

User Manual **IPM-04** PDU management software

W series PDU : **Single Phase 63A**



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.

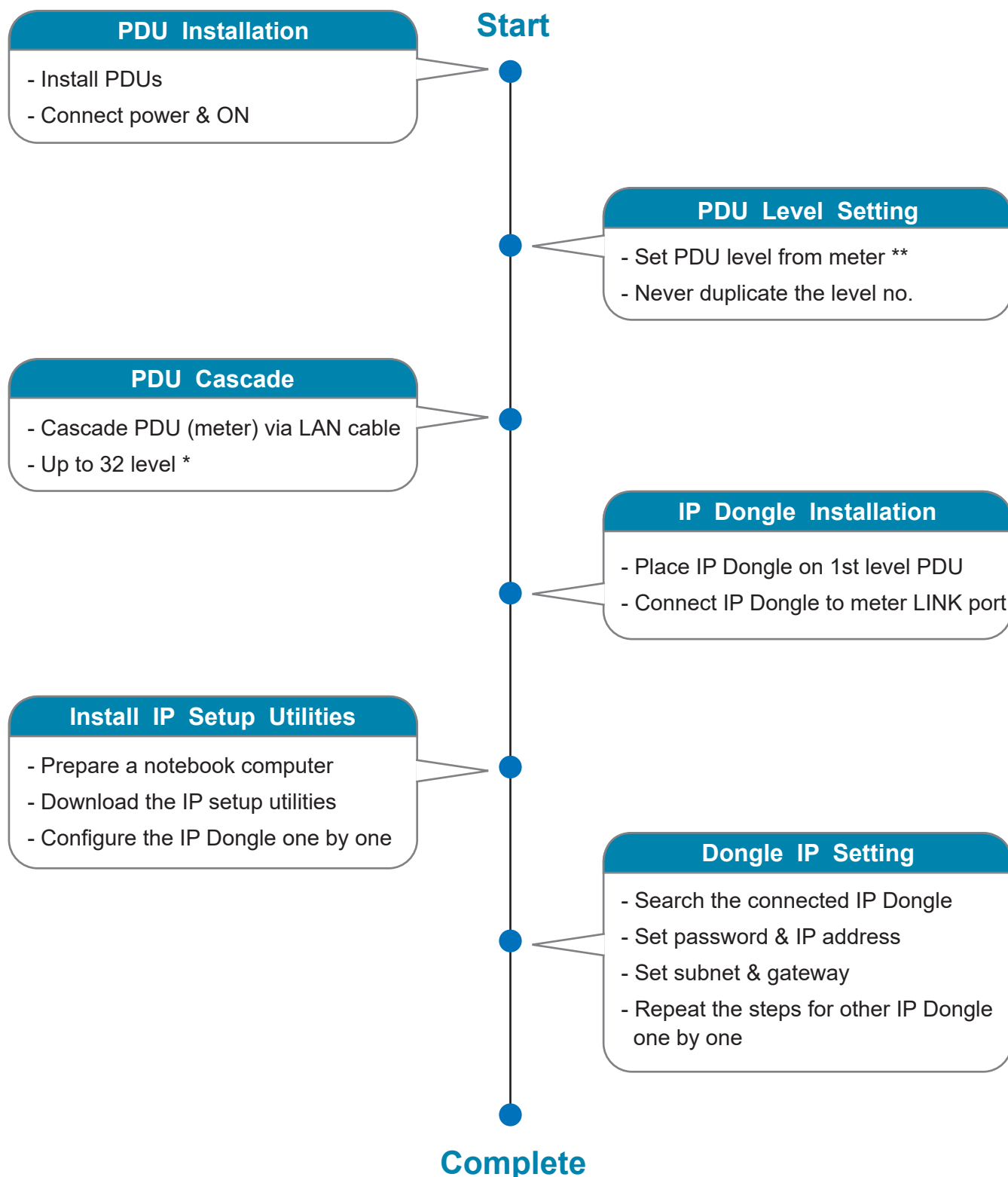


Don't exceed the outlet, branch or phase limitations

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



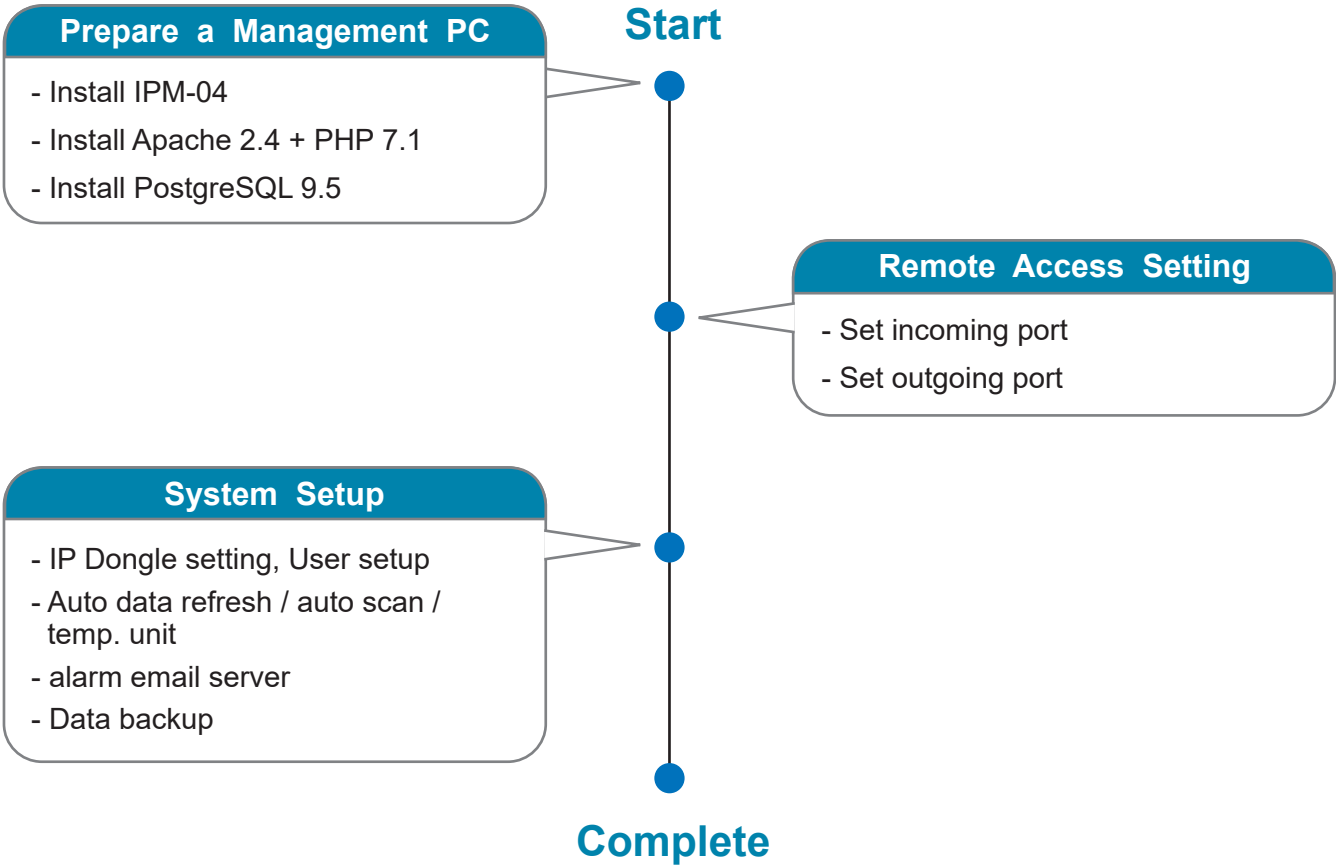
* - Only IPD-03-S / IPD-H-03-S supports PDU level up to 32

** - PDU with touchscreen LCD meter (firmware version V37 or above) supports PDU level setting from 1 to 32

- PDU with touchscreen LCD meter (firmware version V37 or above) supports remote PDU level & ID setting via IPD-03-S WEBUI. Details refer to PPS-03-S user manual :

(https://www.austin-hughes.com/resource_cat/product-resources/rack-power-resources)

Tips for System Setup



Contents

Part I. “ W “ Meter

< 1.1 >	Meter Key Features	1
< 1.2 >	Meter Reading & Setting	3
< 1.3 >	Meter (PDU) Cascade	5
< 1.4 >	Dual Lan IP Dongle	6
< 1.5 >	IP Dongle Installation	7
< 1.6 >	Meter System Timer	7
< 1.7 >	Optional Accessory - Temp. Sensor / Temp. + Humidity Sensor - Door / Smoke Sensor - 4.3” Door Mount PDU Panel	8

Part II. Software

< 2.1 >	Key Features.	13
< 2.2 >	IP Dongle Configuration	14
< 2.3 >	Hardware Requirements of the Management PC	15
< 2.4 >	Supported OS Platform & Language.	15
< 2.5 >	Software Download	16
< 2.6 >	First Time Start-up Setting	17
< 2.7 >	Web Server Port no. Change	22

Part III. System Setup & Remote Access

< 3.1 >	System Setup	23
< 3.2 >	Remote Access	30

Part IV. Software Usage & Operation

< 4.1 >	Status	31
< 4.2 >	Details	32
< 4.3 >	Outlet Setting	33
< 4.4 >	Sensor Status	34
< 4.5 >	Sensor Setting.	35
< 4.6 >	Outlet Schedule Overview	36
< 4.7 >	Outlet Schedule Setting.	37

Part V. Log & Events

< 5.1 > Single Phase PDU / Outlet Log 41

< 5.2 > Three Phase PDU / Outlet Log 47

< 5.3 > Sensor Log. 49

< 5.4 > Event Log 51

Part VI. Report 52

Part VII. SNMP & IP Dongle

< 7.1 > SNMP Setup 53

< 7.2 > IP Dongle Firmware Upgrade. 58

< 7.3 > DHCP Setting 60

Part VIII. FAQ

< 8.1 > Management Software 63

< 8.2 > IP Dongle. 65

< 8.3 > W Meter 67

< 8.4 > Power Module 69

< 8.5 > Outlet Control Module. 69

< 8.6 > TH Sensors & Others 70

Part I. “ W “ Meter

< 1.1 > Meter Key Features

Four intelligent PDU series covering single & three 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	✓	✓	✓	✓
2.8” Color LCD (featured w/ Touchscreen)	✓	✓	✓	✓
Circuit / Phase Amp + kWh Measurement	✓	✓	✓	✓
Support Single & Three Phase PDU	✓	✓	✓	✓
Phase Balance % (3 Phase PDU only)	✓	✓	✓	✓
Temp-Humid Sensor port x 2	✓	✓	✓	✓
32 PDU Levels in Single Daisy Chain	✓	✓	✓	✓
One IP Access up to 32 PDU Levels	✓	✓	✓	✓
Tool-less Mounting for Vertical PDU	✓	✓	✓	✓
SNMP Capability v2 / v3	✓	✓	✓	✓
Free Management Software (via PDU IP Dongle, IPD-03-S)	IPM-04	IPM-04	IPM-04	IPM-04

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

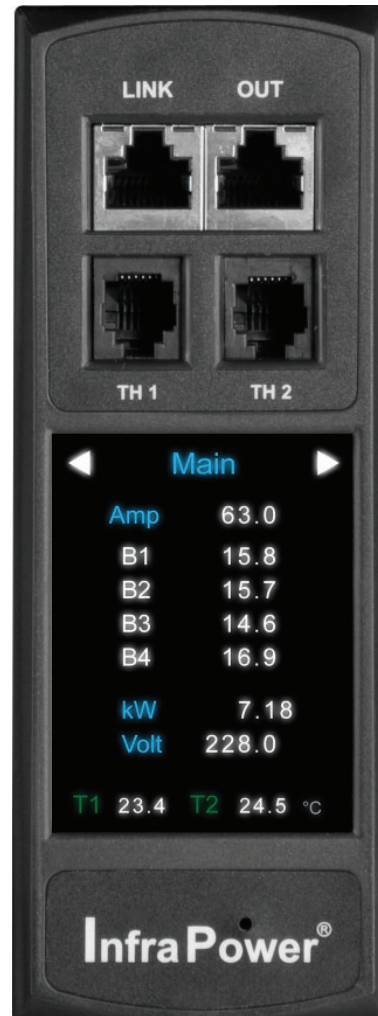
- Single & Three Phase PDU can be inter-cascaded in a single daisy chain.
- Simply connect 1 x IP Dongle to access up to 32 PDUs.
- SNMP Capability v2 / v3 via IP Dongle
- Built-in buzzer will sound when circuit or bank Amp over alarm setting.
- Field replaceable design allows meter replacement without PDU power interruption.

1 Cascade port
Up to 32 PDU Level

2 Sensor port x 2
- Temp. Sensor
- Temp. + Humid. Sensor
- Door Sensor
- Smoke Sensor

3 2.8” color LCD
Featured w/ Touchscreen

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

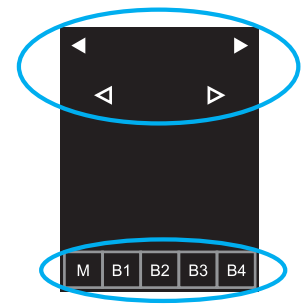


< 1.2 > Meter Reading & Setting

Touch Button

Reading

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



1 - 2

◀ Main ▶

Amp 63.0

B1 15.8

B2 15.7

B3 14.6

B4 16.9

kW 7.18

Volt 228.0

T1 23.4 T2 24.5 °C

M B1 B2 B3 B4

3 - 6

◀ Circuit B1 ▶

15.8 Amp

Peak Load Amp 16.2

1 Jan 15 / 23 : 59 : 40

M B1 B2 B3 B4

◀ Circuit B2 ▶

15.7 Amp

Peak Load Amp 16.2

1 Jan 15 / 23 : 59 : 40

M B1 B2 B3 B4

◀ Circuit B3 ▶

14.6 Amp

Peak Load Amp 16.2

1 Jan 15 / 23 : 59 : 40

M B1 B2 B3 B4

◀ Circuit B4 ▶

16.9 Amp

Peak Load Amp 17.2

1 Jan 15 / 23 : 59 : 40

M B1 B2 B3 B4

7 - 10

◀ Power ▶

Factor 0.50

Active 07.18 kW

Apparent 14.36 kVA

299,678.56 kWh

1 Jan 15 / 23 : 59 : 40

M B1 B2 B3 B4

◀ Sensor ▶

T1 23.4 °C

T2 24.5

H1 63.4 %

H2 56.5

M B1 B2 B3 B4

◀ System ▶

Time 23 : 59 : 40

Date 15 Jan 15

F/W WSi-4B-V7

Serial no. 20315150589-1120-P001

Model no. V24C13/12C19 -63A-WSI/CR_EN/3B-1

M B1 B2 B3 B4

◀ Outlet ▶

B1

◀ 01 ▶

Amp 10.9

kW 1.24

B1 B2 B3 B4

Page no.8

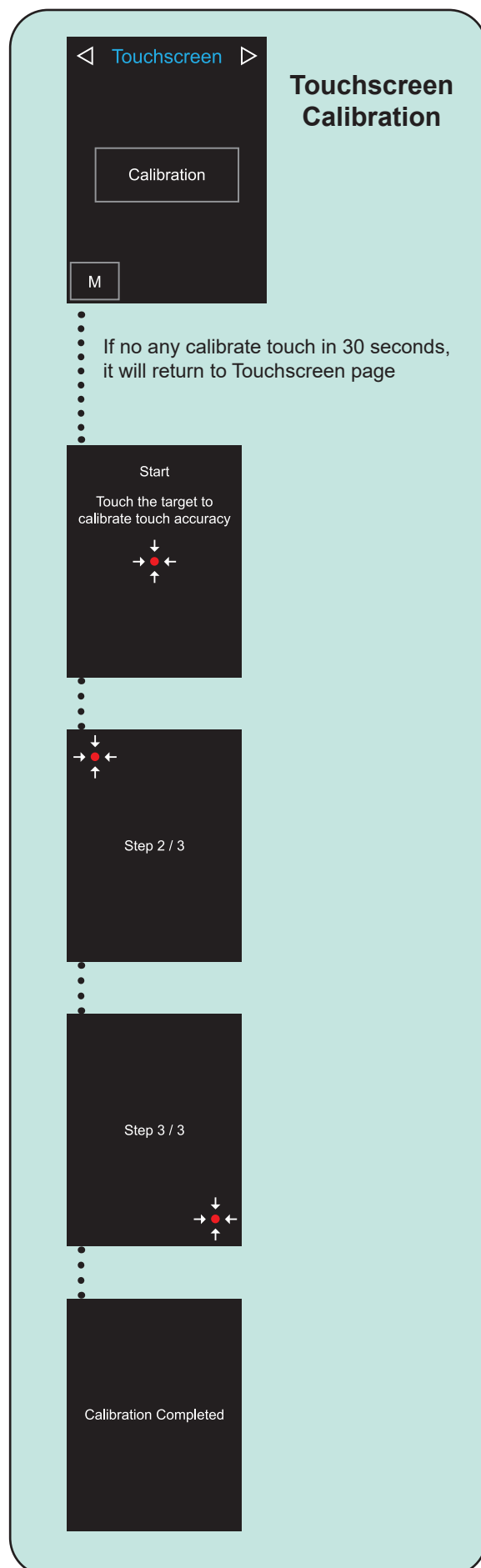
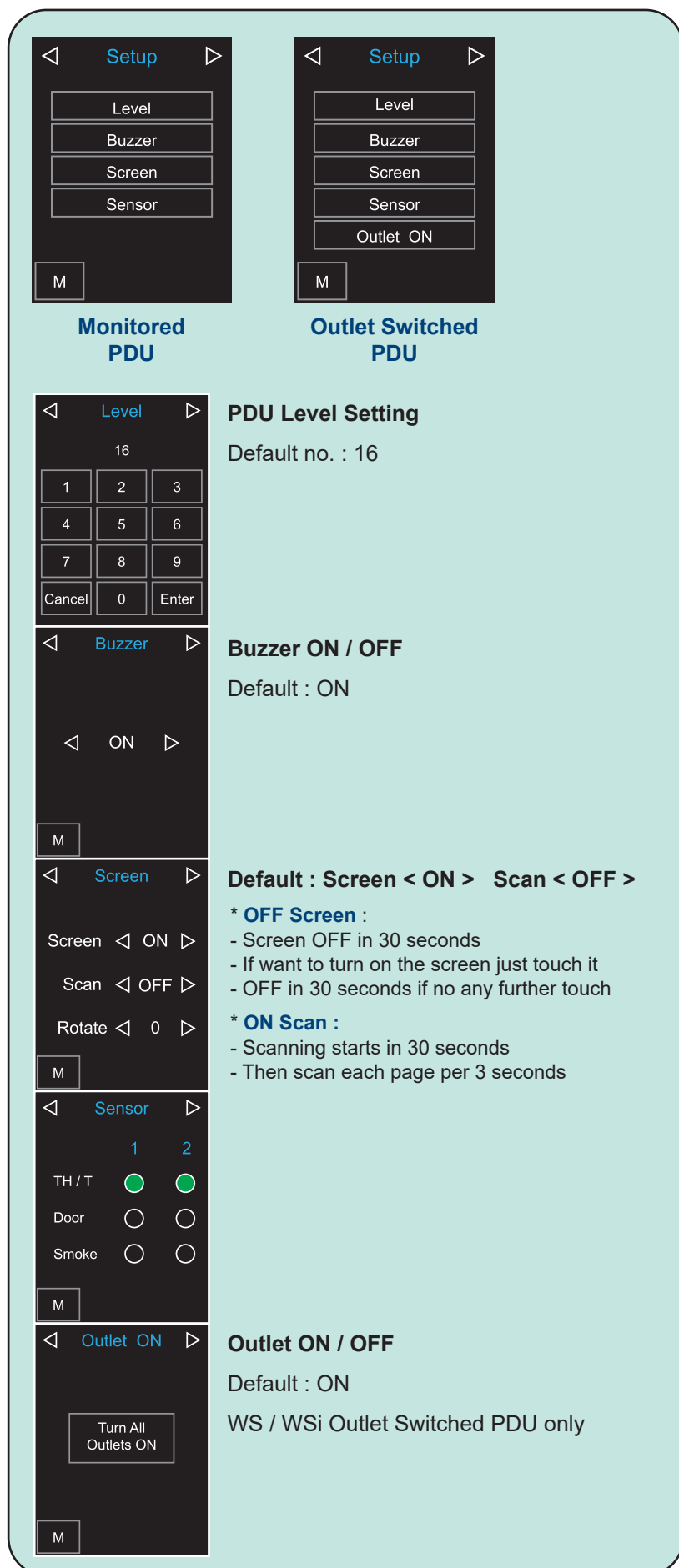
Touch °C / °F to change temp. unit

Page no.10

Wi / WSi outlet measurement PDU only

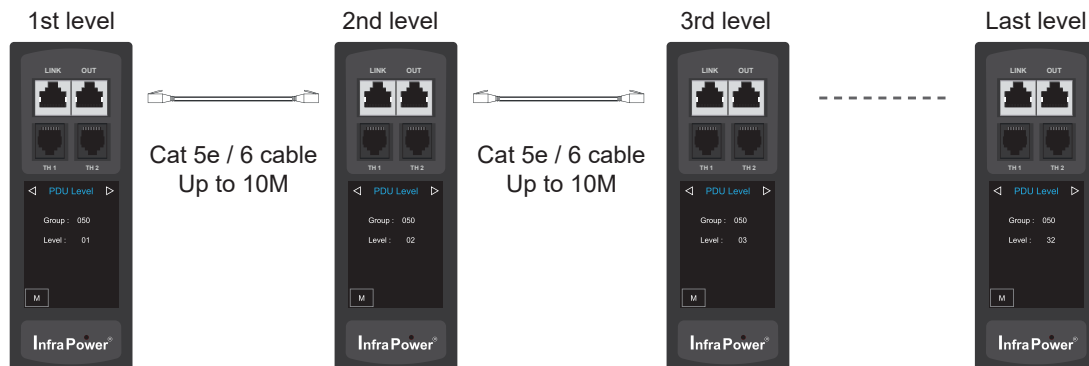
< 1.2 > Meter Reading & Setting

Setting



< 1.3 > Meter (PDU) Cascade

- The PDU can be cascaded up to 32 levels
- For IP PDU access simply connect 1 x IP Dongle - IPD-03-S
- 1 x IP Dongle allows access to 32 levels
- Single & 3 Phase PDU can be inter-cascaded in the single daisy chain



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



< 1.4 > 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. 32 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

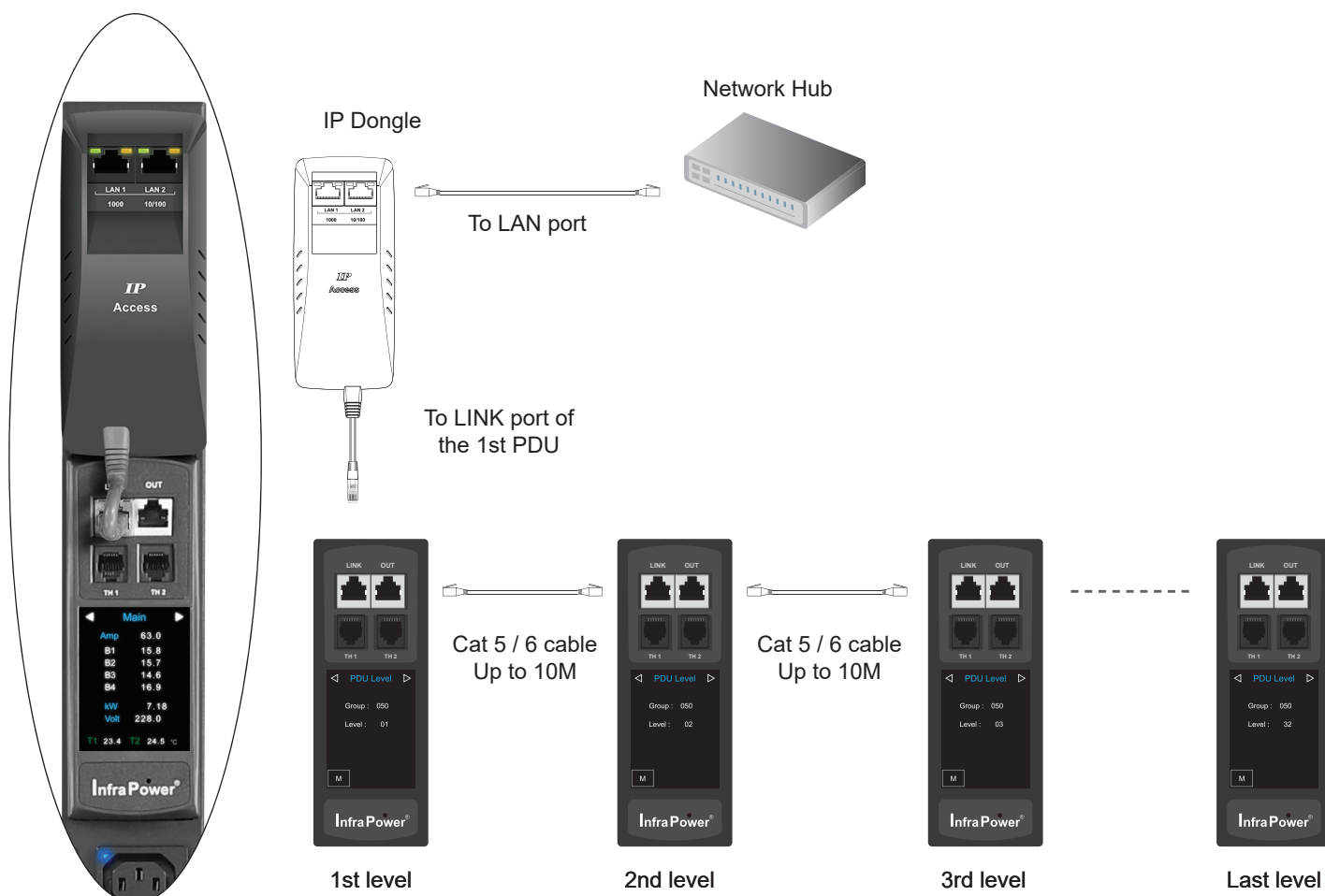
IP Dongle for vertical PDU

- SNMP capability v2 / v3

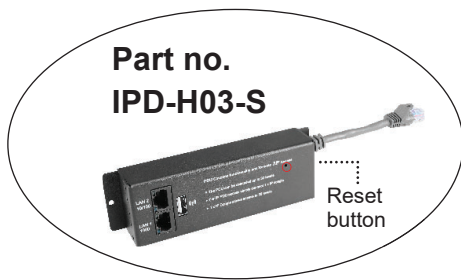


Part no.
IPD-03-S

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



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

< 1.7 > Optional Accessory

Temp. / Temp. + Humidity / Door / Smoke Sensor

W meter provides 2 sensor ports for Temp. / Temp. + Humidity / Door & Smoke sensor monitoring. The default sensor type for the 2 sensor ports is Temp. / TH sensor. You can select different sensor type you installed to the sensor port of W meter.



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)



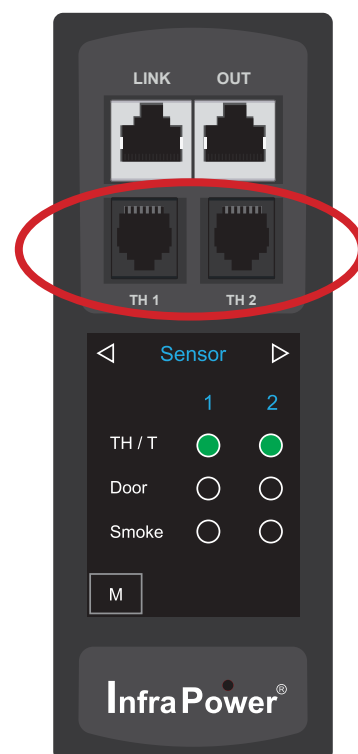
Door Sensor

Part no. :
IP - DSW - 2M (2M cord)
IP - DSW - 4M (4M cord)



Smoke Sensor

Part no. :
IP - S01 - 1M (1M cord)
IP - S01 - 3M (3M 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	3.3VDC, powered by PDU sensor port	
	Current Consumption	70mA	
	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
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Weight	Net	10g
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Compatibility	InfraPower	Single & 3 Phase W / WS / Wi / WSi series PDU
	InfraSolution	X-2000 series
	InfraGuard	Rack sensor system

Safety Regulatory	FCC & CE certified		
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Environmental	RoHS3 & REACH compliant		
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< 1.7 > Optional Accessory

Door Sensor



		Door Sensor
Part no.		IP-DSW
Sensitivity	Actuation	3.00 mm
	Travelling Distance	9.25 mm
	Operating Force	3.5±1 N
	Sensing distance	/
	Sensing object	/
Power Requirement	Voltage	/
	Current Consumption	/
Housing	Material	Plastic
	Color	Gray
Connection	Cable Length	2m / 4m (option)
Environmental	Operating	-20 to 60°C Degree
	Storage	-30 to 70°C Degree
	Relative Humidity	5~90%, non-condensing
Dimensions	Product	52W x 22.5L mm (with metal plate)
	Packing	/
Weight	Net / Gross	14g (with metal plate)
Supply includes	1	Mechanical door sensor
	2	Metal plate
	3	4-wired 3.5mm to RJ-11 cable (2m)
Compatibility	InfraPower	Single & 3 Phase W / WS / Wi / WSi series PDU Dual feed Single & 3 Phase W / WS / Wi / WSi series PDU
Safety Regulatory		FCC & CE certified
Environmental		RoHS3 & REACH compliant by SGS

< 1.7 > Optional Accessory

Smoke Sensor

Smoke sensor comes with a RED LED. When smoke alarm triggers, the RED LED lights on with beep sound continuously.



		Smoke Sensor
Part no.		IP-S01
Sensitivity	Smoke sensitivity	0.15 ~ 0.3 dB/m
Alarm Output	Solid State Relay	24VDC@1A
	Alarm LED	Red
	Audio Alarm	80 dB
	Audio Alarm Pattern	Continuous beeps
Power Requirement	Voltage	3.3VDC, powered by PDU sensor port
	Current Consumption	720uA
	Power ON LED	Red LED flashes every 6 seconds
Housing	Chassis & Cover	ABS plastic
	Color	Ivory White
Connection	Cable Length	1m / 3m (option)
Environmental	Operating	-5 to 50°C Degree
	Storage	-10 to 60°C Degree
	Humidity	5~90%, non-condensing
Dimensions	Product	103L x 103W x 55H mm
Weight	Net	165g
Supply includes	1	Smoke Sensor with 1m cable
Compatibility:	InfraPower	Single & 3 Phase W / WS / Wi / WSi series PDU Dual feed Single & 3 Phase W / WS / Wi / WSi series PDU
Safety Regulatory	FCC & CE certified	
Environmental	RoHS3 & REACH compliant by SGS	

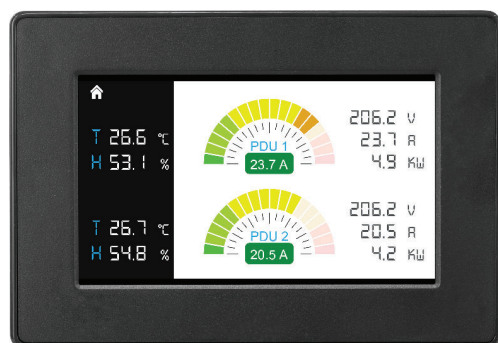
< 1.7 > Optional Accessory

4.3" Door Mount PDU Panel

4.3" Door Mount PDU Panel (IP-ED-01) provides RJ-11 port x 2 for PDU voltage, amp., power & sensor monitoring. Once connected, the data shows on the 4.3" door mount PDU panel.

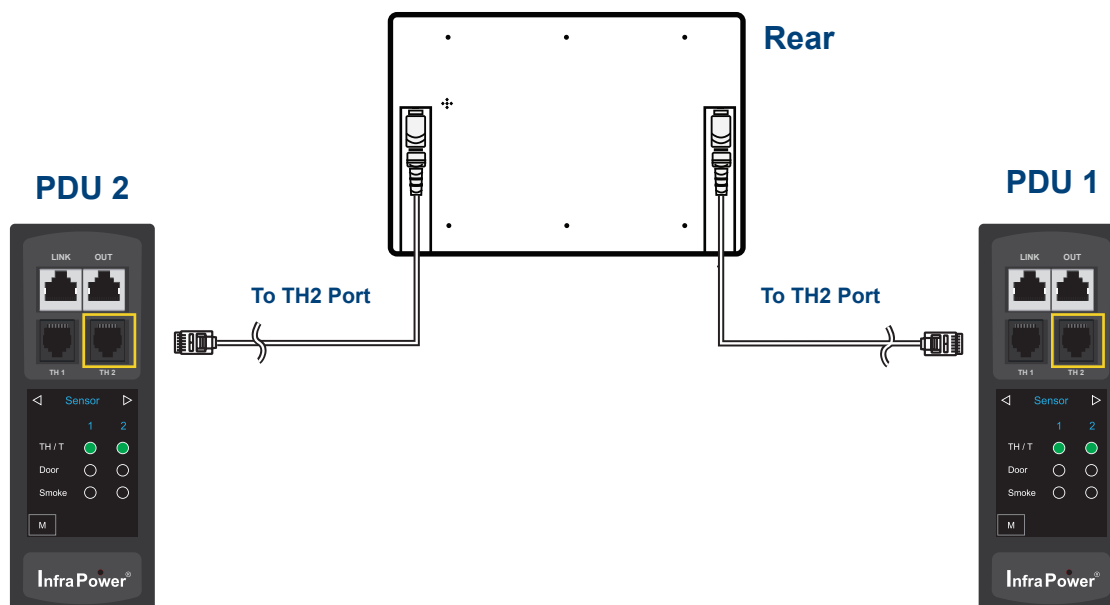
For details, please refer to user manual of 4.3" Door Mount PDU Panel :

https://www.austin-hughes.com/resource_cat/product-resources/rack-power-resources/#tab-product-series-resources-table-manuals



IP-ED-01

4.3" Door Mount PDU Panel



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. 1600 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 32 PDU levels)	50
	PDU number	1600
	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 Threshold 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

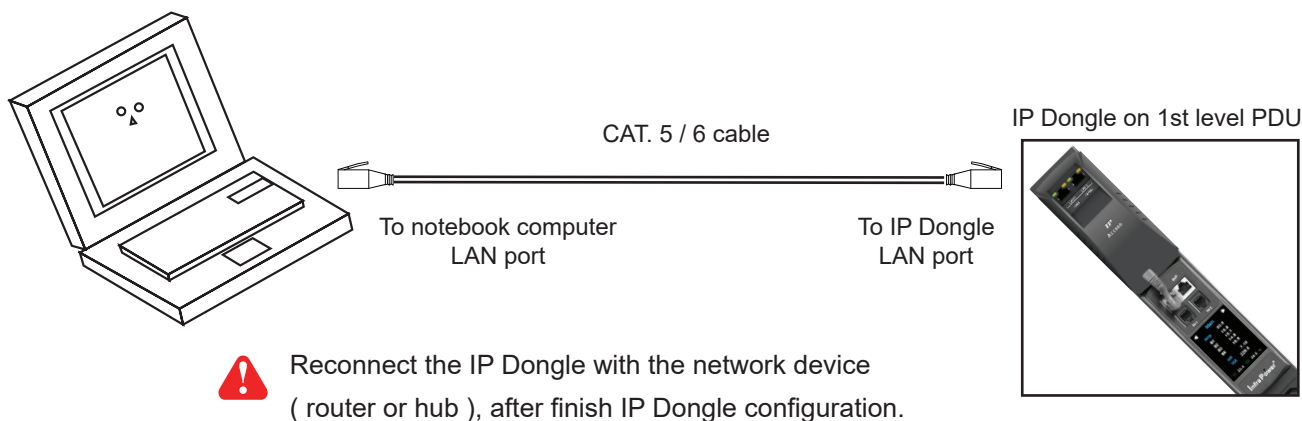
 The following steps show the static IP setting only. For DHCP setting, please refer to < 7.3 > DHCP Setting


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>

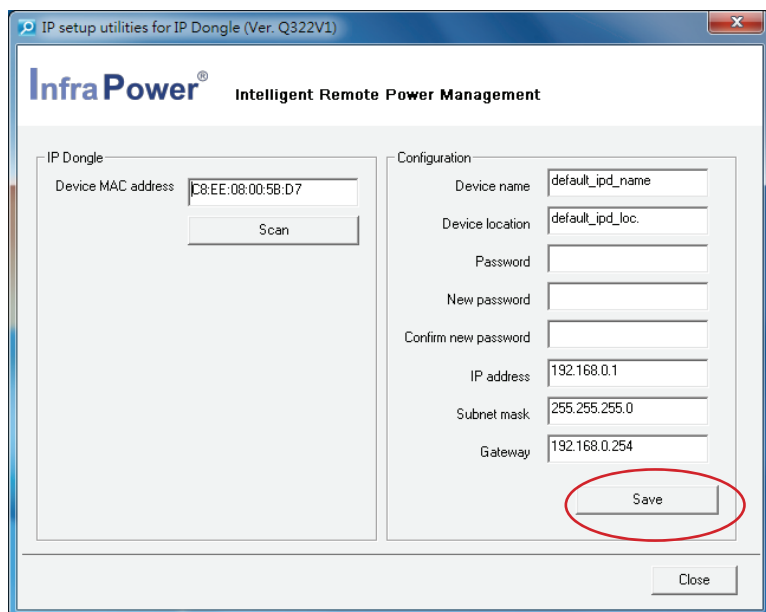
Step 2. Double Click the IPDongleSetup.msi and follow the instruction to complete the installation

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



 Reconnect the IP Dongle with the network device (router or hub), after finish IP Dongle configuration.

 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:

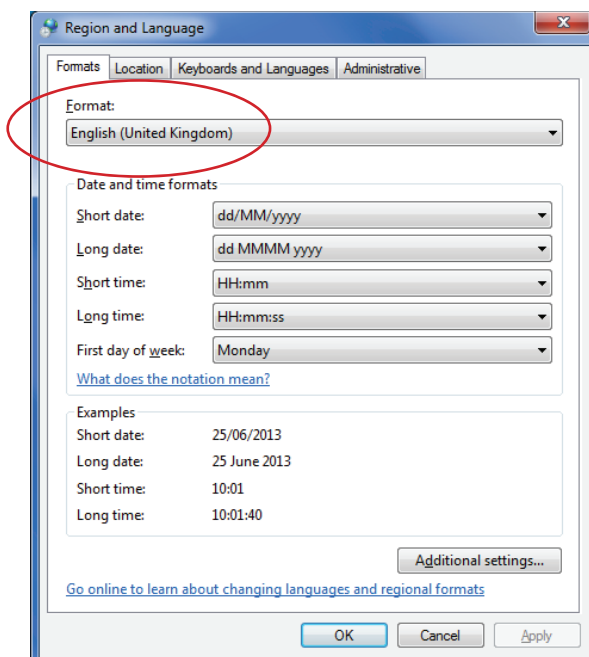
- MS Windows 10 Pro
- MS Windows 7 Professional with SP1
- MS Windows Server 2012 R2 Standard Edition
- MS Windows Server 2008 Standard Edition SP2
- MS Windows Server 2008 R2 Standard Edition SP1
- MS Windows Server 2003 R2 Standard Edition with SP2



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. 1600 (50 IP dongles x 32 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 .

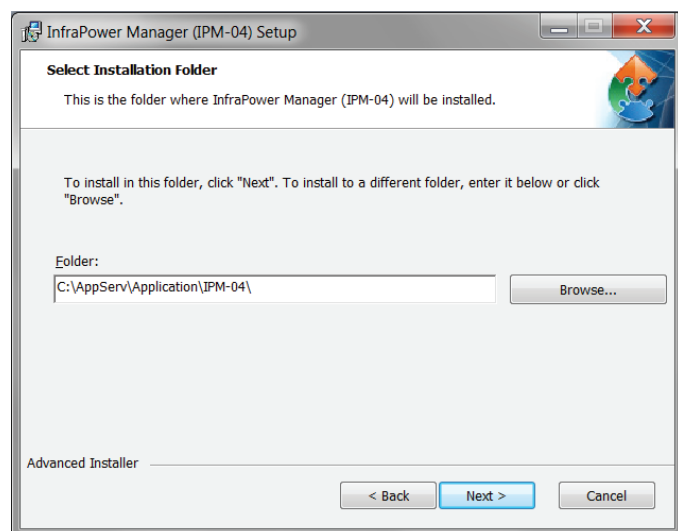
Double click the IPM-04.msi and follow the instruction to complete the installation.



IPM-04.msi

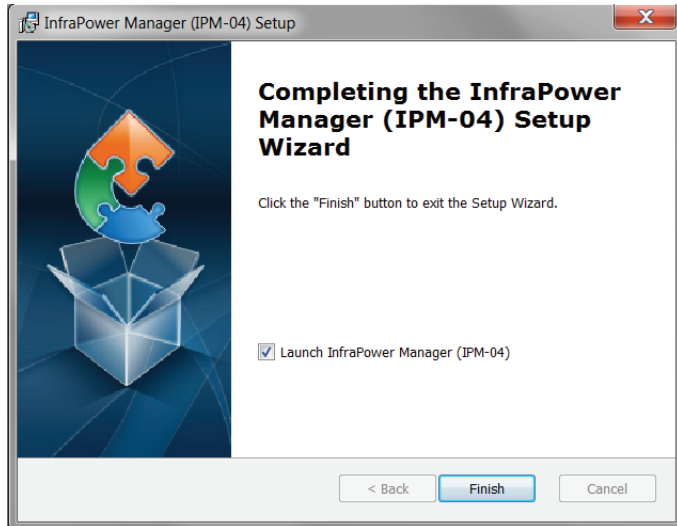


click “ **Next** ”



click “ **Install** ”

< 2.5 > Software Download



↓
click “ **Finish** ”

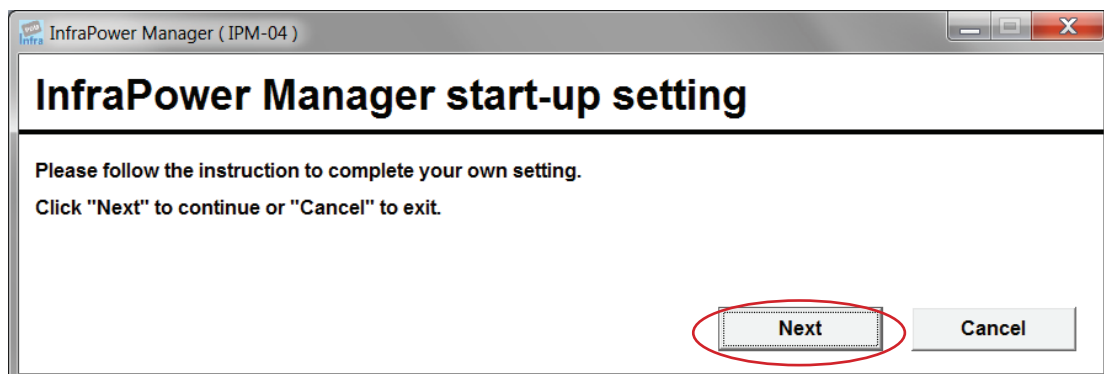
.....•Complete

< 2.6 > First Time Start-up Setting

Step 1. Double Click the 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

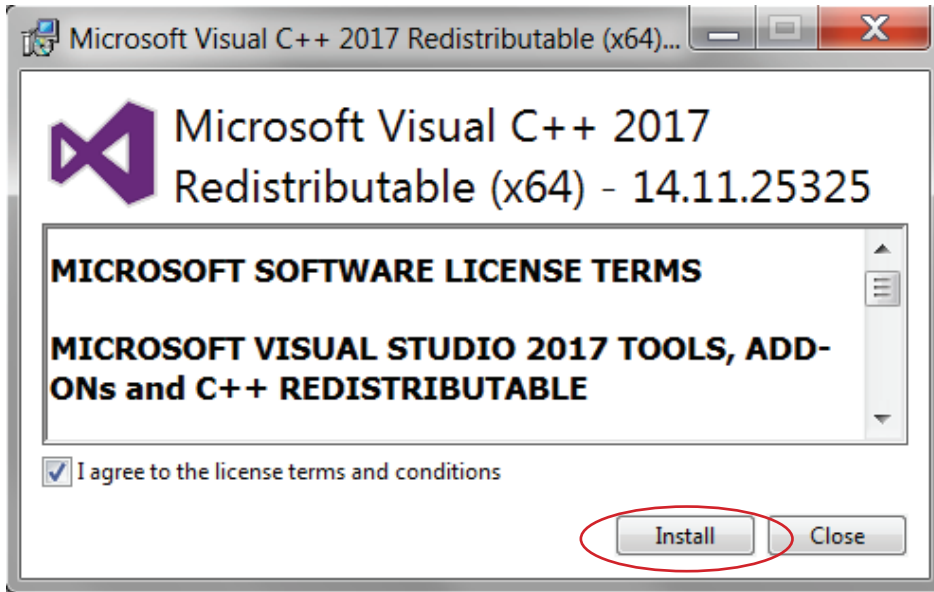
Step 4. Click “ Yes ” to start the installation

Install Apache + PHP

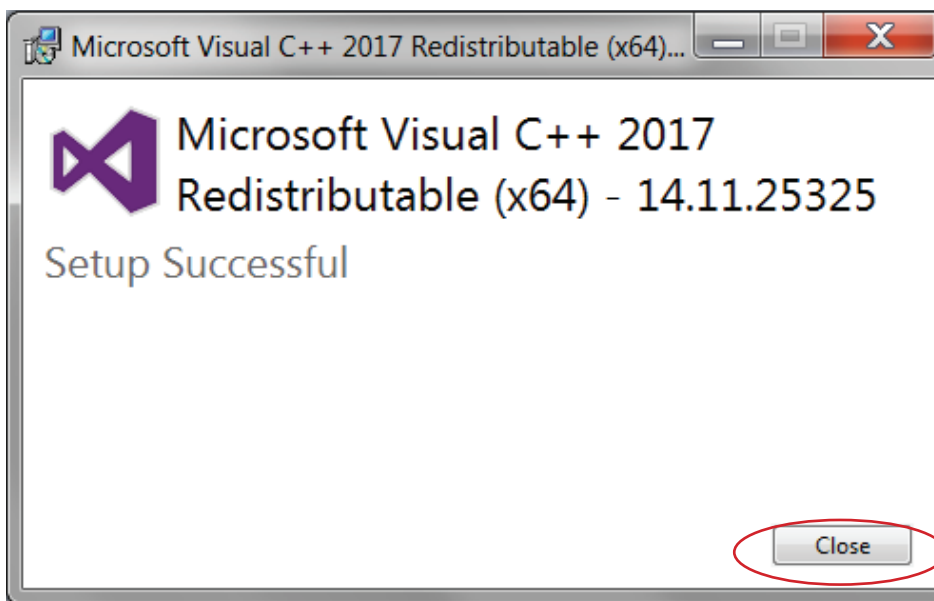
Are you sure to install Apache and PHP modules?

< 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 : C:\AppServ\Apache2.4\

Listen port : 80

(2) PostgreSQL 9.5

Ver.

Folder : C:\AppServ\PostgreSQL9.5\

PostgreSQL login : postgres

PostgreSQL password : 1qaz2WSX

PostgreSQL port : 5432

Database initialization : ☒ Create new ☐ Use existing

IPM-04 database name : db_IPM-04

IPM-04 database user : ipm-04

IPM-04 database password : ipm-04

Verifying PostgreSQL configuration ... failed

Apply Cancel

Ver. Q417V6 (build 4.217.39)

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

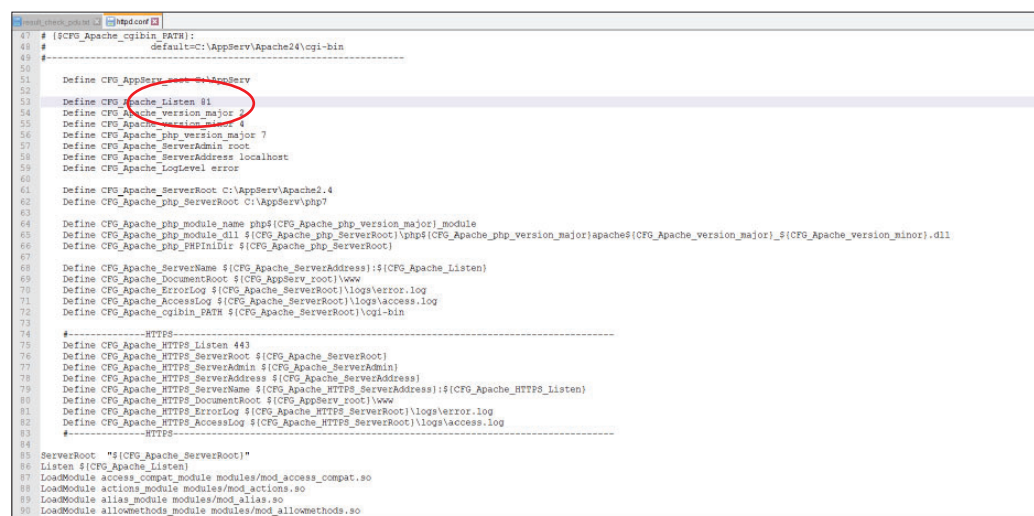
Web server port no. change

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** “

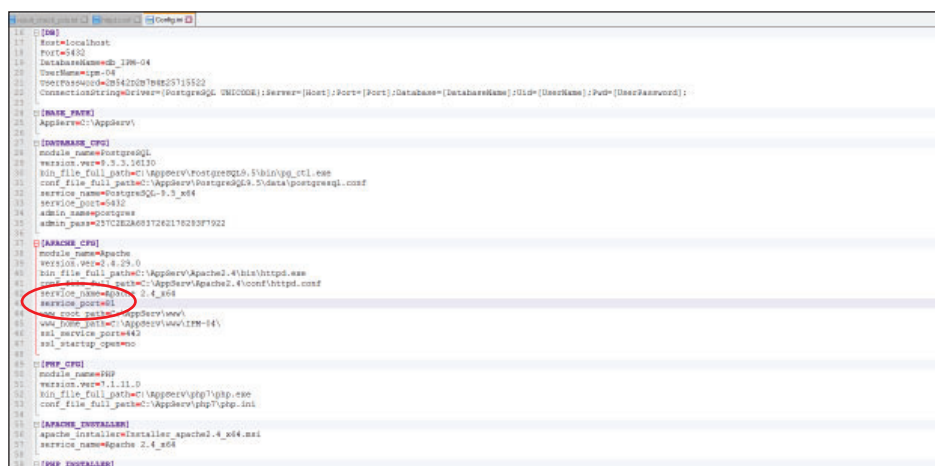


```
47 # {CFG_Apache_cqibin_PATH}:
48 #
49 #-----
50
51 Define CFG_Apache_ServerName localhost
52
53 Define CFG_Apache_Listen 81
54 Define CFG_Apache_version_major 2
55 Define CFG_Apache_version_minor 4
56 Define CFG_Apache_php_version_major 7
57 Define CFG_Apache_ServerAdmin root
58 Define CFG_Apache_ServerAddress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

Step 4. Open the config.ini of 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** “



```
14 [DB]
15 host=localhost
16 port=5432
17 database=ipm04
18 user=ipm-04
19 password=ipm04
20 connectionstring=Server=(host);Port=(port);Database=(databaseName);UID=(userName);PWD=(userPassword);
21
22 [DATABASE_CFG]
23 AppServC:\AppServ\
24
25 [DATABASE_CFG]
26 module_name=PostgreSQL
27 version_ver=3.3.6130
28 bin_file_full_path=C:\AppServ\postgresql\bin\pg_ctl.exe
29 conf_file_full_path=C:\AppServ\postgresql\5\data\postgresql.conf
30 service_name=PostgreSQL-3.3_x64
31 service_port=5432
32 admin_name=postgres
33 admin_pass=5773232683726217623297922
34
35 [APACHE_CFG]
36 module_name=Apache
37 version_ver=2.4.29.0
38 bin_file_full_path=C:\AppServ\Apache2.4\bin\httpd.exe
39 conf_file_full_path=C:\AppServ\Apache2.4\conf\httpd.conf
40 service_name=Apache-2.4_x64
41 service_port=443
42 www_root_path=C:\AppServ\www\
43 ssl_module_path=C:\AppServ\ssl\
44 ssl_startop_openssl
45
46 [PHP_CFG]
47 module_name=PHP
48 version_ver=7.1.11.0
49 bin_file_full_path=C:\AppServ\php7\php.exe
50 conf_file_full_path=C:\AppServ\php7\php.ini
51
52 [APACHE_INSTALLER]
53 apache_installer=installer_apache2.4_x64.msi
54 service_name=Apache 2.4_x64
55
56 [PHP_INSTALLER]
57 php_installer=php7_x64.msi
```

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 11.0

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

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

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

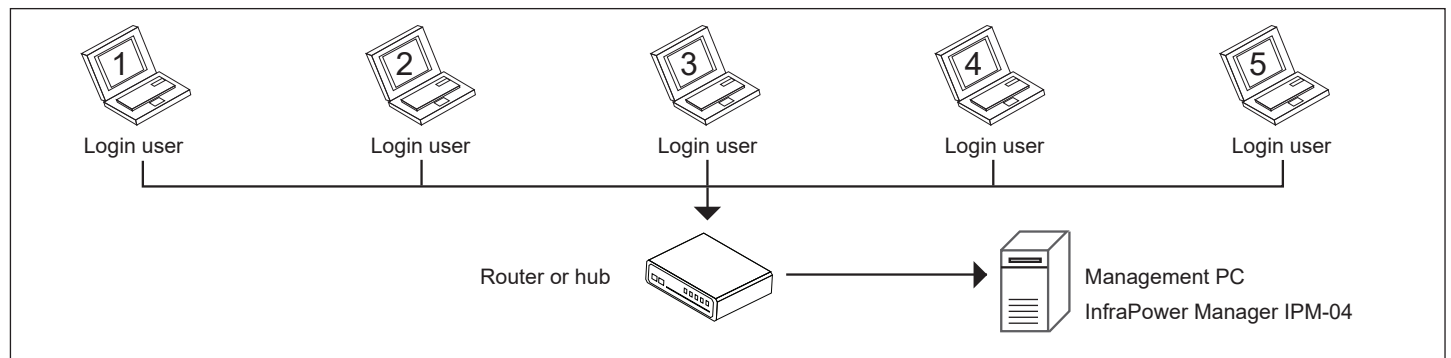
Step 3. Enter “ **User name** “. Default is “ **admin** “

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"/>	admin	*****	*****
<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"/>	Kenny.Wong	*****	*****
Operator 02 :	<input checked="" type="checkbox"/>	William.Wong	*****	*****
Operator 03 :	<input type="checkbox"/>			
Operator 04 :	<input type="checkbox"/>			
		<input type="button" value="Apply"/>	<input type="button" value="Cancel"/>	

< 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 **50** : ☒ Activate ☐ Deactivate

- DO NOT activate the group if there is no any IP dongle and PDU connection.
- Each IP dongle group consists of one IP dongle and max. 32 PDUs.

50 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.

50 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 is required for any PDU configuration and control.
- Administrator can either 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

SMTP server :192.168.0.1

SMTP port :25

User email :example@email.com

SMTP authentication :☒ Enable☐ Disable

User name :example@email.com

Password :.....

SMTP secure :SSL ▾

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

Alarm email to

Alarm mail recipient 01 :user01@email.com✕

Alarm mail recipient 02 :

Alarm mail recipient 03 :

Alarm mail recipient 04 :

Alarm mail recipient 05 :

Apply

Cancel

This alarm setting is for all IP dongle PDU groups.

< 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**
Temp. (°C)
Alarm :
Rising alert :

☐ **Deactivate**
Humid. (%)

☐ **TH2 setting**

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

☐ **Deactivate**
Humid. (%)

< 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 <input type="text" value="No."/>		(3)	Change temperature unit
	(2)	Change IP dongle <input type="text" value="No."/> address or password	- Backup	(1)	Enable / Disable daily backup
	(3)	Enable / Disable IP dongle group <input type="text" value="No."/> command password		(2)	Change backup path
	(4)	Change IP dongle group <input type="text" value="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**

- View latest loading on each PDU's banks / circuits

- View aggregate current & energy consumption on each PDU

- View status & reading of Temp. & Humid sensors connected to each PDU

- View status of Door / Smoke sensors connected to each PDU

**** Please search the new installed PDUs via PPS-03-S WEBUI before do the searching in**

IPM-04. Details please refer to PPS-03-S user manual < 1.5 >

PDU status

IP dongle name : default_ipd_name

IP address : 192.168.0.1

Page : 12

Level	Name	Location	Amp			kWh	kVA	Amp			kWh	kVA	Total			Sensor 1		Sensor 2		Leakage mA		
			Max.	Load	Alarm / R. alert / L. alert			Max.	Load	Alarm / R. alert / L. alert			Amp Load	kWh	kVA	Type	Status	Type	Status			
01	3PWS149-50A	Server_Rack_001L	1A	15	/ 0.6	/ 12.0 / 0.0 / 0.0	0.04	0.22	1B	15	/ 0.0	/ 12.0 / 0.0 / 0.0	0.00	0.00	0.6	0.04	0.22	-	-	-	-	-
			2A	15	/ 0.0	/ 12.0 / 0.0 / 0.0	0.00	0.00	2B	15	/ 0.0	/ 12.0 / 0.0 / 0.0	0.00	0.00				-	-	-	-	
			3A	15	/ 0.0	/ 12.0 / 0.0 / 0.0	0.00	0.00	3B	15	/ 0.0	/ 12.0 / 0.0 / 0.0	0.00	0.00				-	-	-	-	
02	SPWS124-32A	Server_Rack_001R	1A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	1B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	0.0	0.00	0.00	Temp.	26.2 °C	Door	Open	-
			2A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	2B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00								
			3A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	3B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00								
03	SPWS124-32A	Server_Rack_002L	Cir. A	16	/ 0.1	/ 13.0 / 0.0 / 0.0	0.00	0.02	Cir. B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	0.1	0.00	0.02	-	-	-	-	-
04	3PWS136-32A	Server_Rack_002R	1A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	1B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-	-
			2A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	2B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00								
			3A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	3B	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	0.00	0.04	Cir. B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	0.1	0.00	0.04	-	-	-	-	-
06	SPWS112-32A	Server_Rack_003R	Cir. A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	Cir. B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.01	0.00	0.0	0.07	0.00	-	-	-	-	-
07	SPW23-32A	Server_Rack_004L	Cir. A	16	/ 0.2	/ 13.0 / 0.0 / 0.0	84.94	0.06	Cir. B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	0.2	84.94	0.06	-	-	-	-	-
08	3PWS36-32A	Server_Rack_004R	1A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	1B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-	-
			2A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	2B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00								
			3A	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00	3B	16	/ 0.0	/ 13.0 / 0.0 / 0.0	0.00	0.00								

☒ Auto data refresh:

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 : 07 V16C13/8C19-63A-WSI

Name : default_pdu_name

kWh : 1.05

Power factor : 0.00

Frequency : 50.0

Status : Connected

Location : default_pdu_loc.

Load amp : 0.0

kVA : 0.00

Bank 1

Voltage : 218.0

Alarm amp :

Max. amp : 16.0

Rising alert amp :

Load amp : 0.0

Low alert amp :

Peak amp : 8.3

2021/08/09 13:49:45

Reset

kWh : 1.05

2015/01/01 00:00:00

Reset

Bank 3

Voltage : 217.9

Alarm amp :

Max. amp : 16.0

Rising alert amp :

Load amp : 0.0

Low alert amp :

Peak amp : 0.0

2015/01/01 00:00:00

Reset

kWh : 0.00

2015/01/01 00:00:00

Reset

Bank 2

Voltage : 217.9

Alarm amp :

Max. amp : 16.0

Rising alert amp :

Load amp : 0.0

Low alert amp :

Peak amp : 0.0

2015/01/01 00:00:00

Reset

kWh : 0.00

2015/01/01 00:00:00

Reset

Bank 4

Voltage : 218.0

Alarm amp :

Max. amp : 16.0

Rising alert amp :

Load amp : 0.0

Low alert amp :

Peak amp : 0.0

2015/01/01 00:00:00

Reset

kWh : 0.00

2015/01/01 00:00:00

Reset

Outlet	Name	Amp	kWh	kVA	Status	Switch
01	outlet_name_01	0.0	0.00	0.00	ON	OFF
03	outlet_name_03	0.0	0.00	0.00	ON	OFF
05	outlet_name_05	0.0	0.00	0.00	ON	OFF
07	outlet_name_07	0.0	0.00	0.00	ON	OFF
C01	outlet_name_09	0.0	0.00	0.00	ON	OFF
C03	outlet_name_11	0.0	0.00	0.00	ON	OFF
02	outlet_name_02	0.0	0.00	0.00	ON	OFF
04	outlet_name_04	0.0	0.00	0.00	ON	OFF
06	outlet_name_06	0.0	0.00	0.00	ON	OFF
08	outlet_name_08	0.0	0.00	0.00	ON	OFF
C02	outlet_name_10	0.0	0.00	0.00	ON	OFF
C04	outlet_name_12	0.0	0.00	0.00	ON	OFF
01	outlet_name_13	0.0	0.00	0.00	ON	OFF
03	outlet_name_15	0.0	0.00	0.00	ON	OFF
05	outlet_name_17	0.0	0.00	0.00	ON	OFF
07	outlet_name_19	0.0	0.00	0.00	ON	OFF
C01	outlet_name_21	0.0	0.00	0.00	ON	OFF
C03	outlet_name_23	0.0	0.00	0.00	ON	OFF
02	outlet_name_14	0.0	0.00	0.00	ON	OFF
04	outlet_name_16	0.0	0.00	0.00	ON	OFF
06	outlet_name_18	0.0	0.00	0.00	ON	OFF
08	outlet_name_20	0.0	0.00	0.00	ON	OFF
C02	outlet_name_22	0.0	0.00	0.00	ON	OFF
C04	outlet_name_24	0.0	0.00	0.00	ON	OFF

Click outlet icon for setting

* Press F11 to enlarge or diminish the screen

☒ Auto data refresh : Untick during data input

Apply

 Save new data input

Cancel

 Discard new data input


Time Sync

 Synchronize this device time with computer

< 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 : V16C13/8C19-63A-WSi

Status : Connected

Name : default_pdu_name

Location : default_pdu_loc.

Bank1

Outlet : 

Name :

Status : ON

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

Load amp : 0.0

Alarm amp :

Rising alert amp :

Low alert amp :

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


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

kVA : 0.00

< 4.4 > Sensor Status

In < **Sensor status** > ,

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

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

Sensor Status

IP Dongle name : default_name

LAN 1 IPv4 address : 192.168.1.62

LAN 1 IPv6 address : 2001:0:1:a2::ec11/64

LAN 2 IPv4 address : 192.168.0.2

LAN 2 IPv6 address : 2001:0:1:a2::ec01/64

Level Name	Setting	Sensor 1					Sensor 2				
		Location	Type	Status	Alarm	R.alert	Location	Type	Status	Alarm	R.alert
01 default_pdu_name		sensor_location	Temp. (°C)	33.0	35.0	0.0	sensor_location	Door	Close	-	-
02 default_pdu_name		sensor_location	Smoke	Normal	-	-	sensor_location	Temp. (°C)	34.7	45.0	0.0
03 default_pdu_name		-	-	-	-	-	-	-	-	-	-
04 default_pdu_name		-	-	-	-	-	-	-	-	-	-
05 default_pdu_name		-	-	-	-	-	-	-	-	-	-
06 default_pdu_name		-	-	-	-	-	-	-	-	-	-
07 default_pdu_name		-	-	-	-	-	-	-	-	-	-
08 default_pdu_name		-	-	-	-	-	-	-	-	-	-
09 default_pdu_name		-	-	-	-	-	-	-	-	-	-
10 default_pdu_name		-	-	-	-	-	-	-	-	-	-
11 default_pdu_name		-	-	-	-	-	-	-	-	-	-
12 default_pdu_name		-	-	-	-	-	-	-	-	-	-
13 default_pdu_name		-	-	-	-	-	-	-	-	-	-
14 default_pdu_name		-	-	-	-	-	-	-	-	-	-
15 default_pdu_name		-	-	-	-	-	-	-	-	-	-
16 default_pdu_name		-	-	-	-	-	-	-	-	-	-
17 default_pdu_name		-	-	-	-	-	-	-	-	-	-
18 default_pdu_name		-	-	-	-	-	-	-	-	-	-
19 default_pdu_name		-	-	-	-	-	-	-	-	-	-
20 default_pdu_name		-	-	-	-	-	-	-	-	-	-
21 default_pdu_name		-	-	-	-	-	-	-	-	-	-
22 default_pdu_name		-	-	-	-	-	-	-	-	-	-
23 default_pdu_name		-	-	-	-	-	-	-	-	-	-
24 default_pdu_name		-	-	-	-	-	-	-	-	-	-
25 default_pdu_name		-	-	-	-	-	-	-	-	-	-
26 default_pdu_name		-	-	-	-	-	-	-	-	-	-
27 default_pdu_name		-	-	-	-	-	-	-	-	-	-
28 default_pdu_name		-	-	-	-	-	-	-	-	-	-
29 default_pdu_name		-	-	-	-	-	-	-	-	-	-
30 default_pdu_name		-	-	-	-	-	-	-	-	-	-
31 default_pdu_name		-	-	-	-	-	-	-	-	-	-
32 default_pdu_name		-	-	-	-	-	-	-	-	-	-

☒ Auto data refresh : Untick during data input

< 4.5 > Sensor Setting

In < **Sensor Setting** > ,

- Default Sensor setting : Deactivate
- “ **Activate** ” sensors ONLY when they are connected
- Change “ **Location** ” , “ **Rising alert Setting** ” & “ **Alarm Setting** ” of Temp. & Humid sensors
- Change “ **Location** ” of Door sensor & Smoke sensor



If no any sensor connected, NEVER activate.

Sensor Setting

Level : 01 V48C13/24C19-32A-WSI

Status : Connected

Name : default_pdu_name

Location : default_pdu_loc.

Sensor 1

☒ Activate ☐ Deactivate

Type Temp. sensor

Location : sensor_location

Alarm

Rising alert

Setting

Reading

Temp.(°C) : 35.0 0.0 33.0

Sensor 2

☒ Activate ☐ Deactivate

Type Door sensor

Location : sensor_location

State Close

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

Apply Save new data input

Cancel Discard new data input

Exit Return to previous page









< 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		Setting	Outlet Schedule # 1 - 2		Outlet Schedule # 3 - 4		Outlet Schedule # 5 - 6	
Level	Name		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

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 : 08 H8C13-32A-WSi
Status : Connected
Name : SPWSi8-32A
Location : Server_Rack_004R

Outlet schedule : 01 ☐ Disable ☒ Enable
Name : ScheduleName_01
Action : ☐ OFF ☐ ON
Time : ☐ Daily ☐ Weekly ☐ One-Time
01 / 01 (MM / DD date format)
Sun
00 : 00 (24 hours format)

Outlet schedule

PDU
A
☐ 01 Dell_Server_001
☐ 02 outlet_name_02
☐ 03 outlet_name_03
☐ 04 outlet_name_04
B
☐ 05 Dell_Server_002
☐ 06 outlet_name_06
☐ 07 outlet_name_07
☐ 08 outlet_name_08

< 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 : Untick during data input

Search

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

The screenshot shows a window titled "Outlet schedule". Inside, there is a box labeled "PDU" containing two sections, A and B. Section A has four outlets: 01 (checked), 02, 03, and 04. Section B has four outlets: 05 (checked), 06, 07, and 08. Each outlet is represented by a checkbox, a number, a server icon, and a name. Below the PDU box, there are five buttons: "Apply" (circled in red), "Cancel", "Save new data", "Cancel new data input", and "Exit". To the right of the "Exit" button is a link that says "Return to OUTLET SCHEDULE".

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 :

<

< 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 : 08									
Outlet : 02									
Date	Time	PDU Model	PDU Name	Outlet Name	Status	Amp			kVA
						Load	Alarm / R. alert / L. alert	kWh	
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	-
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last									
Last 2000 log records.									
* Press F11 to enlarge or diminish the screen									

< 5.1 > Single Phase PDU / Outlet Log

< Single Phase 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 : 08						
Date	Time	Model	Status	Circuit A kWh	Circuit B kWh	Total kWh
2017/12/20	00:00:00	V1UK/7C13/4C19-32A-WSi	Connected	0.23	0.00	0.23
2017/12/19	00:00:01	V1UK/7C13/4C19-32A-WSi	Connected	0.22	0.00	0.22
2017/12/18	00:00:00	V1UK/7C13/4C19-32A-WSi	Connected	0.22	0.00	0.22
2017/12/17	00:00:00	V1UK/7C13/4C19-32A-WSi	Connected	0.22	0.00	0.22
2017/12/16	00:00:01	V1UK/7C13/4C19-32A-WSi	Connected	0.22	0.00	0.22
2017/12/15	00:00:01	V1UK/7C13/4C19-32A-WSi	Connected	0.23	0.00	0.23
2017/12/14	00:00:00	V1UK/7C13/4C19-32A-WSi	Connected	0.22	0.00	0.22
2017/12/13	00:00:00	V1UK/7C13/4C19-32A-WSi	Connected	0.22	0.00	0.22
2017/12/12	00:00:00	V1UK/7C13/4C19-32A-WSi	Connected	0.25	0.00	0.25
2017/12/11	00:00:00	V1UK/7C13/4C19-32A-WSi	Connected	0.22	0.00	0.22
2017/12/10	00:00:00	V1UK/7C13/4C19-32A-WSi	Connected	0.22	0.00	0.22
2017/12/09	00:00:00	V1UK/7C13/4C19-32A-WSi	Connected	0.12	0.00	0.12
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last						
Last 2000 log records.						
* Press F11 to enlarge or diminish the screen						

< Single Phase Daily kWh Log - Outlet >

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

(Single Phase Outlet Measurement PDU only)

Single Feed > Single Phase > kWh Log - Outlet

PDU level : 06

Outlet : 02

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

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

Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< 5.1 > Single Phase PDU / Outlet Log

< Single Phase Dual Feed PDU Log >

provides past 2000 log records of each Single Phase PDU.

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

						I - A			II - B			II - Total						
Date	Time	Model	Name	Location	Status	Amp					kWh	kVA	Amp	kWh	kVA			
						Max.	Load	Alarm	R. alert	L. alert						Alarm	R. alert	L. alert
2017/12/19	01:50:05	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	01:40:03	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	01:30:02	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	01:20:00	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	01:09:59	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	00:59:58	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	00:49:57	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	00:39:56	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	00:29:54	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	00:19:53	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/19	00:09:52	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	23:59:51	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	23:49:50	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	23:39:49	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	23:29:48	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	23:19:47	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	23:09:46	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	22:59:45	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	22:49:43	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	22:39:42	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	22:29:41	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	22:19:40	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	22:09:39	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	21:59:38	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09
2017/12/18	21:49:37	DV32C13/8C19-32A-WSI	default_pdu_name	default_pdu_loc.	Connected	16	0.0	10.0	0.0	0.0	0.18	0.00	16	0.0	0.09	0.4	41.10	0.09

[First](#) / [Previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [Next](#) / [Last](#)

Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< Single Phase Dual Feed PDU Outlet Log >

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

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

				Amp			kWh	kVA
Date	Time	Model	Name	Outlet Name	Status	Load / Alarm / R. alert / L. alert		
2017/12/20	11:25:46	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-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	DV32C13/8C19-16A-WSI	DSPWSI40-16A	outlet_name_39	ON	0.4 / 16.0 / 0.0 / 0.0	1.69	0.09

[First](#) / [Previous](#) [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [Next](#) / [Last](#)

Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< 5.1 > Single Phase PDU / Outlet Log

< Single Phase Dual Feed Daily kWh Log - PDU >

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

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
						Max. / Load / Alarm / R. alert / L. alert				x. / Load / Alarm / R. alert / L. alert				Load		
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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.52	0.10	
2017/12/21	10:32:47	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.50	0.10	
2017/12/21	10:22:45	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.49	0.10	
2017/12/21	10:12:43	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.47	0.10	
2017/12/21	10:02:42	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.45	0.10	
2017/12/21	09:52:40	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.44	0.10	
2017/12/21	09:42:39	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.42	0.10	
2017/12/21	09:32:38	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.40	0.10	
2017/12/21	09:22:36	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.39	0.10	
2017/12/21	09:12:34	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.37	0.10	
2017/12/21	09:02:33	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.35	0.10	
2017/12/21	08:52:32	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.34	0.10	
2017/12/21	08:42:31	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.32	0.10	
2017/12/21	08:32:29	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.31	0.10	
2017/12/21	08:22:27	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.29	0.10	
2017/12/21	08:12:26	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.27	0.10	
2017/12/21	08:02:24	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.26	0.10	
2017/12/21	07:52:23	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.24	0.10	
2017/12/21	07:42:22	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.22	0.10	
2017/12/21	07:32:20	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.21	0.10	
2017/12/21	07:22:19	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.19	0.10	
2017/12/21	07:12:18	V24C13/8C19-83A-WSi	default_pdu_name	default_pdu_loc.	Connected	15 / 0.4 / 10.0 / 3.0 / 0.0	29.82	0.00	0.0	0.0 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.17	0.10	
2017/12/21	07:02:16	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.15	0.10	
2017/12/21	06:52:14	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.14	0.10	
2017/12/21	06:42:13	V24C13/8C19-83A-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 / 0.0 / 10.0 / 3.0 / 0.0	0.00	0.00	0.4	104.12	0.10	

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

Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< 63A PDU Outlet Log >

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

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

Single Feed > 63A > Outlet Log - PDU

PDU level :

Outlet :

Date	Time	Model	Name	Outlet Name	Status	Amp	kWh	kVA
						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 : 13 ▾

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

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

Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< 63A Daily kWh log - Outlet >

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

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

(63A Outlet measurement PDU only)

Single Feed > 63A > kWh Log - Outlet

PDU level : 13 ▾

Outlet : 05 ▾

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

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

Last 2000 log records.

* Press F11 to enlarge or diminish the screen

< 5.2 > Three Phase PDU / Outlet Log

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

Three Phase PDU log									
PDU level: 01									
Date	Time	Model	Name	Location	Status	Amp			kWh
						Max.	Load	Alarm / R. alert / L. alert	
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last									
Last 2000 log records.									
* Press F11 to enlarge or diminish the screen									

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

Single Feed > Three Phase > Outlet Log - PDU									
PDU level: 14									
Outlet: 03									
Date	Time	PDU Model	PDU Name	Outlet Name	Status	Amp			kWh
						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
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
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
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
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
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
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
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
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
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	5.96
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
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
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
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
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
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
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
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
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
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
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
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
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	5.16
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
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
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last									
Last 2000 log records.									
* Press F11 to enlarge or diminish the screen									

< 5.2 > Three Phase PDU / Outlet Log

< Three Phase Daily kWh Log - PDU >

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

Single Feed > Three Phase > kWh Log - PDU

PDU level : 14

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

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

Last 2000 log records.

* Press F11 to enlarge or diminish the screen.

< Three Phase Daily kWh Log - Outlet >

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

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

(3 Phase Outlet measurement PDU only)

Single Feed > Three Phase > kWh Log - Outlet

PDU level : 14

Outlet : 05

Date	Time	Model	Status	Outlet Name	Outlet kWh
2017/12/20	00:00:00	VP24C13/12C19-32A-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 1 2 3 4 5 6 7 8 9 10 Next / Last

Last 2000 log records.

* Press F11 to enlarge or diminish the screen.

< 5.3 > Sensor Log

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

TH log									
PDU level : 01									
Date	Time	Model	Status	Location	TH 1		Location	TH 2	
					°C	%		°C	%
					Temp. / Alarm / R. Alert	Humid. / Alarm / R. Alert		Temp. / Alarm / R. Alert	Humid. / Alarm / R. Alert
2018/04/25	10:11:19	VP24C13/12C19-32A-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	51.6 / 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	54.6 / 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	30.6 / 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	30.6 / 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	59.6 / 65.0 / 0.0	Rear_Top	30.6 / 35.0 / 0.0	55.9 / 65.0 / 0.0
2018/04/25	08:41:10	VP24C13/12C19-32A-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	59.6 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	56.0 / 65.0 / 0.0
2018/04/25	08:21:08	VP24C13/12C19-32A-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	59.6 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	56.1 / 65.0 / 0.0
2018/04/25	07:51:05	VP24C13/12C19-32A-WSI	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.5 / 35.0 / 0.0	56.1 / 65.0 / 0.0
2018/04/25	07:41:04	VP24C13/12C19-32A-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	59.6 / 65.0 / 0.0	Rear_Top	30.3 / 35.0 / 0.0	56.3 / 65.0 / 0.0
2018/04/25	07:21:02	VP24C13/12C19-32A-WSI	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.4 / 35.0 / 0.0	56.2 / 65.0 / 0.0
2018/04/25	07:11:01	VP24C13/12C19-32A-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	59.6 / 65.0 / 0.0	Rear_Top	30.4 / 35.0 / 0.0	56.2 / 65.0 / 0.0
2018/04/25	06:20:56	VP24C13/12C19-32A-WSI	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.3 / 35.0 / 0.0	56.2 / 65.0 / 0.0
2018/04/25	06:10:55	VP24C13/12C19-32A-WSI	Connected	Front_Top	29.7 / 35.0 / 0.0	59.6 / 65.0 / 0.0	Rear_Top	30.3 / 35.0 / 0.0	56.2 / 65.0 / 0.0
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last									
Last 2000 log records.									
* Press F11 to enlarge or diminish the screen									

< Door Sensor log > provides past 2000 door sensor log records of each PDU.
The software will generate a door sensor log record every 10 mins.

Door sensor log									
Level : 02									
Date	Time	Model	Status	Door 1		Door 2			
				Location	Status	Location	Status		
2021/07/02	13:39:21	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	13:29:20	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	13:19:19	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	13:09:18	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	12:59:17	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	12:49:16	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	12:39:15	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	12:29:14	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	12:19:12	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	12:09:11	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	11:59:10	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
2021/07/02	11:49:09	V16C13-16A-W	Connected	sensor_location	Open	sensor_location	Open		
First / Previous 1 2 3 4 5 6 7 8 9 10 Next / Last									
Last 2000 log records.									
* Press F11 to enlarge or diminish the screen									

< 5.3 > Sensor Log

< **Smoke Sensor Log** > provides past 2000 smoke sensor log records of each PDU.
The software will generate a smoke sensor log record every 10 mins.

Smoke sensor log

Level : 02

Date	Time	Model	Status	Smoke 1		Smoke 2	
				Location	Status	Location	Status
2021/07/02	11:39:08	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	11:29:07	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	11:19:06	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	11:09:05	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	10:59:04	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	10:49:03	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	10:39:02	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	10:29:01	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	10:19:00	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	10:08:59	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	09:58:58	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	09:48:57	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	09:38:56	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	09:28:55	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	09:18:54	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	09:08:53	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	08:58:52	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	08:48:51	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	08:38:50	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	08:28:49	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	08:18:48	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	08:08:47	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	07:58:46	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	07:48:45	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal
2021/07/02	07:38:44	V16C13-16A-W	Connected	sensor_location	Normal	sensor_location	Normal

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** , **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
☐ Inline Meter
☐ ATS
☐ Sensor log
☐ Event

☒ Single Feed
☐ Dual Feed

☐ Single phase PDU log
☐ Single phase PDU daily kWh log
☐ Single phase outlet log
☐ Single phase outlet daily kWh log

☒ Three phase PDU log
☐ Three phase PDU daily kWh log
☐ Three phase outlet log
☐ Three phase outlet daily kWh log

☐ 63A PDU log
☐ 63A PDU daily kWh log
☐ 63A outlet log
☐ 63A outlet daily kWh log

Period (Year / Month)
From: 2021 / 01
To: 2021 / 12

Target
IP dongle group: 01
PDU level:

<input type="checkbox"/> 01	<input type="checkbox"/> 09	<input type="checkbox"/> 17	<input type="checkbox"/> 25	<input type="checkbox"/> all
<input type="checkbox"/> 02	<input type="checkbox"/> 10	<input type="checkbox"/> 18	<input type="checkbox"/> 26	
<input type="checkbox"/> 03	<input type="checkbox"/> 11	<input type="checkbox"/> 19	<input type="checkbox"/> 27	
<input type="checkbox"/> 04	<input type="checkbox"/> 12	<input type="checkbox"/> 20	<input type="checkbox"/> 28	
<input type="checkbox"/> 05	<input type="checkbox"/> 13	<input type="checkbox"/> 21	<input type="checkbox"/> 29	
<input type="checkbox"/> 06	<input type="checkbox"/> 14	<input type="checkbox"/> 22	<input type="checkbox"/> 30	
<input type="checkbox"/> 07	<input type="checkbox"/> 15	<input type="checkbox"/> 23	<input type="checkbox"/> 31	
<input type="checkbox"/> 08	<input type="checkbox"/> 16	<input type="checkbox"/> 24	<input type="checkbox"/> 32	

Apply Cancel

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

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

Report Category

☐ PDU
☐ Inline Meter
☐ ATS
☐ Sensor log
☐ Event

Apply Cancel

To download the file, please:
(1) Right click the file link below
(2) Select **Save link as** to download the file

[- 3PHPDULog_IPDongleGroup01.csv](#)

- Open link in new tab
- Open link in new window
- Open link in InPrivate window
- Save link as**
- Copy link
- Add to Collections
- Web capture Ctrl+Shift+S
- Inspect Ctrl+Shift+I

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.

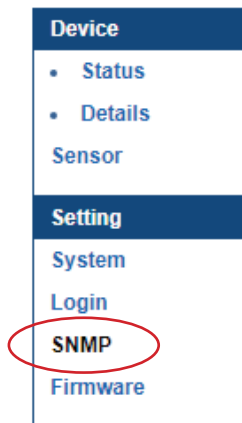
Password: the one you set in Step 7 of < 2.2 > IP Dongle Configuration.



The image shows a login dialog box with a white background and a thin black border. It contains two text input fields: the first 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 labels for the fields and buttons are in a small, dark font.

< 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. At the top left is the title 'SNMP'. Below it, the 'SNMP agent' section has radio buttons for 'Enable' and 'Disable', with 'Disable' selected. Below this are input fields for 'SNMP version' (a dropdown menu showing 'v1/v2'), 'SNMP port' (a text box with '161'), 'sysContact' (a text box with 'human.being<nobody@but.you>'), 'sysLocation' (a text box with 'Earth'), and 'sysName' (a text box with 'PPS-03-S'). The 'SNMP configuration' section follows, with 'Read community' (a text box with 'public') and 'Write community' (a text box with 'private'). At the bottom, there are three columns for 'Station 1', 'Station 2', and 'Station 3'. Each column has a 'Deactivate' (selected) and 'Activate' radio button, followed by input fields for 'Trap Station IP', 'Trap port', and 'Trap community'. All three stations have the same default values: IP '192.168.0.254', port '162', and community 'private'. At the very 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 ”

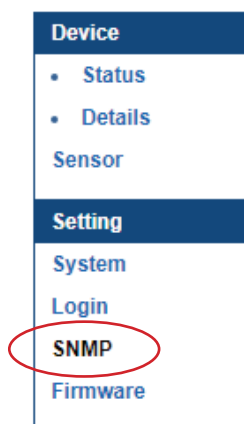
Step 4. Enter “ **Login name** ” & “ **Password** ”.

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 image shows the 'SNMP' configuration window. At the top left is the title 'SNMP'. Below it is the 'SNMP agent' section with a radio button for 'Enable' (selected) and 'Disable'. Below this are fields for 'SNMP version' (dropdown set to 'v1/v2'), 'SNMP port' (text box with '161'), 'sysContact' (text box with 'human.being<nobody@but.you>'), 'sysLocation' (text box with 'Earth'), and 'sysName' (text box with 'PPS-03-S'). Below this is the 'SNMP configuration' section. It has 'Read community' (text box with 'public') and 'Write community' (text box with 'private'). Below this are three columns for 'Station 1', 'Station 2', and 'Station 3'. Each column has a radio button for 'Deactivate' or 'Activate'. Station 1 has 'Activate' selected. Below each radio button are fields for 'Trap Station IP', 'Trap port', and 'Trap community'. Station 1 values are '192.168.1.113', '162', and 'private'. Station 2 values are '192.168.0.254', '162', and 'private'. Station 3 values are '192.168.0.254', '162', and '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 :

SNMP

SNMP agent : ☒ Enable ☐ Disable

SNMP version : **v3**

SNMP port : 161

sysContact : human.being<nobody@but.you>

sysLocation : Earth

sysName : PPS-03-S

SNMP configuration

User 1 :	User 2 :	User 3 :
<input type="radio"/> Deactivate <input checked="" type="radio"/> Activate	<input checked="" type="radio"/> Deactivate <input type="radio"/> Activate	<input checked="" type="radio"/> Deactivate <input type="radio"/> Activate
User role : read only	User role : read only	User role : read only
USM user : usm_user1	USM user : usm_user2	USM user : usm_user3
Auth algorithm : None	Auth algorithm : None	Auth algorithm : None
Auth password : *****	Auth password : *****	Auth password : *****
Privacy algorithm : None	Privacy algorithm : None	Privacy algorithm : None
Privacy password : *****	Privacy password : *****	Privacy password : *****
SNMP trap : Disabled	SNMP trap : Disabled	SNMP trap : Disabled
Trap Station IP : 192.168.1.113	Trap Station IP : 192.168.0.254	Trap Station IP : 192.168.0.254
Trap port : 162	Trap port : 162	Trap port : 162

Apply Cancel

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** ”

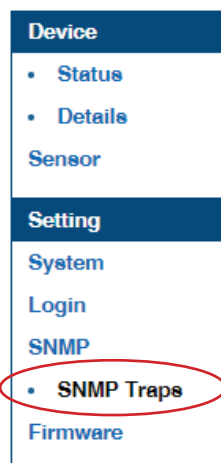
Step 22. Repeat step 12 to 20 for User 2 & 3

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.

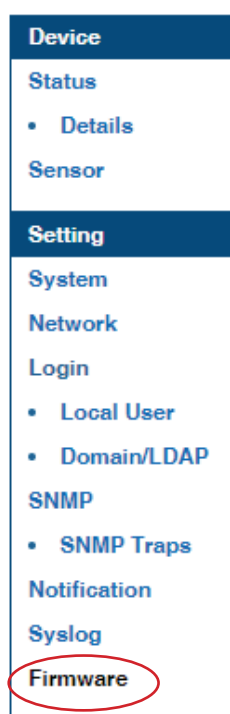
Password: the one you set in Step 7 of < 2.2 > IP Dongle Configuration.



Login name

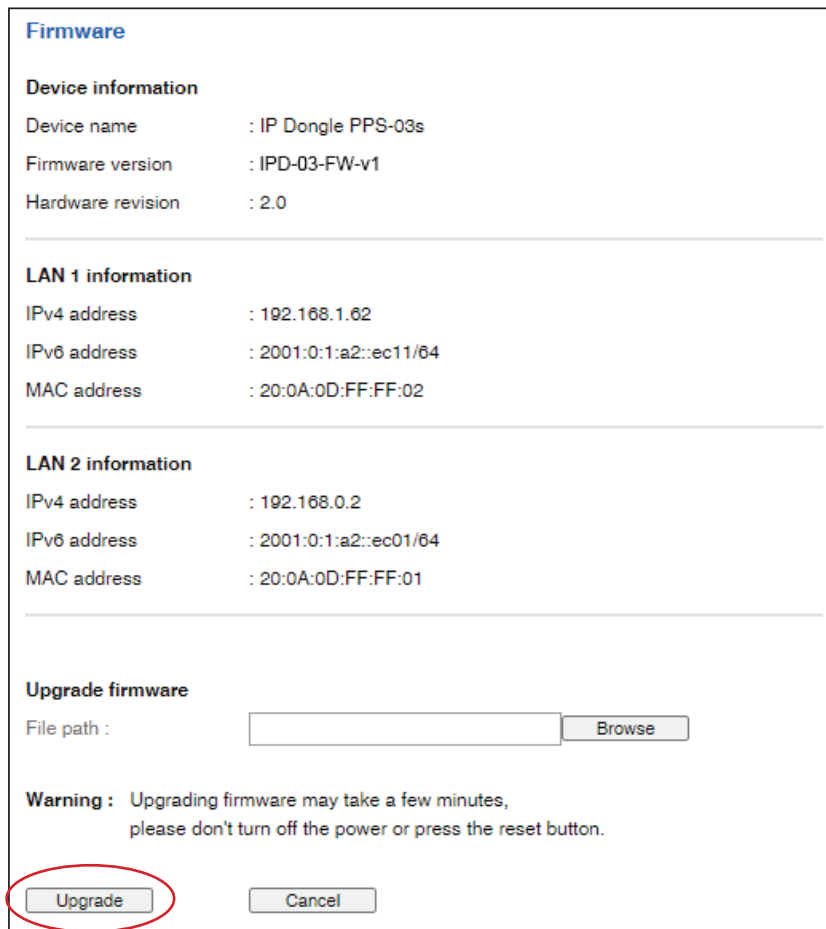
Password

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 :



The screenshot shows a web-based 'Firmware' upgrade window. It is divided into several sections: 'Device information' with fields for Device name (IP Dongle PPS-03s), Firmware version (IPD-03-FW-v1), and Hardware revision (2.0); 'LAN 1 information' with IPv4 (192.168.1.62), IPv6 (2001:0:1:a2::ec11/64), and MAC (20:0A:0D:FF:FF:02) addresses; and 'LAN 2 information' with similar fields (IPv4: 192.168.0.2, IPv6: 2001:0:1:a2::ec01/64, MAC: 20:0A:0D:FF:FF:01). Below this is the 'Upgrade firmware' section, which includes a 'File path' input field and a 'Browse' button. A 'Warning' message states: 'Upgrading firmware may take a few minutes, please don't turn off the power or press the reset button.' At the bottom, there are two buttons: 'Upgrade' (which is circled in red) and 'Cancel'.

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.

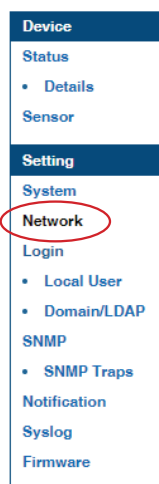
Password: the one you set in Step 7 of < 2.2 > IP Dongle Configuration.



Login name

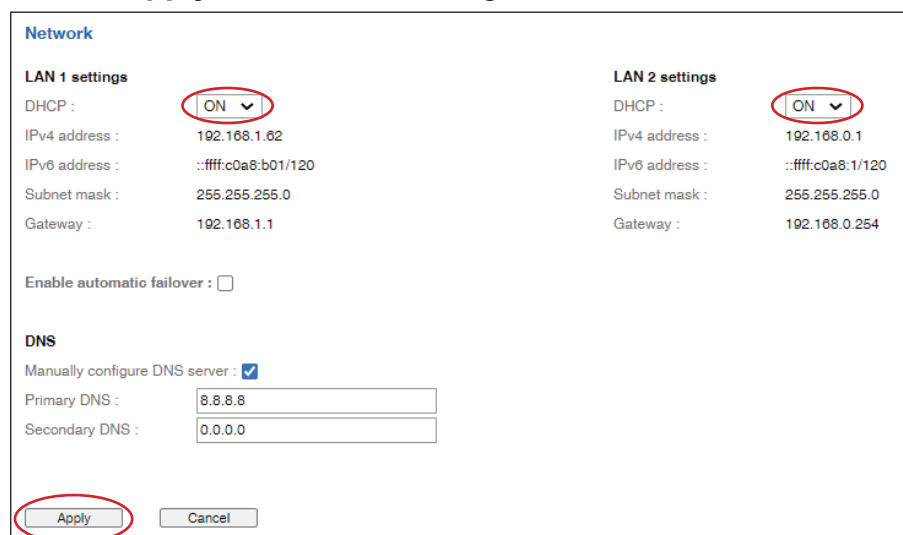
Password

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



Network

LAN 1 settings

DHCP : **ON** ▼

IPv4 address : 192.168.1.62

IPv6 address : ::ffff:c0a8:b01/120

Subnet mask : 255.255.255.0

Gateway : 192.168.1.1

LAN 2 settings

DHCP : **ON** ▼

IPv4 address : 192.168.0.1

IPv6 address : ::ffff:c0a8:1/120

Subnet mask : 255.255.255.0

Gateway : 192.168.0.254

Enable automatic failover : ☐

DNS

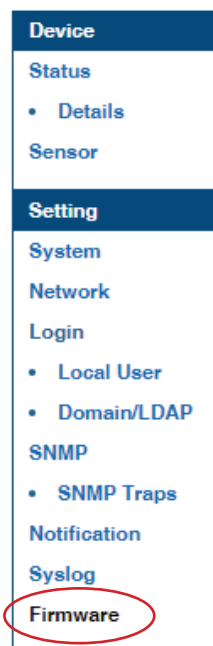
Manually configure DNS server : ☒

Primary DNS : 8.8.8.8

Secondary DNS : 0.0.0.0

< 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

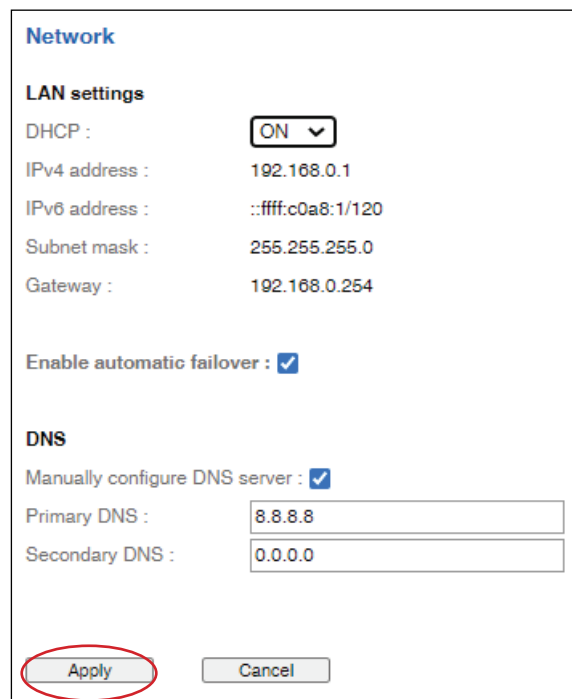
Upgrade firmware
File path :

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

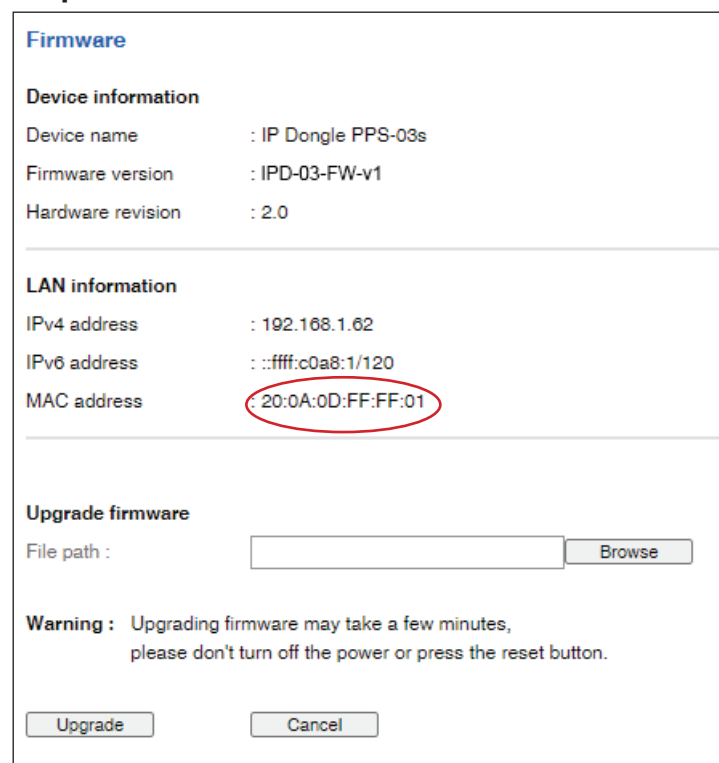
Step 10. Failover Mode: Select “ **ON** ” from “ **DHCP** ” & Click “ **Apply** ” to save the settings



The screenshot shows the 'Network' configuration page. Under 'LAN settings', the 'DHCP' dropdown is set to 'ON'. The IPv4 address is 192.168.0.1, IPv6 address is ::ffff:c0a8:1/120, Subnet mask is 255.255.255.0, and Gateway is 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 at the bottom left is circled in red.

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

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



The screenshot shows the 'Firmware' 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.' At the bottom are 'Upgrade' and 'Cancel' buttons.

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. **1600 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 ?**

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

< 8.1 > Management Software

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 1600 & 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.



Reset button

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 Dual Feed single phase , single & 3 Phase PDU and they can be inter-cascaded in a single daisy chain
- Support switched PDU and outlet amp + kWh measurement
- Simply connect 1 x IP Dongle to access up to 32 PDUs to save IP network address
- SNMP Capability v2 / v3 via IP Dongle
- Sensor port x 2
- 2.8" color LCD featured w/ touchscreen
- Built-in buzzer will sound when circuit or bank Amp over alarm setting
- Field replaceable design allows meter replacement without PDU power interruption

2. What is the default PDU level ?

Level 16

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

ON

4. If one of the cascaded PDU 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 10 meter (33 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-W3-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.

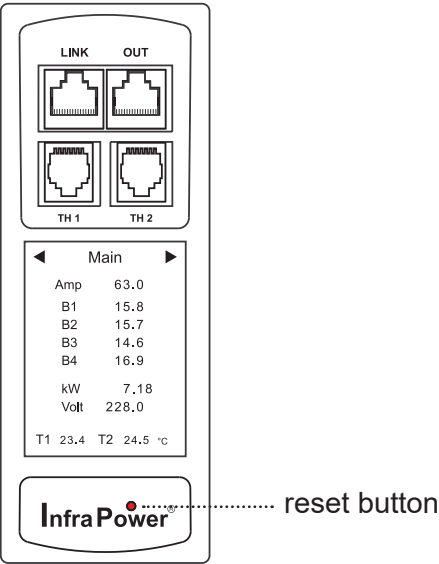
Functional Specifications - Metering	
Input Metering Range	0.3 to Rated Input Current
Outlet Metering Range	0.3 to 16.0A
Ampere Accuracy (A)	+/- 1%
Voltage Accuracy (V)	+/- 1%
Power Accuracy (kW)	+/- 1%
Energy Accuracy (kWh)	+/- (1%)*hours

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



< 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
- but outlet can still supply power to device

4. Why the Power Module fails to work ?

- the power module itself fails

5. How can I replace a failed Power Module ?

For safety, please follow the Power Module replacement guide.

Download the guide below to replace the Power Module :

<http://www.austin-hughes.com/support/replacementguide/infrapower/RG-IP-W3-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
- but outlet can still supply power to device

3. Why the outlet control module fails to work ?

- the outlet control module itself fails

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

No, not like 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-W3-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 ?

First, all outlets will return to power OFF status within 5 seconds.

Then, all 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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