

User Manual IPM-04 PDU management software

W series PDU : Single Phase (Meter with 1.8" LCD)



Designed and manufactured by Austin Hughes

FC CE  REACH

Legal Information

First English printing, June 2023

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

What the warranty does not cover

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

Regulatory Notices Federal Communications Commission (FCC)

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

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 damage, contact the supplier immediately.



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

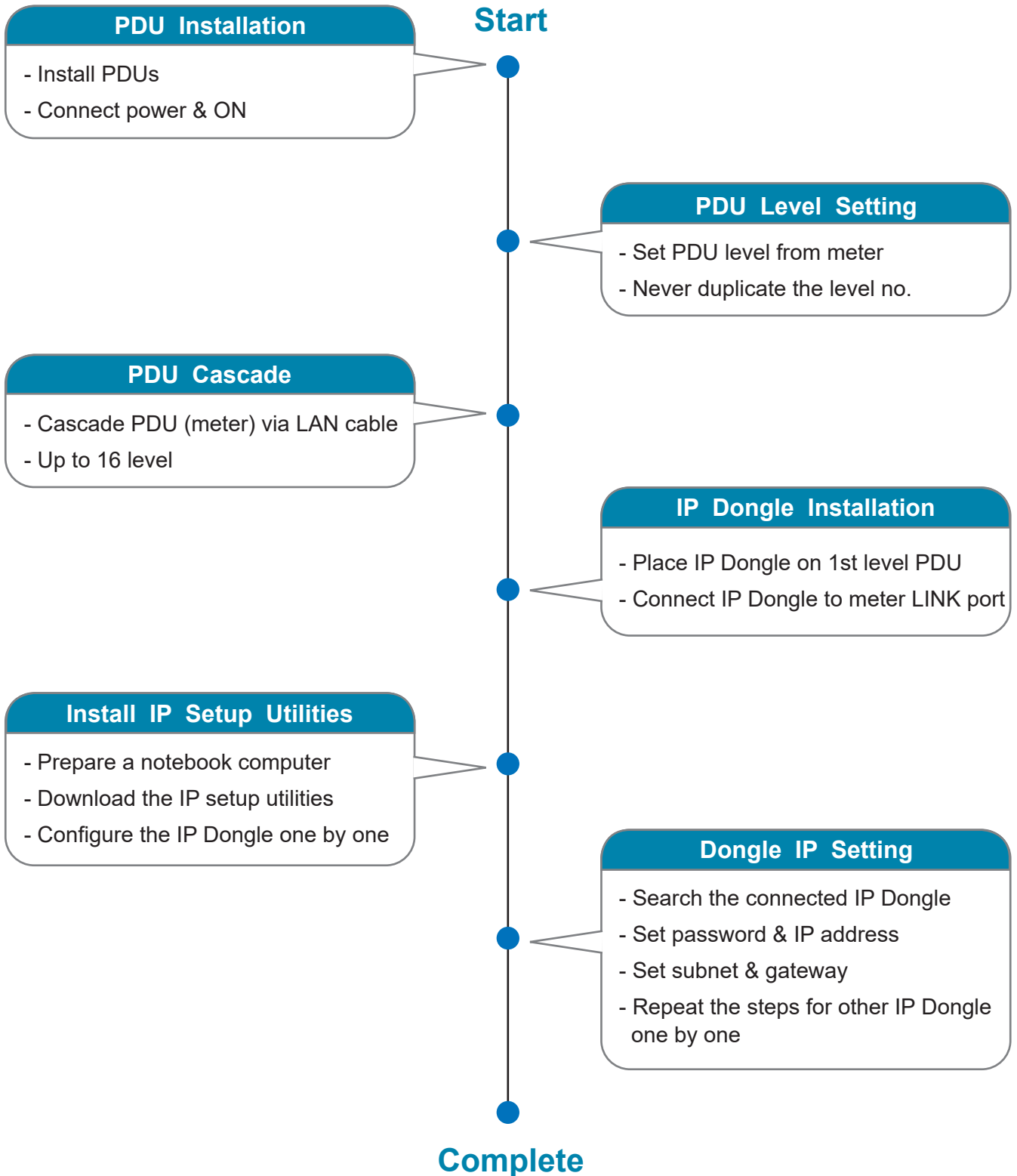


Don't exceed the outlet, branch or phase limitations

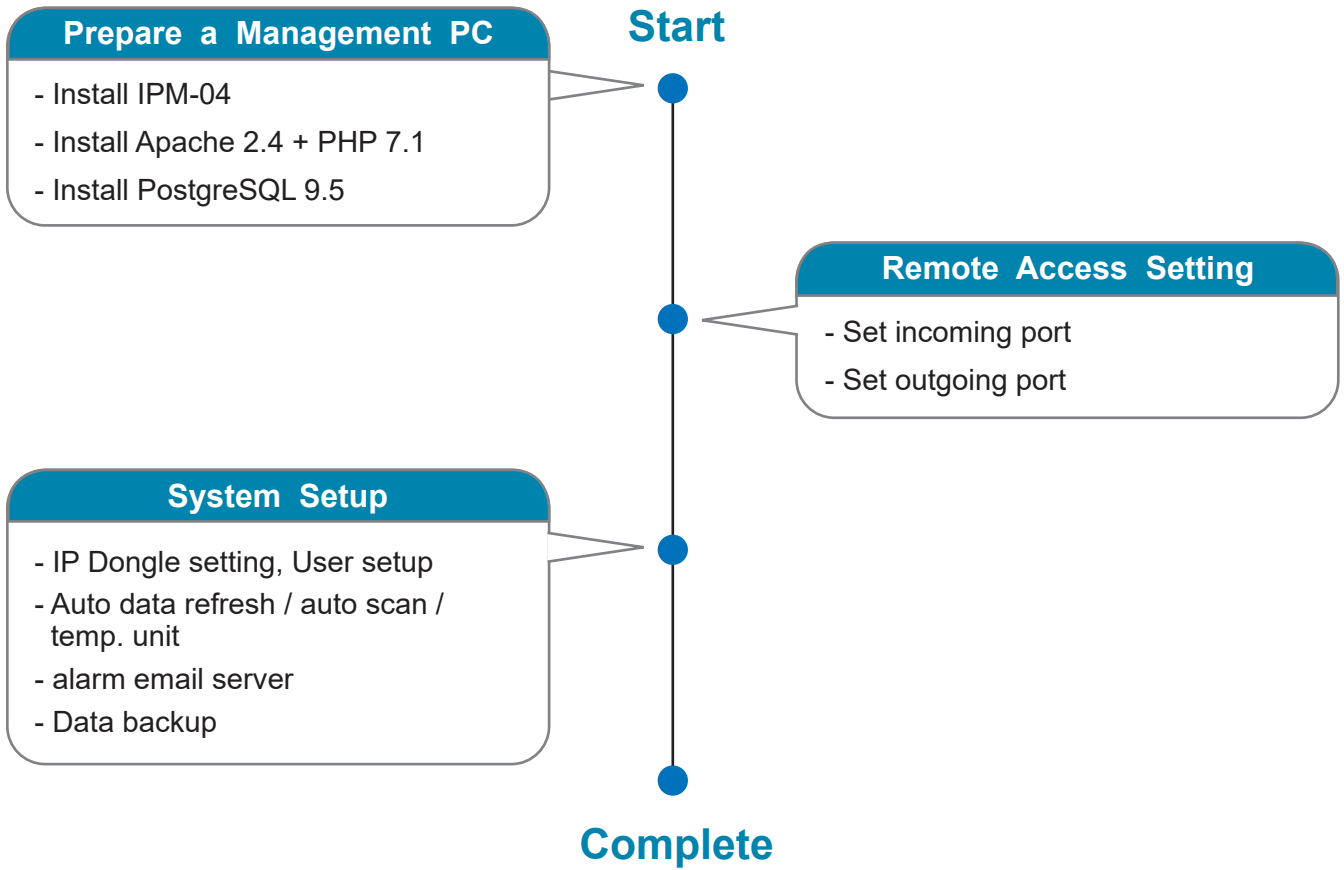
Power ON

- 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



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Part I. “ W “ Meter

< 1.1 > Meter Key Features

Four intelligent PDU series covering single phase equipped with W Meter :

Monitored PDU : ① W PDU
 ② Wi PDU - Outlet Measurement

Switched PDU : ③ WS PDU
 ④ WSi PDU - Outlet Measurement

| InfraPower® | Monitored PDU | | Switched PDU | |
|--|---------------|--------|--------------|--------|
| | W | Wi | WS | WSi |
| Outlet Amp + kWh Measurement | | ✓ | | ✓ |
| Outlet Switch ON / OFF | | | ✓ | ✓ |
| Field Replaceable Meter | ✓ | ✓ | ✓ | ✓ |
| 1.8” Color LCD | ✓ | ✓ | ✓ | ✓ |
| Circuit / Phase Amp + kWh Measurement | ✓ | ✓ | ✓ | ✓ |
| Support Single Phase PDU | ✓ | ✓ | ✓ | ✓ |
| 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 Dongle, IPD-03S) | IPM-04 | IPM-04 | IPM-04 | IPM-04 |

W series PDU is equipped with a highly advanced component - “ W “ Meter .

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

1 Cascade port

Up to 16 PDU Level

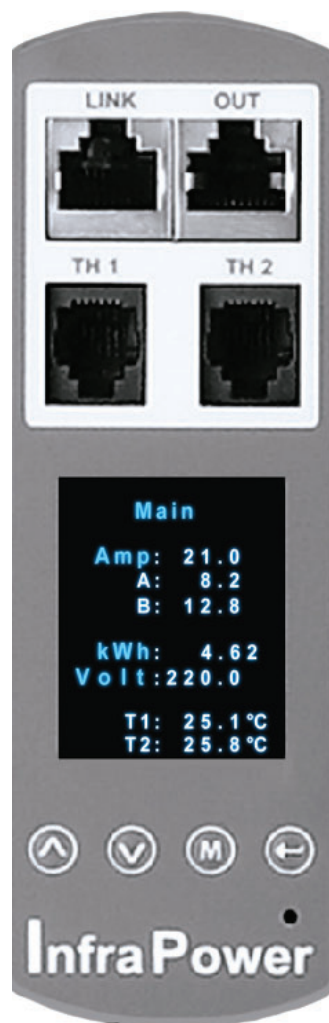
2 Sensor port x 2

- Temp. Sensor
- Temp. + Humid. Sensor

3 1.8” color LCD

4 Reset button

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



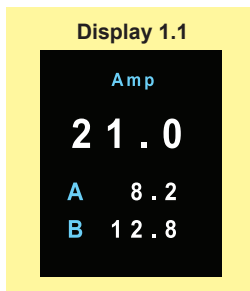
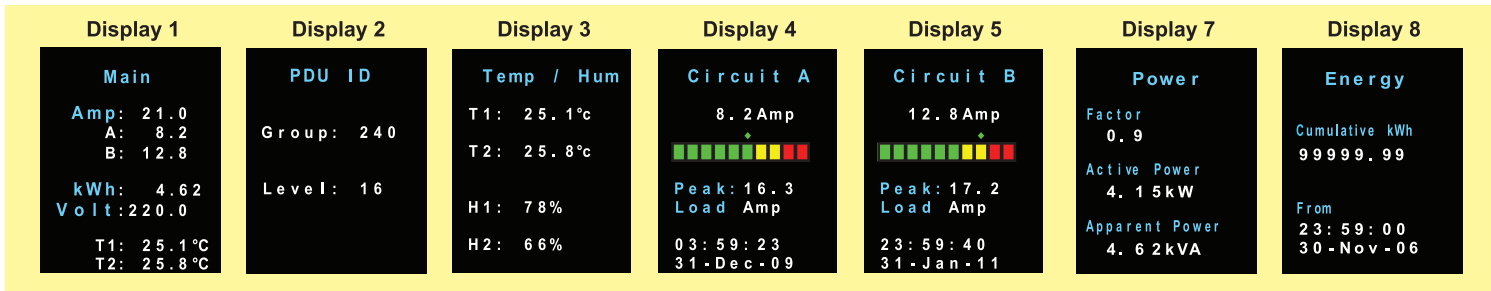
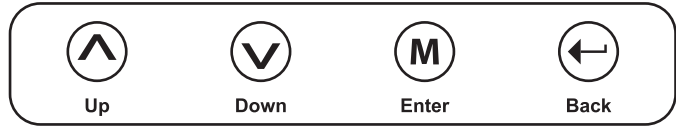
< 1.2 > Meter Reading & Setting

W meter 1.8" color LCD provides a sharp and highly visible reading for the local reading of Current (Amp), Voltage (Volt), Power (kW), Energy Consumption (kWh), Power Factor, Temperature & Humidity.

Display for PDU Monitoring

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

W Meter provides the buttons to select the displays

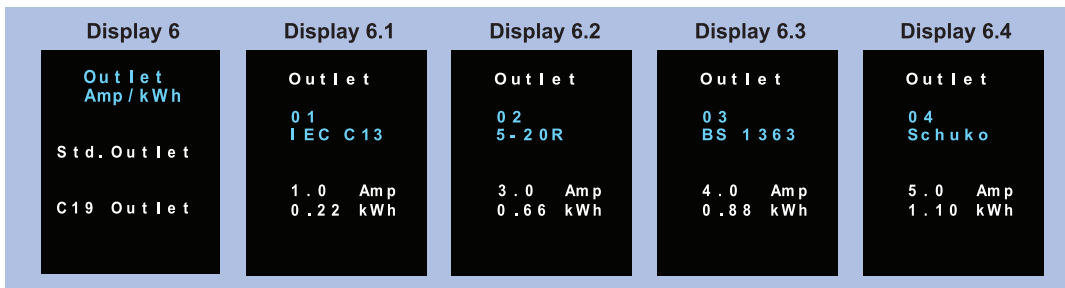


Press (M) to change °C / °F

Display for Outlet Measurement

- Outlet Amp
- Outlet kWh
- (Wi and WSi series PDUs only)

! Display 6 only for Wi / WSi outlet measurement PDU

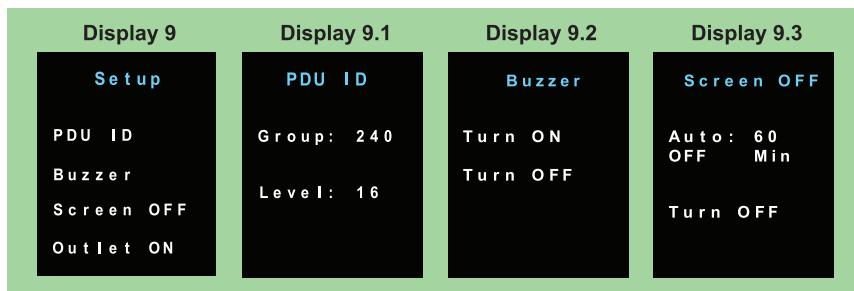


< 1.2 > Meter Reading & Setting

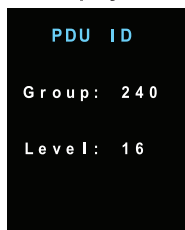
W meter allows the user to do some settings below :

Display for Local PDU Setting

- PDU Level
- Meter buzzer
- Meter screen



Display 9.1



PDU level setting :

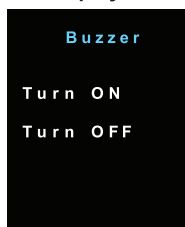
Step 1 - Press the \uparrow & \downarrow button to display no.9 and press M to confirm

Step 2 - Press the \uparrow & \downarrow button to PDU ID and press M to confirm

Step 3 - In display 9.1, Press the \uparrow & \downarrow button to select PDU level no. & press M to confirm

Step 4 - Press \leftarrow to exit

Display 9.2



Buzzer :

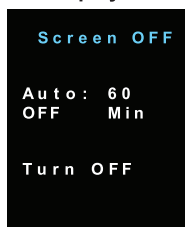
W meter allows the user to set the meter buzzer ON / OFF by meter's 4 buttons.

All PDUs are shipped with the buzzer in ON status.

When the PDU's circuit or outlet Amp is over alarm level, the buzzer will sound.

The user can press any button to stop the buzzer sound.

Display 9.3



Screen OFF :

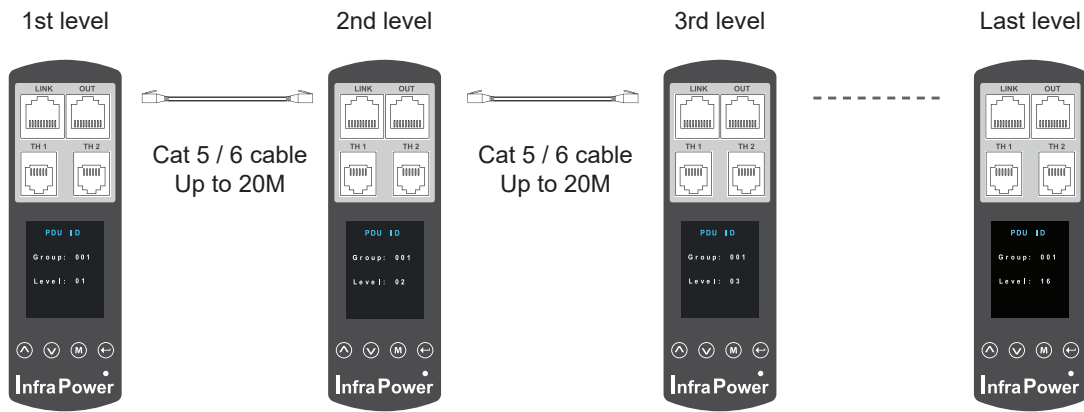
All PDUs are shipped with the meter LCD in always ON status.


W meter allows the user to turn off the meter LCD by time setting (1 - 60 mins, 0 = always ON)

When the meter is in OFF status, the user can press any button to make it ON.

< 1.3 > Meter (PDU) Cascade

- The PDU can be cascaded up to 16 levels
- For IP PDU access simply connect 1 x IP Dongle - IPD-03-S
- 1 x IP Dongle allows access to 16 levels
- Single & 3 Phase PDU can be inter-cascaded in the single daisy chain



 For **PDU level setting**, please refer to previous page.

< 1.4 > Dual Lan IP Dongle

Patented IP Dongle provides IP remote access to the PDUs by a true network IP address chain.

Only 1 x IP Dongle 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 Dongle installation. Simply integrate the IP Dongle to the 1st PDU, then the entire daisy chain group can be remote over IP.

- Press the reset button and release instantly to reboot IP dongle.
- Press and hold the reset button until Green LED off to reset IP dongle to factory default

Installation steps :

- slide and fix the IP Dongle on the plate over the meter
- plug its RJ-45 connector into the LINK port of the 1st level PDU meter
- connect IP Dongle to network device via CAT. 5 / 6 cable

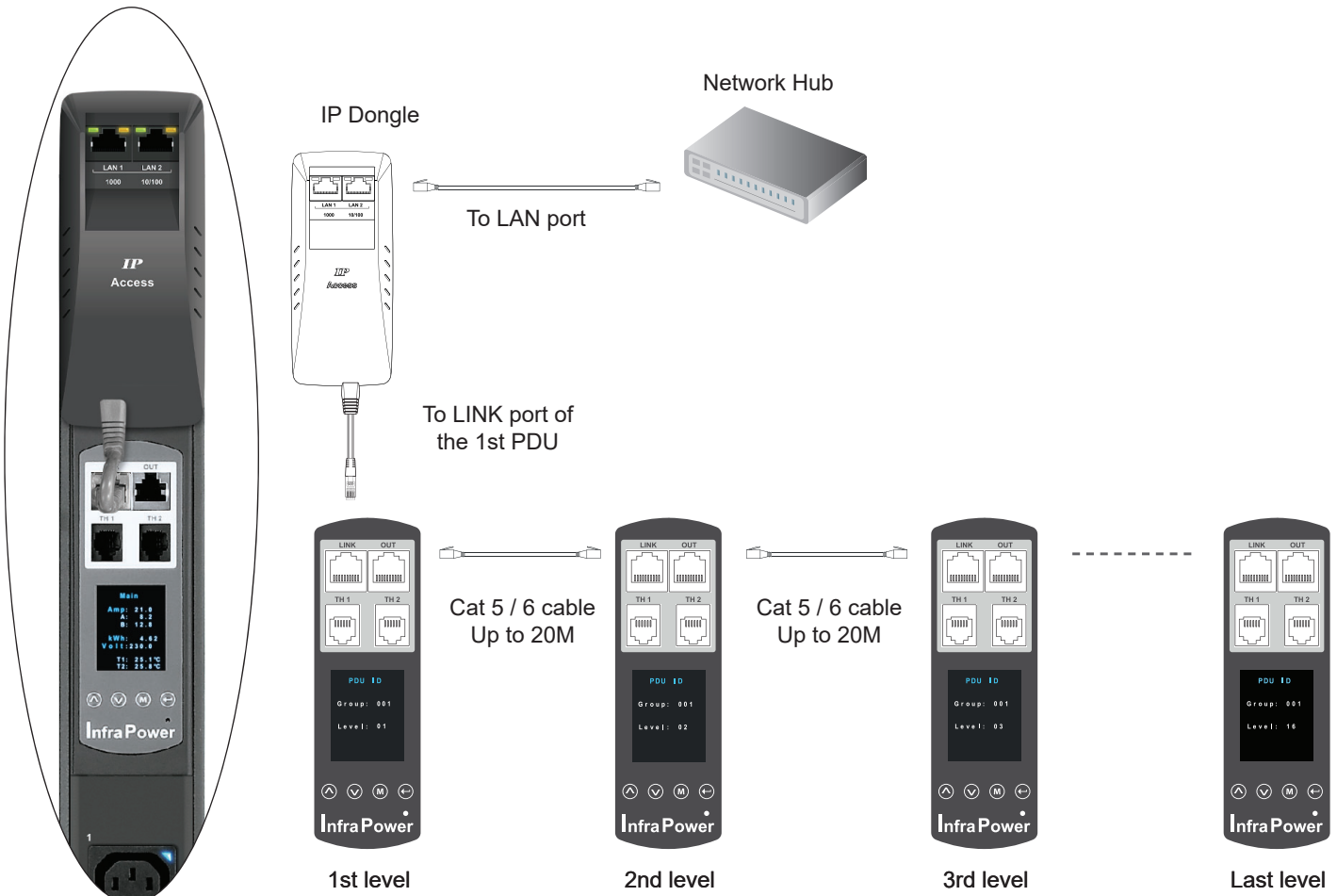
IP Dongle for vertical PDU

- SNMP capability v2 / v3

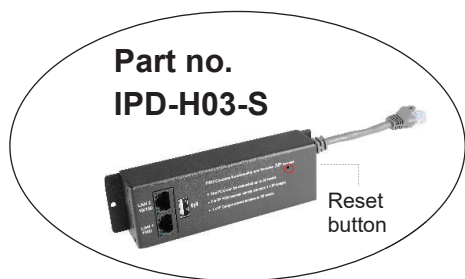


Part no.
IPD-03-S

Reset
button



< 1.5 > IP Dongle Installation



IP Dongle for rackmount PDU

- SNMP capability v2 / v3

- Press the reset button and release instantly to reboot IP dongle.
- Press and hold the reset button until Green LED off to reset IP dongle to factory default

Installation steps :

- fix the IP Dongle 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 Dongle to network device via CAT. 5 / 6 cable



< 1.6 > 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 IPM-04 at the first time
- When the PDU is reconnected to IPM-04 after disconnection
- At 00:00:00 (hh:mm:ss) daily

< 1.7 > Optional Accessory

Temp. / Temp. + Humidity Sensor

W 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. :

IG - TH01 - 2M (2M cord)

IG - TH01 - 4M (4M cord)

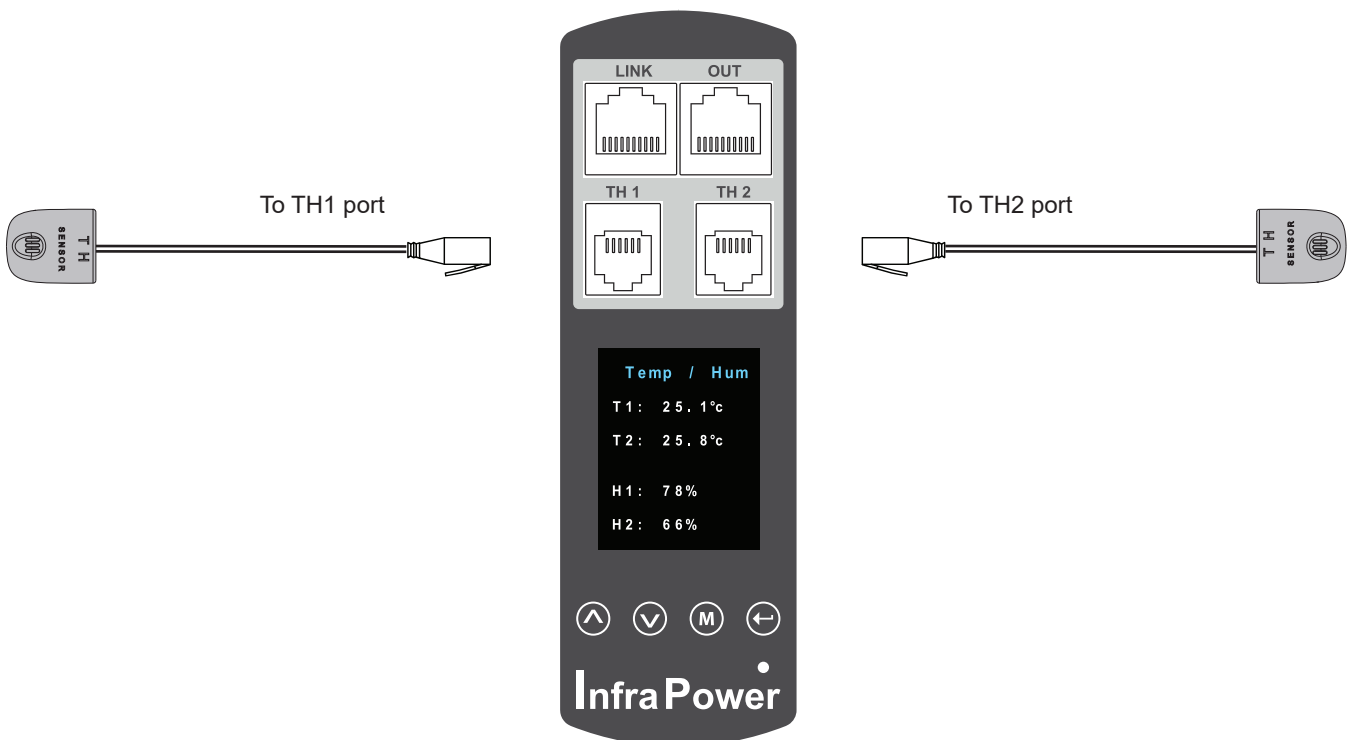


Temp. Sensor

Part no. :

IG - T01 - 2M (2M cord)

IG - T01 - 4M (4M cord)



< 1.7 > Optional Accessory

Temp. / Temp. + Humidity Sensor



| | | | |
|-----------------|--|----------------------------------|---------------------|
| | | Temp. & Humid. Sensor | Temp. Sensor |
| Part no. | | IG - TH01 | 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 20 to 80, ±4.5% R.H. | / |
| | Resolution | 1% R.H. | / |
| | Response Time | 8 sec | / |

| | | | |
|--------------------------|---------------------|-------------------------------|-----------|
| Power Requirement | Voltage | 12VDC, powered by sensor port | |
| | Current Consumption | 20mA | |
| | Power consumption | 0.24 Watt | |
| | Power on indicator | Red LED | Green LED |

| | | | |
|----------------|-----------------|---|--|
| Housing | Chassis & Cover | plastic | |
| | Color | Dark gray | |
| | Installation | Magnetic base for unrestricted installation | |

| | | | |
|--------------|---------------------|--|--|
| Cable | Cable Length | TH sensor w/ 2m cable (standard) TH sensor w/ 4m cable (option) | T sensor w/ 2m cable (standard) T sensor w/ 4m cable (option) |
| | Cable Specification | 4-wired 3.5mm to RJ11 | |
| | Cable Color | Black | Beige |

| | | | |
|----------------------|-----------|------------------------|--|
| Environmental | Operating | 0 to 80°C Degree | |
| | Storage | -5 to 80°C Degree | |
| | Humidity | 0~100%, non-condensing | |

| | | |
|-------------------|---------|-------------------|
| Dimensions | Product | 30L x 25Wx 18H mm |
|-------------------|---------|-------------------|

| | | |
|---------------|-----|-----|
| Weight | Net | 10g |
|---------------|-----|-----|

| | | | |
|----------------------|---------------|---|--|
| Compatibility | InfraPower | Single & 3 Phase W / WS / Wi / WSi series PDU | |
| | InfraSolution | X-2000 series | |
| | InfraGuard | Rack sensor system | |

| | |
|--------------------------|--------------------|
| Safety Regulatory | FCC & CE certified |
|--------------------------|--------------------|

| | |
|----------------------|-------------------------|
| Environmental | RoHS3 & REACH compliant |
|----------------------|-------------------------|

Part II. Software

< 2.1 > Key Features


InfraPower Manger IPM-04 is a free but powerful and 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 dongles.

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

InfraPower IPM-04

| Features | | |
|---------------------------|---|-----|
| Capacity | IP Dongle 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 W Monitored PDU | ✓ |
| | Single & 3 Phase Wi Monitored PDU (Outlet Measurement) | ✓ |
| | Single & 3 Phase WS Switched PDU | ✓ |
| | Single & 3 Phase WSi Switched PDU (Outlet Measurement) | ✓ |
| | Single Phase Dual Feed W Monitored PDU | ✓ |
| | Single Phase Dual Feed Wi Monitored PDU (Outlet Measurement) | ✓ |
| | Single Phase Dual Feed WS Switched PDU | ✓ |
| | Single Phase Dual Feed WSi Switched PDU (Outlet Measurement) | ✓ |

< 2.2 > IP Dongle Configuration

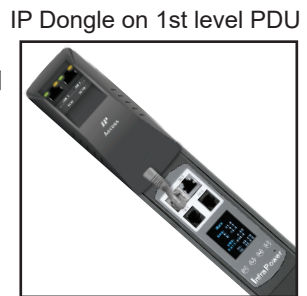
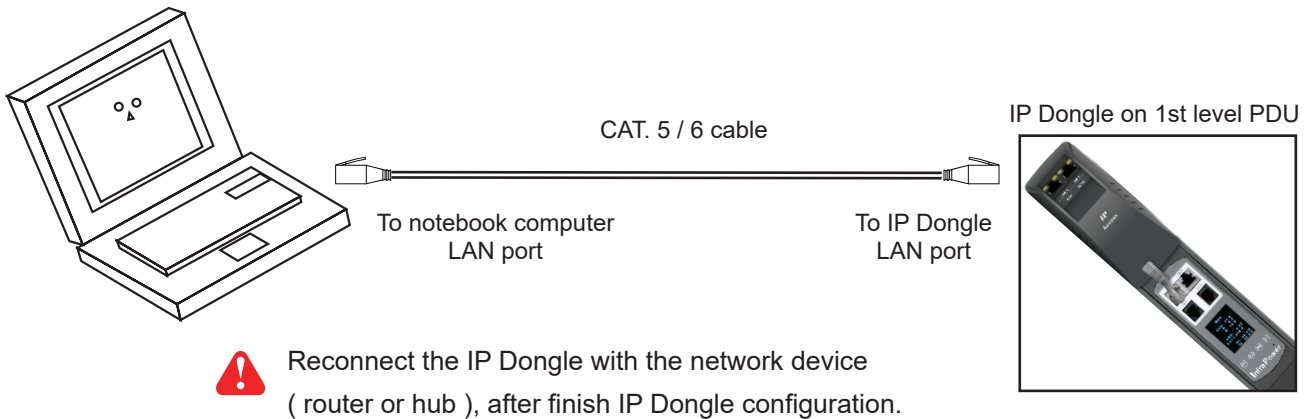
 The following steps show the static IP setting only. For DHCP setting, please refer to < 7.3 > DHCP Setting


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

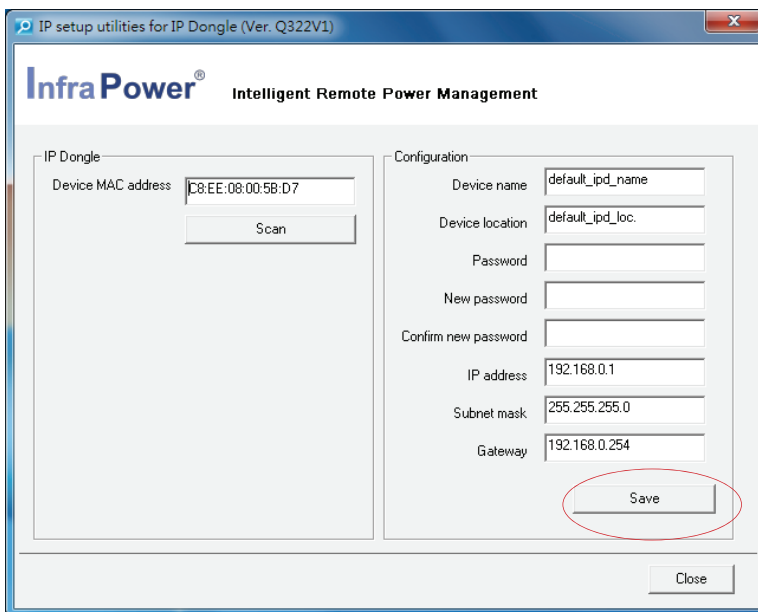
Step 1. Prepare a notebook computer to download the IP setup utilities from the link :
<http://www.austin-hughes.com/support/utilities/infrapower/IPdongleSetup.msi>

Step 2. Double Click the 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 Dongle by IP setup utilities as below. Please take the procedure for all IP dongles **ONE BY ONE**



 Ensure the PDU in power ON status



1. If the IP dongle is in factory default setting or the password is “ 00000000 “, you **MUST** change the password for security purpose .
2. 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 !, @, #, %). [`], [\$], [“], [\] are NOT supported.

Step 4. Click “ **Scan** ” to search the connected IP dongle

Step 5. Enter device name in “ **Device name** ” (min. 4 char. / max. 16 char.). Default is “ **default_ipd_name** ”

Step 6. Enter device location in “ **Device location** ” (min. 4 char. / max. 16 char.). Default is “ **default_ipd_loc.** ”

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. Change the desired “ **IP address** ” / “ **Subnet mask** ” / “ **Gateway** ”, then Click “ **Save** ” to confirm the changes

Lan 1. The default IP setting is as below:

| | |
|---------------|----------------|
| IP address : | 192.168.11.1 |
| Subnet mask : | 255.255.255.0 |
| Gateway : | 192.168.11.254 |

Lan 2. The default IP setting is as below:

| | |
|---------------|---------------|
| IP address : | 192.168.0.1 |
| Subnet mask : | 255.255.255.0 |
| Gateway : | 192.168.0.254 |

Step 11. Repeat **Step 4 & Step 10** for **Lan 2** Port of IP dongle if you will use LAN 2 as well. Otherwise, ignore this step.

< 2.3 > Hardware Requirements of the Management PC

Please prepare a management PC with the hardware requirements as below for InfraPower Manager - IPM-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 InfraPower Manager - IPM-04 is recommended.
- Make sure the management PC is POWER ON & IPM-04 is under operation.
Otherwise, daily data backup will NOT be proceeded.

< 2.4 > Supported OS Platform & Language

InfraPower Manager – IPM-04 supports the OS platforms & languages as below:

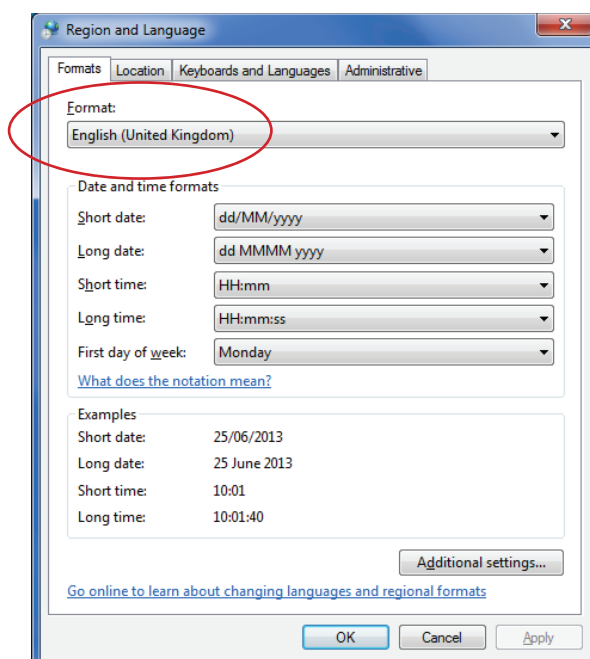
- MS Windows 10 Pro
- MS Windows 7 Professional with SP1
- MS Windows Server 2012 R2 Standard Edition
- MS Windows Server 2008 Standard Edition SP2
- MS Windows Server 2008 R2 Standard Edition SP1
- MS Windows Server 2003 R2 Standard Edition with SP2



Ensure the user logs in in the management PC as a member of “Administrators” Group before IPM-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

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

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

Software download

Please download the InfraPower Manager - IPM-04 to the management PC

from the link <http://www.austin-hughes.com/support/software/infrapower/IPM-04.msi>



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

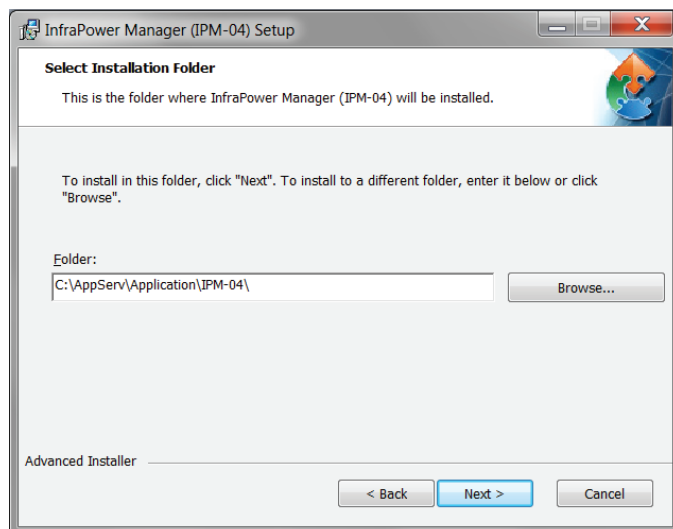


IPM-04.msi

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

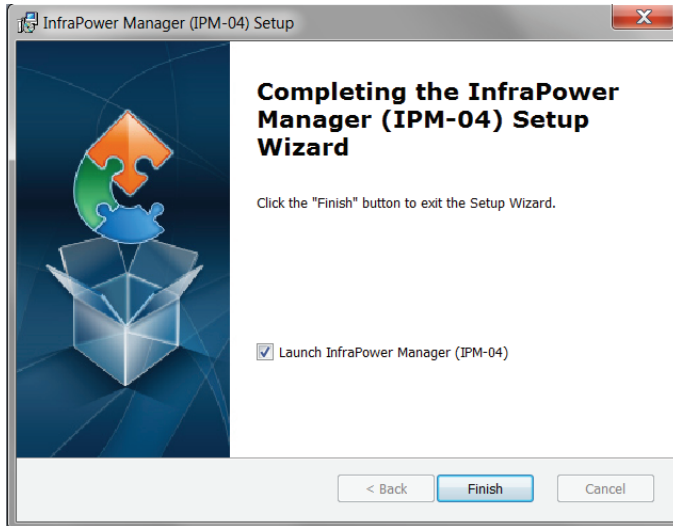


click "Next"



click "Install"

< 2.5 > Software Download



click "Finish"

..... Complete

< 2.6 > First Time Start-up Setting

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



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



< 2.6 > First Time Start-up Setting


Step 3. Apache 2.4 + PHP 7.1 installation

InfraPower Manager (IPM-04)

Software component(s) configuration & installation


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

(1) Apache 2.4 + PHP 7.1 ✘ Ver. ---

Folder : 

Listen port :

(2) PostgreSQL 9.5 ✘ Ver. ---

Folder : 

PostgreSQL login :

PostgreSQL password :

PostgreSQL port :

Database initialization : Create new Use existing


IPM-04 database name :

IPM-04 database user :

IPM-04 database password :

Verifying PostgreSQL configuration ... failed

Ver. Q417V6 (build 4.217.39)

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

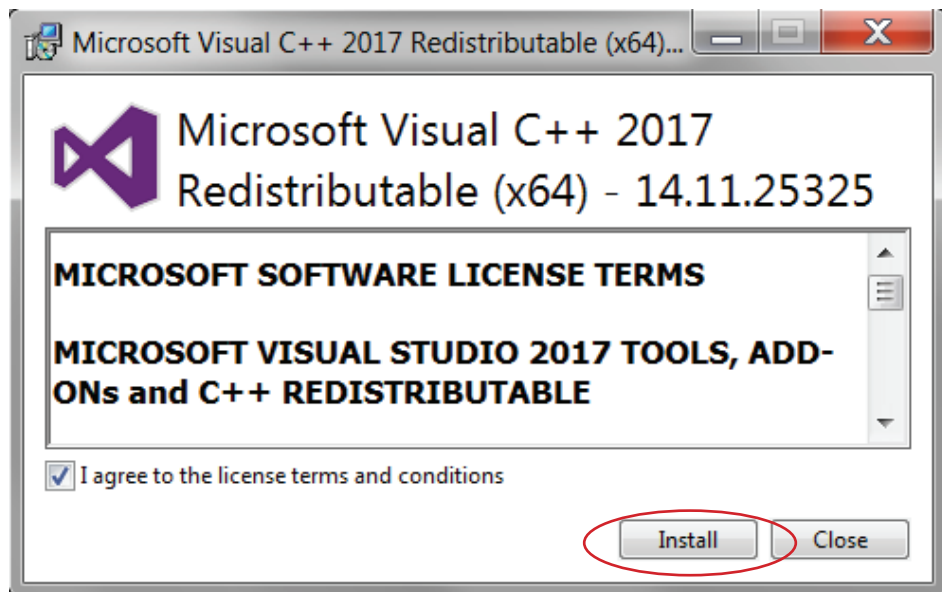
Step 4. Click “ Yes “ to start the installation

Install Apache + PHP ✘

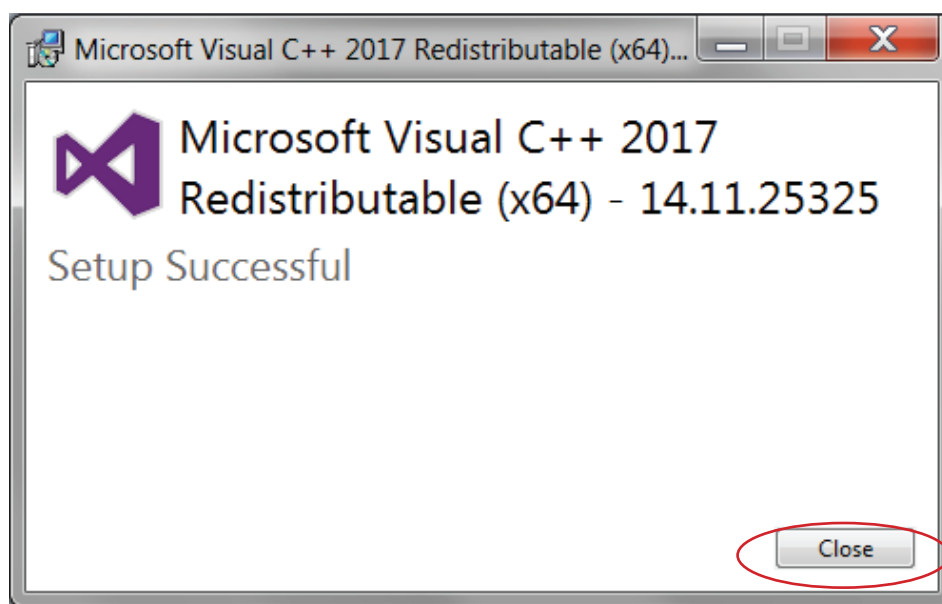
Are you sure to install Apache and PHP modules?

< 2.6 > First Time Start-up Setting

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



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



< 2.6 > First Time Start-up Setting

Step 7. PostgreSQL 9.5 installation

InfraPower Manager (IPM-04)

Software component(s) configuration & installation

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

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

Folder :

Listen port :

(2) PostgreSQL 9.5 Ver. ---

Folder :

PostgreSQL login :

PostgreSQL password :

PostgreSQL port :

Database initialization : Create new Use existing

IPM-04 database name :

IPM-04 database user :

IPM-04 database password :

Verifying PostgreSQL configuration ... failed

Ver. 0417V6 (build 4.217.39)

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

< 2.6 > First Time Start-up Setting

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

InfraPower Manager (IPM-04)

Software component(s) configuration & installation

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

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

Folder :

Listen port :

(2) PostgreSQL 9.5 ✔ Running
Ver. 9.5.3.16130

Folder :

PostgreSQL login :

PostgreSQL password :

PostgreSQL port :

Database initialization : Create new Use existing

IPM-04 database name :

IPM-04 database user :

IPM-04 database password :

Verifying Apache configuration ... success

Ver. Q417V6 (build 4.217.39)

..... 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 **InfraPower Manager IPM-04** “ **First time start-up setting** “ is completed.

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

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

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

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

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

```
16 [DB]
17 host=localhost
18 port=5432
19 database_name=ipm-04
20 user_name=ipm-04
21 user_password=ip5432097885715522
22 connection_string=server=postgres; dbname=${DBNAME}; server=${host}; port=${port}; database=${DatabaseName}; uid=${Username}; pwd=${UserPassword};
23
24 [SERVICE_NAME]
25 AppServ=C:\AppServ\
26
27 [POSTGRESQL_CFG]
28 module_name=PostgreSQL
29 version_ver=9.3.3.16120
30 bin_file_full_path=C:\AppServ\postgresql9.3\bin\pg_ctl.exe
31 conf_file_full_path=C:\AppServ\postgresql9.3\data\postgresql.conf
32 service_name=postgres-9.3_x64
33 service_port=5432
34 admin_name=postgres
35 admin_pass=537C2E286072E21762B2F7922
36
37 [APACHE_CFG]
38 module_name=Apache
39 version_ver=2.4.29.0
40 bin_file_full_path=C:\AppServ\Apache2.4\bin\httpd.exe
41 conf_file_full_path=C:\AppServ\Apache2.4\conf\httpd.conf
42 service_port=80
43 www_root_path=C:\AppServ\www\
44 ssl_cert_path=C:\AppServ\www\
45 www_listen_path=C:\AppServ\www\127.0.0.1:80
46 ssl_service_port=443
47 ssl_startip_openssl=
48
49 [PHP_CFG]
50 module_name=PHP
51 version_ver=5.6.15.0
52 bin_file_full_path=C:\AppServ\php7\php.exe
53 conf_file_full_path=C:\AppServ\php7\php.ini
54
55 [APACHE_INSTALLER]
56 apache_installer=installer_apache2.4_x64.msi
57 service_name=apache 2.4_x64
58
59 [PHP_INSTALLER]
```

Step 7. Restart Apache services.

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

..... **Complete**


Part III. System Setup & Remote Access

< 3.1 > System Setup

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

Step 1. Open Internet Explorer (I.E.), version 9.0 or above

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/IPM-04/>

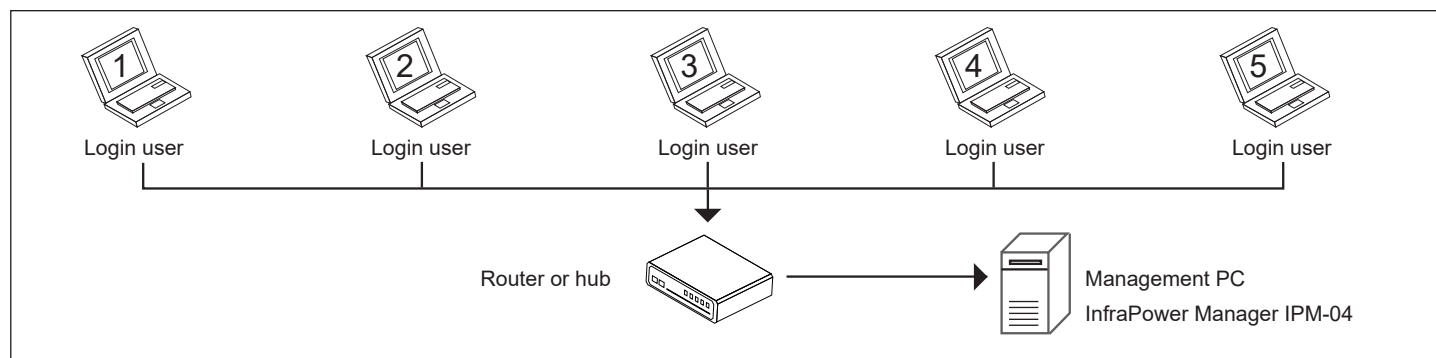
Step 3. Enter “ **User name** “. Default is “ **admin** “

Enter “ **Password** “. Default is “ **00000000** “

System authentication

User name

Password



Only one administrator among 5 concurrent users

Only Administrator is authorised to access :

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

< 3.1 > System Setup

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

Step 1. Tick “ **Operator 1:** “

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

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

Step 4. Repeat Step 1 to 3 for other operators

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

User setup

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

< 3.1 > System Setup

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

Step 1. “ **Activate** “ IP Dongle group 01

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

Please refer to Step. 10 & 7 of < 2.2 > IP dongle configuration respectively.

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 Dongle group setup

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

* Initially, please setup the IP dongle one by one.

IP dongle group **01** : Activate Deactivate

- DO NOT activate the group if there is no any IP dongle and PDU connection.
- Each IP dongle group consist of one IP dongle and max. 16 PDU.

01 IP dongle setting

IP dongle address :

IP dongle password :

- If the administrator wants to change IP dongle address and password, two steps are required.
- Firstly, enter the IP Setup utilities to make the change. (ref. to User Manual < IP Dongle Configuration >)
- Secondly, return to this page to make the same change on IP address and password.

01 IP dongle group

Command password : Enable Disable

New command password :

Confirm new password :

- Administrator needs to set command password for IP dongle groups one by one.
- Command password required for any PDU configuration and control.
- Administrator can set different command password for different IP dongle group or all IP dongle groups share the same password.

< 3.1 > System Setup

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

Default is “**Disable**”.

Step 1. “ **Enable** “ alarm email

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

Step 3. Input “ **User email** “

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

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

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

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

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

Step 9. Repeat step 8 for other alarm recipients

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

Alarm email server setting

Alarm email : Enable Disable • This alarm setting is for all IP dongle PDU groups.

SMTP server :

SMTP port :

User email :

SMTP authentication : Enable Disable

User name :

Password :

SMTP secure : ▼

Alarm interval : (Min. 10, Max. 60 minutes)

Alarm email to

Alarm mail recipient 01 : ×

Alarm mail recipient 02 :

Alarm mail recipient 03 :

Alarm mail recipient 04 :

Alarm mail recipient 05 :

< 3.1 > System Setup

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

Auto data refresh

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

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

IP dongle groups auto scan

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

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

Temperature unit

Unit : °C °F

In < **Backup** >

Default is “ **Enable** “

Default Backup Path : “ **C:\AppServ\Application\IPM-04** “

Data backup setting

Daily backup : Enable Disable


Backup to :
Example : C:\Program Files\IPM-04\

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

< 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 dongle group first.

PDU global setting

Bank amp. setting (Max. 6 banks)

Alarm :

Rising alert :

Low alert :

Outlet amp. setting (Max. 48 outlets)

Alarm :

Rising alert :

Low alert :

TH1 setting

Activate Deactivate

Temp. (°C) Humid. (%)

Alarm :

Rising alert :

TH2 setting

Activate Deactivate

Temp. (°C) Humid. (%)

Alarm :

Rising alert :

< 3.1 > System Setup

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

- < User >

- < Setup >

- < Alarm >

- < General >

- < Backup >

| First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last | | | | Last 2000 log records. |
|---|----------|-------|---|------------------------|
| Date | Time | Event | Description | |
| 2012/05/24 | 15:38:18 | User | [admin] : Add operator - Operator 01 - Kenny.Wong | |
| 2012/05/24 | 15:38:18 | User | [admin] : Add operator - Operator 02 - William.Wong | |
| 2012/05/17 | 17:43:18 | Setup | [admin] : Disable command password - IP dongle group 01 | |
| 2012/05/17 | 17:36:23 | Setup | [admin] : Enable command password - IP dongle group 01 | |

| System setup events | | | | | |
|---------------------|-----|---|-----------|-----|-------------------------------|
| - User | (1) | Add / Delete operator | - General | (1) | Change refresh mode time rate |
| | (2) | Change user login password | | (2) | Change scan mode time rate |
| - Setup | (1) | Activate / Deactivate IP dongle group [No.] | | (3) | Change temperature unit |
| | (2) | Change IP dongle [No.] address or password | - Backup | (1) | Enable / Disable daily backup |
| | (3) | Enable / Disable IP dongle group [No.] command password | | (2) | Change backup path |
| | (4) | Change IP dongle group [No.] command password | | | |
| - Alarm | (1) | Enable or Disable alarm | | | |
| | (2) | Change alarm email server setting | | | |
| | (3) | Add / Delete alarm mail recipient | | | |

< 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 &

IPM-04

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

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

Step 2. Open the web browser of remote client PC

Step 3. Input the URL of InfraPower Manager IPM-04 in the address bar

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

Step 4. System authentication page pops up automatically.

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

System authentication

User name

Password

Part IV. Software Usage & Operation

< 4.1 > Status

< Status > provides

- **Search** function to search new installed PDUs in each IP Dongle 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 Dongle group **ONE by ONE**

PDU status

IP dongle name : default_ipd_name
IP address : 192.168.0.1

Page: 1 2

| Level | Name | Location | Amp | | | | | | kWh | kVA | Amp | | | | | | Total | | | TH 1 | | TH 2 | | | | | | | | | | | |
|-------|-------------|------------------|---------|------|-------|----------|----------|------|-----|-----|-----|-----|--------|------|---------|----------|----------|-----|-----|------|----|------|----|-----|------|------|-----|--------|------|------|------|---|---|
| | | | Max. | Load | Alarm | R. alert | L. alert | Load | | | kWh | kVA | Max. | Load | Alarm | R. alert | L. alert | Amp | kWh | kVA | °C | % | °C | % | | | | | | | | | |
| 01 | SPWS112-32A | Server_Rack_001L | Cir. A | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.06 | 0.00 | Cir. B | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.01 | 0.00 | 0.0 | 0.07 | 0.00 | 29.5 | 50.4 | - | - |
| 02 | SPWS24-32A | Server_Rack_001R | L1 - B1 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | L1 - B2 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | 0.0 | 0.00 | 0.00 | 25.7 | 55.8 | - | - |
| | | | L2 - B3 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | L2 - B4 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | | | | | | | |
| | | | L3 - B5 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | L3 - B6 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | | | | | | | |
| 03 | SPWS24-32A | Server_Rack_002L | Cir. A | 16 | / | 0.1 | / | 13.0 | / | 0.0 | / | 0.0 | 11.17 | 0.02 | Cir. B | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | 0.1 | 11.17 | 0.02 | - | - | - | - |
| 04 | SPWS36-32A | Server_Rack_002R | L1 - B1 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | L1 - B2 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | 0.0 | 0.00 | 0.00 | - | - | - | - |
| | | | L2 - B3 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | L2 - B4 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | | | | | | | |
| | | | L3 - B5 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | L3 - B6 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | | | | | | | |
| 05 | SPW23-32A | Server_Rack_003L | Cir. A | 16 | / | 0.1 | / | 13.0 | / | 0.0 | / | 0.0 | 1.25 | 0.04 | Cir. B | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | 0.1 | 1.25 | 0.04 | - | - | - | - |
| 06 | SPWS24-63A | Server_Rack_003R | Bank1 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.16 | 0.00 | Bank2 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.04 | 0.00 | 0.0 | 0.26 | 0.00 | - | - | - | - |
| | | | Bank3 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.04 | 0.00 | Bank4 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.02 | 0.00 | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 07 | SPW23-32A | Server_Rack_004L | Cir. A | 16 | / | 0.2 | / | 13.0 | / | 0.0 | / | 0.0 | 84.71 | 0.05 | Cir. B | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | 0.2 | 84.71 | 0.06 | - | - | - | - |
| 08 | SPWS36-32A | Server_Rack_004R | L1 - B1 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | L1 - B2 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | 0.0 | 0.00 | 0.00 | - | - | - | - |
| | | | L2 - B3 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | L2 - B4 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | | | | | | | |
| | | | L3 - B5 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | L3 - B6 | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.00 | 0.00 | | | | | | | |
| 09 | SPWS112-32A | Server_Rack_005L | Cir. A | 16 | / | 0.2 | / | 13.0 | / | 0.0 | / | 0.0 | 102.69 | 0.07 | Cir. B | 16 | / | 0.0 | / | 13.0 | / | 0.0 | / | 0.0 | 0.31 | 0.00 | 0.3 | 103.00 | 0.07 | - | - | - | - |

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

PDU details

Level: 01 V1UK7C13/4C19-32A-WSI Name: SPWS112-32A kWh: 0.07 Power factor: 0.47
 Status: Connected Location: Server_Rack_001L Load amp: 0.0 kVA: 0.00

Cir. A

| | | | |
|------------|-------|---------------------|--|
| Voltage : | 219.8 | Alarm amp : | <input style="width: 50px;" type="text" value="13.0"/> |
| Max. amp : | 16 | Rising alert amp : | <input style="width: 50px;" type="text" value="0.0"/> |
| Load amp : | 0.0 | Low alert amp : | <input style="width: 50px;" type="text" value="0.0"/> |
| Peak amp : | 3.1 | 2016/05/08 15:11:10 | <input type="button" value="Reset"/> |
| kWh : | 0.06 | 2016/05/08 15:08:05 | <input type="button" value="Reset"/> |

Cir. B

| | | | |
|------------|-------|---------------------|--|
| Voltage : | 219.8 | Alarm amp : | <input style="width: 50px;" type="text" value="13.0"/> |
| Max. amp : | 16 | Rising alert amp : | <input style="width: 50px;" type="text" value="0.0"/> |
| Load amp : | 0.0 | Low alert amp : | <input style="width: 50px;" type="text" value="0.0"/> |
| Peak amp : | 3.1 | 2016/05/08 15:10:01 | <input type="button" value="Reset"/> |
| kWh : | 0.01 | 2016/05/08 15:08:31 | <input type="button" value="Reset"/> |

| Outlet | Name | Amp | kWh | kVA | Status | Switch |
|--------|----------------|-----|------|-----|--------|------------------------------------|
| 01 | outlet_name_01 | 0.0 | 0.02 | - | ON | <input type="button" value="OFF"/> |
| 02 | outlet_name_02 | 0.0 | 0.03 | - | ON | <input type="button" value="OFF"/> |
| 03 | outlet_name_03 | 0.0 | 6.59 | - | ON | <input type="button" value="OFF"/> |
| 04 | outlet_name_04 | 0.0 | 0.00 | - | ON | <input type="button" value="OFF"/> |
| C01 | outlet_name_09 | 0.0 | 0.00 | - | ON | <input type="button" value="OFF"/> |
| C02 | outlet_name_10 | 0.0 | 0.00 | - | ON | <input type="button" value="OFF"/> |

| Outlet | Name | Amp | kWh | kVA | Status | Switch |
|--------|----------------|-----|------|-----|--------|------------------------------------|
| 05 | outlet_name_05 | 0.0 | 0.00 | - | ON | <input type="button" value="OFF"/> |
| 06 | outlet_name_06 | 0.0 | 0.05 | - | ON | <input type="button" value="OFF"/> |
| 07 | outlet_name_07 | 0.0 | 0.01 | - | ON | <input type="button" value="OFF"/> |
| 08 | outlet_name_08 | 0.0 | 0.00 | - | ON | <input type="button" value="OFF"/> |
| C03 | outlet_name_11 | 0.0 | 0.00 | - | ON | <input type="button" value="OFF"/> |
| C04 | outlet_name_12 | 0.0 | 0.00 | - | ON | <input type="button" value="OFF"/> |

Click outlet icon for setting

Auto data refresh : ||||| Untick during data input
 Save new data
 Cancel new data input


All IPM communication to and from the PDU is stopped, notification to the user is stopped,
Set PDU in Maintenance mode and the PDU readings are "-".
 Stop monitoring removed PDU

* Press F11 to enlarge or diminish the screen

< 4.3 > Outlet Setting

In < Outlet setting > ,

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



 Click “ **Apply** ” to finish the above settings

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

Outlet setting

PDU level : V1UK7C13/4C19-32A-WSI
Status : Connected
Name : SPWSI12-32A
Location : Server_Rack_001L

Cir. A

Outlet :  

Name :

Status : ON

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

Load amp : 0.0

Alarm amp :

Rising alert amp :

Low alert amp :

Peak amp : 0.3 2016/04/25 16:21:38

kWh : 0.02 2016/04/18 15:43:08

kVA : -

Save new data Return to PDU DETAILS

Cancel new data input

< 4.4 > Sensor Status

















In < TH status > ,

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

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

Sensor status

IP dongle name : Default_ipd_name
IP address : 192.168.0.1

| | | | TH 1 | | | | TH 2 | | | |
|-------|-------------|--|--------------------------|---|--------------------------|---|--------------------------|---|--------------------------|--|
| | | | °C | | % | | °C | | % | |
| PDU | | | Temp. / Alarm / R. alert | | Humid / Alarm / R. alert | | Temp. / Alarm / R. alert | | Humid / Alarm / R. alert | |
| Level | Name | Setting | Location | | Location | | Location | | Location | |
| 01 | 3PWSi36-32A |  | Front_Top | | Front_Top | | Rear_Top | | Rear_Top | |
| 02 | 3PWSi36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 03 | 3PWSi36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 04 | 3PWSi36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 05 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 06 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 07 | 3PW36-32A |  | Front_Top | | Front_Top | | Rear_Top | | Rear_Top | |
| 08 | 3PW36-32A |  | 27.8 / 35.0 / 0.0 | | 51.5 / 65.0 / 0.0 | | 28.5 / 35.0 / 0.0 | | 48.1 / 65.0 / 0.0 | |
| 09 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 10 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 11 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 12 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 13 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 14 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 15 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |
| 16 | 3PW36-32A |  | - / - / - | - | - / - / - | - | - / - / - | - | - / - / - | |

Auto data refresh : XXXXXXXXXX Untick during data input

Search new installed PDUs

* Press F11 to enlarge or diminish the screen

< 4.5 > Sensor Setting

In < TH setting > ,

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

 If no any TH sensor connected, NEVER activate.

Sensor setting

PDU level : VP24C13/12C19-32A-WS1
Status : Connected
Name : 3PWSI36-32A
Location : Server_Rack_001R

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

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

TH 1 Activate Deactivate
Location :

TH 2 Activate Deactivate
Location :

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

Save new data Return to TH STATUS
 Cancel new data input









< 4.6 > Outlet Schedule Overview

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

Outlet schedule overview

IP dongle name : default_ipd_name
IP address : 192.168.0.1

Page : 1 2

| PDU Level | Name | Setting | Outlet Schedule # 1 - 2 | | Outlet Schedule # 3 - 4 | | Outlet Schedule # 5 - 6 | |
|-----------|-------------|---|-------------------------|------------|-------------------------|----------|-------------------------|----------|
| | | | Name | Action | Name | Action | Name | Action |
| 01 | 3PWSi48-50A |  | - | Disabled | - | Disabled | - | Disabled |
| | | | - | Disabled | - | Disabled | - | Disabled |
| 02 | SPWSi24-32A |  | - | Disabled | - | Disabled | - | Disabled |
| | | | - | Disabled | - | Disabled | - | Disabled |
| 03 | SPWSi24-32A |  | ScheduleName_01 | Daily - On | - | Disabled | - | Disabled |
| | | | - | Disabled | - | Disabled | - | Disabled |
| 04 | 3PWSi36-32A |  | - | Disabled | - | Disabled | - | Disabled |
| | | | - | Disabled | - | Disabled | - | Disabled |
| 05 | SPW23-32A |  | - | Disabled | - | Disabled | - | Disabled |
| | | | - | Disabled | - | Disabled | - | Disabled |
| 06 | SPWSi12-32A |  | - | Disabled | - | Disabled | - | Disabled |
| | | | - | Disabled | - | Disabled | - | Disabled |
| 07 | SPW23-32A |  | - | Disabled | - | Disabled | - | Disabled |
| | | | - | Disabled | - | Disabled | - | Disabled |
| 08 | 3PWS36-32A |  | - | Disabled | - | Disabled | - | Disabled |
| | | | - | Disabled | - | Disabled | - | Disabled |

Auto data refresh : Untick during data input

Search new installed PDUs

* Press F11 to enlarge or diminish the screen

< 4.7 > Outlet Schedule Setting

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

Outlet schedule setting

PDU level : H8C13-32A-WSi
Status : Connected
Name : SPWSI8-32A
Location : Server_Rack_004R

Outlet schedule : Disable Enable

Name :

Action : OFF ON

Time : Daily Weekly One-Time
 / (MM / DD date format)
 : (24 hours format)

Outlet schedule

PDU

A

- 01 Dell_Server_001
- 02 outlet_name_02
- 03 outlet_name_03
- 04 outlet_name_04

B

- 05 Dell_Server_002
- 06 outlet_name_06
- 07 outlet_name_07
- 08 outlet_name_08

< 4.7 > Outlet Schedule Setting

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









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

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

Outlet schedule overview

IP dongle name : default_ipd_name
IP address : 192.168.0.1

Page : 1 2

| PDU Level | Name | Setting | Outlet Schedule # 1 - 2 | | Outlet Schedule # 3 - 4 | | Outlet Schedule # 5 - 6 | |
|-----------|-------------|--|-------------------------|------------|-------------------------|----------|-------------------------|----------|
| | | | Name | Action | Name | Action | Name | Action |
| 01 | 3PWSi48-50A |  | - | Disabled | - | Disabled | - | Disabled |
| 02 | SPWSi24-32A |  | - | Disabled | - | Disabled | - | Disabled |
| 03 | SPWSi24-32A |  | ScheduleName_01 | Daily - On | - | Disabled | - | Disabled |
| 04 | 3PWSi36-32A |  | - | Disabled | - | Disabled | - | Disabled |
| 05 | SPW23-32A |  | - | Disabled | - | Disabled | - | Disabled |
| 06 | SPWSi12-32A |  | - | Disabled | - | Disabled | - | Disabled |
| 07 | SPW23-32A |  | - | Disabled | - | Disabled | - | Disabled |
| 08 | 3PWS36-32A |  | - | Disabled | - | Disabled | - | Disabled |

Auto data refresh : Unlick during data input

Search new Installed PDUs

* Press F11 to enlarge or diminish the screen

< 4.7 > Outlet Schedule Setting

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

Step 3. Provide the name of the outlet schedule

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

Step 5. Select the time for outlet schedule.

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

Daily ON / OFF Schedule

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

Weekly ON / OFF Schedule

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

One-time ON / OFF Schedule

< 4.7 > Outlet Schedule Setting

Step 6. Tick the outlets to switch ON / OFF

Outlet schedule

PDU

A

01 Dell_Server_001

02 outlet_name_02

03 outlet_name_03

04 outlet_name_04

B

05 Dell_Server_002

06 outlet_name_06

07 outlet_name_07

08 outlet_name_08

Apply Save new data Exit Return to OUTLET SCHEDULE

Cancel Cancel new data input

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:

| Date | Time | Model | Name | Location | Status | Circuit A | | | Circuit B | | | Total | | |
|------------|----------|----------------------|-------------|------------------|-----------|-----------------------------|--------|------|-----------------------------|------|------|-------|--------|------|
| | | | | | | Amp | kWh | kVA | Amp | kWh | kVA | Amp | kWh | kVA |
| 2017/12/20 | 10:38:16 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | Server_Rack_005L | Connected | 16 / 0.2 / 10.0 / 0.0 / 0.0 | 257.28 | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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:

Outlet:

| Date | Time | PDU Model | PDU Name | Outlet Name | Status | Amp | | | kWh | kVA |
|------------|----------|----------------------|-------------|----------------|--------|------|-------|---------------------|--------|-----|
| | | | | | | Load | Alarm | R. alert / L. alert | | |
| 2017/12/20 | 10:48:19 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 300.01 | - |
| 2017/12/20 | 10:38:17 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 10:28:16 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 10:18:14 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 10:08:12 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 09:58:11 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 09:48:10 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 300.00 | - |
| 2017/12/20 | 09:38:08 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 09:28:07 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 09:18:06 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 09:08:05 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 08:58:04 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.99 | - |
| 2017/12/20 | 08:48:03 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 08:38:02 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 08:28:01 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 08:17:59 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 08:07:58 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 07:57:57 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.98 | - |
| 2017/12/20 | 07:47:56 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 07:37:54 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 07:27:53 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 07:17:51 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 07:07:50 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.97 | - |
| 2017/12/20 | 06:57:48 | V1UK7C134C19-32A-WSI | SPWSI12-32A | outlet_name_02 | ON | 0.2 | 3.0 | 0.0 / 0.0 | 299.96 | - |
| 2017/12/20 | 06:47:47 | V1UK7C134C19-32A-WSI | SPWSI12-32A | 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 :

| Date | Time | Model | Status | Circuit A kWh | Circuit B kWh | Total kWh |
|------------|----------|-----------------------|-----------|------------------|------------------|--------------|
| 2017/12/20 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | 0.23 | 0.00 | 0.23 |
| 2017/12/19 | 00:00:01 | V1UK7C13/4C19-32A-WSi | Connected | 0.22 | 0.00 | 0.22 |
| 2017/12/18 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | 0.22 | 0.00 | 0.22 |
| 2017/12/17 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | 0.22 | 0.00 | 0.22 |
| 2017/12/16 | 00:00:01 | V1UK7C13/4C19-32A-WSi | Connected | 0.22 | 0.00 | 0.22 |
| 2017/12/15 | 00:00:01 | V1UK7C13/4C19-32A-WSi | Connected | 0.23 | 0.00 | 0.23 |
| 2017/12/14 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | 0.22 | 0.00 | 0.22 |
| 2017/12/13 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | 0.22 | 0.00 | 0.22 |
| 2017/12/12 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | 0.25 | 0.00 | 0.25 |
| 2017/12/11 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | 0.22 | 0.00 | 0.22 |
| 2017/12/10 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | 0.22 | 0.00 | 0.22 |
| 2017/12/09 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | 0.12 | 0.00 | 0.12 |

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Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< Single Phase Daily kWh Log - Outlet >

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

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 :

Outlet :

| Date | Time | Model | Status | Outlet Name | Outlet kWh |
|------------|----------|-----------------------|-----------|----------------|---------------|
| 2017/12/20 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.23 |
| 2017/12/19 | 00:00:01 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.24 |
| 2017/12/18 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.22 |
| 2017/12/17 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.22 |
| 2017/12/16 | 00:00:01 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.23 |
| 2017/12/15 | 00:00:01 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.22 |
| 2017/12/14 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.23 |
| 2017/12/13 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.22 |
| 2017/12/12 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.24 |
| 2017/12/11 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.23 |
| 2017/12/10 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.22 |
| 2017/12/09 | 00:00:00 | V1UK7C13/4C19-32A-WSi | Connected | outlet_name_02 | 0.13 |

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Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< 5.1 > Single Phase Dual Feed PDU / Outlet Log

< Single Phase Dual Feed PDU Log >

provides past 2000 log records of each Single Phase PDU.

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

| Date | Time | Model | Name | Location | Status | I - A | | | v | II - B | | | II - Total | | |
|------------|----------|---------------------|------------------|------------------|-----------|-----------------------------|------|------|----|------------------|-------|------|------------|-------|------|
| | | | | | | Amp | kWh | kVA | | Amp | kWh | kVA | Load | kWh | kVA |
| 2017/12/19 | 01:50:05 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 10.0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 01:40:03 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 01:30:02 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 01:20:00 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 01:09:59 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 00:59:58 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 00:49:57 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 00:39:56 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 00:29:54 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 00:19:53 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/19 | 00:09:52 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 23:59:51 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 10.0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 23:49:50 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 10.0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 23:39:49 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 10.0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 23:29:48 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 23:19:47 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 23:09:46 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 22:59:45 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 22:49:43 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 22:39:42 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 22:29:41 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 22:19:40 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 22:09:39 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 21:59:38 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 31.67 | 0.00 | 0.4 | 41.10 | 0.09 |
| 2017/12/18 | 21:49:37 | DV32C138C19-32A-WSI | default_pdu_name | default_pdu_loc. | Connected | 16 / 0.0 / 10.0 / 0.0 / 0.0 | 0.18 | 0.00 | 16 | 0 / 0.0 / 0.0 | 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.

| Date | Time | Model | Name | Outlet Name | Status | Amp | kWh | kVA |
|------------|----------|---------------------|--------------|----------------|--------|------------------------------------|------|------|
| | | | | | | Load / Alarm / R. alert / L. alert | | |
| 2017/12/20 | 11:25:46 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 2.04 | 0.09 |
| 2017/12/20 | 11:15:45 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 2.03 | 0.09 |
| 2017/12/20 | 11:05:43 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 2.01 | 0.10 |
| 2017/12/20 | 10:55:42 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 2.00 | 0.08 |
| 2017/12/20 | 10:45:40 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.98 | 0.08 |
| 2017/12/20 | 10:35:39 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.97 | 0.09 |
| 2017/12/20 | 10:25:38 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.95 | 0.08 |
| 2017/12/20 | 10:15:36 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.94 | 0.08 |
| 2017/12/20 | 10:05:35 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.93 | 0.08 |
| 2017/12/20 | 09:55:34 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.91 | 0.09 |
| 2017/12/20 | 09:45:32 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.90 | 0.09 |
| 2017/12/20 | 09:35:30 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.88 | 0.09 |
| 2017/12/20 | 09:25:28 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.87 | 0.09 |
| 2017/12/20 | 09:15:26 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.85 | 0.09 |
| 2017/12/20 | 09:05:24 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.84 | 0.09 |
| 2017/12/20 | 08:55:22 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.82 | 0.09 |
| 2017/12/20 | 08:45:21 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.81 | 0.09 |
| 2017/12/20 | 08:35:19 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.80 | 0.09 |
| 2017/12/20 | 08:25:17 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.78 | 0.09 |
| 2017/12/20 | 08:15:15 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.76 | 0.09 |
| 2017/12/20 | 08:05:14 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.75 | 0.10 |
| 2017/12/20 | 07:55:13 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.73 | 0.09 |
| 2017/12/20 | 07:45:12 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.72 | 0.09 |
| 2017/12/20 | 07:35:11 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.71 | 0.09 |
| 2017/12/20 | 07:25:09 | DV32C138C19-16A-WSI | DSPWSI40-16A | outlet_name_39 | ON | 0.4 / 16.0 / 0.0 / 0.0 | 1.69 | 0.09 |

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Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< 5.1 > Single Phase PDU / Outlet Log

< Single Phase Dual Feed Daily kWh Log - PDU >

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

Dual Feed > Single Phase > kWh Log - PDU

PDU level : 10

| Date | Time | Model | Status | I-A kWh | I-B kWh | I-Total kWh | II-A kWh | II-B kWh | II-Total kWh |
|------------|----------|----------------------|-----------|------------|------------|----------------|-------------|-------------|-----------------|
| 2017/12/20 | 00:00:00 | DV32C13/8C19-32A-WSi | Connected | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2017/12/19 | 00:00:00 | DV32C13/8C19-32A-WSi | Connected | 0.00 | 0.00 | 0.00 | 1.60 | 0.00 | 1.60 |
| 2017/12/18 | 00:00:00 | DV32C13/8C19-32A-WSi | Connected | 0.00 | 0.00 | 0.00 | 2.18 | 0.00 | 2.18 |
| 2017/12/17 | 00:00:00 | DV32C13/8C19-32A-WSi | Connected | 0.00 | 0.00 | 0.00 | 2.16 | 0.00 | 2.16 |
| 2017/12/16 | 00:00:00 | DV32C13/8C19-32A-WSi | Connected | 0.00 | 0.00 | 0.00 | 0.51 | 0.00 | 0.51 |

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 Dual Feed Daily kWh Log - Outlet >

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

(Single Phase Outlet Measurement PDU only)

Dual Feed > Single Phase > kWh Log - Outlet

PDU level : 09

Outlet : 39

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

| Date | Time | Model | Name | Location | Status | Bank1 | | Bank4 | | | Total | | |
|------------|----------|---------------------|------------------|------------------|-----------|-----------------------------|-------|-------|-----|-----|-------|--------|------|
| | | | | | | Amp | kWh | Amp | kWh | kVA | Amp | kWh | kVA |
| 2017/12/21 | 10:42:48 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.52 | 0.10 |
| 2017/12/21 | 10:32:47 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.50 | 0.10 |
| 2017/12/21 | 10:32:45 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.49 | 0.10 |
| 2017/12/21 | 10:12:43 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.47 | 0.10 |
| 2017/12/21 | 10:02:42 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.45 | 0.10 |
| 2017/12/21 | 09:52:40 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.44 | 0.10 |
| 2017/12/21 | 09:42:39 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.42 | 0.10 |
| 2017/12/21 | 09:32:38 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.40 | 0.10 |
| 2017/12/21 | 09:22:38 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.39 | 0.10 |
| 2017/12/21 | 09:12:34 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.37 | 0.10 |
| 2017/12/21 | 09:02:33 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.35 | 0.10 |
| 2017/12/21 | 08:52:32 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.34 | 0.10 |
| 2017/12/21 | 08:42:31 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.32 | 0.10 |
| 2017/12/21 | 08:32:29 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.31 | 0.10 |
| 2017/12/21 | 08:22:27 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.29 | 0.10 |
| 2017/12/21 | 08:12:28 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.27 | 0.10 |
| 2017/12/21 | 08:02:24 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.26 | 0.10 |
| 2017/12/21 | 07:52:23 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.24 | 0.10 |
| 2017/12/21 | 07:42:22 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.22 | 0.10 |
| 2017/12/21 | 07:32:20 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.21 | 0.10 |
| 2017/12/21 | 07:22:19 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.19 | 0.10 |
| 2017/12/21 | 07:12:18 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.17 | 0.10 |
| 2017/12/21 | 07:02:18 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.15 | 0.10 |
| 2017/12/21 | 06:52:14 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.14 | 0.10 |
| 2017/12/21 | 06:42:13 | V24C13/8C19-83A-WSI | default_pdu_name | default_pdu_loc. | Connected | 15 / 0.4 / 10.0 / 3.0 / 0.0 | 29.82 | 0.0 | 0.0 | 0.0 | 0.4 | 104.12 | 0.10 |

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Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< 63A PDU Outlet Log >

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

The software will generate an outlet log record every 10 mins.

Single Feed > 63A > Outlet Log - PDU

PDU level: 13

Outlet: 05

| Date | Time | Model | Name | Outlet Name | Status | Amp | | kWh | kVA |
|------------|----------|---------------------|------------------|----------------|--------|------------------------------------|------------------------------------|------|-----|
| | | | | | | Load / Alarm / R. alert / L. alert | Load / Alarm / R. alert / L. alert | | |
| 2017/12/21 | 10:53:07 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 | V24C13/8C19-83A-WSI | 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 :

| Date | Time | Model | Status | Bank1 kWh | Bank2 kWh | Bank3 kWh | Bank4 kWh | Total kWh |
|------------|----------|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| 2017/12/21 | 00:00:00 | V24C13/8C19-83A-WSi | Connected | 2.39 | 0.00 | 0.00 | 0.00 | 2.39 |
| 2017/12/20 | 00:00:00 | V24C13/8C19-83A-WSi | Connected | 2.40 | 0.00 | 0.00 | 0.00 | 2.40 |
| 2017/12/19 | 00:00:01 | V24C13/8C19-83A-WSi | Connected | 2.38 | 0.00 | 0.00 | 0.00 | 2.38 |
| 2017/12/18 | 00:00:00 | V24C13/8C19-83A-WSi | Connected | 2.42 | 0.00 | 0.00 | 0.00 | 2.42 |
| 2017/12/17 | 00:00:01 | V24C13/8C19-83A-WSi | Connected | 2.42 | 0.00 | 0.00 | 0.00 | 2.42 |
| 2017/12/16 | 00:00:01 | V24C13/8C19-83A-WSi | Connected | 2.39 | 0.00 | 0.00 | 0.00 | 2.39 |
| 2017/12/15 | 00:00:01 | V24C13/8C19-83A-WSi | Connected | 2.40 | 0.00 | 0.00 | 0.00 | 2.40 |
| 2017/12/14 | 00:00:00 | V24C13/8C19-83A-WSi | Connected | 2.38 | 0.00 | 0.00 | 0.00 | 2.38 |
| 2017/12/13 | 00:00:00 | V24C13/8C19-83A-WSi | Connected | 2.40 | 0.00 | 0.00 | 0.00 | 2.40 |
| 2017/12/12 | 00:00:00 | V24C13/8C19-83A-WSi | Connected | 2.40 | 0.00 | 0.00 | 0.00 | 2.40 |
| 2017/12/11 | 00:00:00 | V24C13/8C19-83A-WSi | Connected | 2.43 | 0.00 | 0.00 | 0.00 | 2.43 |
| 2017/12/10 | 00:00:00 | V24C13/8C19-83A-WSi | Connected | 2.43 | 0.00 | 0.00 | 0.00 | 2.43 |
| 2017/12/09 | 00:00:00 | V24C13/8C19-83A-WSi | Connected | 1.32 | 0.00 | 0.00 | 0.00 | 1.32 |

First / Previous 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 .

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

(63A Outlet measurement PDU only)

Single Feed > 63A > kWh Log - Outlet

PDU level :

Outlet :

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

First / Previous 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 PDU. The software will generate a log every 10 mins.

| Three Phase PDU log | | | | | | | | | | | | | | | | | | |
|--|----------|-----------------------|-------------|-----------------|-----------|---------|------|-----------------------------|------|------|------|-----------------------------|-----|-----|-------|-----|-------|------|
| PDU level: <input type="text" value="01"/> | | | | | | | | | | | | | | | | | | |
| Date | Time | Model | Name | Location | Status | Amp | | | kWh | Amp | | | kWh | kVA | Total | | | |
| | | | | | | Max. | Load | Alarm / R. alert / L. alert | | Max. | Load | Alarm / R. alert / L. alert | | | Amp | kWh | kVA | |
| 2017/12/20 | 11:01:57 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | | | | 0.8 | 79.34 | 0.17 |
| 2017/12/20 | 10:51:55 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | | | | 0.8 | 79.31 | 0.17 |
| 2017/12/20 | 10:41:54 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.8 | 79.28 | 0.17 |
| 2017/12/20 | 10:31:53 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.8 | 79.25 | 0.17 |
| 2017/12/20 | 10:21:52 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.8 | 79.23 | 0.17 |
| 2017/12/20 | 10:11:51 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.8 | 79.20 | 0.17 |
| 2017/12/20 | 10:01:50 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.8 | 79.17 | 0.17 |
| 2017/12/20 | 09:51:49 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.8 | 79.14 | 0.17 |
| 2017/12/20 | 09:41:48 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 79.11 | 0.17 |
| 2017/12/20 | 09:31:47 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.8 | 79.08 | 0.17 |
| 2017/12/20 | 09:21:46 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.8 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.8 | 79.06 | 0.17 |
| 2017/12/20 | 09:11:45 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 79.03 | 0.17 |
| 2017/12/20 | 09:01:44 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 79.00 | 0.17 |
| 2017/12/20 | 08:51:43 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.97 | 0.17 |
| 2017/12/20 | 08:41:42 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.95 | 0.17 |
| 2017/12/20 | 08:31:41 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.92 | 0.17 |
| 2017/12/20 | 08:21:40 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.89 | 0.17 |
| 2017/12/20 | 08:11:39 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.86 | 0.17 |
| 2017/12/20 | 08:01:38 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.83 | 0.17 |
| 2017/12/20 | 07:51:37 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.81 | 0.17 |
| 2017/12/20 | 07:41:36 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.78 | 0.17 |
| 2017/12/20 | 07:31:35 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.75 | 0.17 |
| 2017/12/20 | 07:21:34 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.72 | 0.17 |
| 2017/12/20 | 07:11:33 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.70 | 0.17 |
| 2017/12/20 | 07:01:32 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | Box_06_PDU1_loc | Connected | L1 - B1 | 16 | 0.7 | 13.0 | 0.0 | 0.0 | 16.90 | 0.0 | | | 0.7 | 78.67 | 0.17 |

< 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.

| Single Feed > Three Phase > Outlet Log - PDU | | | | | | | | | | | |
|--|----------|-----------------------|-------------|----------------|--------|------|-----------------------------|-----|-----|------|------|
| PDU level: <input type="text" value="14"/> | | | | | | | | | | | |
| Outlet: <input type="text" value="03"/> | | | | | | | | | | | |
| Date | Time | PDU Model | PDU Name | Outlet Name | Status | Amp | | | kWh | kVA | |
| | | | | | | Load | Alarm / R. alert / L. alert | | | | |
| 2017/12/20 | 11:02:04 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.7 | 3.0 | 0.0 | 0.0 | 6.51 | 0.37 |
| 2017/12/20 | 10:52:03 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.7 | 3.0 | 0.0 | 0.0 | 6.45 | 0.37 |
| 2017/12/20 | 10:42:02 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.7 | 3.0 | 0.0 | 0.0 | 6.38 | 0.36 |
| 2017/12/20 | 10:32:01 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.7 | 3.0 | 0.0 | 0.0 | 6.32 | 0.37 |
| 2017/12/20 | 10:22:00 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.7 | 3.0 | 0.0 | 0.0 | 6.27 | 0.37 |
| 2017/12/20 | 10:11:59 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.7 | 3.0 | 0.0 | 0.0 | 6.20 | 0.37 |
| 2017/12/20 | 10:01:58 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 6.14 | 0.37 |
| 2017/12/20 | 09:51:57 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 6.08 | 0.37 |
| 2017/12/20 | 09:41:56 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 6.02 | 0.37 |
| 2017/12/20 | 09:31:55 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.98 | 0.37 |
| 2017/12/20 | 09:21:54 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.90 | 0.37 |
| 2017/12/20 | 09:11:53 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.84 | 0.37 |
| 2017/12/20 | 09:01:52 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.77 | 0.37 |
| 2017/12/20 | 08:51:51 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.71 | 0.37 |
| 2017/12/20 | 08:41:50 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.65 | 0.37 |
| 2017/12/20 | 08:31:49 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.59 | 0.37 |
| 2017/12/20 | 08:21:48 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.53 | 0.37 |
| 2017/12/20 | 08:11:46 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.47 | 0.37 |
| 2017/12/20 | 08:01:45 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.40 | 0.37 |
| 2017/12/20 | 07:51:43 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.34 | 0.37 |
| 2017/12/20 | 07:41:41 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.29 | 0.37 |
| 2017/12/20 | 07:31:40 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.22 | 0.37 |
| 2017/12/20 | 07:21:39 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.18 | 0.37 |
| 2017/12/20 | 07:11:38 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.10 | 0.37 |
| 2017/12/20 | 07:01:37 | VP24C13/12C19-32A-WSI | Box_06_PDU1 | outlet_name_05 | ON | 1.6 | 3.0 | 0.0 | 0.0 | 5.03 | 0.37 |

< 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:

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

First / Previous 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 .

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:

Outlet:

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

First / Previous 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 | | | | TH 1 | | | | TH 2 | | | | | |
|----------------|----------|-----------------------|-----------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|-------------------|----|--|---|--|
| PDU level : 01 | | | | | | | | | | | | | |
| Date | Time | Model | Status | Location | °C | | % | | Location | °C | | % | |
| | | | | | Temp. / Alarm / R. Alert | Humid / Alarm / R. Alert | Temp. / Alarm / R. Alert | Humid / Alarm / R. Alert | | | | | |
| 2018/04/25 | 10:11:19 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.5 / 35.0 / 0.0 | 52.8 / 65.0 / 0.0 | Rear_Top | 30.3 / 35.0 / 0.0 | 49.5 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 10:01:18 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 55.0 / 65.0 / 0.0 | Rear_Top | 30.5 / 35.0 / 0.0 | 51.8 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 09:51:17 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.8 / 35.0 / 0.0 | 57.9 / 65.0 / 0.0 | Rear_Top | 30.7 / 35.0 / 0.0 | 53.8 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 09:41:16 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.8 / 35.0 / 0.0 | 58.1 / 65.0 / 0.0 | Rear_Top | 30.7 / 35.0 / 0.0 | 53.9 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 09:31:15 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.8 / 35.0 / 0.0 | 58.8 / 65.0 / 0.0 | Rear_Top | 30.7 / 35.0 / 0.0 | 54.8 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 09:21:14 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.8 / 35.0 / 0.0 | 59.2 / 65.0 / 0.0 | Rear_Top | 30.8 / 35.0 / 0.0 | 55.3 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 09:11:13 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.8 / 35.0 / 0.0 | 59.8 / 65.0 / 0.0 | Rear_Top | 30.8 / 35.0 / 0.0 | 55.9 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 09:01:12 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.8 / 35.0 / 0.0 | 59.7 / 65.0 / 0.0 | Rear_Top | 30.6 / 35.0 / 0.0 | 56.0 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 08:51:11 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.8 / 35.0 / 0.0 | 59.8 / 65.0 / 0.0 | Rear_Top | 30.6 / 35.0 / 0.0 | 55.9 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 08:41:10 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.8 / 35.0 / 0.0 | 59.5 / 65.0 / 0.0 | Rear_Top | 30.5 / 35.0 / 0.0 | 55.9 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 08:31:09 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.8 / 65.0 / 0.0 | Rear_Top | 30.5 / 35.0 / 0.0 | 56.0 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 08:21:08 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.7 / 65.0 / 0.0 | Rear_Top | 30.5 / 35.0 / 0.0 | 56.0 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 08:11:07 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.7 / 65.0 / 0.0 | Rear_Top | 30.5 / 35.0 / 0.0 | 56.1 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 08:01:06 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.8 / 65.0 / 0.0 | Rear_Top | 30.5 / 35.0 / 0.0 | 56.1 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 07:51:05 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.8 / 65.0 / 0.0 | Rear_Top | 30.5 / 35.0 / 0.0 | 56.1 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 07:41:04 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.7 / 65.0 / 0.0 | Rear_Top | 30.3 / 35.0 / 0.0 | 56.3 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 07:31:03 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.8 / 65.0 / 0.0 | Rear_Top | 30.3 / 35.0 / 0.0 | 56.3 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 07:21:02 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.8 / 65.0 / 0.0 | Rear_Top | 30.4 / 35.0 / 0.0 | 56.2 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 07:11:01 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.7 / 65.0 / 0.0 | Rear_Top | 30.4 / 35.0 / 0.0 | 56.3 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 07:01:00 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.7 / 65.0 / 0.0 | Rear_Top | 30.4 / 35.0 / 0.0 | 56.2 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 06:50:59 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.7 / 65.0 / 0.0 | Rear_Top | 30.4 / 35.0 / 0.0 | 56.1 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 06:40:58 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.7 / 65.0 / 0.0 | Rear_Top | 30.4 / 35.0 / 0.0 | 56.2 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 06:30:57 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.8 / 65.0 / 0.0 | Rear_Top | 30.4 / 35.0 / 0.0 | 56.2 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 06:20:56 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.8 / 65.0 / 0.0 | Rear_Top | 30.3 / 35.0 / 0.0 | 56.2 / 65.0 / 0.0 | | | | |
| 2018/04/25 | 06:10:55 | VP24C13/12C19-32A-WSI | Connected | Front_Top | 29.7 / 35.0 / 0.0 | 59.8 / 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 Dongle group one by one to provide past 2000 event records of :

- IP Dongle connection
- PDU connection
- TH sensor connection

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

| | | | |
|----------------------------|--|------------------------|--|
| 2014/09/16 | 18:48:09 | IP dongle connection | [-] : IP dongle disconnection |
| 2014/09/16 | 18:34:02 | IP dongle connection | [-] : IP dongle disconnection |
| 2014/09/12 | 09:52:40 | IP dongle connection | [-] : IP dongle disconnection |
| 2014/09/12 | 02:06:07 | PDU configuration | [-] : PDU amp. normal - PDU level 03 - Circuit 01 |
| 2014/09/12 | 02:06:07 | PDU configuration | [-] : PDU amp. normal - PDU level 03 - Circuit 02 |
| 2014/09/12 | 02:05:54 | PDU configuration | [-] : PDU amp. rising alert - PDU level 03 - Circuit 02 |
| <hr/> | | | |
| Events | | | |
| - IP dongle connection | (1) Disconnection (2) Reconnection | - Outlet configuration | (1) Switch outlet on / off (2) Change outlet name (3) Change power up sequence delay (4) Change alarm amp. (5) Change rising alert amp. (6) Change low alert amp. (7) Reset peak amp /w date and time (8) Reset kWh /w date and time (9) Amp. alarm (10) Amp. rising alert (11) Amp. low alert (12) Amp. normal |
| - PDU connection | (1) Disconnection (2) Reconnection | | |
| - TH connection | (1) Disconnection (2) Reconnection | | |
| - PDU configuration | (1) Change alarm amp. (2) Change rising alert amp. (3) Change low alert amp. (4) Reset peak amp /w date and time (5) Reset kWh /w date and time (6) Change PDU name (7) Change PDU location (8) Amp. alarm (9) Amp. rising alert (10) Amp. low alert (11) Amp. normal (12) Circuit Breaker tripped / return to normal (13) Set PDU to maintenance (14) Remove PDU from maintenance (15) Disable monitoring | - TH configuration | (1) Activate / Deactivate TH Sensor (2) Change temp. alarm (3) Change temp. alert (4) Change humid. alarm (5) Change humid. alert (6) Change TH location (7) Temp. alarm (8) Temp. alert (9) Humid. alarm (10) Humid. alert |
| - Scheduling configuration | (1) Enable / Disable outlet schedule (2) Change outlet schedule conf. (3) Change outlet schedule name | | |

Part VI. Report

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

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

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

Report Category

PDU Single Feed Single phase PDU log

Inline Meter Dual Feed Single phase PDU daily kWh log

Sensor log Single phase outlet log

Event Single phase outlet daily kWh log

Period (Year / Month)

From: 2017 / 12

To: 2017 / 12

Target

IP dongle group: 01

PDU level: 01 05 09 13 all

02 06 10 14

03 07 11 15

04 08 12 16

Apply Cancel

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

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

Report Category

PDU

Inline Meter

Sensor log

Event

Apply Cancel

Open

Open in new tab

Open in new window

Save target as...

Print target

Cut

Copy

Copy shortcut

Paste

E-mail with Windows Live

Translate with Bing

All Accelerators

Inspect element

Add to favorites...

傳送至 OneNote(N)

Properties

To download the file, please:

(1) Right click the file link below

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

[-DualFeedPDU_Log_IPDongleGroup01.csv](#)

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

..... **Complete**

Part VII. SNMP & IP Dongle

< 7.1 > SNMP Setup

The IP dongle can manage the connected single & three phase intelligent PDUs in a single daisy-chain up to 32 levels via SNMP v1/v2 or v3 (Simple Network Management Protocol)

(I). Accessing MIB Files

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

<http://www.austin-hughes.com/resources/infrapower/software>

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 Dongle for SNMP v1 / v2 support.

Step 1. Connect the IP Dongle to a computer. (Please refer to < 2.2 > IP dongle configuration)

Step 2. Open the MS Edge

Step 3. Enter the configured IP Dongle address into the address bar.

Default IP address of LAN 1 is “ **192.168.11.1** “

Default IP address of LAN 2 is “ **192.168.0.1** “

Step 4. Enter “ **Login name** “ & “ **Password** “ .

Default Login name : 00000000.

To change Login name of IP dongle WEBUI (PPS-03-S), please refer to PPS-03-S user manual 1.10 < Login > for details.

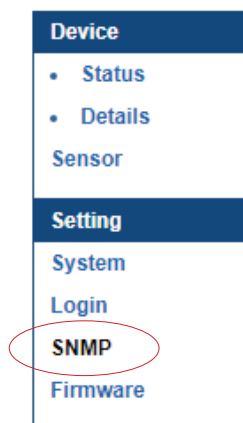
Password: the one you set in Step 7 of < 2.2 > IP Dongle Configuration.



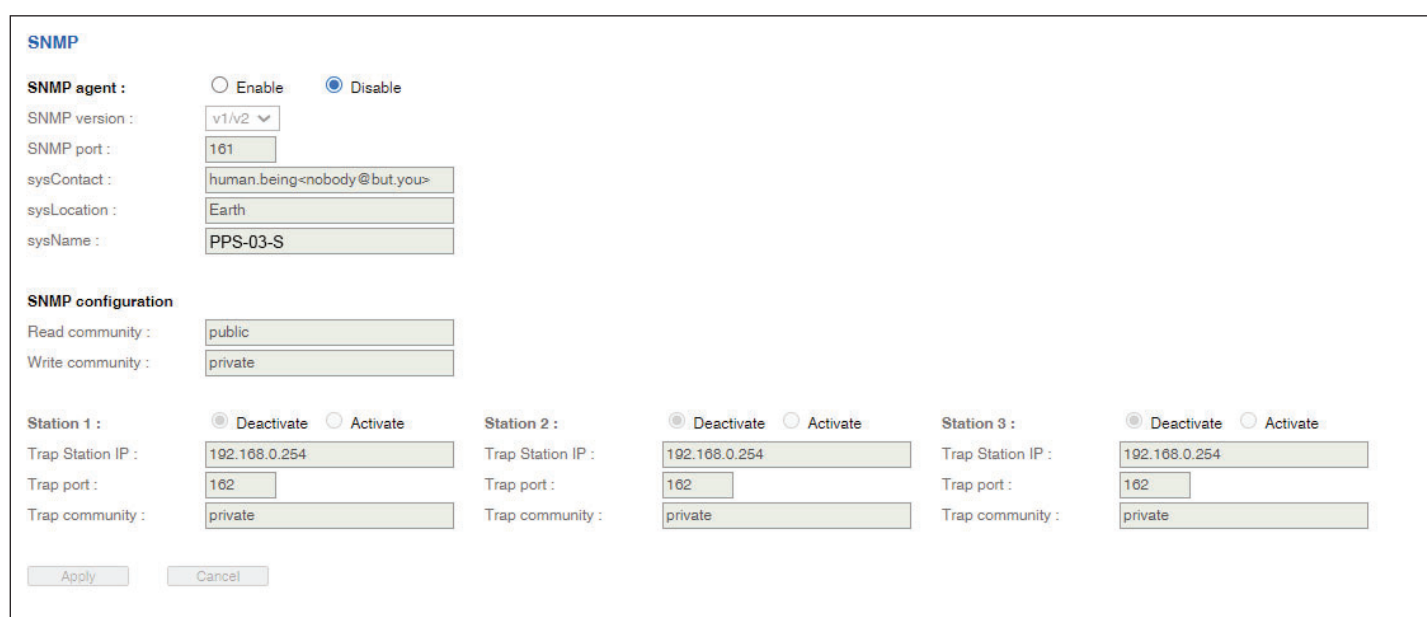
The image shows a login dialog box with a white background and a thin black border. It contains two text input fields. The first field is labeled 'Login name' and the second is labeled 'Password'. Below these fields are two buttons: 'Login' on the left and 'Cancel' on the right. The buttons have a light gray background and black text.

< 7.1 > SNMP Setup

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



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

A screenshot of the 'SNMP' configuration window. The window has a title bar 'SNMP'. Under 'SNMP agent', there are radio buttons for 'Enable' and 'Disable' (selected), a dropdown for 'SNMP version' (v1/v2), and text boxes for 'SNMP port' (161), 'sysContact' (human.being<nobody@but.you>), 'sysLocation' (Earth), and 'sysName' (PPS-03-S). Under 'SNMP configuration', there are text boxes for 'Read community' (public) and 'Write community' (private). Below that are three sections for 'Station 1', 'Station 2', and 'Station 3'. Each station has radio buttons for 'Deactivate' (selected) and 'Activate', and text boxes for 'Trap Station IP' (192.168.0.254), 'Trap port' (162), and 'Trap community' (private). At the bottom are 'Apply' and 'Cancel' buttons.

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

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

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

Step 10. Input “ **sysContact** “. Default is human.being<nobody@but.you>

Step 11. Input “ **sysLocation** “. Default is Earth

Step 12. Input “ **sysName** “. Default is A320D

Step 13. Input “ **Read Community** “. Default is public

Step 14. Input “ **Write Community** “. Default is private

Step 15. Click “ **Activate** “ in Station 1 to enable the trap service

Step 16. Input “ **Trap Station IP** “ , “ **Trap Port** “ & “ **Trap Community** “ of Station 1

Step 17. Repeat Step 14 & 15 for Station 2 & 3

Step 18. Click “ **Apply** “ to finish the SNMP v1 / v2 settings

< 7.1 > SNMP Setup

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

Step 1. Connect the IP dongle to a computer. (Please refer to < 2.2 > IP dongle configuration)

Step 2. Open MS Edge

Step 3. Enter the configured IP Dongle address into the address bar.

Default IP address of LAN 1 is “ 192.168.11.1 “

Default IP address of LAN 2 is “ 192.168.0.1 “

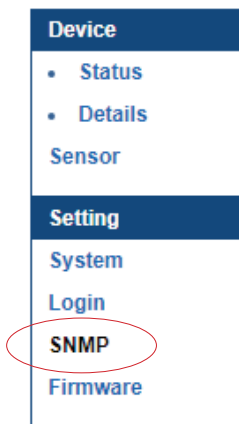
Step 4. Enter “ **Login name** “ & “ **Password** “.

Default Login name : 00000000.

To change Login name of IP dongle WEBUI (PPS-03-S),
please refer to PPS-03-S user manual 1.10 < Login > for details.

Password: the one you set in Step 7 of < 2.2 > IP Dongle Configuration.

Step 5. Select SNMP from the left navigation pane



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

The screenshot shows the 'SNMP' configuration window. It has two main sections: 'SNMP agent' and 'SNMP configuration'.
In the 'SNMP agent' section, there are radio buttons for 'Enable' (selected) and 'Disable'. Below are input fields for 'SNMP version' (v1/v2), 'SNMP port' (161), 'sysContact' (human.being<nobody@but.you>), 'sysLocation' (Earth), and 'sysName' (PPS-03-S).
The 'SNMP configuration' section has input fields for 'Read community' (public) and 'Write community' (private).
Below are three station configurations: 'Station 1', 'Station 2', and 'Station 3'. Each station has radio buttons for 'Deactivate' and 'Activate'.
Station 1: 'Activate' is selected. Fields: Trap Station IP (192.168.1.113), Trap port (162), Trap community (private).
Station 2: 'Deactivate' is selected. Fields: Trap Station IP (192.168.0.254), Trap port (162), Trap community (private).
Station 3: 'Deactivate' is selected. Fields: Trap Station IP (192.168.0.254), Trap port (162), Trap community (private).
At the bottom are 'Apply' and 'Cancel' buttons.

< 7.1 > SNMP Setup

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

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

The screenshot shows the SNMP v3 configuration window. It is divided into several sections. The top section, 'SNMP agent', has 'Enable' selected. Below it, 'SNMP version' is set to 'v3', 'SNMP port' is '161', 'sysContact' is 'human.being<nobody@but,you>', 'sysLocation' is 'Earth', and 'sysName' is 'PPS-03-S'. The 'SNMP configuration' section has three users. User 1 is active with role 'read only', USM user 'usm_user1', and 'None' auth/privacy algorithms. User 2 is deactivated with role 'read only', USM user 'usm_user2', and 'None' auth/privacy algorithms. User 3 is deactivated with role 'read only', USM user 'usm_user3', and 'None' auth/privacy algorithms. All three users have 'SNMP trap' set to 'Disabled', 'Trap Station IP' set to '192.168.0.254', and 'Trap port' set to '162'. There are 'Apply' and 'Cancel' buttons at the bottom.

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

Step 10. Input “ **sysContact** “. Default is human.being<nobody@but,you>

Step 11. Input “ **sysLocation** “. Default is Earth

Step 12. Input “ **sysName** “. Default is A320D

Step 13. Click “ **Activate** “ in User 1

Step 14. Select “ **Read Only** “ or “ **Read & Write** “ in User role :

Step 15. Input the name of “ **USM user** “. Default is usm_user1

Step 16. Select “ **None / MD5 / SHA** “ in “ **Auth algorithm** “.
If you select “ **Read & Write** “ in “ **User role:** “ ,
you MUST select “ **MD5 / SHA** “ in “ **Auth algorithm** “

Step 17. Input the “ **Auth password:** “ Default is “ 00000000 ‘

Step 18. Select “ **None / DES / AES / AES192 / AES256** “ in “ **Privacy algorithm** “.
If the Auth algorithm is “ **NONE** “ , NO privacy algorithm can be selected.

Step 19. Input the “ **Privacy password** “

Step 20. If you want to receive trap message, select “ **Enable** “ in **SNMP trap**

Step 21. Input the “ **Trap Station IP** “ & “ **Trap port** “

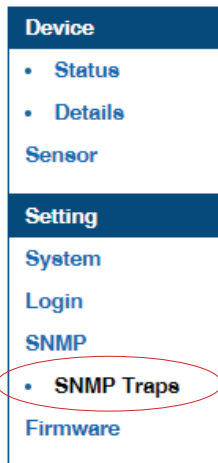
Step 22. Repeat step 12 to 20 for User 2 & 3

Step 23. Click “ **Apply** “ to finish the SNMP v3 settings.

< 7.1 > SNMP Setup

(III). SNMP Traps Setting

After enable SNMP, you can click “ SNMP Traps “ to go to the “ SNMP Traps Setting “ page



Below is the default setting for each PDU SNMP trap.

You can set the SNMP trap option and Click “ Apply “ to finish the settings.

SNMP Traps Setting

| | | | |
|--------------------------------|-------------------------------|---|------------------------------|
| pduConnectionLost : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| pduConnectionRecovered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |
| circuitLoadEventTriggered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| circuitLoadEventCleared : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |
| circuitBreakerTripped : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| circuitBreakerRecovered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |
| sensorConnectionLost : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| sensorConnectionRecovered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |
| tempSensorEventTriggered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| tempSensorEventCleared : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |
| humiSensorEventTriggered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| humiSensorEventCleared : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |
| rcmSensorConnectionLost : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| rcmSensorConnectionRecovered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |
| rcmSensorEventTriggered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| rcmSensorEventCleared : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |
| smokeSensorEventTriggered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| smokeSensorEventCleared : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |
| doorSensorEventTriggered : | <input type="radio"/> Disable | <input checked="" type="radio"/> Once | <input type="radio"/> Cyclic |
| doorSensorEventCleared : | <input type="radio"/> Disable | <input checked="" type="radio"/> Enable | |

< 7.2 > IP Dongle Firmware Upgrade

< Firmware Upgrade >

For function enhancement of IP dongle WEBUI, please take the following steps to remotely upgrade the IP Dongle firmware :

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

<http://www.austin-hughes.com/resources/infrapower/software>

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

Step 3. Connect the IP Dongle to the computer. (Please refer to < 2.2 > IP dongle configuration)

Step 4. Open the MS Edge

Step 5. Enter the configured IP Dongle address into the Address bar.

Default IP address of LAN 1 is “ **192.168.11.1** “

Default IP address of LAN 2 is “ **192.168.0.1** “

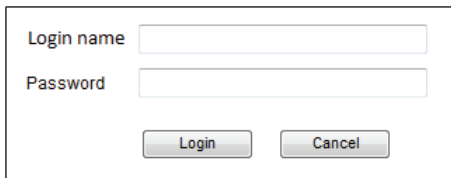
Step 6. Enter “ **Login name** “ & “ **Password** “ .

Default Login name : 00000000.

To change Login name of IP dongle WEBUI (PPS-03-S),

please refer to PPS-03-S user manual 1.10 < Login > for details.

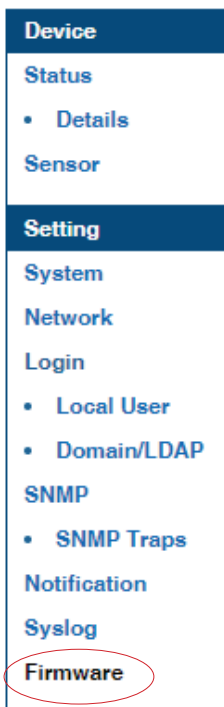
Password: the one you set in Step 7 of < 2.2 > IP Dongle Configuration.



Login name

Password

Step 7. Select the Firmware from the left navigation pane



< 7.2 > IP Dongle Firmware Upgrade

Step 8. The firmware upgrade window appears as below :

Firmware

Device information

Device name : IP Dongle PPS-03s
Firmware version : IPD-03-FW-v1
Hardware revision : 2.0

LAN 1 information

IPv4 address : 192.168.1.62
IPv6 address : 2001:0:1:a2::ec11/64
MAC address : 20:0A:0D:FF:FF:02

LAN 2 information

IPv4 address : 192.168.0.2
IPv6 address : 2001:0:1:a2::ec01/64
MAC address : 20:0A:0D:FF:FF:01

Upgrade firmware

File path :

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

Step 9. Click “ **Browse** ” and select the firmware file (xxx.zip for firmware version IPD-03-FW-v1 / xxx.enc for firmware version IPD-03-FW-V1.1 or above) 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 dongle to the computer (Please refer to < 2.2 > IP dongle configuration)

Step 2. Open the MS Edge

Step 3. Enter the configured IP Dongle address into the address bar.

Default IP address of LAN 1 is “ **192.168.11.1** ”

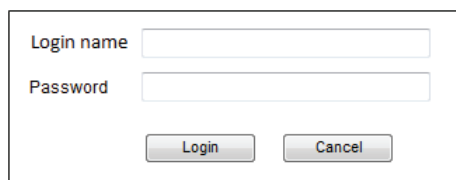
Default IP address of LAN 2 is “ **192.168.0.1** ”

Step 4. Enter “ **Login name** ” & “ **Password** ”.

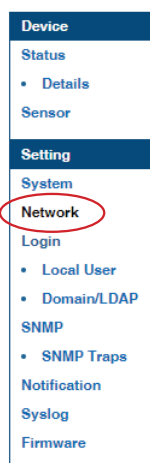
Default Login name : 00000000.

To change Login name of IP dongle WEBUI (PPS-03-S),
please refer to PPS-03-S user manual 1.10 < Login > for details.

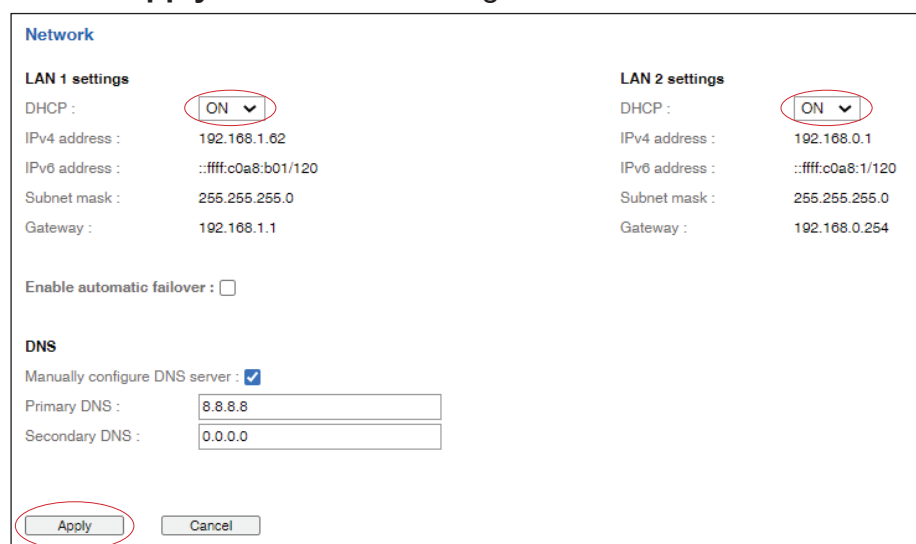
Password: the one you set in Step 7 of < 2.2 > IP Dongle Configuration.



Step 5. Select “ **Network** ” from the left navigation pane



Step 6. Dual Lan Mode: Select “ **ON** ” from “ **DHCP** ” of LAN 1 & LAN 2
Click “ **Apply** ” to save the settings



| LAN 1 settings | LAN 2 settings |
|------------------------------------|----------------------------------|
| DHCP : ON | DHCP : ON |
| IPv4 address : 192.168.1.62 | IPv4 address : 192.168.0.1 |
| IPv6 address : ::ffff:c0a8:b01/120 | IPv6 address : ::ffff:c0a8:1/120 |
| Subnet mask : 255.255.255.0 | Subnet mask : 255.255.255.0 |
| Gateway : 192.168.1.1 | Gateway : 192.168.0.254 |

Enable automatic failover :

DNS

Manually configure DNS server :

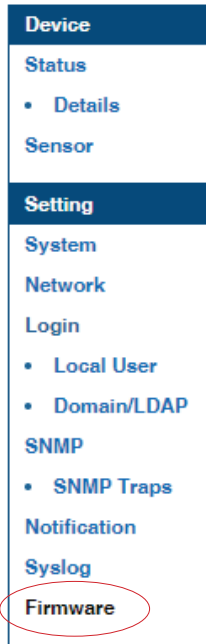
Primary DNS : 8.8.8.8

Secondary DNS : 0.0.0.0

Apply Cancel

< 7.3 > DHCP Setting

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



Step 8. Record the “ MAC address “ of LAN 1 & LAN 2.

Firmware

Device information

Device name : IP Dongle PPS-03s
Firmware version : IPD-03-FW-v1
Hardware revision : 2.0

LAN 1 information

IPv4 address : 192.168.1.62
IPv6 address : 2001:0:1:a2::ec11/64
MAC address : 20:0A:0D:FF:FF:02

LAN 2 information

IPv4 address : 192.168.0.2
IPv6 address : 2001:0:1:a2::ec01/64
MAC address : 20:0A:0D:FF:FF:01

Upgrade firmware

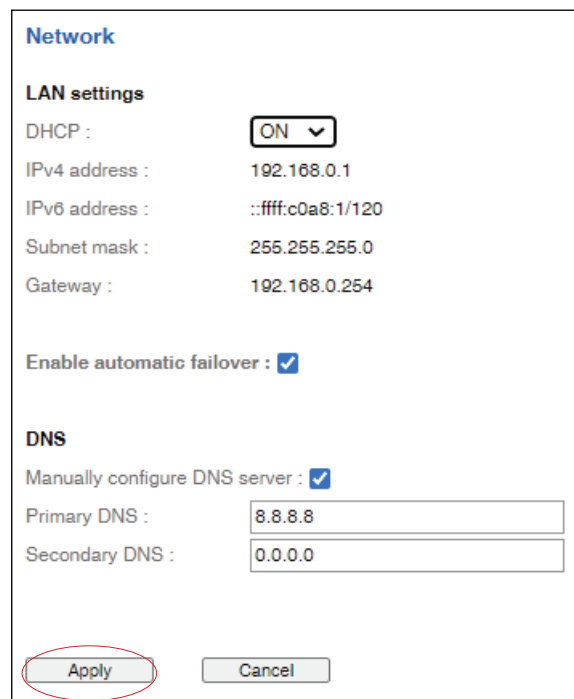
File path :

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

Step 9. Assign an IP address of LAN 1 & LAN 2 of to the IP Dongle from your DHCP server.

< 7.3 > DHCP Setting

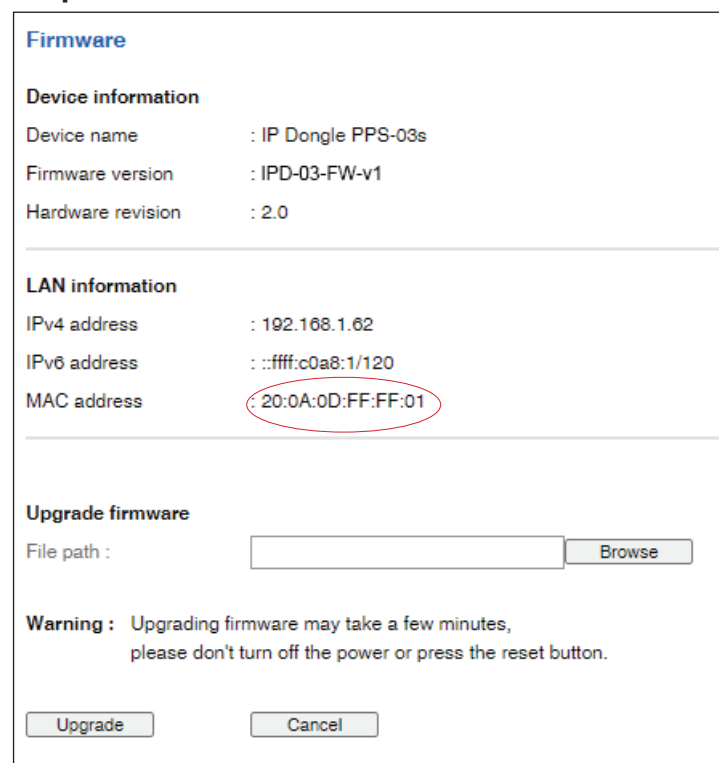
Step 10. Failover Mode: Select “ **ON** ” from “ **DHCP** ” & Click “ **Apply** ” to save the settings



The screenshot shows the 'Network' configuration page. Under 'LAN settings', the 'DHCP' dropdown menu is set to 'ON'. Other settings include IPv4 address (192.168.0.1), IPv6 address (::ffff:c0a8:1/120), Subnet mask (255.255.255.0), and Gateway (192.168.0.254). The 'Enable automatic failover' checkbox is checked. Under 'DNS', the 'Manually configure DNS server' checkbox is checked, with Primary DNS set to 8.8.8.8 and Secondary DNS set to 0.0.0.0. The 'Apply' button is circled in red.

Step 11. Select “ **Firmware** ” from the left navigation pane

Step 12. Record the “ **MAC address** ”



The screenshot shows the 'Firmware' configuration page. Under 'Device information', the device name is 'IP Dongle PPS-03s', firmware version is 'IPD-03-FW-v1', and hardware revision is '2.0'. Under 'LAN information', the IPv4 address is 192.168.1.62, IPv6 address is ::ffff:c0a8:1/120, and the MAC address is 20:0A:0D:FF:FF:01, which is circled in red. Under 'Upgrade firmware', there is a 'File path' input field and a 'Browse' button. A warning message states: 'Warning : Upgrading firmware may take a few minutes, please don't turn off the power or press the reset button.' The 'Upgrade' and 'Cancel' buttons are at the bottom.

Step 13. Assign an IP address to the IP Dongle from your DHCP server.

..... • **Complete**

Part VIII. FAQ

< 8.1 > Management Software



1. Is IPM-04 management software free of charge ?

Yes.

2. What is InfraPower Manager ?

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

- SNMP Capability v2 / v3 via IP Dongle
- 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 IPM-04 support ?

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



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

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

- UTP port : 8890 for searching IP Dongle
- TCP port : 4000 for IP Dongle 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 IPM-04 support ?

PostgreSQL

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

1qaz2WSX

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

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

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

< 8.1 > Management Software

Default user name “ **admin** ” / Default login password “ **00000000** ”

11. What is the command password of IPM-04 ?

- Each IP Dongle 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 Dongle 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 W 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 Dongle fails
Refer to < 8.2 > IP Dongle

- the W Meter fails
Refer to < 8.3 > W 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 Dongle

1. What is the IP Dongle ?

The IP Dongle, with patented hot-plug & field replaceable design and SNMP function, provides a simple and economical way to consolidate management of max. 32 pcs of Dual Feed single phase , single & 3 Phase PDUs via a single network IP address to save IP address cost.



2. Does IP Dongle 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 32 PDUs in a daisy chain, no any reporting, event & log. If need a complete monitoring & control AND a log & reporting for some hundred PDUs, the free IPM-04 PDU management software is absolutely required.

3. How to reset IP dongle to factory default ?

Press and hold the reset button until Green LED off to reset IP dongle to factory default.



4. Can I use the built-in dongle UI and IPM-04 management software simultaneously?

Yes.

5. Is the IP Dongle essential to IPM-04 management software ?

Yes, the software can't run without IP Dongle

6. Is the IP Dongle essential to SNMP function ?

Yes, absolutely.

7. Does the IP Dongle support SNMP v2 and v3 ?

Yes.

8. What is default setting of IP Dongle ?

The default IP setting is as below :

LAN 1

IP address : 192.168.11.1

Subnet Mask : 255.255.255.0

Gateway : 192.168.11.254

LAN 2

IP address : 192.168.0.1

Subnet Mask : 255.255.255.0

Gateway : 192.168.0.254

< 8.2 > IP Dongle

9. What is the IP setup utilities?

This is a windows application used to assign the IP address of IP Dongle.

Please find the link below :

<http://www.austin-hughes.com/support/utilities/infrapower/IPdongleSetup.msi>

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

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

11. Does the IP Dongle support DHCP (Dynamic Host Configuration Protocol)?

Yes.

12. Will the reset of IP Dongle affect the power to the outlets ?

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

13. What are the symptoms if the IP Dongle fails ?

- UI shows IP Dongle disconnection and users fail to access the whole cascaded PDUs.
- Orange LED off of IP Dongle

14. Why the IP Dongle fails to work ?

- the IP Dongle itself fails or
- the 1st level W Meter fails or
- the 1st level Power Module fails or
- cable loose or defective between IP Dongle and the network device

15. How can I replace a failed IP Dongle ?

Download the guide below to replace the IP Dongle :

<http://www.austin-hughes.com/support/replacementguide/infrapower/RG-IP-W-IP-Dongle.pdf>

16. Does the IP dongle have firmware built-in ?

Yes

17. How can I get the updated IP dongle firmware ?

Please find the link below :

<http://www.austin-hughes.com/resources/software/infrapower>

18. Can I remotely update the IP dongle firmware ?

Yes.

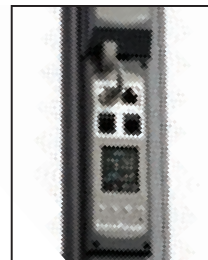
Download the guide below to update the firmware accordingly :

<http://www.austin-hughes.com/support/upgradeguide/infrapower/UG-IP-W-IPdongle-Firmware.pdf>

< 8.3 > W Meter

1. What are features of the W Meter ?

- Support Single phase PDU
- Support switched PDU and outlet amp + kWh measurement
- Simply connect 1 x IP Dongle to access up to 16 PDUs to save IP network address
- SNMP Capability v2 / v3 via IP Dongle
- Sensor port x 2
- 1.8" color LCD
- Built-in buzzer will sound when circuit 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 W Meter fails, will it affect the data transmission among PDUs in the same daisy chain ?

No , the meter design prevents this from happening.

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

Yes, if the 1st level PDU loses power.

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

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

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

7. What are the symptoms if the W Meter fails ?

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

8. Why the W Meter fails to work ?

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

9. How can I replace a failed W Meter ?

Download the guide below to replace the W Meter :

<http://www.austin-hughes.com/support/replacementguide/infrapower/RG-IP-W-Meter.pdf>

< 8.3 > W Meter

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

The W 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.

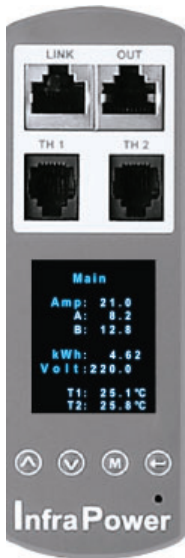
| Functional Specifications - Metering | |
|--------------------------------------|----------------------------|
| Input Metering Range | 0.3 to Rated Input Current |
| Outlet Metering Range | 0.3 to 16.0A |
| Ampere Accuracy (A) | +/- 1% |
| Voltage Accuracy (V) | +/- 1% |
| Power Accuracy (kW) | +/-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

11. Does the W meter have firmware built-in ?

Yes

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

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



..... reset button

< 8.4 > Power Module

1. What is feature of the Power Module ?

- convert AC to DC for W Meter, IP Dongle & outlet control module
- field replaceable design allows quick replacement

2. How affect the W Meter if the Power Module fails ?

It will cause the meter fails to work as below :

- if the W 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 W Meter PDU is the 1st level, UI shows IP Dongle disconnection and users fail to access the whole cascaded PDUs
- W Meter no display and / or no data return

3. How affect the switched & measurement WS / WSi / Wi PDU if the Power Module fails ?

- lose outlet On/Off control and outlet amp & kWh measurement
- outlet no power supply 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 :

<http://www.austin-hughes.com/support/replacementguide/infrapower/RG-IP-W-Power-Module.pdf>



< 8.5 > Outlet Control Module

1. How many types of Outlet Control Module ?

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

- switched & measurement module for WSi switched & outlet level measurement PDU
- outlet measurement module for Wi outlet level measurement PDU
- switched module for WS switched PDU

2. How affect the switched & measurement WS / WSi / Wi PDU if the Outlet Module fails ?

- lose outlet On/Off control and outlet level measurement
- outlet no power supply to device

3. Why the outlet control module fails to work ?

- the outlet control module itself fails

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

No, not like W 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 :

<http://www.austin-hughes.com/support/replacementguide/infrapower/RG-IP-W-PDU.pdf>

< 8.5 > Outlet Control Module

- 6. What status the outlet LED means for WS / WSi switched PDU ?**
LED in Solid Blue : Outlet ON
LED Not lit : Outlet OFF
- 7. How the outlets react when the user power up the WS / WSi switched PDU ?**
Outlets power ON sequentially
- 8. Why the outlet LED Not lit but the outlets still ON power status ?**
The outlet LED is defective.

< 8.6 > TH Sensors & Others

TH sensors

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

< 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 InfraPower PDU has the over ampere protection ?**
Yes, the optional resettable fuse and circuit breaker available.
- 3. What is the standard inlet cable length of InfraPower PDU ?**
3 meter (9.9 feet)
- 4. Where can I find the Catalogue / User manual / Model list / Wire diagram of InfraPower PDUs ?**
Please visit the www.austin-hughes.com
- 5. How can we get a further support?**
Please send the email to support@austin-hughes.com or sales@austin-hughes.com

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