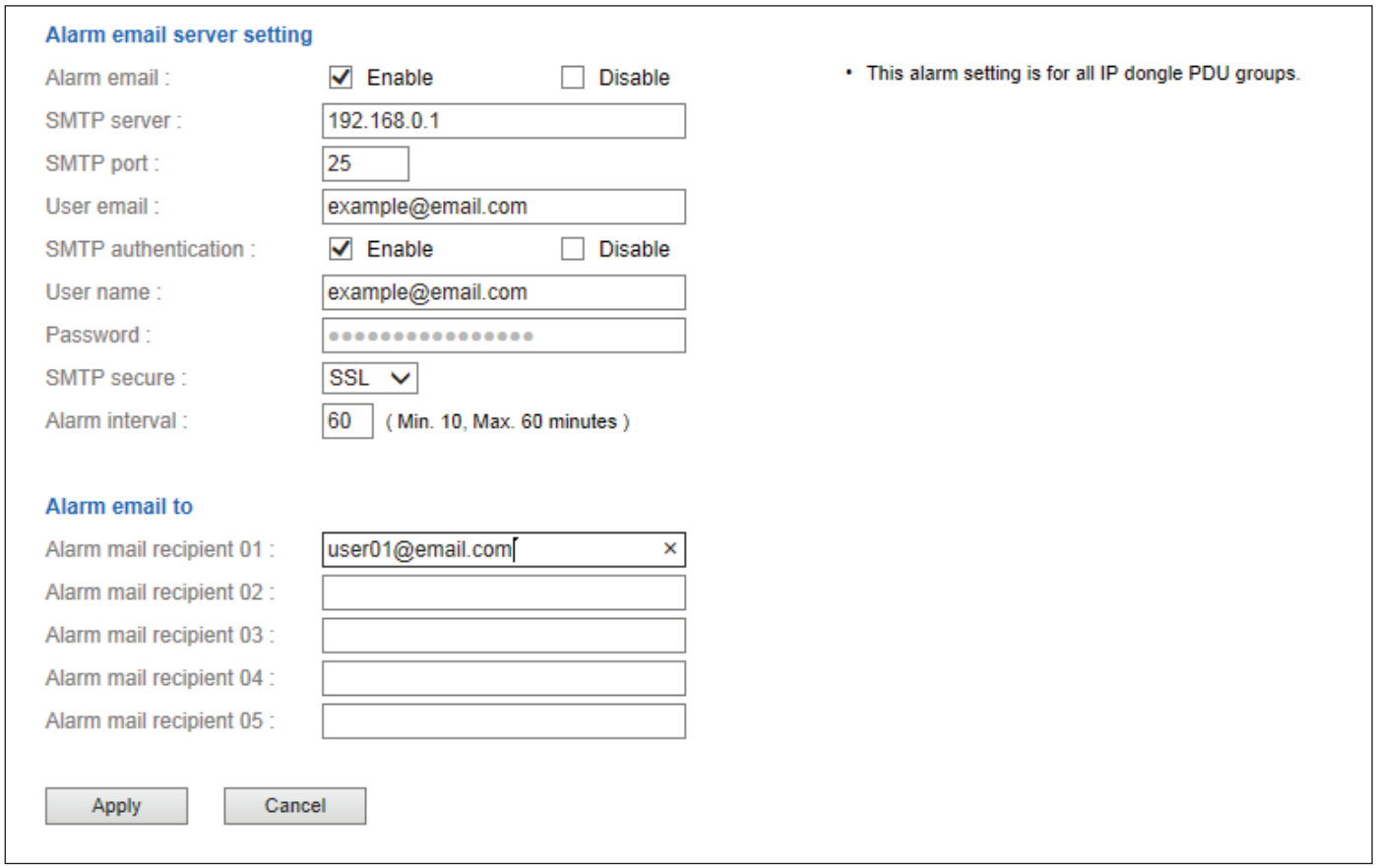
**Step 6.** Select the **" SMTP secure "** ( None / SSL / TLS )

**Step 7.** Input the **" Alarm interval "**

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

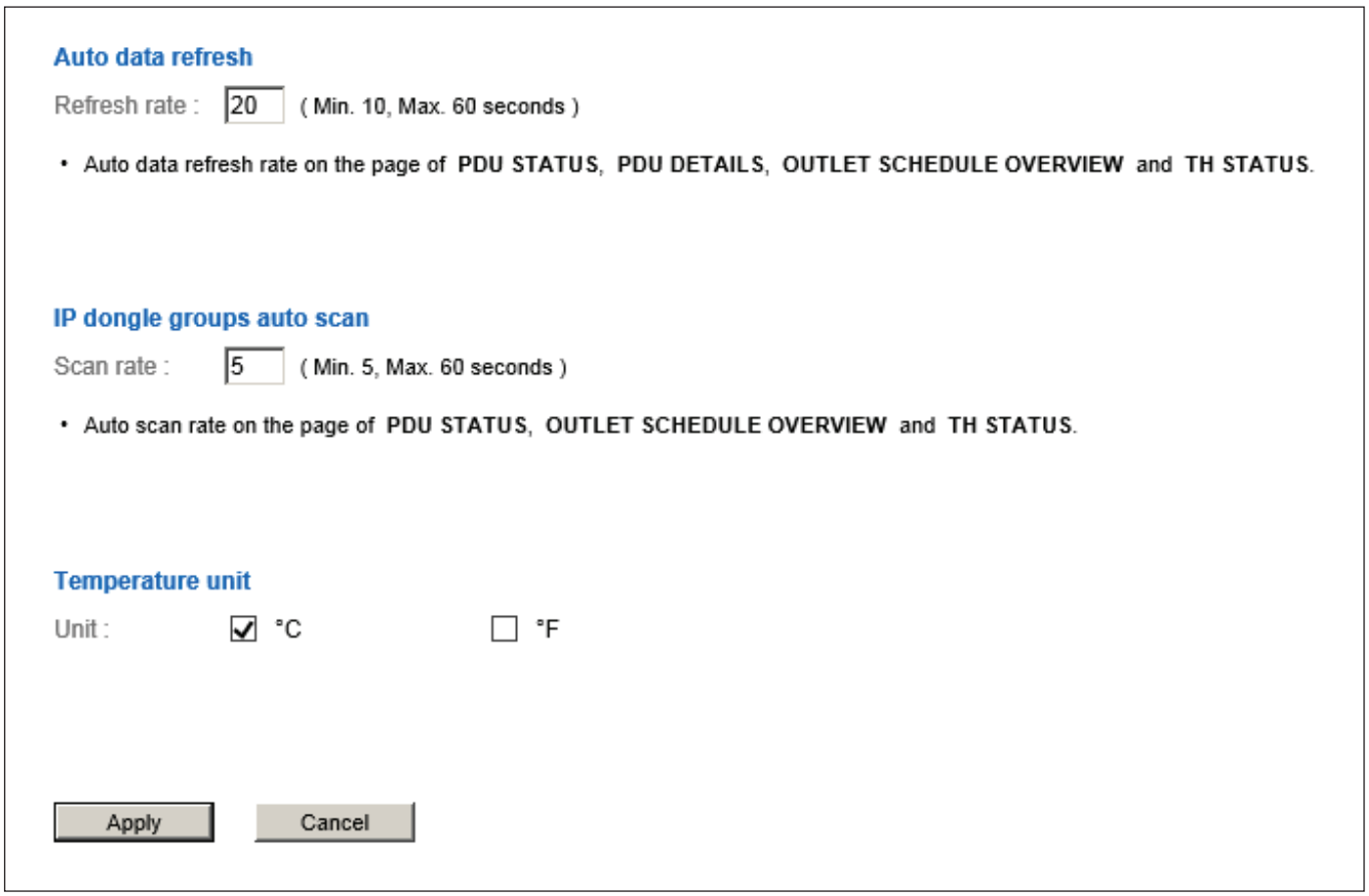
**Step 9.** Repeat step 8 for other alarm recipients

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

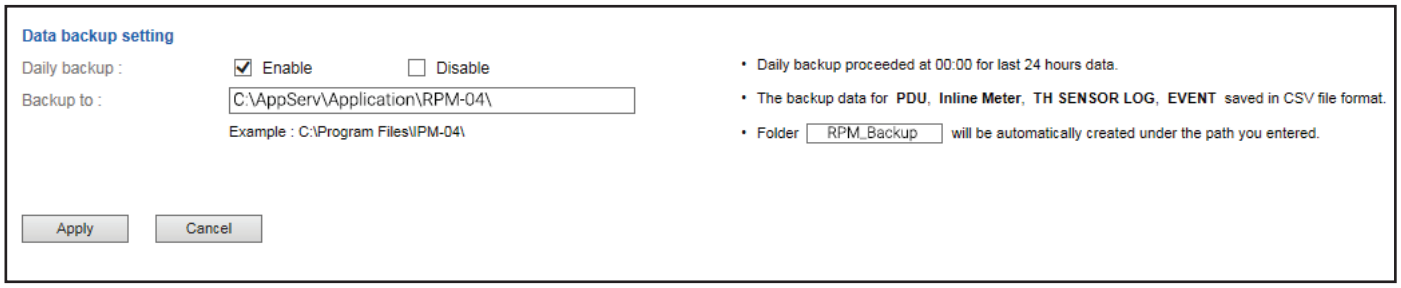


## 3.1 SYSTEM SETUP

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




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



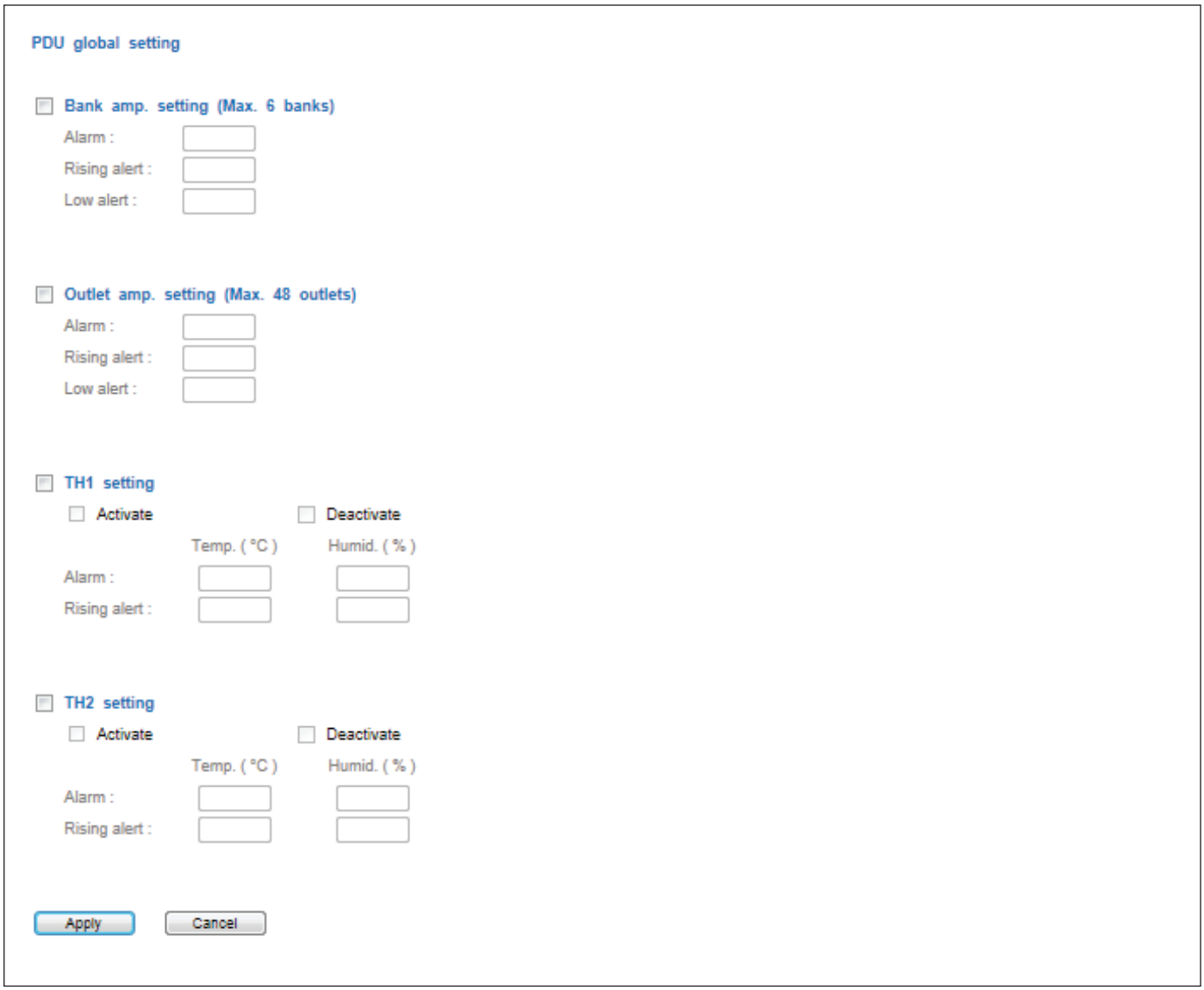
## 3.1 SYSTEM SETUP

**In < Global > ,** you can configure the settings of all the connected PDUs.

- 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 PDUs of each IP Hardware group first.



## 3.1 SYSTEM SETUP

In **< Sys log >**, it provides past 2000 event records of:

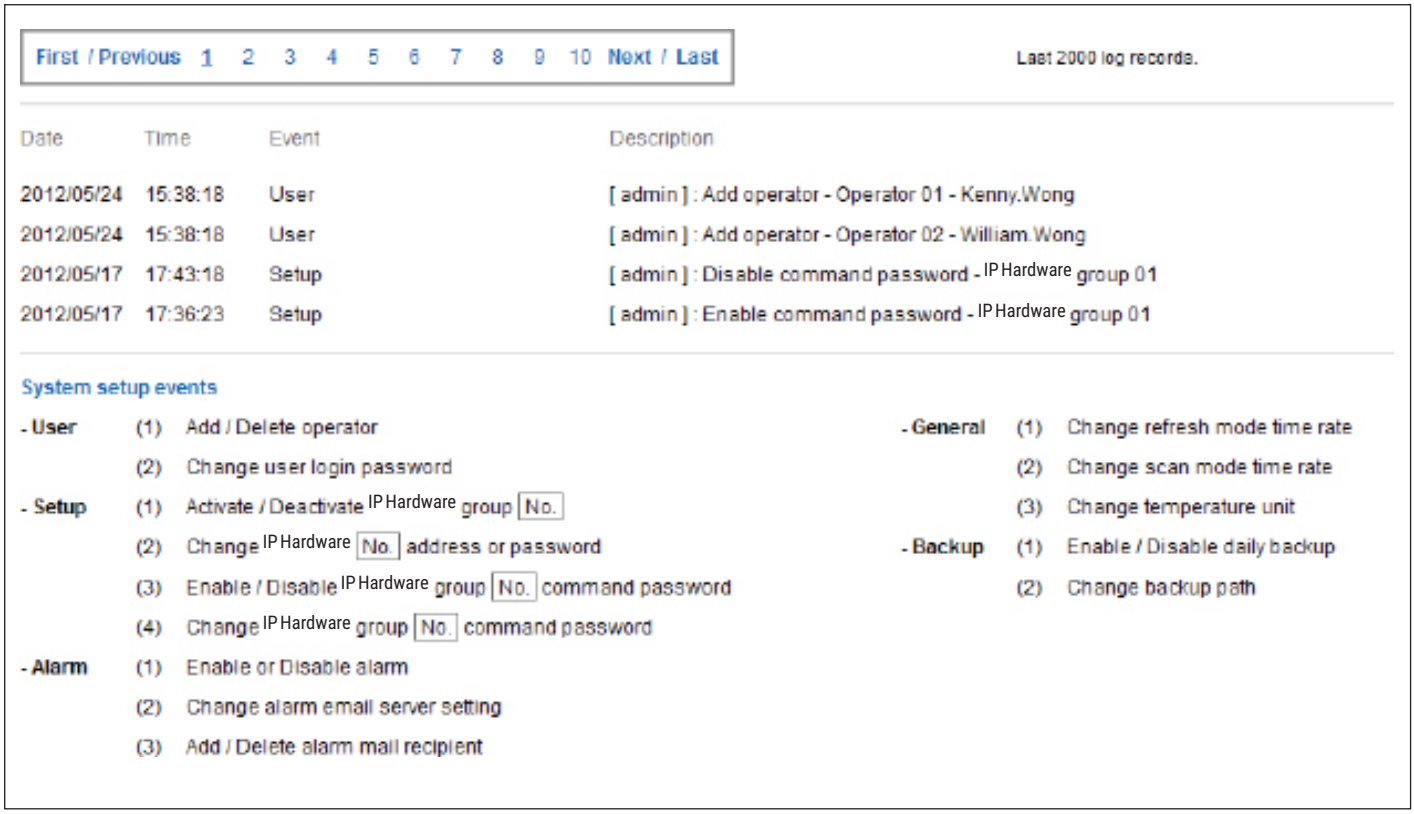
**- < User >**

**- < Setup >**

**- < Alarm >**

**- < General >**

**- < Backup >**



## 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 port**s " & 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

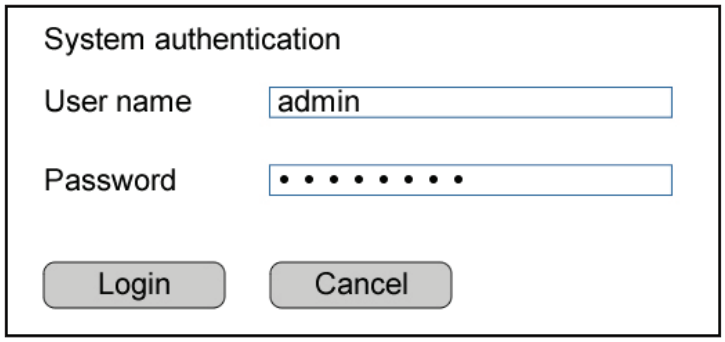
**Step 3.** Input the URL of RackPower Manager RPM-04 in the address bar

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** "



# Part IV. Software Usage & Operation

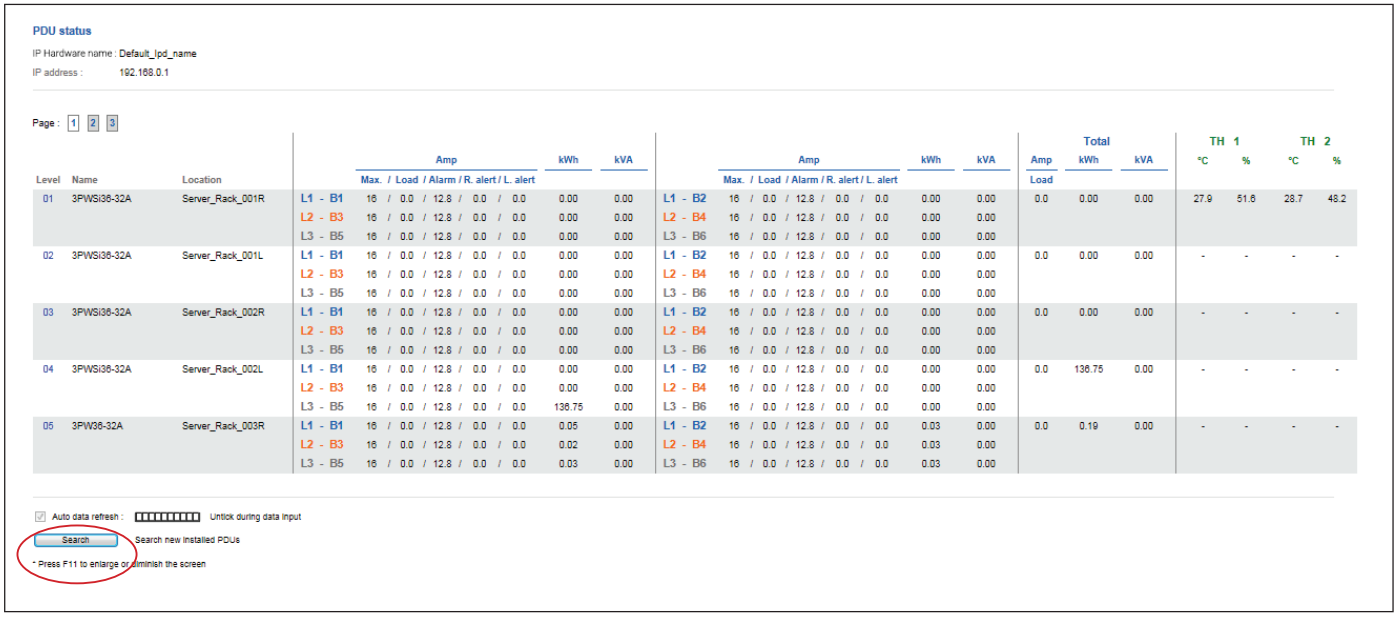
## 4.1 STATUS

**< 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 Max. / Load / Alarm / R. alert / L. alert | kWh | kVA | | Amp Max. / Load / Alarm / R. alert / L. alert | kWh | kVA | Total Amp Load | Total kWh | Total kVA | TH 1 °C | TH 1 % | TH 2 °C | TH 2 % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 01 | 3PWSi36-32A | Server_Rack_001R | L1 - B1 | 16 / 0.0 / 12.8 / 0.0 / 0.0 | 0.00 | 0.00 | L1 - B2 | 16 / 0.0 / 12.8 / 0.0 / 0.0 | 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 | 3PWSi36-32A | Server_Rack_001L | L1 - B1 | 16 / 0.0 / 12.8 / 0.0 / 0.0 | 0.00 | 0.00 | L1 - B2 | 16 / 0.0 / 12.8 / 0.0 / 0.0 | 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 | 3PWSi36-32A | Server_Rack_002R | L1 - B1 | 16 / 0.0 / 12.8 / 0.0 / 0.0 | 0.00 | 0.00 | L1 - B2 | 16 / 0.0 / 12.8 / 0.0 / 0.0 | 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 | 3PWSi36-32A | Server_Rack_002L | L1 - B1 | 16 / 0.0 / 12.8 / 0.0 / 0.0 | 0.00 | 0.00 | L1 - B2 | 16 / 0.0 / 12.8 / 0.0 / 0.0 | 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 | 136.75 | 0.00 | 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 | L1 - B2 | 16 / 0.0 / 12.8 / 0.0 / 0.0 | 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 : Untick during data input

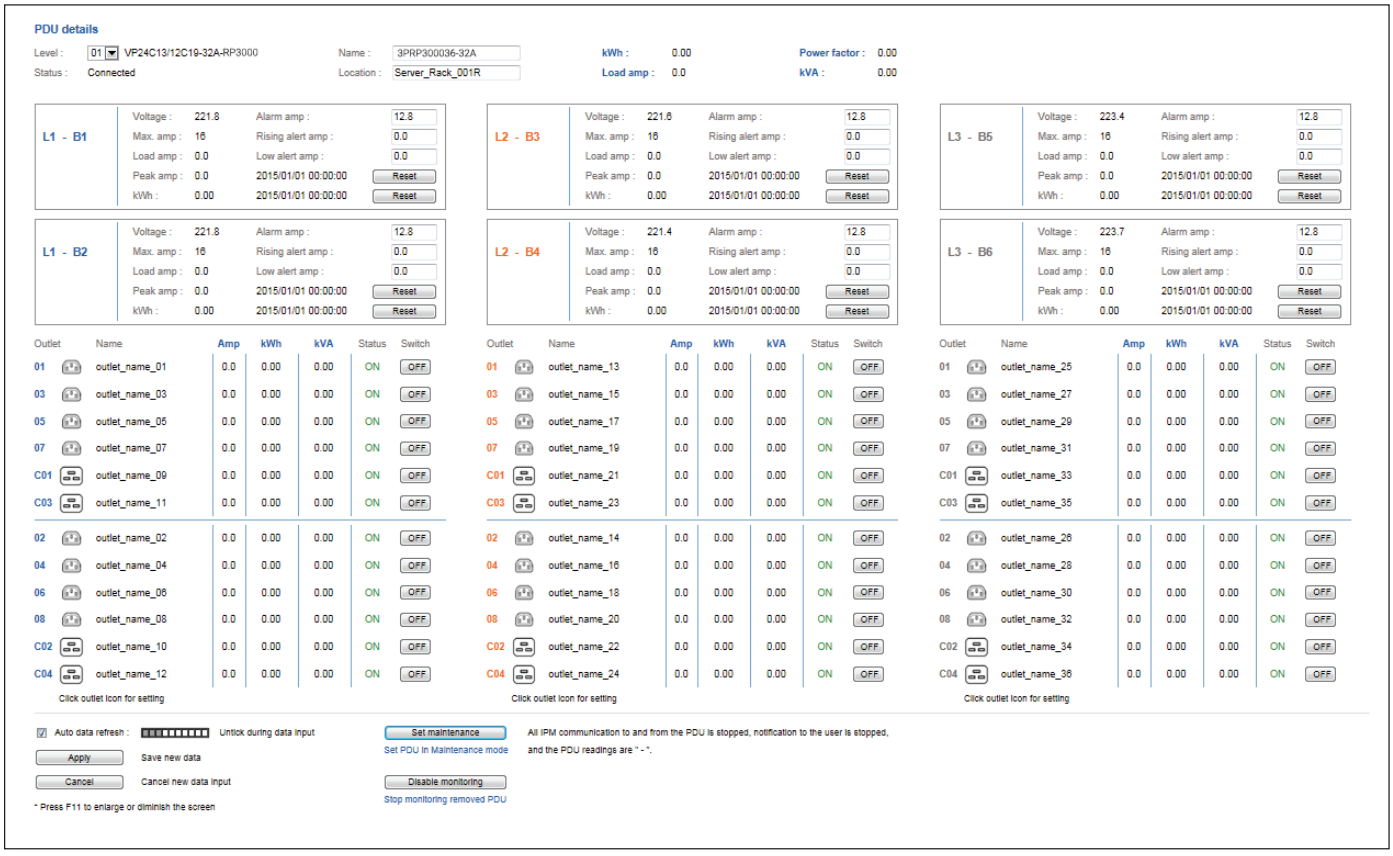
Search — Search new installed PDUs

* 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



## 4.3 OUTLET SETTING

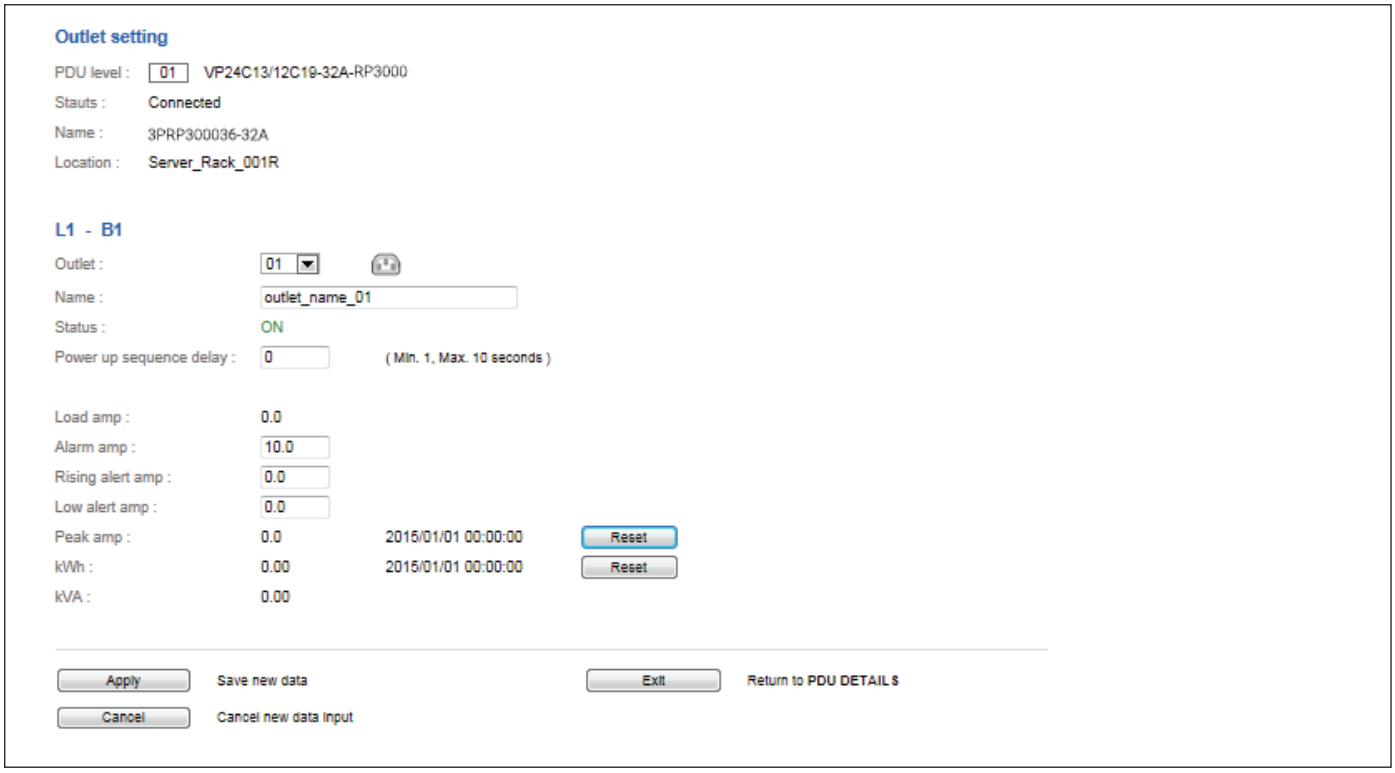
In < **Outlet setting** >,

- 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 )

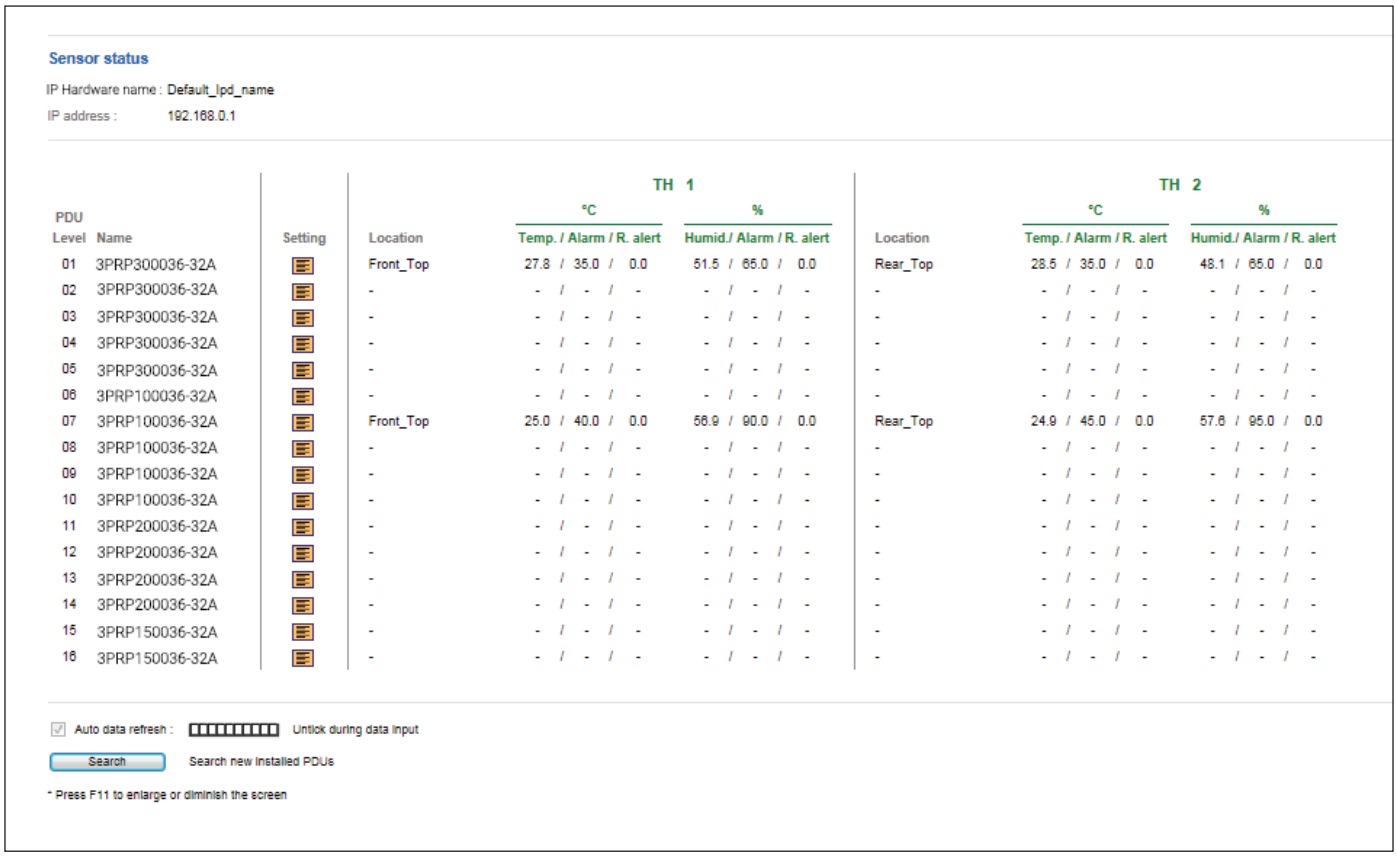


## 4.4 SENSOR STATUS

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 Level | Name | Setting | Location | TH 1 °C Temp. / Alarm / R. alert | TH 1 % Humid./ Alarm / R. alert | Location | TH 2 °C Temp. / Alarm / R. alert | TH 2 % 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 | 3PRP300036-32A | | - | - / - / - | - / - / - | - | - / - / - | - / - / - |
| 06 | 3PRP100036-32A | | - | - / - / - | - / - / - | - | - / - / - | - / - / - |
| 07 | 3PRP100036-32A | | Front_Top | 25.0 / 40.0 / 0.0 | 56.9 / 90.0 / 0.0 | Rear_Top | 24.9 / 45.0 / 0.0 | 57.6 / 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 | 3PRP150036-32A | | - | - / - / - | - / - / - | - | - / - / - | - / - / - |
| 16 | 3PRP150036-32A | | - | - / - / - | - / - / - | - | - / - / - | - / - / - |

Auto data refresh : Untick during data input

Search — Search new installed PDUs

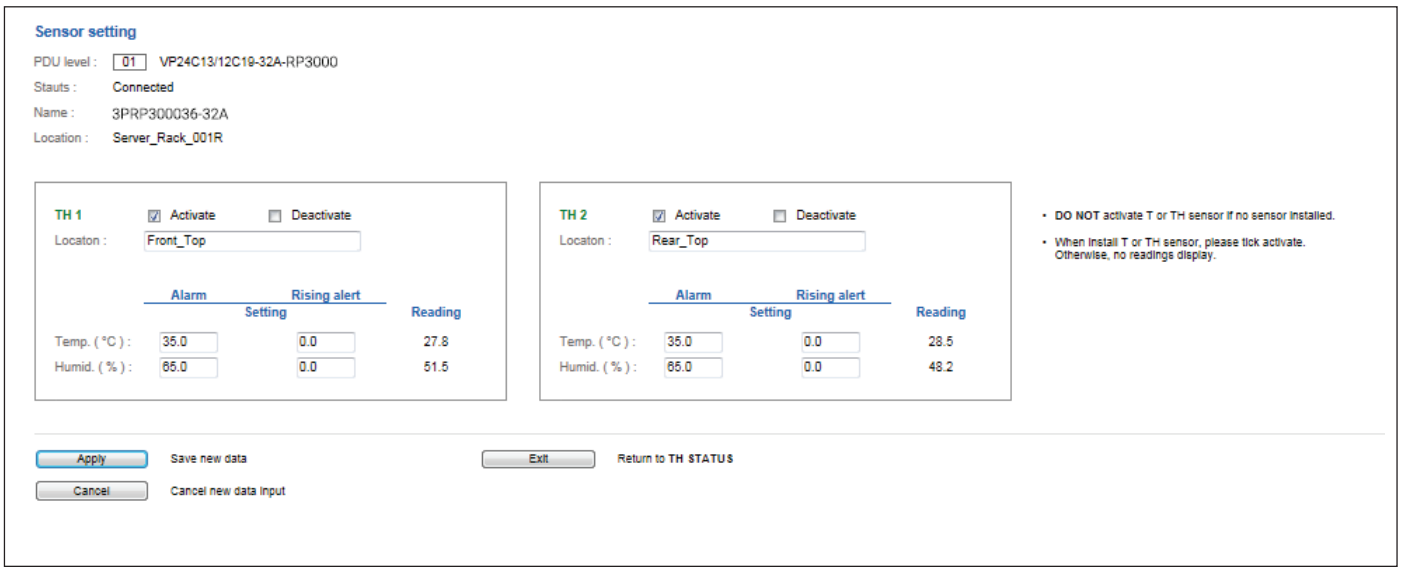
* Press F11 to enlarge or diminish the screen

## 4.5 SENSOR SETTING

In < **TH setting** >,

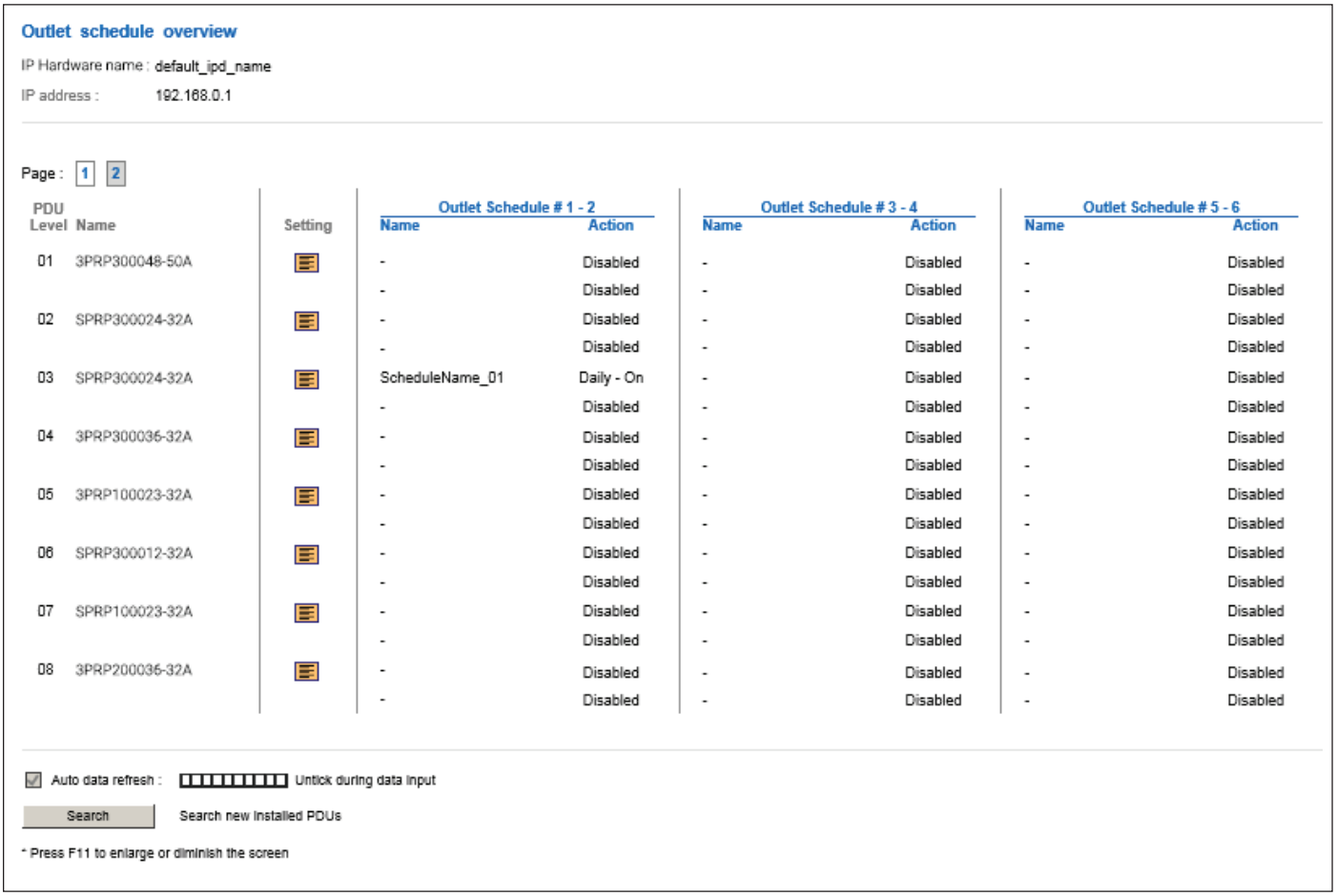
- Default TH setting: Deactivate
- " **Activate** " Temp. & Humid sensors ONLY when they are connected
- Change " **Location** " , " **Rising alert Setting** " & "**Alarm Setting** " of Temp. & Humid sensors
- Click " **Apply** " to finish the above settings

If no any TH sensor connected, NEVER activate.



## 4.6 OUTLET SCHEDULE OVERVIEW

< **Outlet Schedule Overview** > provides an overview on outlet schedule setting of PDU's 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 Name | Outlet Schedule # 1 - 2 Action | Outlet Schedule # 3 - 4 Name | Outlet Schedule # 3 - 4 Action | Outlet Schedule # 5 - 6 Name | Outlet Schedule # 5 - 6 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 | 3PRP100023-32A | | - | 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 |

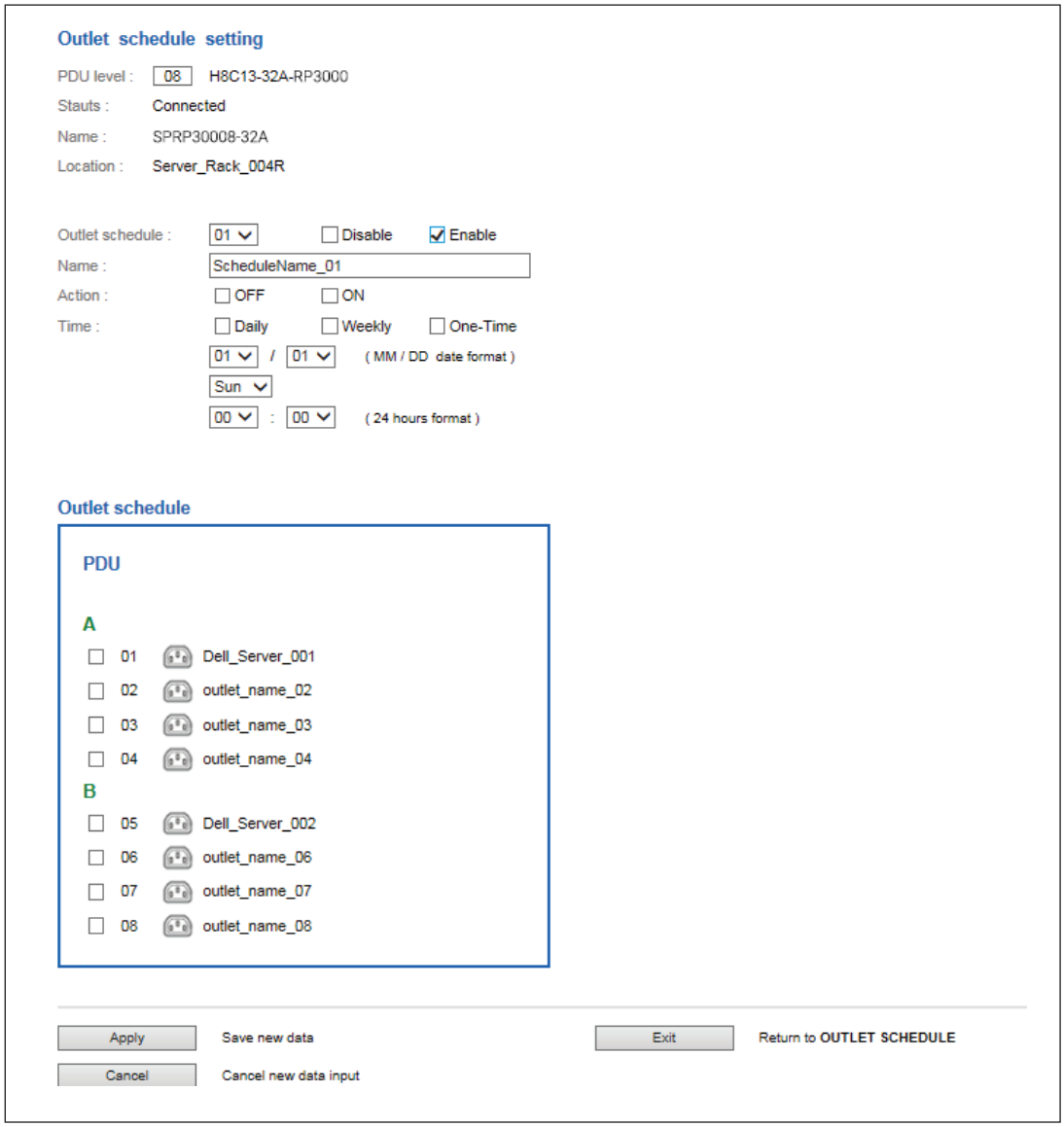
Auto data refresh : Untick during data input

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 )

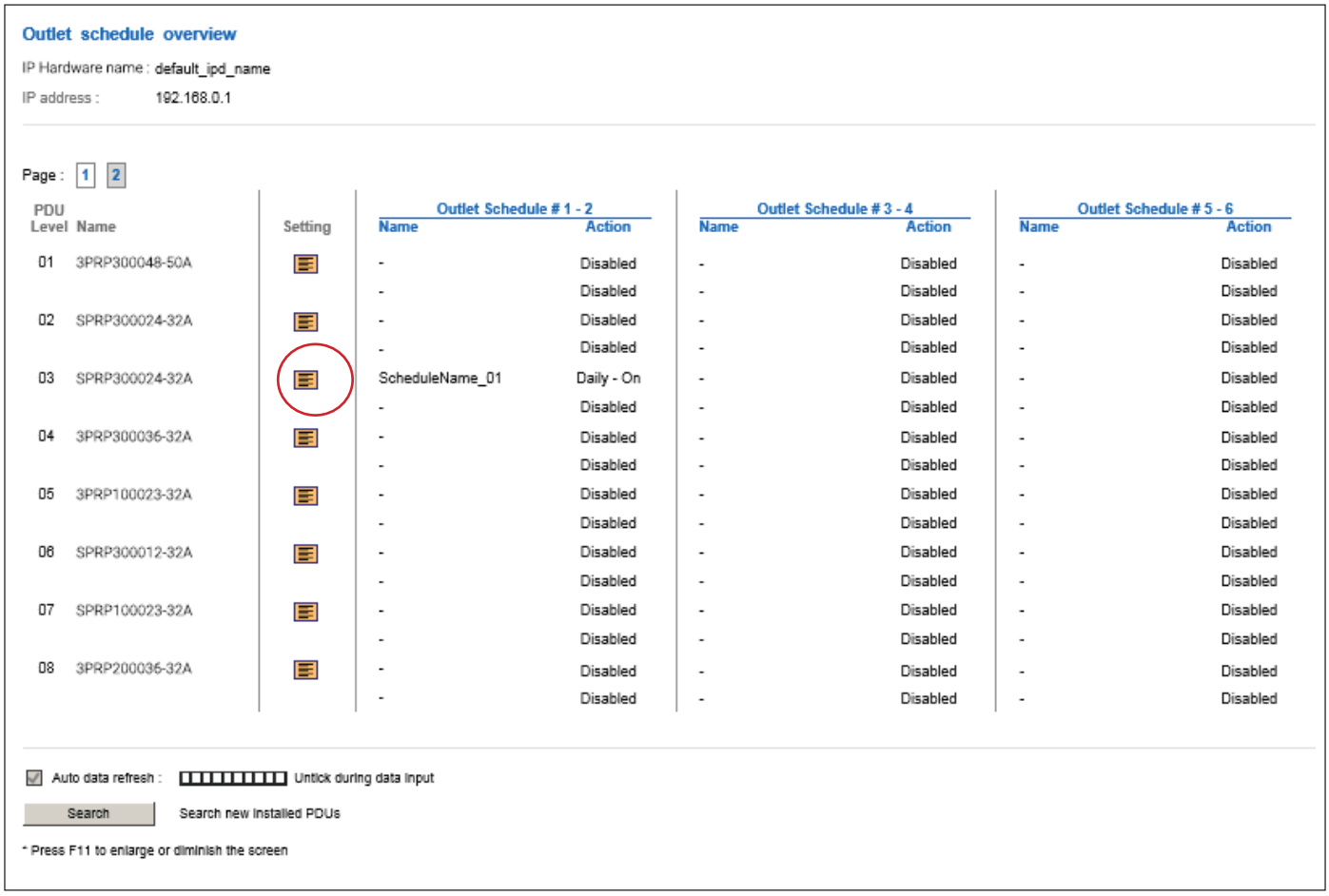


## 4.7 OUTLET SCHEDULE SETTING

PDU outlet schedule is a function allowing users to set a specific time to turn ON or OFF the outlet 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** "



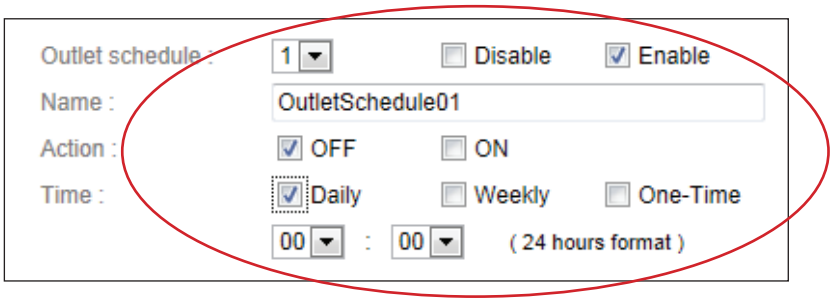
## 4.7 OUTLET SCHEDULE SETTING

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

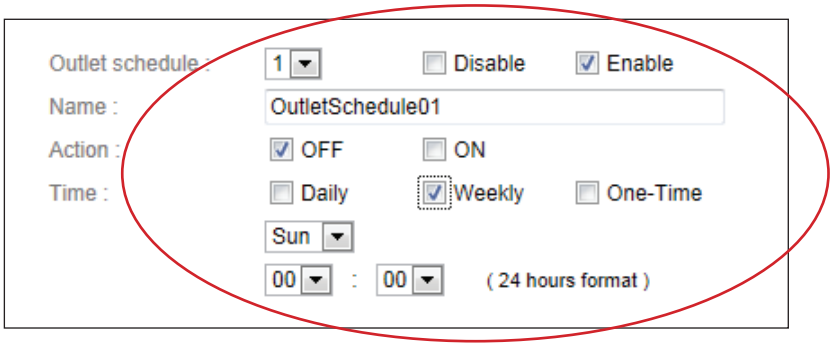
**Step 3.** Provide the name of the outlet schedule

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

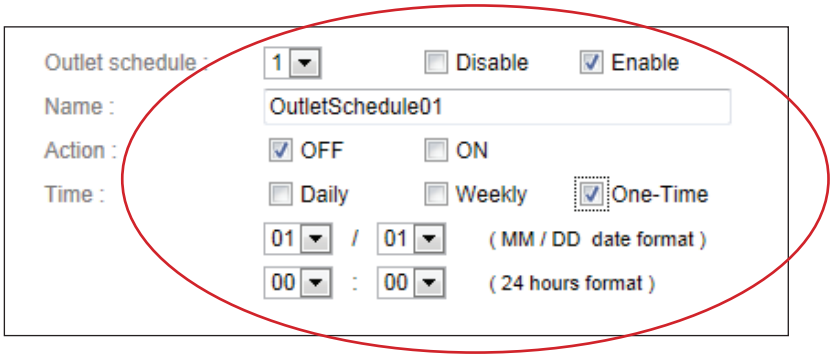
**Step 5.** Select the time for outlet schedule.




**Daily** ON / OFF Schedule



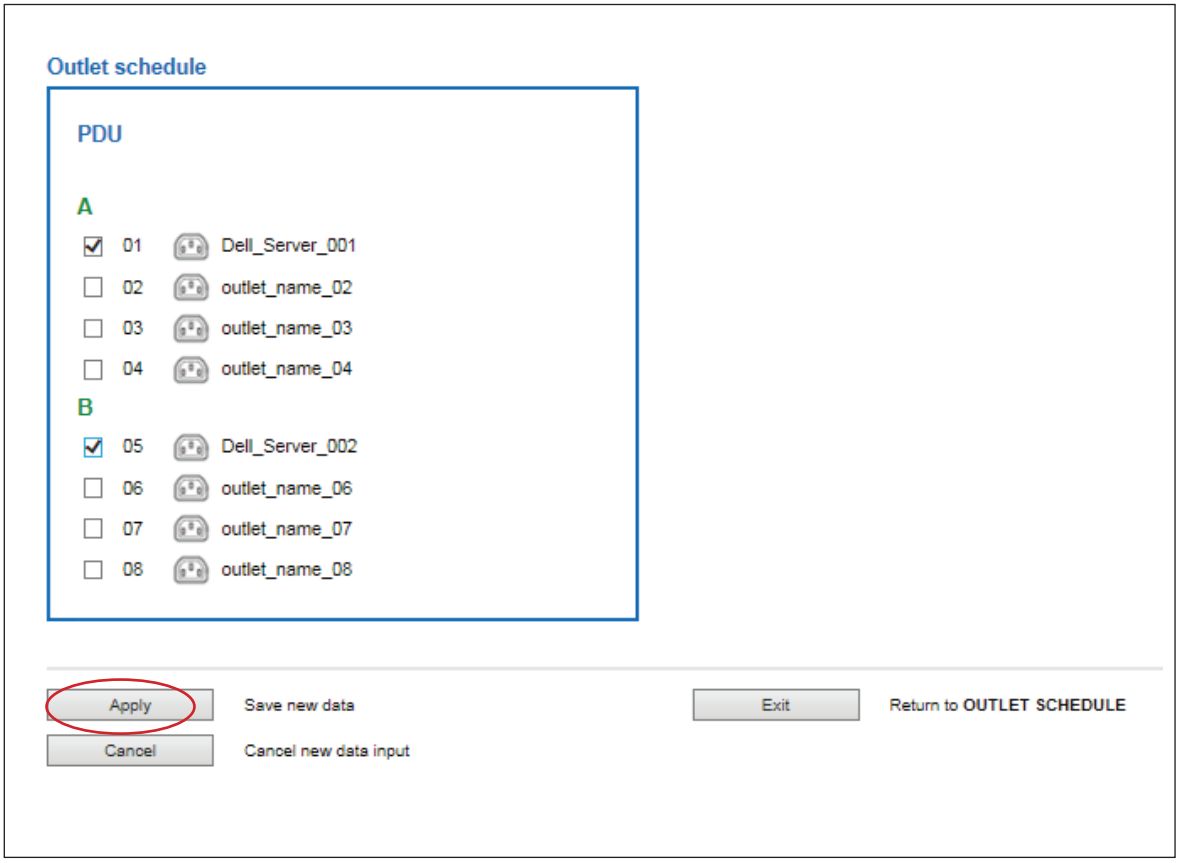

**Weekly** ON / OFF Schedule




**One-time** ON / OFF Schedule

## 4.7 OUTLET SCHEDULE SETTING

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




**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.

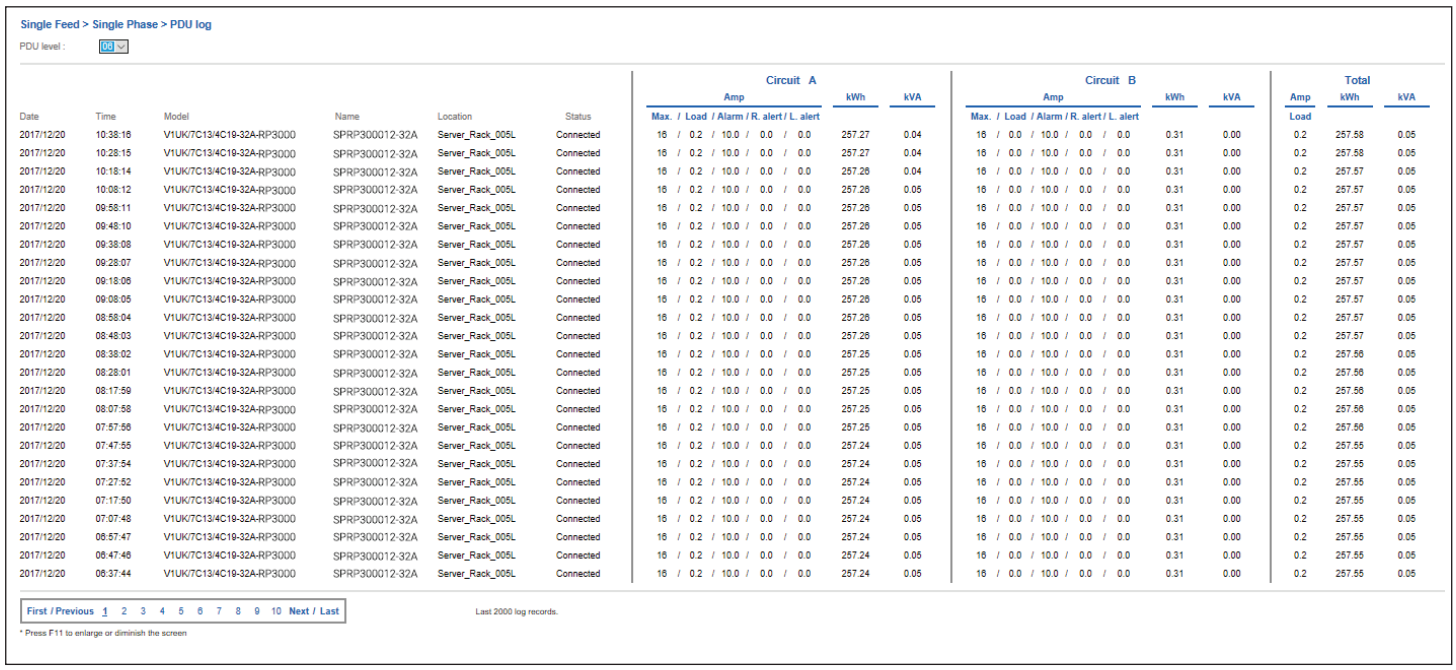
# Part V. Log & Events

## 5.1 SINGLE PHASE PDU / OUTLET LOG

**< Single Phase PDU Log >**

provides past 2000 log records of each Single Phase PDU.

The software will generate a PDU log record every 10 mins.



Single Feed > Single Phase > PDU log

PDU level : 06

| | | | | | | Circuit A | | | Circuit B | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Amp | kWh | kVA | Amp | kWh | kVA | Amp | kWh | kVA |
| Date | Time | Model | Name | Location | Status | Max. / Load / Alarm / R. alert / L. alert | | | Max. / Load / Alarm / R. alert / L. alert | | | Load | | |
| 2017/12/20 | 10:38:16 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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 | V1UK/7C13/4C19-32A-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

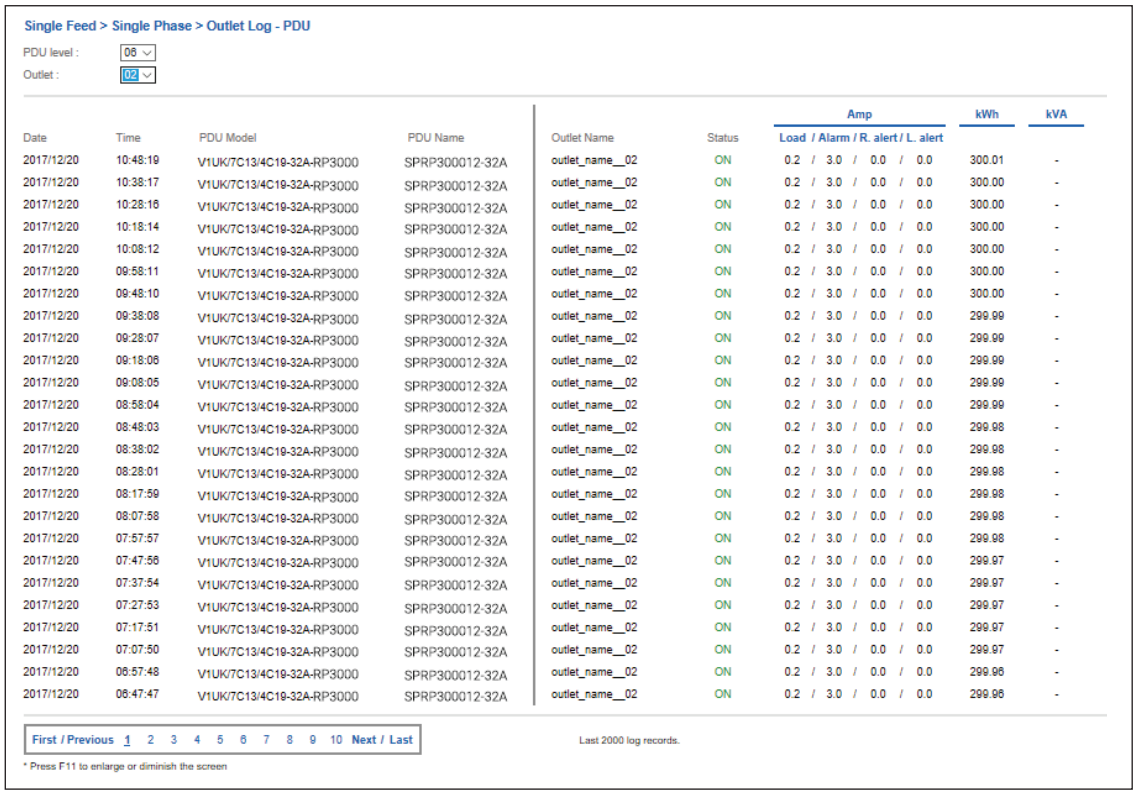
Last 2000 log records.

* 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 generate an outlet log record every 10 mins.



Single Feed > Single Phase > Outlet Log - PDU

PDU level : 06

Outlet : 02

| | | | | | | Amp | kWh | kVA |
|---|---|---|---|---|---|---|---|---|
| Date | Time | PDU Model | PDU Name | Outlet Name | Status | Load / Alarm / R. alert / L. alert | | |
| 2017/12/20 | 10:48:19 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 300.01 | - |
| 2017/12/20 | 10:38:17 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 10:28:16 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 10:18:14 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 10:08:12 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 09:58:11 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 09:48:10 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 09:38:08 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 09:28:07 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 09:18:06 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 09:08:05 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 08:58:04 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 08:48:03 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 08:38:02 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 08:28:01 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 08:17:59 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 08:07:58 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 07:57:57 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 07:47:56 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 07:37:54 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 07:27:53 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 07:17:51 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 07:07:50 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 06:57:48 | V1UK/7C13/4C19-32A-RP3000 | SPRP300012-32A | outlet_name__02 | ON | 0.2 / 3.0 / 0.0 / 0.0 | 299.96 | - |
| 2017/12/20 | 06:47:47 | V1UK/7C13/4C19-32A-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.

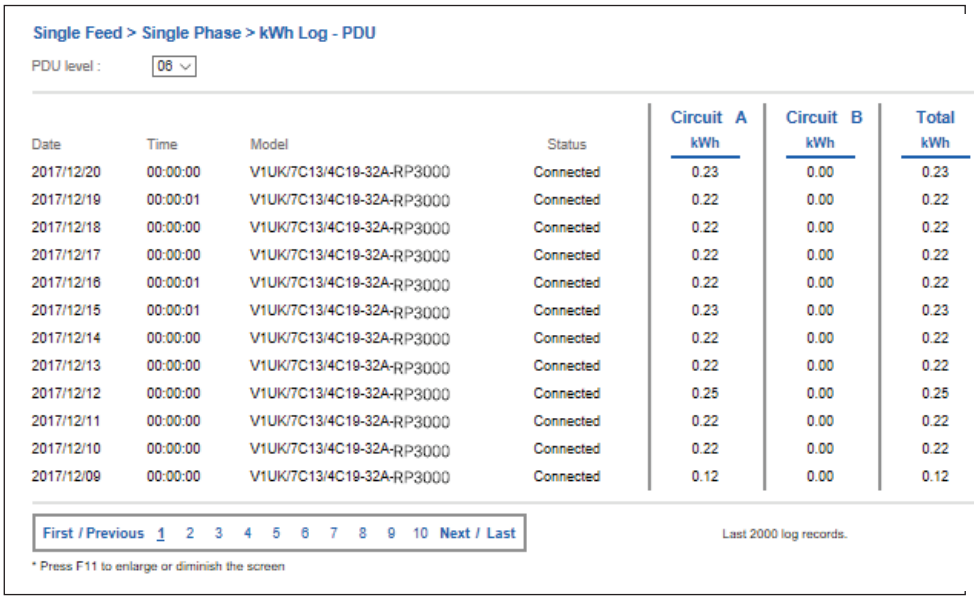
* Press F11 to enlarge or diminish the screen

## 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 |

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

Last 2000 log records.

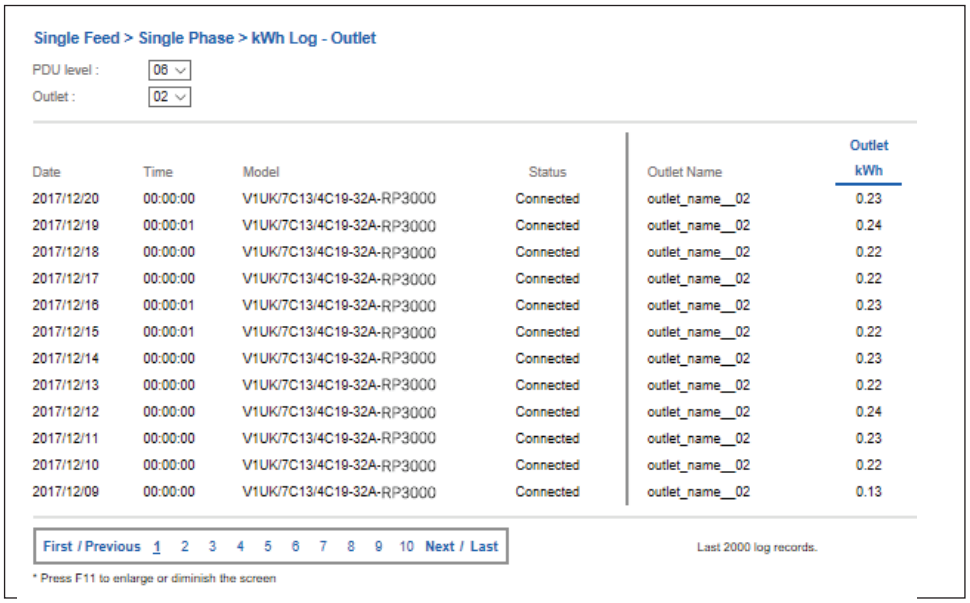
* Press F11 to enlarge or diminish the screen

**< Single Phase 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.

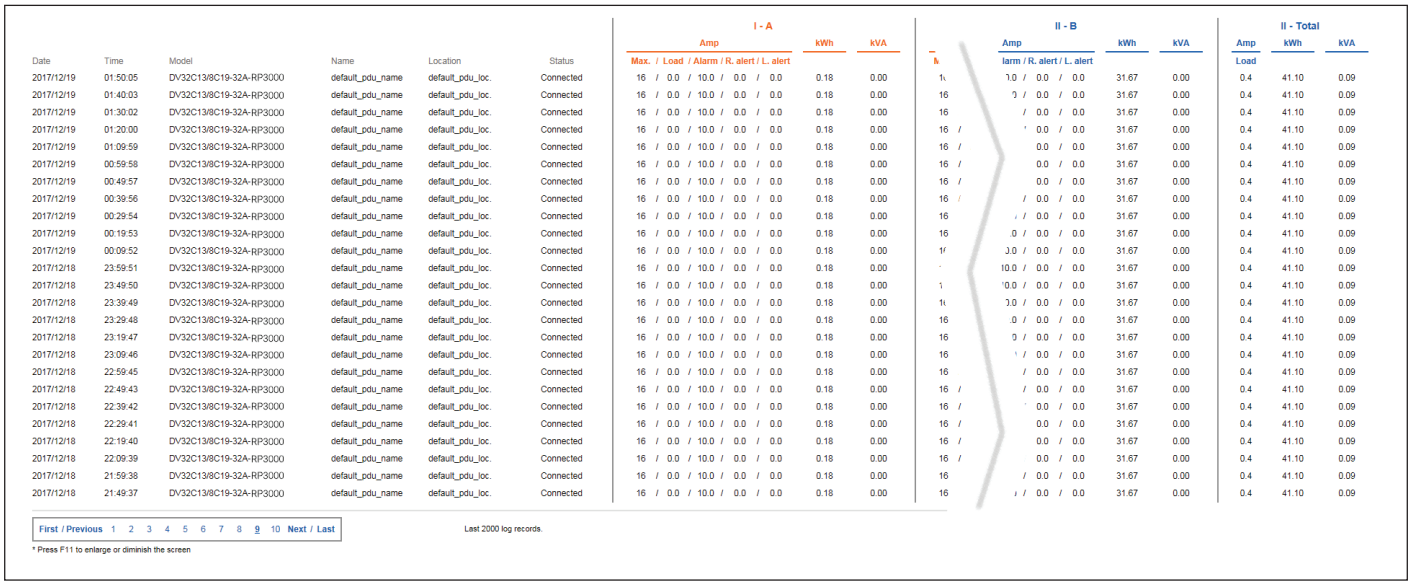
* Press F11 to enlarge or diminish the screen

# Part V. Log & Events

## 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 generate a PDU log record every 10 mins.



| | | | | | | I - A | | | II - B | | | II - Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Amp | kWh | kVA | Amp | kWh | kVA | Amp | kWh | kVA |
| Date | Time | Model | Name | Location | Status | Max. / Load / Alarm / R. alert / L. alert | | | Alarm / R. alert / L. alert | | | Load | | |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 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 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |

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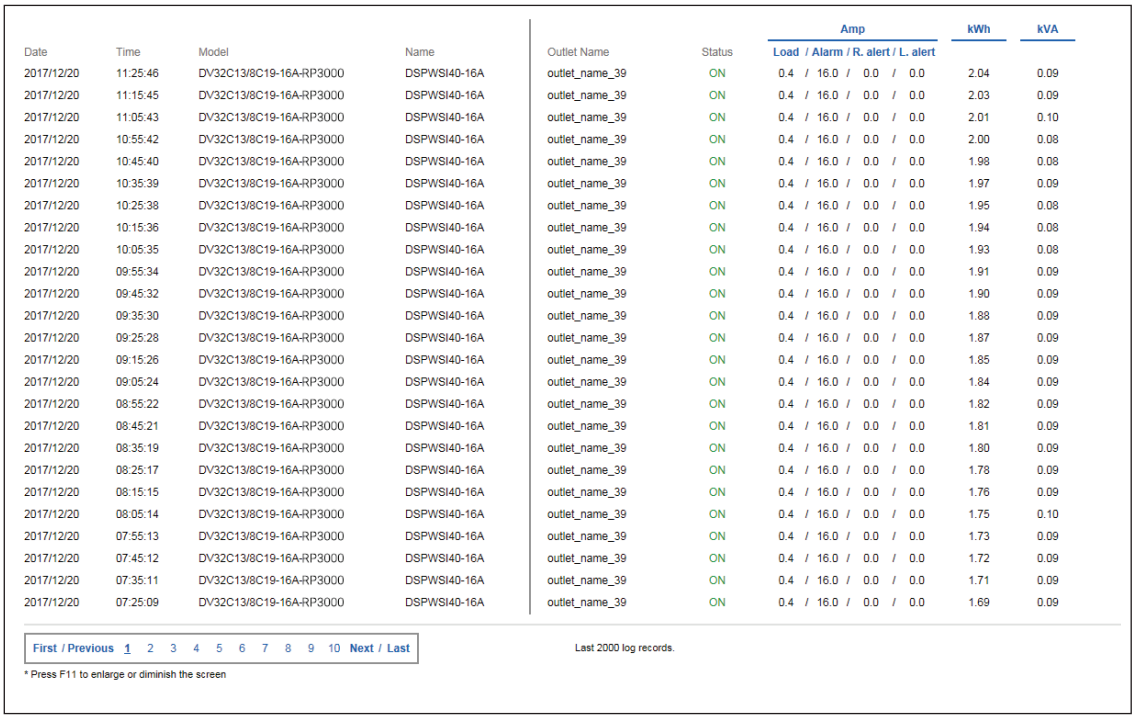
Last 2000 log records.

* 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 generate an outlet log record 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | 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 | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.69 | 0.09 |

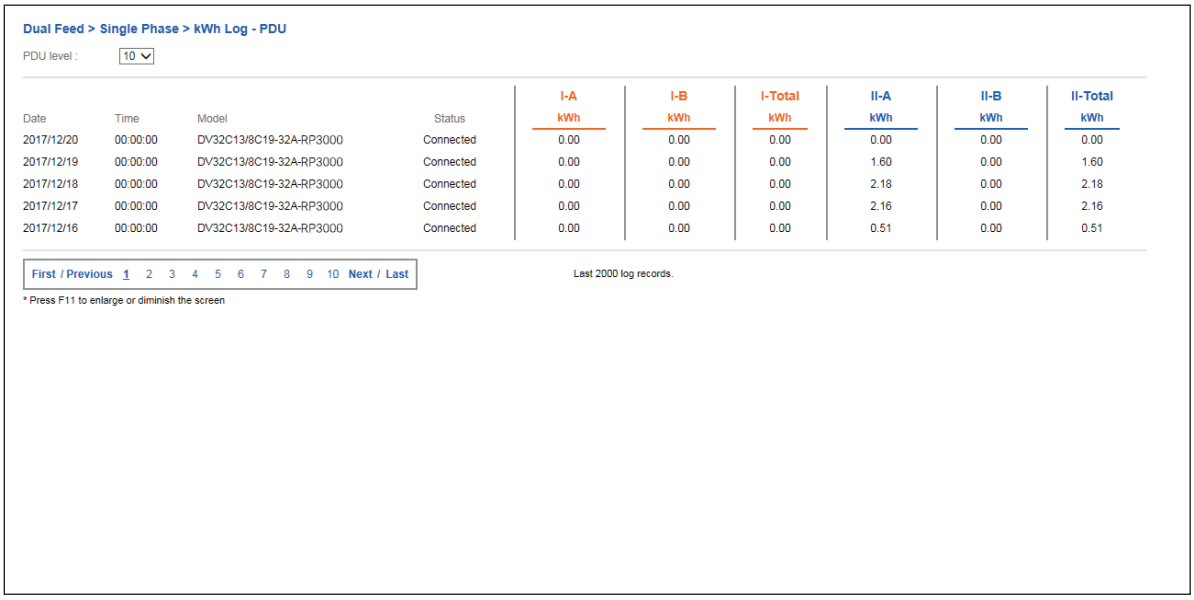
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last

Last 2000 log records.

* Press F11 to enlarge or diminish the screen

## 5.1 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. )

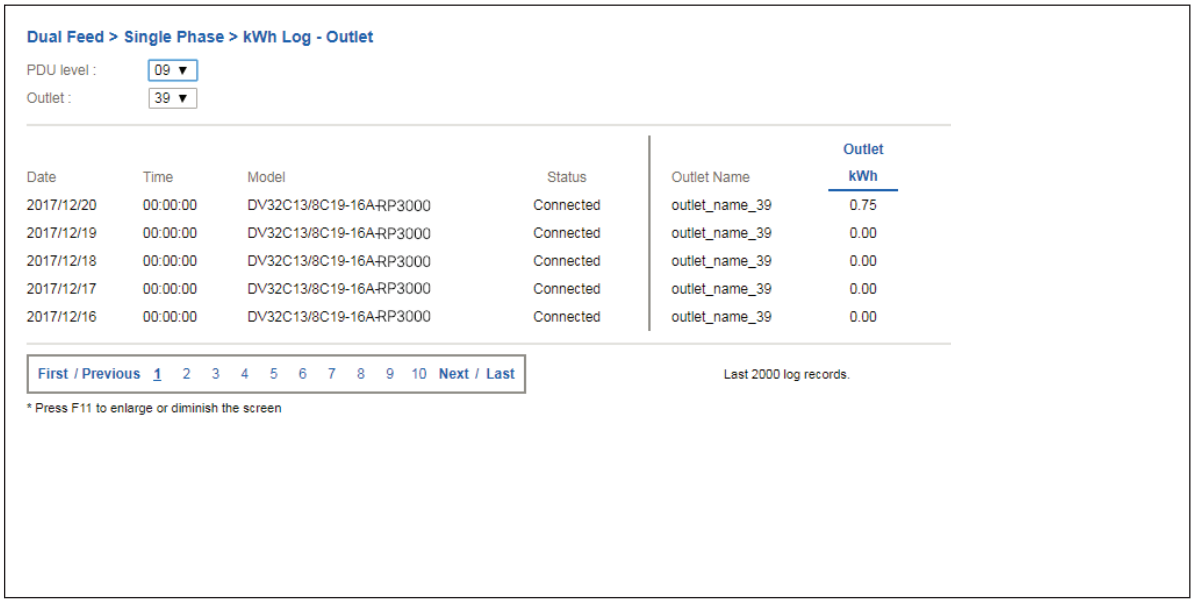



**< Single Phase Dual Feed Daily kWh Log - Outlet >**

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

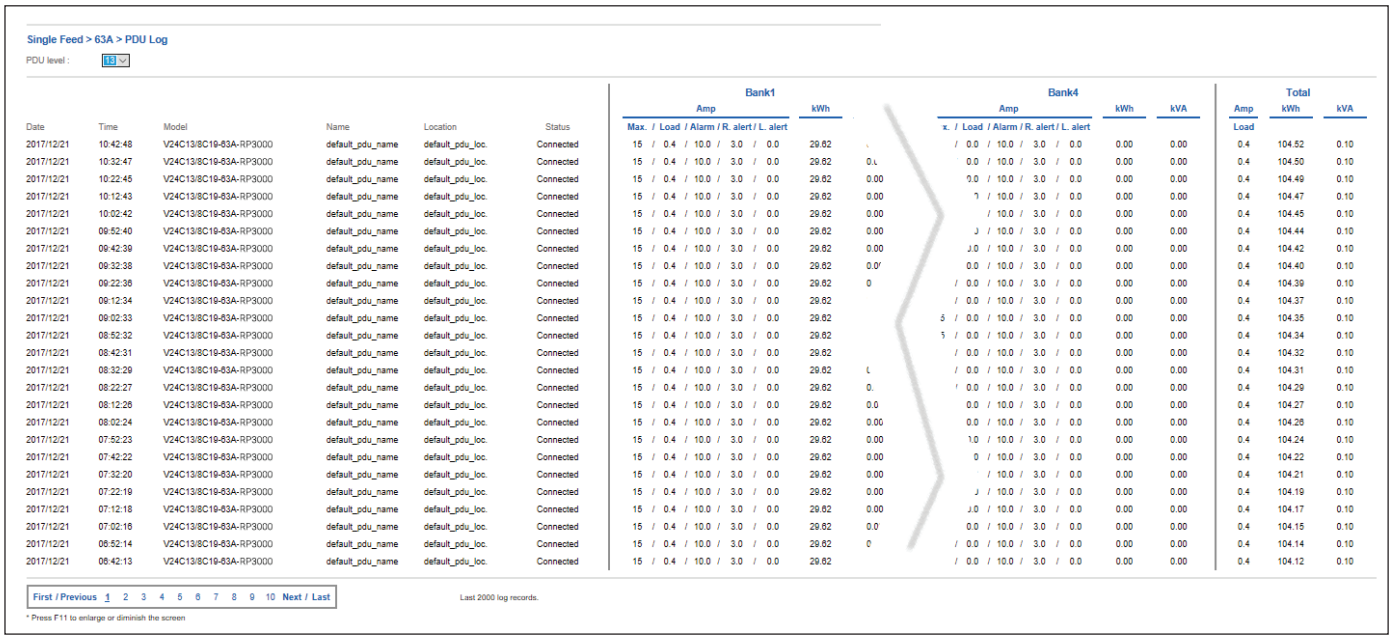
The record is logged at 00:00 everyday ( +/- 5 mins. ) .

( Single Phase Outlet Measurement PDU only )



# 5.1 SINGLE PHASE PDU / OUTLET LOG

**< 63A PDU Log >**
provides past 2000 log records of each 63A PDU.
The software will generate a PDU log record every 10 mins.



Single Feed > 63A > PDU Log

PDU level : 13

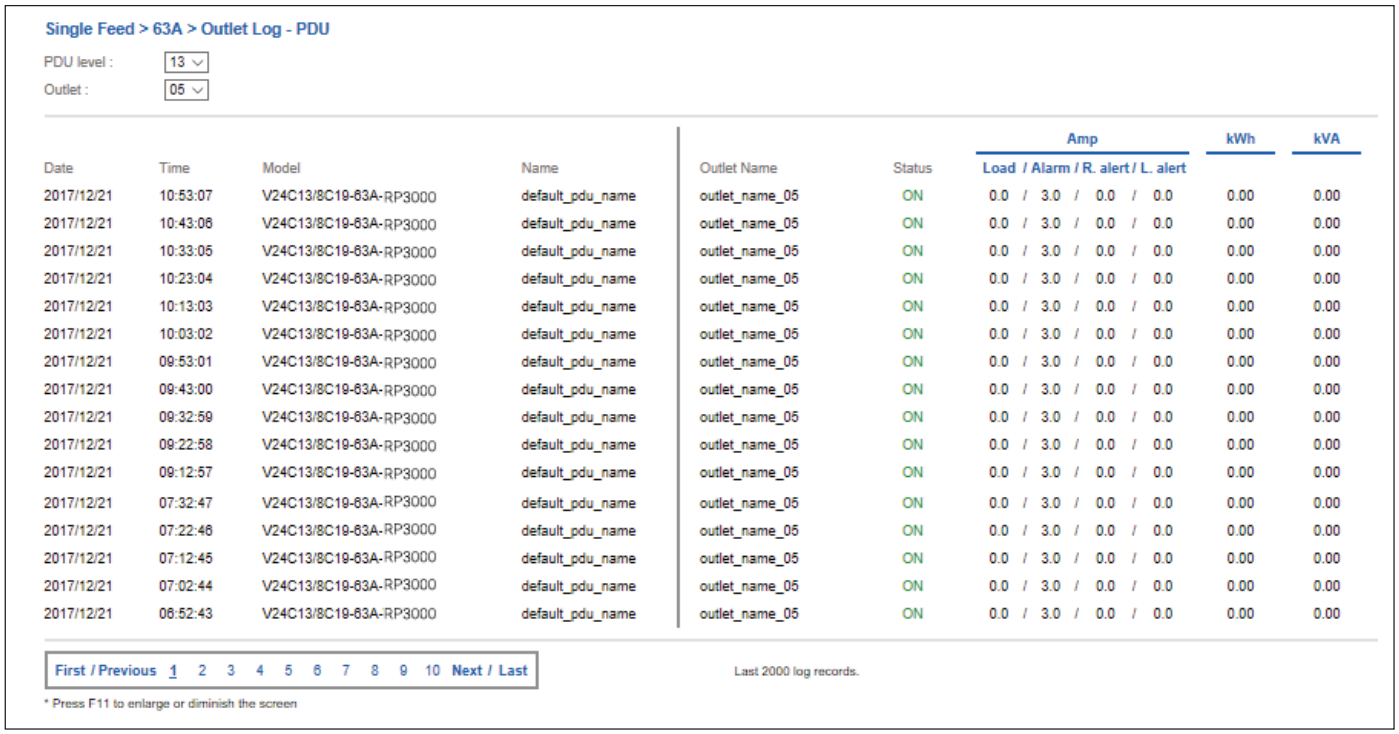
| | | | | | | Bank1 | | | | | | | Bank4 | | | | | | Total | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Amp | | | | | kWh | | Amp | | | | | kWh | kVA | Amp | kWh | kVA |
| Date | Time | Model | Name | Location | Status | Max. | / Load | / Alarm | / R. alert | / L. alert | | | x. | / Load | / Alarm | / R. alert | / L. alert | | | Load | | |
| 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 | 29.62 | | | / 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 | 29.62 | 0.( | | 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 | 29.62 | 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 | 29.62 | 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 | 29.62 | 0.00 | | | / 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 | 29.62 | 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 | 29.62 | 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 | 29.62 | 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 | 29.62 | 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 | 29.62 | | | / 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 | 29.62 | | | 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 | 29.62 | | | 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 | 29.62 | | | / 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 | 29.62 | 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 | 29.62 | 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 | 29.62 | 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 | 29.62 | 0.00 | | 0.0 | / 10.0 | / 3.0 | / 0.0 | 0.00 | 0.00 | 0.4 | 104.26 | 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 | 29.62 | 0.00 | | 1.0 | / 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 | 29.62 | 0.00 | | 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 | 29.62 | 0.00 | | | / 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 | 29.62 | 0.00 | | J | / 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 | 29.62 | 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 | 29.62 | 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 | 29.62 | 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 | 29.62 | | | / 0.0 | / 10.0 | / 3.0 | / 0.0 | 0.00 | 0.00 | 0.4 | 104.12 | 0.10 |

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

**< 63A PDU Outlet Log >**
provides past 2000 log records of each Single Phase PDU's Outlet.
The software will generate an outlet log record every 10 mins.



Single Feed > 63A > Outlet Log - PDU

PDU level : 13

Outlet : 05

| | | | | | | Amp | | | | kWh | kVA |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Date | Time | Model | Name | Outlet Name | Status | 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 |

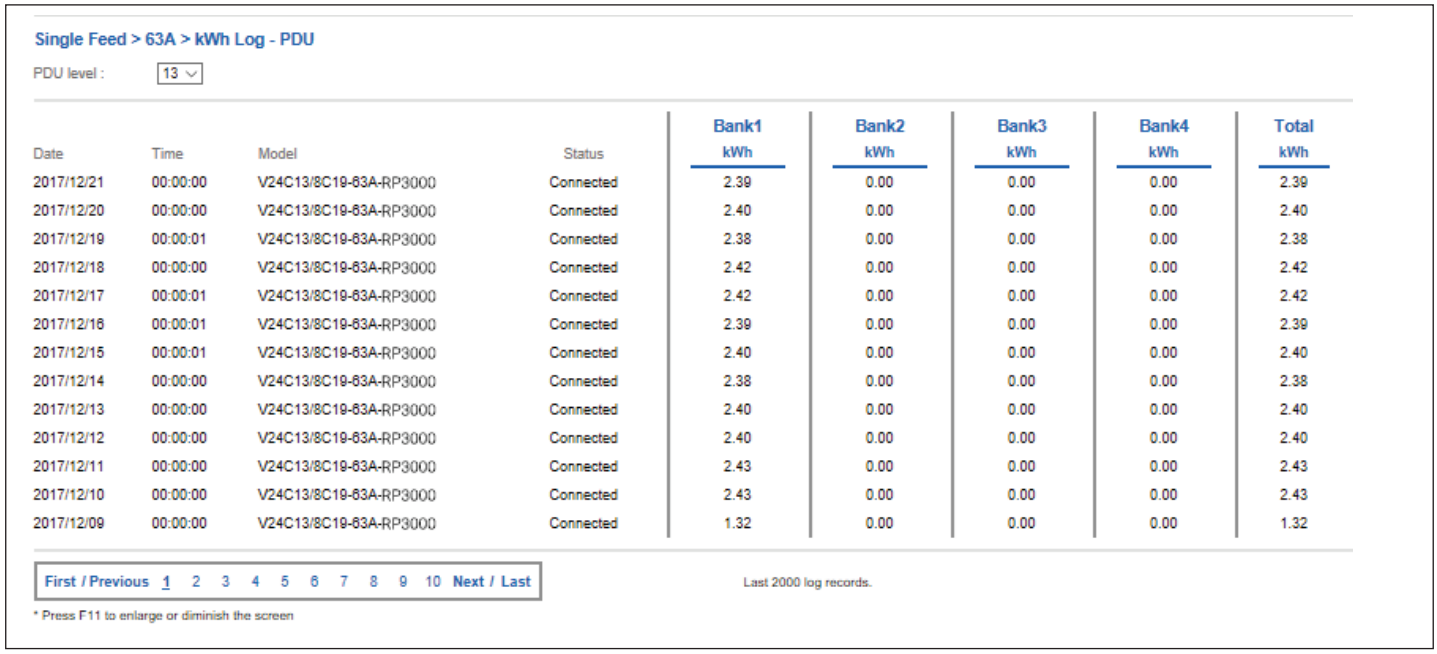
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last

Last 2000 log records.

* Press F11 to enlarge or diminish the screen

## 5.1 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 - PDU

PDU level : 13

| Date | Time | Model | Status | Bank1 kWh | Bank2 kWh | Bank3 kWh | Bank4 kWh | Total kWh |
|---|---|---|---|---|---|---|---|---|
| 2017/12/21 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | 2.39 | 0.00 | 0.00 | 0.00 | 2.39 |
| 2017/12/20 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | 2.40 | 0.00 | 0.00 | 0.00 | 2.40 |
| 2017/12/19 | 00:00:01 | V24C13/8C19-63A-RP3000 | Connected | 2.38 | 0.00 | 0.00 | 0.00 | 2.38 |
| 2017/12/18 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | 2.42 | 0.00 | 0.00 | 0.00 | 2.42 |
| 2017/12/17 | 00:00:01 | V24C13/8C19-63A-RP3000 | Connected | 2.42 | 0.00 | 0.00 | 0.00 | 2.42 |
| 2017/12/16 | 00:00:01 | V24C13/8C19-63A-RP3000 | Connected | 2.39 | 0.00 | 0.00 | 0.00 | 2.39 |
| 2017/12/15 | 00:00:01 | V24C13/8C19-63A-RP3000 | Connected | 2.40 | 0.00 | 0.00 | 0.00 | 2.40 |
| 2017/12/14 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | 2.38 | 0.00 | 0.00 | 0.00 | 2.38 |
| 2017/12/13 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | 2.40 | 0.00 | 0.00 | 0.00 | 2.40 |
| 2017/12/12 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | 2.40 | 0.00 | 0.00 | 0.00 | 2.40 |
| 2017/12/11 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | 2.43 | 0.00 | 0.00 | 0.00 | 2.43 |
| 2017/12/10 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | 2.43 | 0.00 | 0.00 | 0.00 | 2.43 |
| 2017/12/09 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | 1.32 | 0.00 | 0.00 | 0.00 | 1.32 |

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

Last 2000 log records.

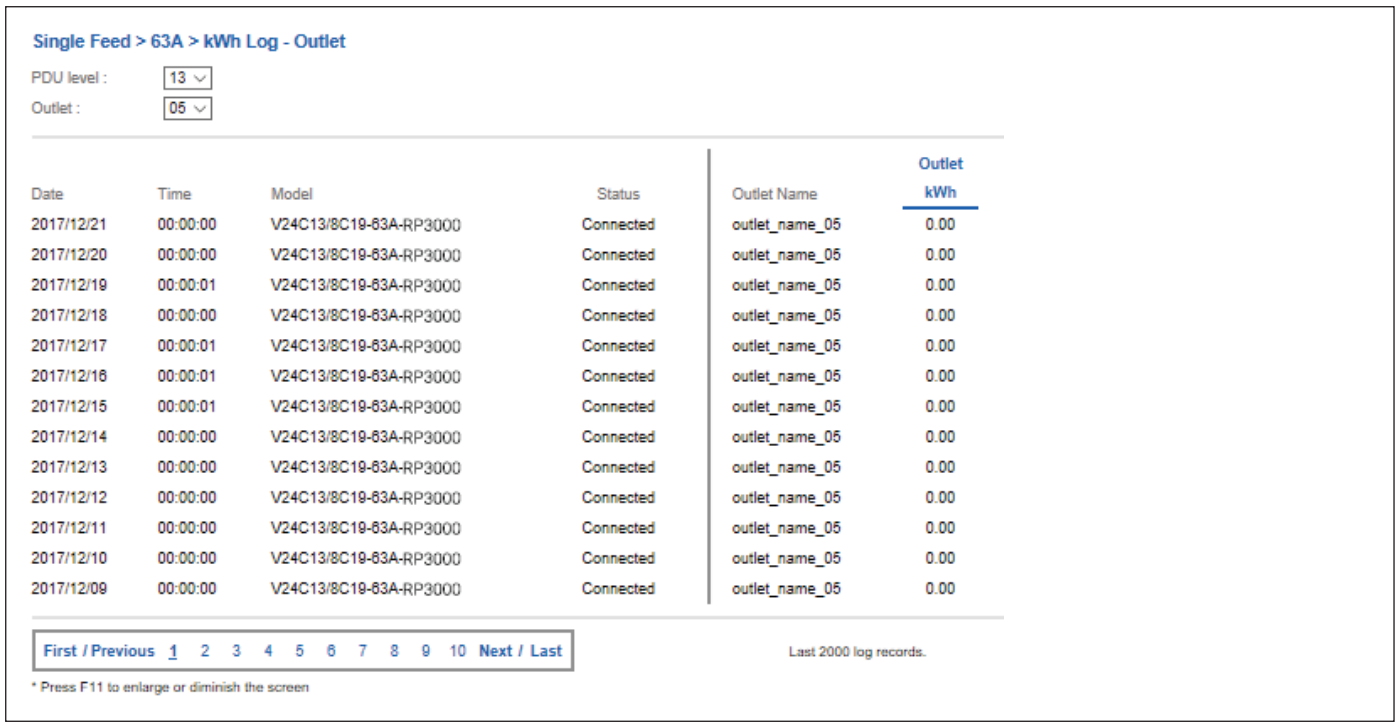
* Press F11 to enlarge or diminish the screen

**< 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 : 13

Outlet : 05

| Date | Time | Model | Status | Outlet Name | Outlet kWh |
|---|---|---|---|---|---|
| 2017/12/21 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/20 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/19 | 00:00:01 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/18 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/17 | 00:00:01 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/16 | 00:00:01 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/15 | 00:00:01 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/14 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/13 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/12 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/11 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/10 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |
| 2017/12/09 | 00:00:00 | V24C13/8C19-63A-RP3000 | Connected | outlet_name_05 | 0.00 |

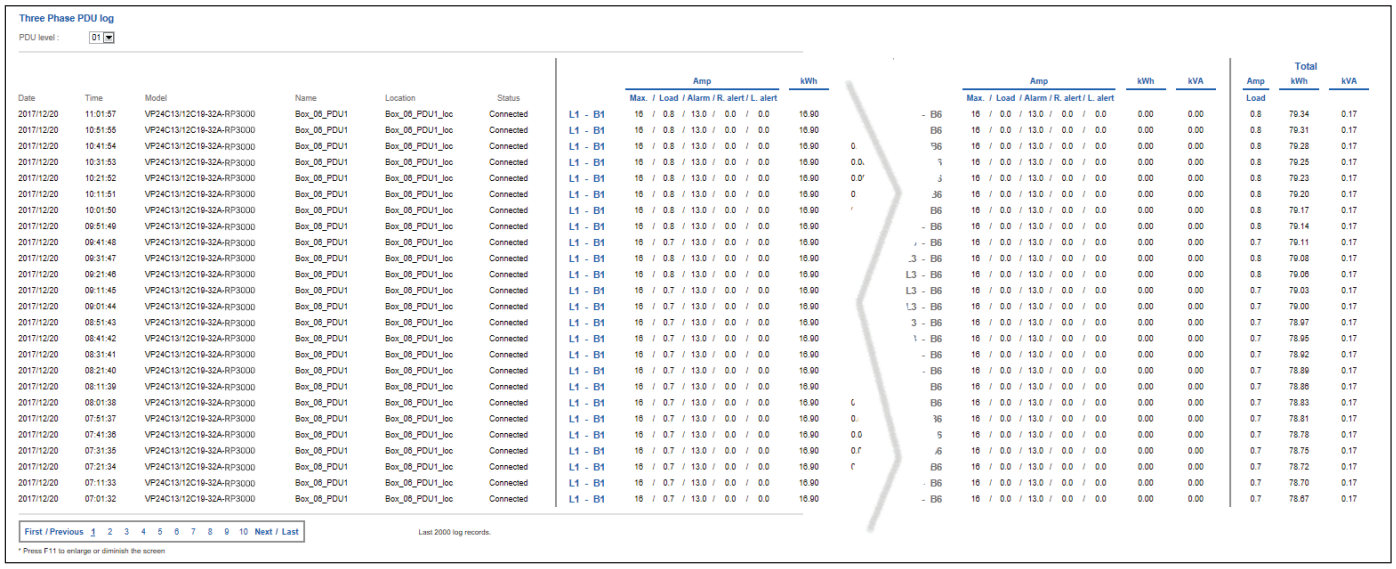
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last

Last 2000 log records.

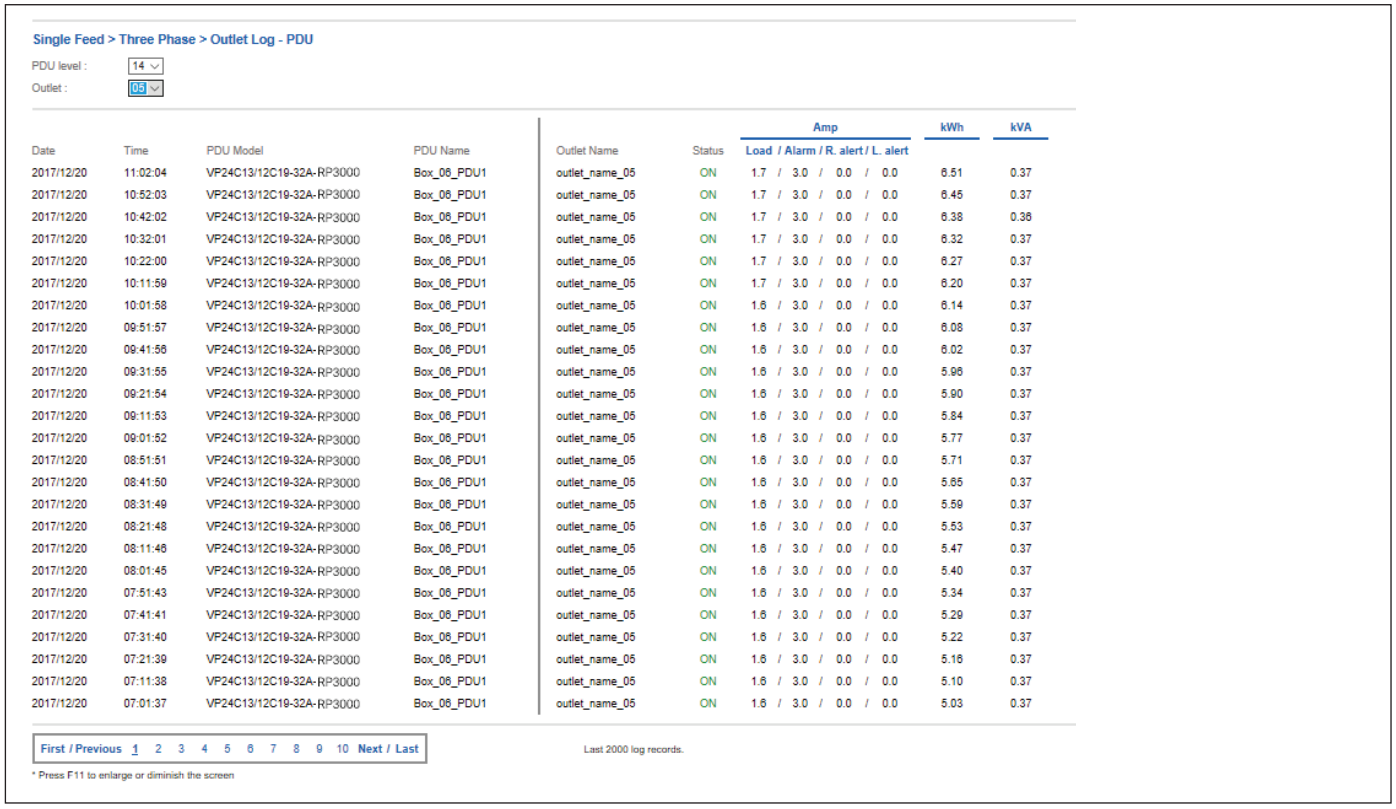
* Press F11 to enlarge or diminish the screen

## 5.2 THREE PHASE PDU / OUTLET LOG

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

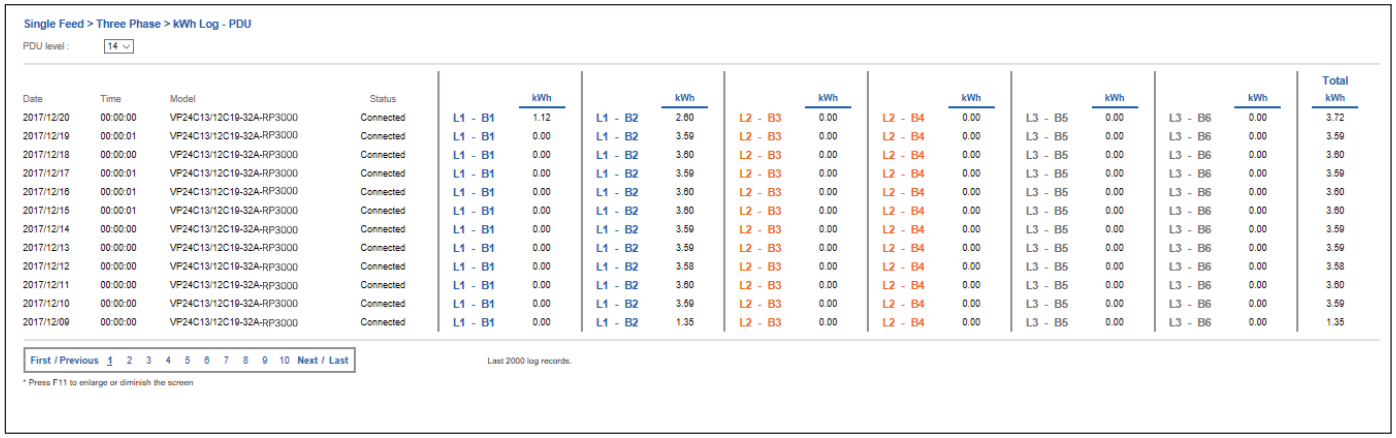



**< Three Phase PDU Outlet Log >** provides past 2000 log records of each Three Phase PDU's Outlet.
The software will generate a log every 10 mins.



## 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 | L1 - B1 kWh | L1 - B2 kWh | L2 - B3 kWh | L2 - B4 kWh | L3 - B5 kWh | L3 - B6 kWh | Total kWh |
|---|---|---|---|---|---|---|---|---|---|---|
| 2017/12/20 | 00:00:00 | VP24C13/12C19-32A-RP3000 | Connected | 1.12 | 2.60 | 0.00 | 0.00 | 0.00 | 0.00 | 3.72 |
| 2017/12/19 | 00:00:01 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.59 | 0.00 | 0.00 | 0.00 | 0.00 | 3.59 |
| 2017/12/18 | 00:00:00 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.60 | 0.00 | 0.00 | 0.00 | 0.00 | 3.60 |
| 2017/12/17 | 00:00:01 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.59 | 0.00 | 0.00 | 0.00 | 0.00 | 3.59 |
| 2017/12/16 | 00:00:01 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.60 | 0.00 | 0.00 | 0.00 | 0.00 | 3.60 |
| 2017/12/15 | 00:00:01 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.60 | 0.00 | 0.00 | 0.00 | 0.00 | 3.60 |
| 2017/12/14 | 00:00:00 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.59 | 0.00 | 0.00 | 0.00 | 0.00 | 3.59 |
| 2017/12/13 | 00:00:00 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.59 | 0.00 | 0.00 | 0.00 | 0.00 | 3.59 |
| 2017/12/12 | 00:00:00 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.58 | 0.00 | 0.00 | 0.00 | 0.00 | 3.58 |
| 2017/12/11 | 00:00:00 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.60 | 0.00 | 0.00 | 0.00 | 0.00 | 3.60 |
| 2017/12/10 | 00:00:00 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 3.59 | 0.00 | 0.00 | 0.00 | 0.00 | 3.59 |
| 2017/12/09 | 00:00:00 | VP24C13/12C19-32A-RP3000 | Connected | 0.00 | 1.35 | 0.00 | 0.00 | 0.00 | 0.00 | 1.35 |

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

Last 2000 log records.

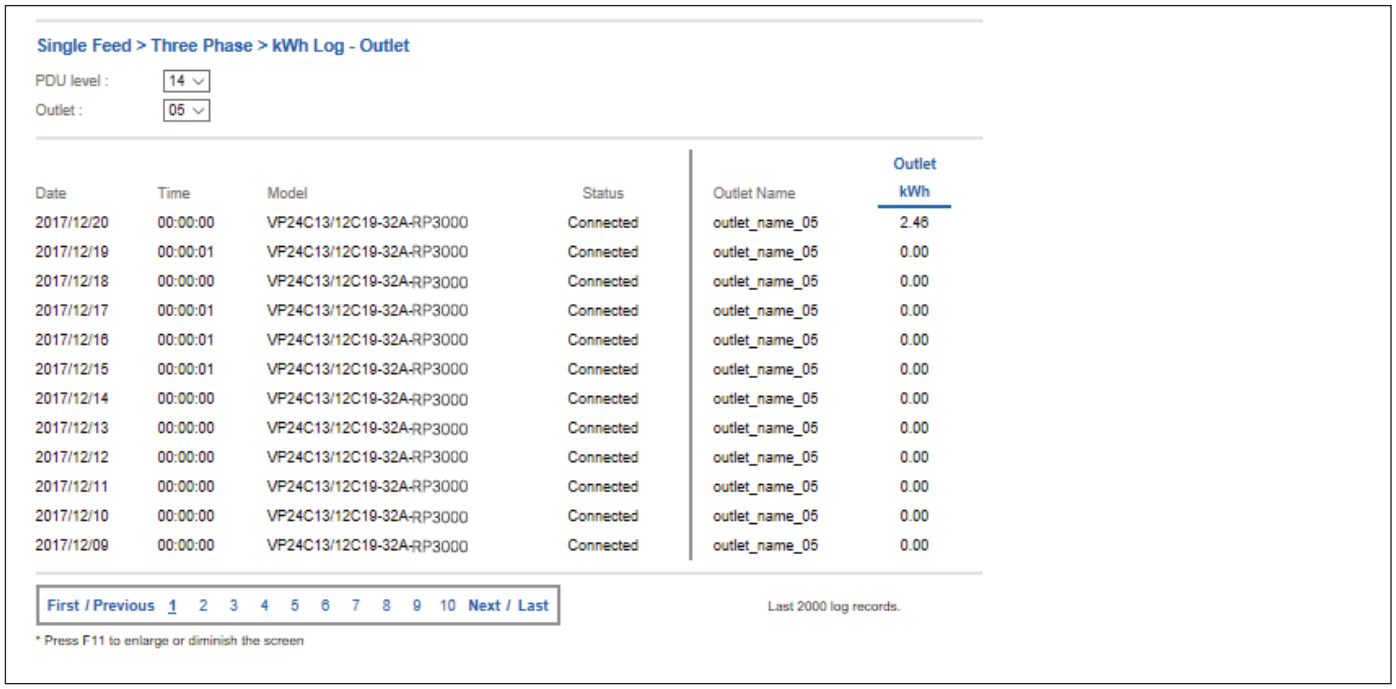
* Press F11 to enlarge or diminish the screen

**< 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 |

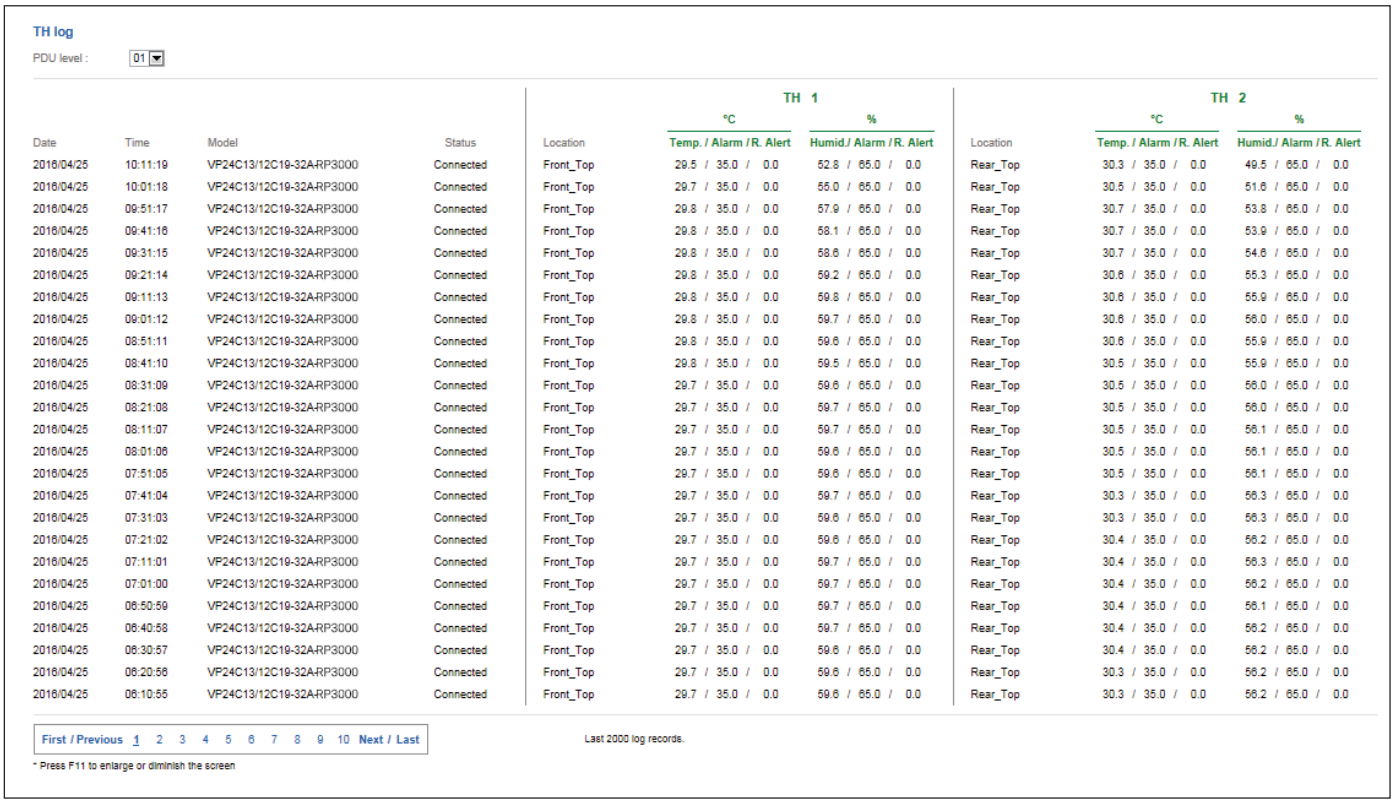
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last

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 generate a TH log record every 10 mins.



TH log

PDU level : 01

| | | | | TH 1 | | TH 2 | |
|---|---|---|---|---|---|---|---|
| | | | | °C | % | °C | % |
| Date | Time | Model | Status | Location | Temp. / Alarm / R. Alert | Humid./ Alarm / R. Alert | Location | Temp. / Alarm / R. Alert | Humid./ Alarm / R. Alert |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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 |
| 2016/04/25 | 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.

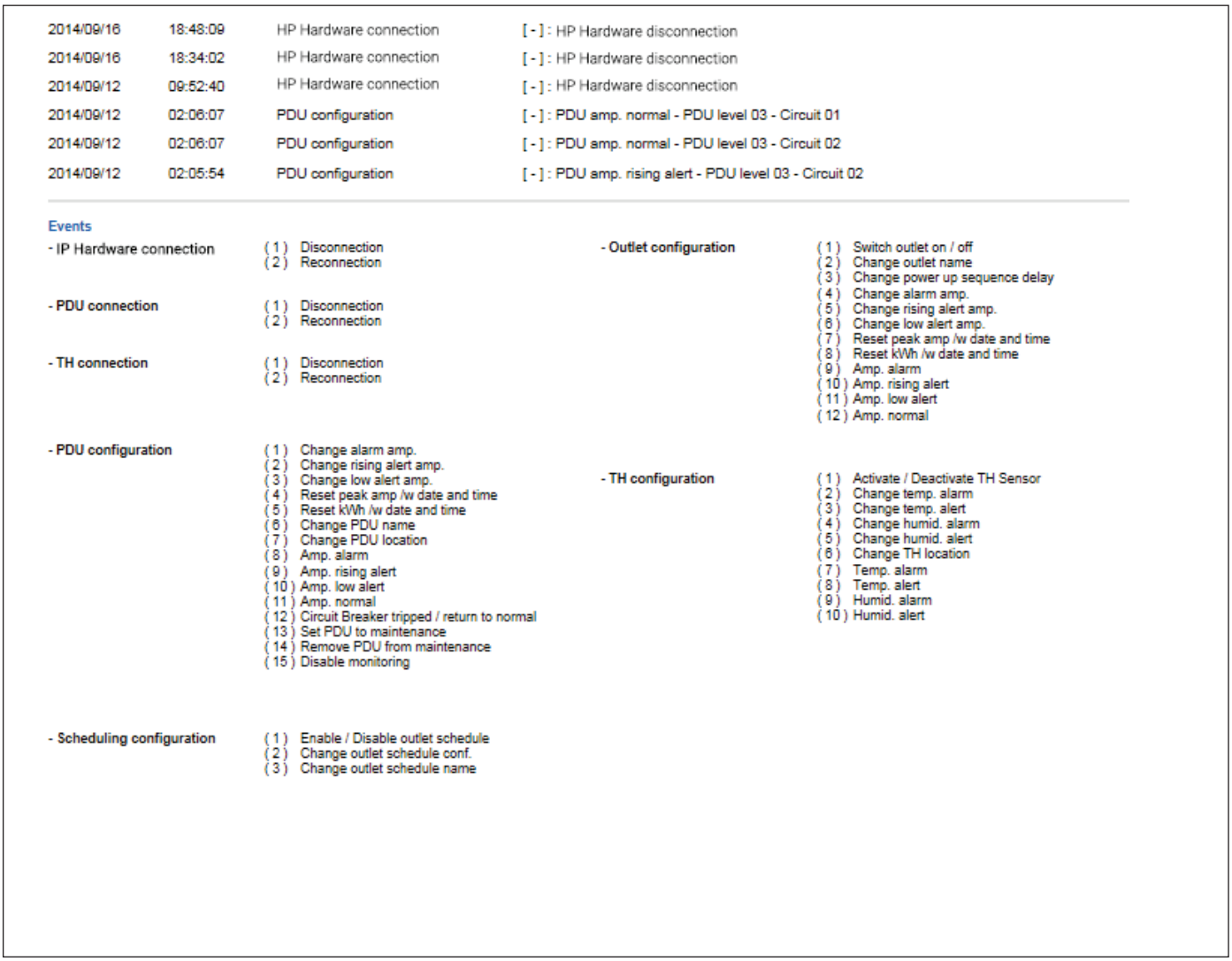
* Press F11 to enlarge or diminish the screen

## 5.4 EVENT LOG

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

- IP Hardware connection
- PDU connection
- TH sensor connection

- PDU configuration
- Outlet configuration
- TH sensor configuration
- Scheduling configuration

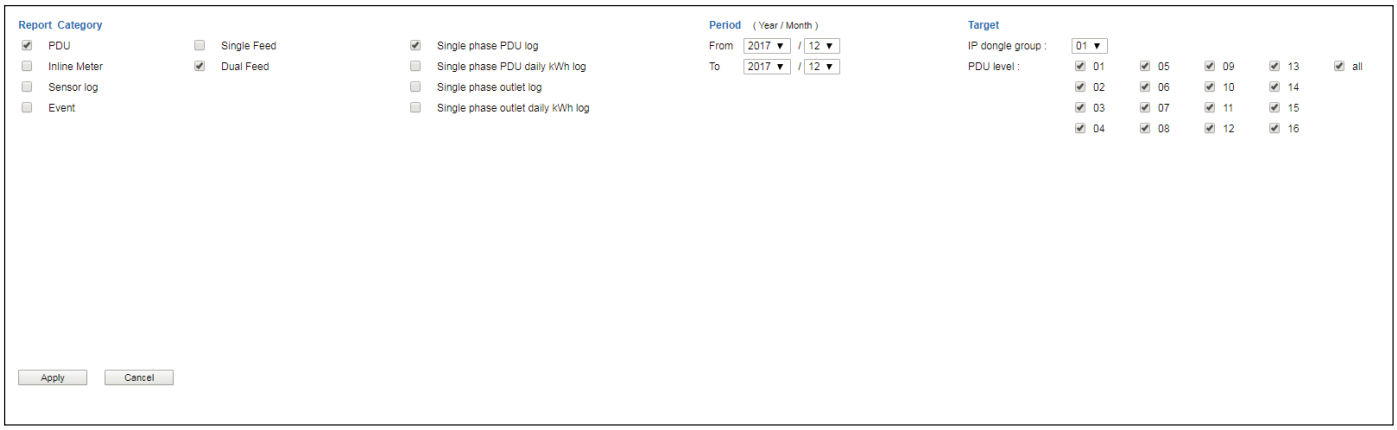


# Part VI. Report

**< 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.**

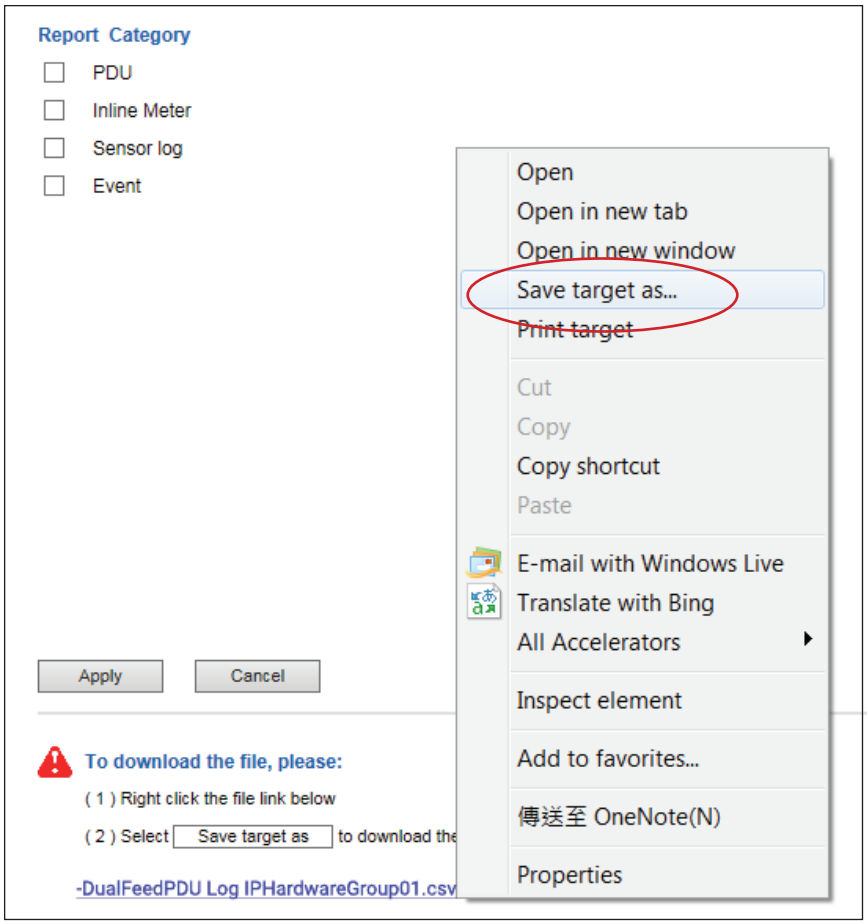
Please follow the steps below to export the log category you want:

**Step 1**. Select " **Report Category** " , " **Period** " & " **Target** "




**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




**Step 4**. Click " **Close** " to complete or " **Open** " to view the content of log file

**Complete**

# 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 )

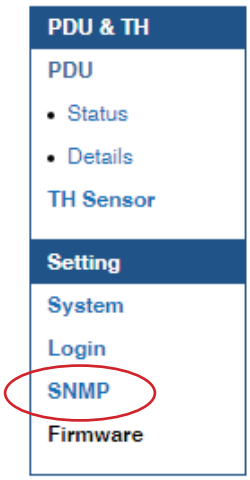
**Step 2**. Open the Internet Explorer ( I.E. ) version 11.0

**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** "

## 7.1 SNMP SETUP

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




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


**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.

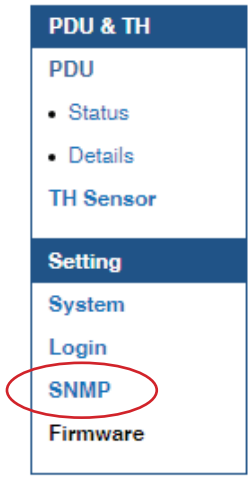
**Step 1**. Connect the IP Hardware to a computer. ( Please refer to < 2.2 > IP Hardware Configuration )

**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

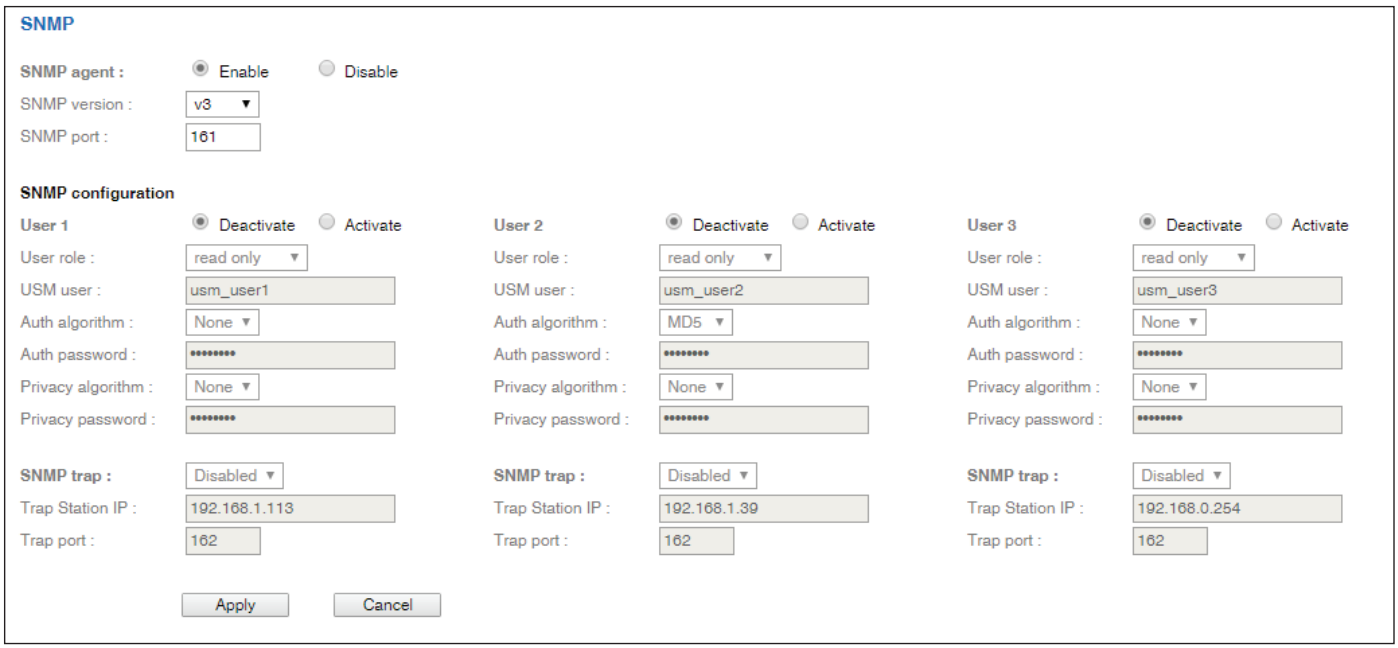



**Step 6**. The SNMP Settings window appears as below:

## 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:




**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

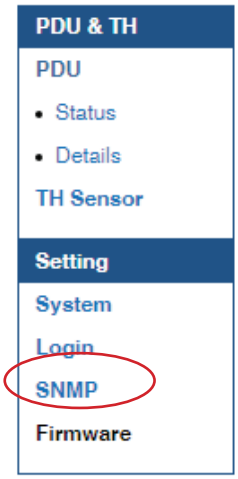
**Step 3**. Connect the IP Hardware to the computer. ( Please refer to < 2.2 > IP Hardware Configuration )

**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** "

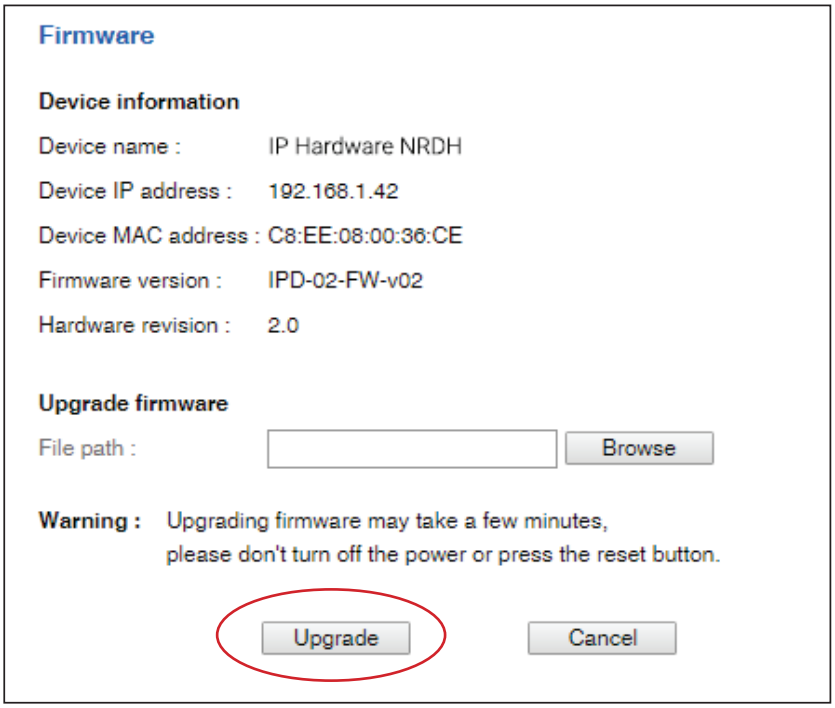
**Step 6**. Enter " **Login name** " & " **Password** ". Default login name & password are " **00000000** "


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



## 7.2 IP HARDWARE FIRMWARE UPGRADE

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




**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

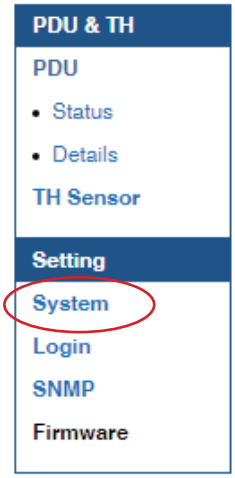
**Step 1.** Connect the IP Hardware to the computer ( Please refer to < 2.2 > IP Hardware Configuration )

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

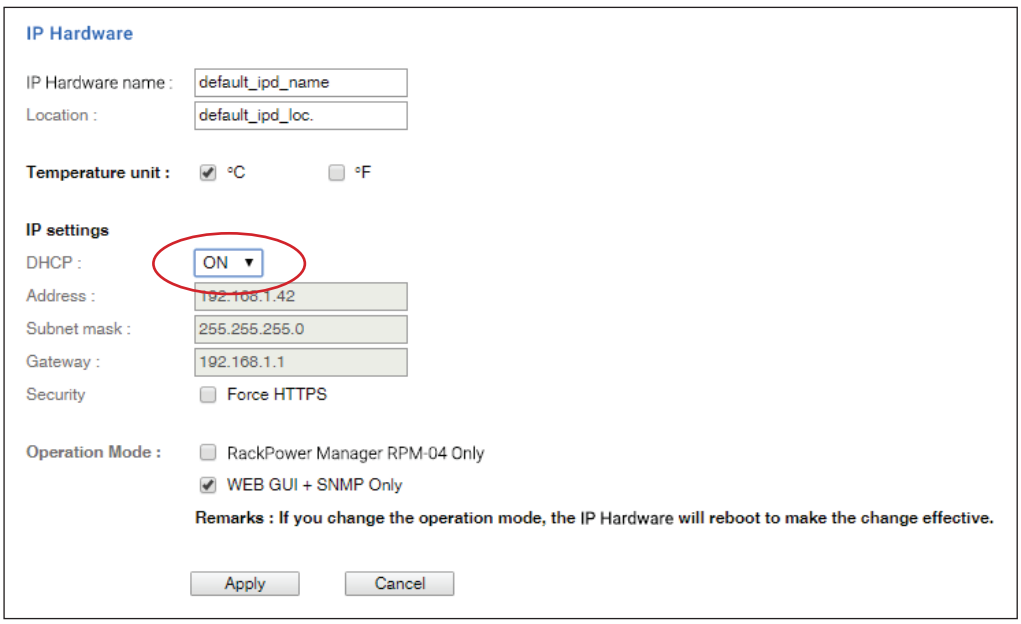
**Step 3.** Enter the default IP address of the IP Hardware into the I.E. address bar.
Default IP address is " **192.168.0.1** "

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


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

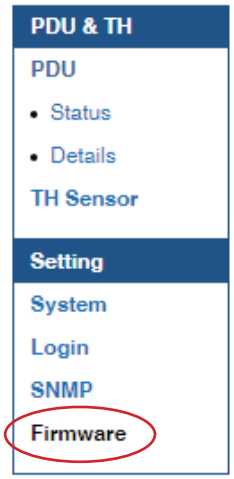



**Step 6.** Select " **ON** " from " **DHCP** " & click " **Apply** " to save the settings

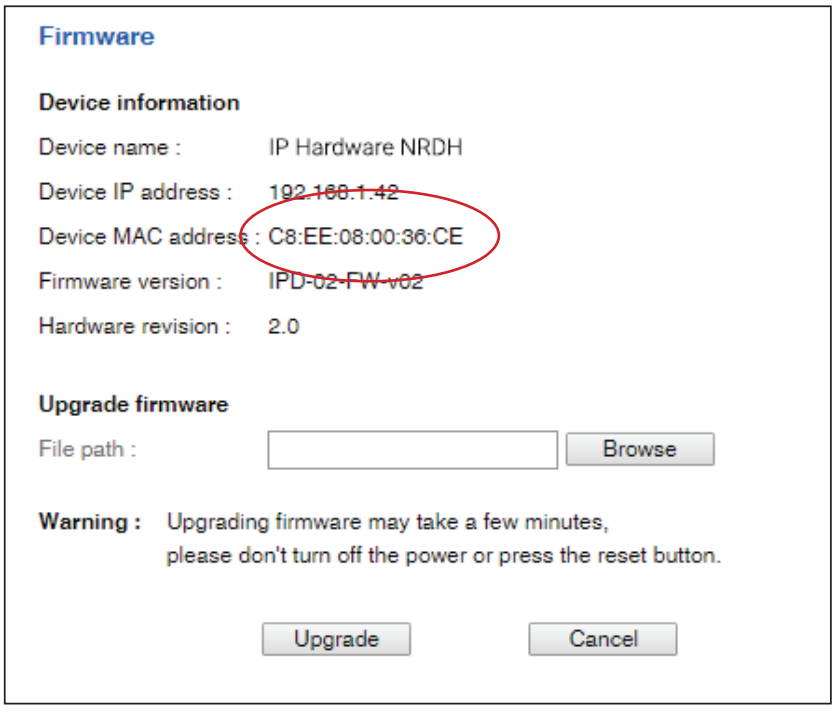


## 7.3 DHCP SETTING

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




**Step 8.** Record the " **Device MAC address** "




**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 Hardwares**, 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 logins 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 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 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

## 8.2 IP HARDWARE


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, events & logs.
   The free RPM-04 PDU management software is essential if it is necessary to monitor, control, and log hundreds of PDU's .

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://lp.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

**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 fails 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 PDU's 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 PDU's 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 PDU's?**
   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 at 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 fails 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

## 8.3 RP METER

**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.

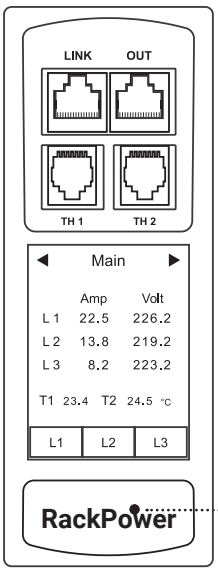
| Functional Specifications - Metering | |
|---|---|
| Input Metering Range | 0.3 to Rated Input Current |
| Outlet Metering Range | 0.3 to 16.0A |
| Ampere Accuracy (A) | +/- 1% |
| Voltage Accuracy (V) | +/- 1% |
| Power Accuracy (kW) | +/- 1% |
| Energy Accuracy (kWh) | +/- (1%)*hours |

**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 is the RP meter affected 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 will the switched & measurement RP2000/RP3000/RP1500 PDU be 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 are available?**
   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 will the switched & measurement RP2000/RP3000/RP1500 PDU be affected if the Power Module fails?**
   - Lose outlet On/Off control and outlet level measurement
   - But outlet can still supply power to device

3. **Why does the outlet control module fail 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

6. **What does the LED signify 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?**
   ± 1°C ( typical ) & ± 4.5% RH ( typical )

2. **How accurate is the Temp. sensor?**
   ± 1.5°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

## < 8.6 > TH SENSORS & OTHERS

**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 are 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 PDU's?**
   Please visit the 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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