

User Manual

PPS-02-S, IP dongle GUI & SNMP

W Monitored

Wi Outlet Monitored

WS Switched

WSi Outlet Switched



Designed and manufactured by Austin Hughes



Legal Information

First English printing, October 2002

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 B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

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

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

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

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< 1.1 > IP Dongle GUI PPS-02-S Key Features

InfraPower Manager PPS-02-S is a **FREE** built-in GUI of each IP dongle (IPD-02-S only) to remotely monitor the connected PDUs (max. up to 16 PDU levels)

InfraPower PPS-02-S

Features		
Capacity	IP Dongle Group (Just 1 for 16 PDU levels)	1
	PDU number	16
	Concurrent Users	1
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	✓
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)	✓

< 1.2 > IP Dongle Installation & Meter (PDU) Cascade

IP Dongle Access to 16 PDU Levels

Patented IP Dongle provides IP remote access to the PDUs by a true network IP address chain. Only 1 x IP dongle allows access to max. 16 PDUs in 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. Hence, administrator can remotely access all PDUs in the daisy chain group by one single IP via the IP Dongle.



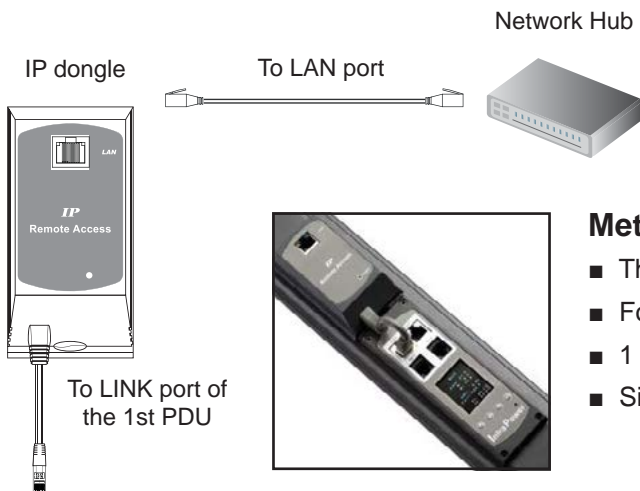
Part no.
IPD-02-S

IP Dongle for vertical PDU

- SNMP capability v2 / v3

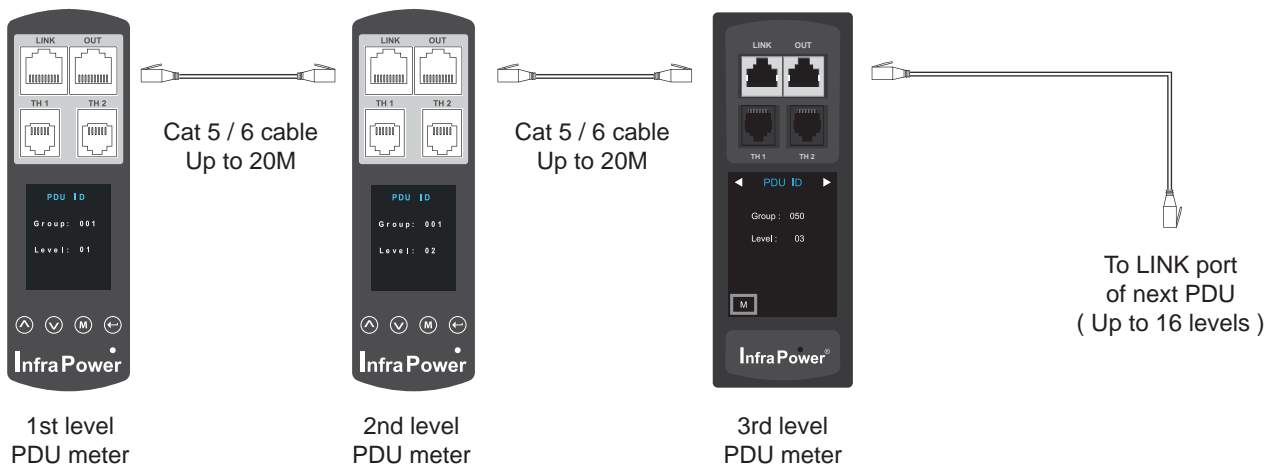
Vertical IP dongle installation steps :

- slide the IP dongle on the plate above the meter
- plug the RJ-45 connector of IP dongle into the LINK port of the 1st level PDU meter
- use the CAT. 5 / 6 cable to connect IP dongle to network device



Meter (PDU) Cascade

- The PDU can be cascaded up to 16 levels
- For IP PDU access simply connect 1 x IP Dongle - IPD-02-S
- 1 x IP Dongle allows access to 16 levels
- Single & 3 Phase PDU can be inter-cascaded in the single daisy chain



< 1.2 > IP Dongle Installation & Meter (PDU) Cascade



IP Dongle for rackmount PDU

- SNMP capability v2 / v3

Installation steps :

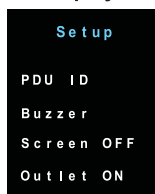
- fix the IP Dongle on the rear side of rackmount PDU with 4 screws
- plug its RJ-45 connector into the LINK port of the 1st level PDU meter
- connect IP Dongle to network device via CAT. 5 / 6 cable



< 1.3 > Meter (PDU) Level Setting

(I) For 1.8" LCD Meter (No touchscreen function)

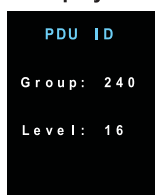
Display 9



Step 1 - Press the \wedge & \vee button to display no.9 and press \textcircled{M} to confirm

Step 2 - Press the \wedge & \vee button to PDU ID and press \textcircled{M} to confirm

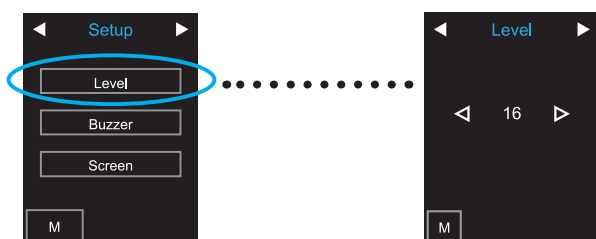
Display 9.1




Step 3 - In display 9.1, Press the \wedge & \vee button to select PDU level no. & press \textcircled{M} to confirm

Step 4 - Press \leftarrow to exit

(II) For 2.8" LCD Meter (With touchscreen function)

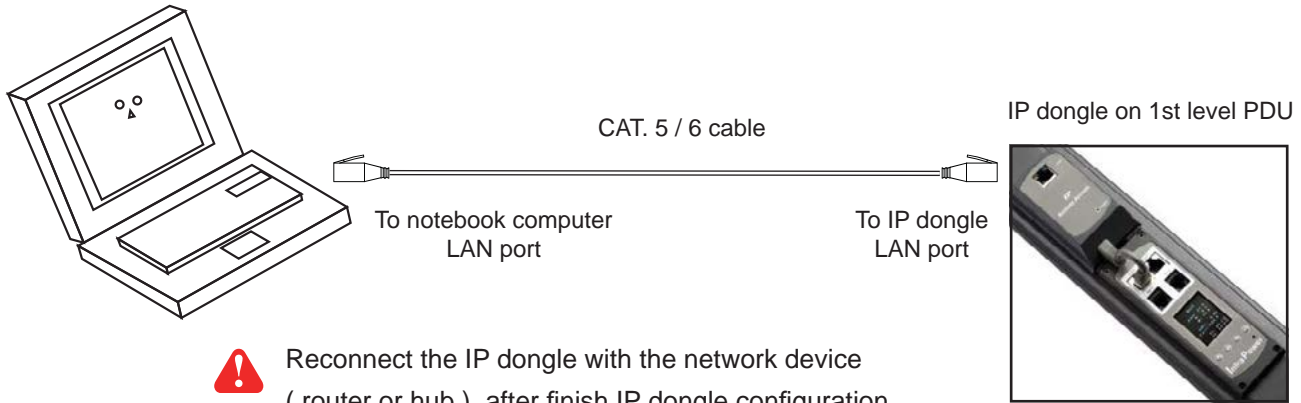



< 1.4 > IP Dongle Configuration

 The following steps show the static IP setting only. For DHCP setting, please refer to < 1.7 > DHCP Setting

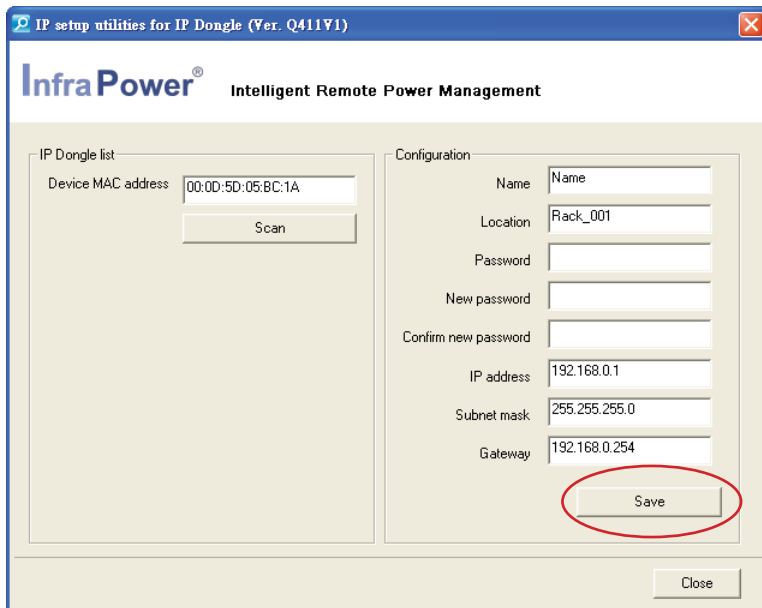
After the completion of IP dongle connection, please take the following steps to configure the IP dongle :

- Step 1.** Prepare a notebook computer to download the IP setup utilities from the link :
<http://www.austin-hughes.com/support/utilities/infrapower/IPdongleSetup.msi>
- Step 2.** Double Click the and follow the instruction to complete the installation
- Step 3.** Go to each first level PDU with the notebook computer & a piece of CAT. 5 / 6 cable to configure the IP dongle by IP setup utilities as below. Please take the procedure for all IP dongles **ONE BY ONE**



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

Ensure the PDU in power ON status



The screenshot shows the 'IP setup utilities for IP Dongle (Ver. Q411Y1)' software interface. The window title is 'IP setup utilities for IP Dongle (Ver. Q411Y1)'. The main title is 'InfraPower® Intelligent Remote Power Management'. The interface is divided into two sections: 'IP Dongle list' and 'Configuration'. The 'IP Dongle list' section shows a 'Device MAC address' field with the value '00:0D:5D:05:BC:1A' and a 'Scan' button. The 'Configuration' section has several fields: 'Name' (default 'Name'), 'Location' (default 'Rack_001'), 'Password', 'New password', 'Confirm new password', 'IP address' (default '192.168.0.1'), 'Subnet mask' (default '255.255.255.0'), and 'Gateway' (default '192.168.0.254'). A 'Save' button is circled in red, and a 'Close' button is at the bottom right.


- Step 4.** Click “ Scan ” to search the connected IP dongle
- Step 5.** Enter device name in “ Name ” (min. 4 char. / max. 16 char.). Default is “ Name ”
- Step 6.** Enter device location in “ Location ” (min. 4 char. / max. 16 char.). Default is “ Rack_001 ”
- Step 7.** Enter password in “ Password ” for authentication (min. 8 char. / max. 16 char.) Default is “ 00000000 ”
- Step 8.** Enter new password in “ New password ” (min. 8 char. / max. 16 char.)
- Step 9.** Re-enter new password in “ Confirm new password ”
- Step 10.** Change the desired “ IP address ” / “ Subnet mask ” / “ Gateway ”, then Click “ Save ” to confirm the changes


The default IP setting is as below:

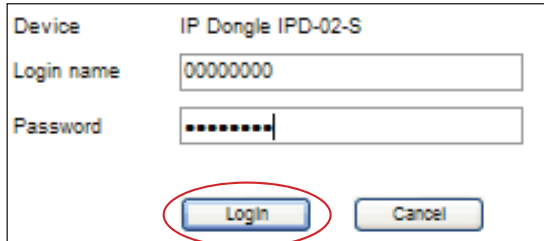
IP address : 192.168.0.1
Subnet mask : 255.255.255.0
Gateway : 192.168.0.254

< 1.5 > PPS-02-S IP Dongle GUI

Each IP dongle (IPD-02-S) provides a **FREE** built-in GUI , PPS-02-S, which allows user, via a web browser, to see PDU's data and remotely manage the PDU over a TCP / IP Ethernet network.

 Each web browser window supports only one IP dongle (IPD-02-S). If user installs more IP dongles, multi windows will be required

 PPS-02-S is a management software with very limited features. User can use more advanced software, **InfraPower Manager IPM-04**



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

Step 2. Enter the configured IP dongle address into the I.E. address bar (Please refer to < 1.3 > IP dongle configuration)

Step 3. Enter “ **Login name** ” , “ **Password** ” & Click “ **Login** ” (Please refer to < 1.3 > IP dongle configuration)

In < **Status** > ,

- Click “ **Search** ” to search all new installed PDUs (If search fails, please refer to < 1.6 > for IP dongle firmware upgrade)
- View all installed PDUs' status
- View latest loading on each PDU's circuits
- View aggregate current & energy consumption on each PDU
- View status & latest reading of Temp. & Humid sensors connected to each PDU
- Click “ **Time Sync** ” update all connected PDU's real time clock from the computer logged in the IP Dongle

PDU Status		IP dongle name :		IP address :		PDU Data															
Level	Name	Location	Amp				kWh	kVA	Amp				kWh	kVA	Total			TH 1		TH 2	
			Max.	Load	Alarm	R. alert			L. alert	Max.	Load	Alarm			R. alert	L. alert	Amp	kWh	kVA	Load	°C
01	3PWS30-32A	Server_Rack_001R	L1 - B1	10.0 / 0.0 / 12.8 / 0.0 / 0.0	0.15	0.00	L1 - B2	10.0 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.0	0.15	0.00	25.5	60.5	25.6	60.3				
02	3PWS30-32A	Server_Rack_001L	L1 - B1	15.0 / 0.0 / 10.5 / 9.5 / 0.0	0.00	0.00	L1 - B2	15.0 / 0.0 / 10.5 / 9.5 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
03	3PWS30-32A	Server_Rack_002R	L1 - B1	15.0 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	L1 - B2	15.0 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
04	3PWS30-32A	Server_Rack_002L	L1 - B1	15.0 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	L1 - B2	15.0 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
05	3PWS30-32A	Server_Rack_003R	L1 - B1	15.0 / 0.0 / 8.0 / 2.0 / 0.0	0.00	0.00	L1 - B2	15.0 / 0.0 / 8.0 / 2.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
06	3PWS30-32A	Server_Rack_003L	L1 - B1	15.0 / 0.0 / 8.2 / 2.2 / 0.0	0.00	0.00	L1 - B2	15.0 / 0.0 / 8.2 / 2.2 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
07	3PWS30-32A	Server_Rack_004R	L1 - B1	10.0 / 0.7 / 13.0 / 0.0 / 0.0	223.50	0.19	L1 - B2	10.0 / 0.0 / 13.0 / 0.0 / 0.0	12.22	0.00	0.7	235.72	0.19	-	-	-	-				
08	3PWS30-32A	Server_Rack_005R	L1 - B1	15.0 / 0.8 / 13.0 / 0.0 / 0.0	207.71	0.19	L1 - B2	15.0 / 0.0 / 13.0 / 0.0 / 0.0	0.00	0.00	0.8	207.71	0.20	-	-	-	-				
09	3PWS30-32A	Server_Rack_005L	L1 - B1	15.0 / 0.0 / 8.0 / 2.0 / 0.0	0.00	0.00	L1 - B2	15.0 / 0.0 / 8.0 / 2.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
10	3PWS30-32A	Server_Rack_006R	L1 - B1	10.0 / 0.0 / 13.0 / 10.1 / 0.0	0.00	0.00	L1 - B2	10.0 / 0.0 / 13.0 / 10.2 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
11	3PWS30-32A	Server_Rack_006L	L1 - B1	15.0 / 0.0 / 13.0 / 0.0 / 0.0	0.00	0.00	L1 - B2	15.0 / 0.0 / 13.0 / 0.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
12	3PWS30-32A	Server_Rack_007L	L1 - B1	10.0 / 0.0 / 13.0 / 0.0 / 0.0	0.00	0.00	L1 - B2	10.0 / 0.0 / 13.0 / 0.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
13	3PWS30-32A	Server_Rack_007R	L1 - B1	10.0 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	L1 - B2	10.0 / 0.0 / 12.8 / 0.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				
14	3PWS30-32A	Server_Rack_007L	L1 - B1	15.0 / 0.0 / 10.0 / 7.0 / 0.0	0.08	0.00	L1 - B2	15.0 / 0.0 / 10.0 / 4.0 / 0.0	0.10	0.00	0.0	0.16	0.00	-	-	-	-				
15	3PWS30-32A	Server_Rack_008R	L1 - B1	15.0 / 0.3 / 13.0 / 0.0 / 0.0	4.56	0.08	L1 - B2	15.0 / 0.0 / 13.1 / 1.2 / 0.0	0.00	0.00	0.3	4.85	0.08	28.0	81.4	25.4	81.9				
16	3PWS30-32A	Server_Rack_008L	L1 - B1	15.0 / 0.0 / 12.0 / 0.0 / 0.0	0.00	0.00	L1 - B2	15.0 / 0.0 / 12.0 / 0.0 / 0.0	0.00	0.00	0.0	0.00	0.00	-	-	-	-				

< 1.5 > PPS-02-S IP Dongle GUI

In < **Details** > ,

- Change “ **Name** ” and “ **Location** ” of PDU & Click “ **Apply** ”
- Change “ **Alarm amp.** ” & “ **Low alert amp.** ” of PDU’s circuits & Click “ **Apply** ”
- Click “ **Reset** ” to reset peak amp. or kWh of PDU’s circuits
- 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’s outlet (Outlet Measurement PDU only)
- Click “ **Time Sync** ” update PDU’s real time clock from the computer logged in the IP Dongle

PDU details

Level: VP24C13/12C19-32A-WSI Name: kWh: 0.13 Power factor: 0.00
 Status: Connected Location: Load amp: 0.0 kVA: 0.00

Circuit	Voltage	Max. amp.	Load amp.	Peak amp.	kWh	Alarm amp.	Rising alert amp.	Low alert amp.
L1 - B1	221.7	18.0	0.0	0.0	0.13	12.0	0.0	0.0
L1 - D2	221.7	18.0	0.0	0.0	0.00	12.8	0.0	0.0
L2 - B3	221.0	18.0	0.0	0.0	0.00	12.0	0.0	0.0
L2 - D4	221.8	18.0	0.0	0.0	0.00	12.8	0.0	0.0
L3 - B5	223.9	18.0	0.0	0.0	0.00	12.0	0.0	0.0
L3 - D6	223.9	18.0	0.0	0.0	0.00	12.8	0.0	0.0

Outlet	Name	Amp	kWh	kVA	Status	Switch
01	outlet_name_01	0.0	0.11	0.0	ON	OFF
03	outlet_name_03	0.0	0.00	0.0	ON	OFF
05	outlet_name_05	0.0	0.00	0.0	ON	OFF
07	outlet_name_07	0.0	0.00	0.0	ON	OFF
C01	outlet_name_09	0.0	0.00	0.0	ON	OFF
C03	outlet_name_11	0.0	0.00	0.0	ON	OFF
02	outlet_name_12	0.0	0.00	0.0	ON	OFF
04	outlet_name_04	0.0	0.00	0.0	ON	OFF
06	outlet_name_06	0.0	0.00	0.0	ON	OFF
08	outlet_name_08	0.0	0.00	0.0	ON	OFF
C02	outlet_name_10	0.0	0.00	0.0	ON	OFF
C04	outlet_name_12	0.0	0.00	0.0	ON	OFF

Click outlet icon for setting

Auto data refresh: (Link to data input)

save new data synchronize this PDU time with computer

cancel new data input

Press F11 to enlarge or diminish the screen

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: VP24C13/12C19-32A-WSI Status: Connected
 Name: Location:

L1 - B1

Outlet:

Name:

Status:

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

Load amp:

Alarm amp:

R. alert amp:

L. alert amp:

Peak amp: 2015/05/04 11:16:33

kWh: 2015/01/01 00:13:11

Save new data Return to PDU Details

cancel new data input

< 1.5 > PPS-02-S IP Dongle GUI

In < **System** > ,

- Change IP dongle name & location
- Change temperature unit displayed in UI
- Change IP dongle's IP address, subnet mask & gateway. (For static IP setting only)
- Select “ **ON** ” in “ **DHCP** ” to enable DHCP setting.
- Tick “ **Force HTTPS** ” to provide data transmission security.
- Click “ **Apply** ” to finish the above settings

IP Dongle

IP Dongle name :

Location :

Temperature unit : C F

IP settings

DHCP : (circled in red)

Address :

Subnet mask :

Gateway :

Security Force HTTPS

Operation Mode : InfraPower Manager IPM-04 Only
 WEB GUI + SNMP Only

Remarks : If you change the operation mode, the IP Dongle will reboot to make the change effective.

(circled in red)

In < **Login** > ,

- Change “ **Login name** ” OR “ **Password** ”
- Re-enter password in “ **Confirm password** ”
- Click “ **Apply** ” to finish the above settings

Web UI

Login name


Password

Confirm password

(circled in red)

< 1.6 > SNMP Setup

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

 Only IP Dongle model : IPD-02-S or IPD-H02-S can support SNMP

(I). Accessing MIB Files

Step 1. Click the following link to go to the mangement software download page :
<http://www.austin-hughes.com/resources/software/infrapower>

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 < 1.3 > IP Dongle Configuration)

Step 2. Open the Internet Explorer (I.E.) version 9.0 or above

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

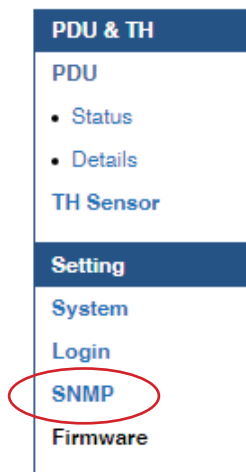
Step 4. Enter “ **Login name** “ & “ **Password** “. Default login name & password are “ **00000000** “



A screenshot of a login dialog box. It contains two text input fields: the first is labeled "Login name" and the second is labeled "Password". Below the input fields are two buttons: "Login" and "Cancel".

< 1.6 > 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, it says 'SNMP'. Below that, there are radio buttons for 'SNMP agent' (Enable and Disable), with 'Disable' selected. There is a dropdown for 'SNMP version' (v1/v2) and a text input for 'SNMP port' (161). The 'SNMP configuration' section has text inputs for 'Read community' (public) and 'Write community' (private). Below that, there are three columns for 'Station 1', 'Station 2', and 'Station 3'. Each station has radio buttons for 'Deactivate' (selected) and 'Activate'. Each station also has text inputs for 'Trap Station IP' (192.168.0.254), 'Trap port' (162), and 'Trap community' (private). At the bottom, there are 'Apply' and 'Cancel' buttons.

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

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

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

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

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

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

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

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

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

< 1.6 > SNMP Setup

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

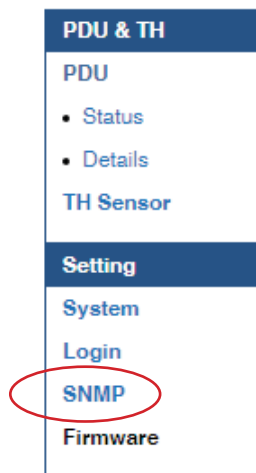
Step 1. Connect the IP dongle to a computer. (Please refer to < 1.3 > IP Dongle Configuration)

Step 2. Open Internet Explorer (I.E.) version 9.0 or above

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

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

Step 5. Select SNMP from the left navigation pane



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

A screenshot of the 'SNMP' settings window. The window has a title bar 'SNMP'. Below the title bar, there are several configuration options: 'SNMP agent' with radio buttons for 'Enable' and 'Disable' (selected); 'SNMP version' with a dropdown menu showing 'v1/v2'; and 'SNMP port' with a text input field containing '161'. Below these are 'SNMP configuration' options: 'Read community' (public) and 'Write community' (private). At the bottom, there are three columns for 'Station 1', 'Station 2', and 'Station 3'. Each column has radio buttons for 'Deactivate' (selected) and 'Activate', and text input fields for 'Trap Station IP' (192.168.0.254), 'Trap port' (162), and 'Trap community' (private). At the very bottom, there are 'Apply' and 'Cancel' buttons.

< 1.6 > SNMP Setup

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

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

The screenshot shows the SNMP v3 configuration window. At the top, the 'SNMP agent' is set to 'Enable'. The 'SNMP version' is set to 'v3' and the 'SNMP port' is '161'. Below this is the 'SNMP configuration' section, which is divided into three columns for 'User 1', 'User 2', and 'User 3'. Each user configuration includes a 'User role' dropdown (all set to 'read only'), a 'USM user' text field, an 'Auth algorithm' dropdown (User 1: None, User 2: MD5, User 3: None), an 'Auth password' text field, a 'Privacy algorithm' dropdown (all set to None), and a 'Privacy password' text field. Below these are 'SNMP trap' settings: a 'SNMP trap' dropdown (all set to Disabled), a 'Trap Station IP' text field, and a 'Trap port' text field (all set to 162). At the bottom of the window are 'Apply' and 'Cancel' buttons.

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

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

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

Step 12. Input the name of “ **USM user** “. Default is usm_user1

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

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

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

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

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

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

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

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

< 1.7 > IP Dongle Firmware Upgrade

< Firmware Upgrade >

For function enhancement of IP dongle WEB UI or fail to search the PDU, 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/downloads/IPDL/IPDfirmware.html>

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 < 1.3 > IP Dongle Configuration)

Step 4. Open the Internet Explorer (I.E.) version 9.0 or above

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

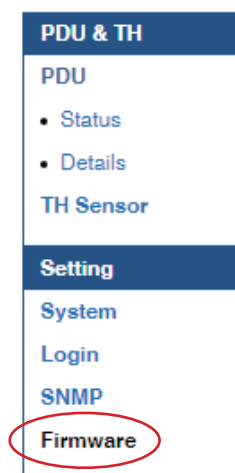
Default IP address is “ **192.168.0.1** “

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



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

Step 7. Select the Firmware from the left navigation pane



< 1.7 > IP Dongle Firmware Upgrade

Step 8. The firmware upgrade window appears as below :

Firmware

Device information

Device name : IP Dongle IPD-02s

Device IP address : 192.168.1.42

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

Firmware version : IPD-02-FW-v02

Hardware revision : 2.0

Upgrade firmware

File path :

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

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

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

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

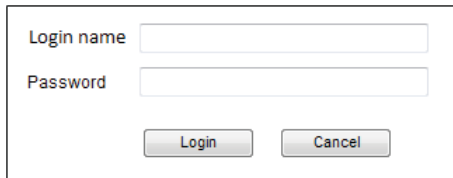
< 1.8 > DHCP Setting

Step 1. Connect the IP dongle to the computer (Please refer to < 1.3 > IP Dongle Configuration)

Step 2. Open the Internet Explorer (I.E.) version 9.0 or above

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

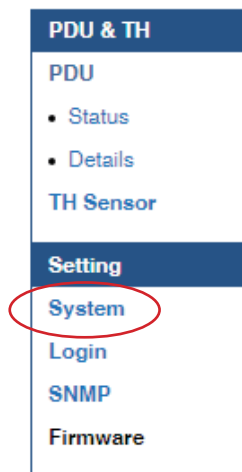
Step 4. Enter the “ **Login name** “ & “ **Password** “. Default login name & password are “ **00000000** “



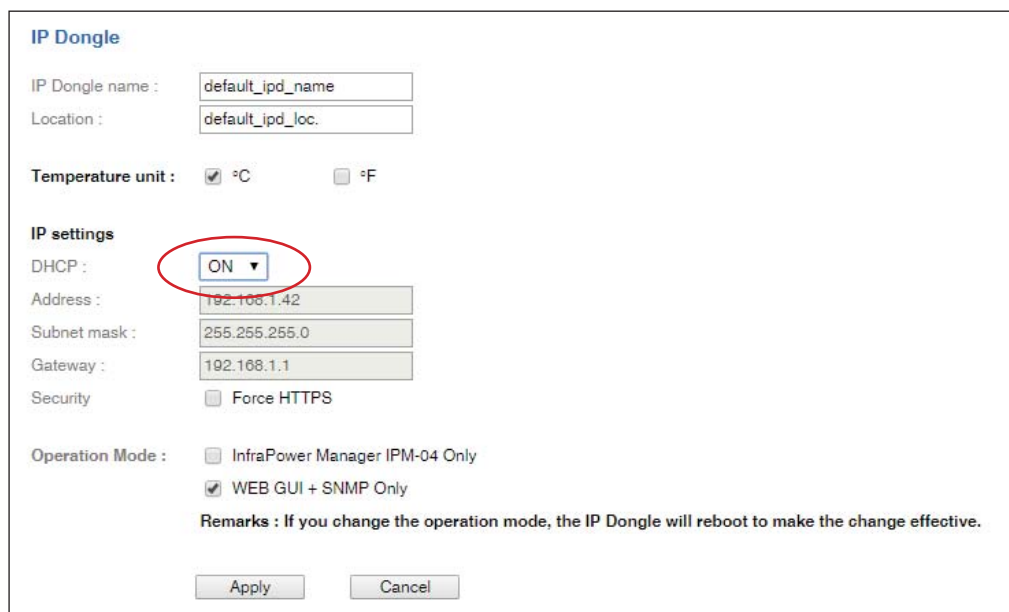
Login name

Password

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



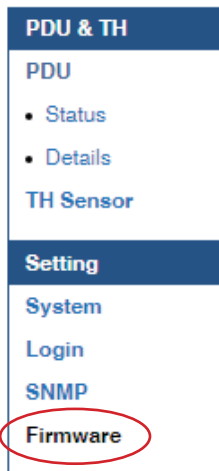
Step 6. Select “ **ON** “ from “ **DHCP** “ & click “ **Apply** “ to save the settings



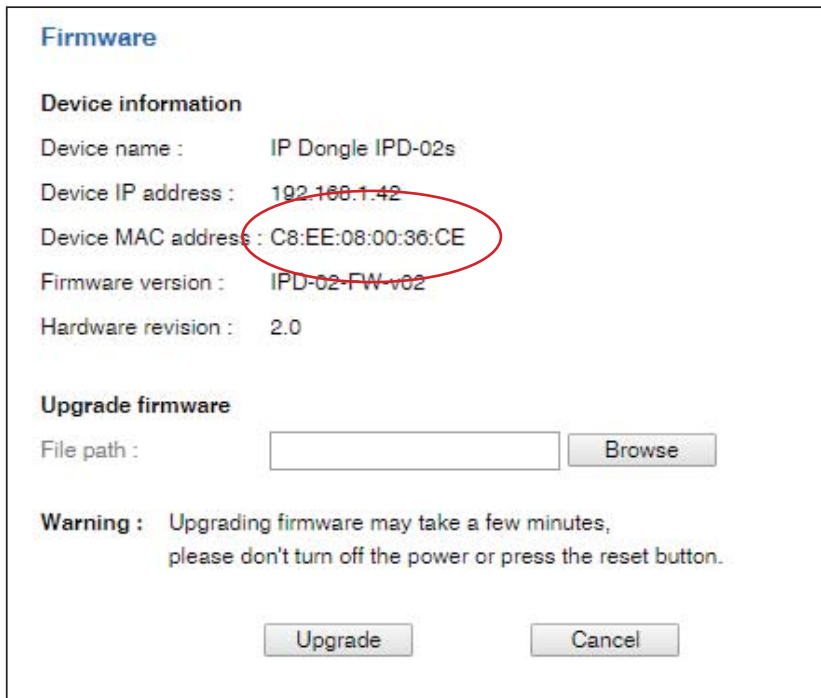
The screenshot shows the IP Dongle configuration page. The DHCP setting is set to ON, which is circled in red. Other settings include IP Dongle name (default_ipd_name), Location (default_ipd_loc), Temperature unit (°C selected), Address (192.168.1.42), Subnet mask (255.255.255.0), Gateway (192.168.1.1), Security (Force HTTPS), and Operation Mode (WEB GUI + SNMP Only selected). A remark states: "Remarks : If you change the operation mode, the IP Dongle will reboot to make the change effective." Buttons for Apply and Cancel are at the bottom.

< 1.8 > DHCP Setting

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



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



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

..... • **Complete**

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