InfraPower®

Intelligent Remote Power Management

User Manual

PPS-01, IP dongle GUI software

MTS switched PDU
MT monitored PDU

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 40º Celsius (104º Fahrenheit).
- When installing, place the equipment on a sturdy, level surface to prevent it from accidentally falling and causing dam age 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 labeled 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 dam aged 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 invali date its warranty.
- If any part of the equipment becomes damaged or stops functioning, have it checked by qualified service personnel.

What the warranty does not cover

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

Regulatory Notices Federal Communications Commission (FCC)

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

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

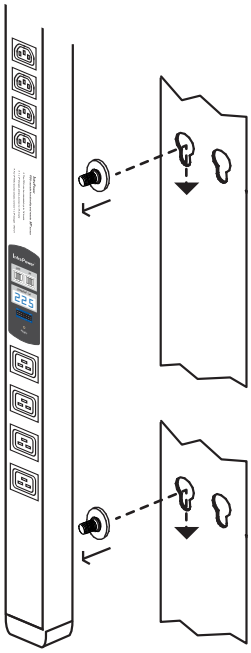
The equipment comes with the standard parts shown on the package contents. Check and make sure they are included and in good condition. If anything is missing, or damage, contact the supplier immediately.

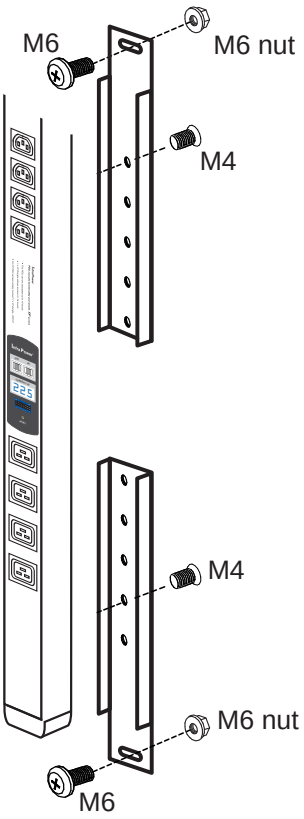
Package contents

(1) Vertical MTS / MT PDU x 1

- **VMS** mounting screw, set of 2 or 3

- **VMB** mounting bracket set





OR

(2) Rackmount MTS / MT PDU x 1

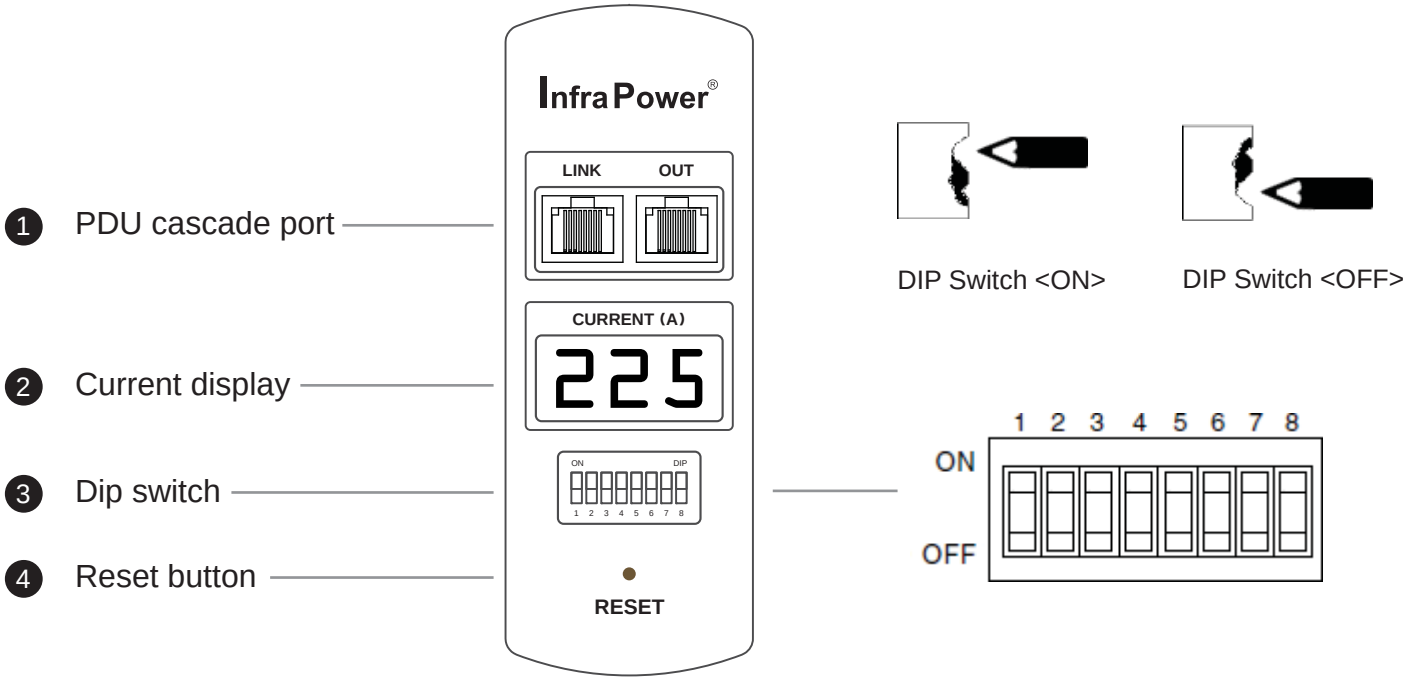
Power ON

- 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

Don’t exceed the outlet, branch or phase limitations

Content

< 1.1 > PDU meter setting & cascade

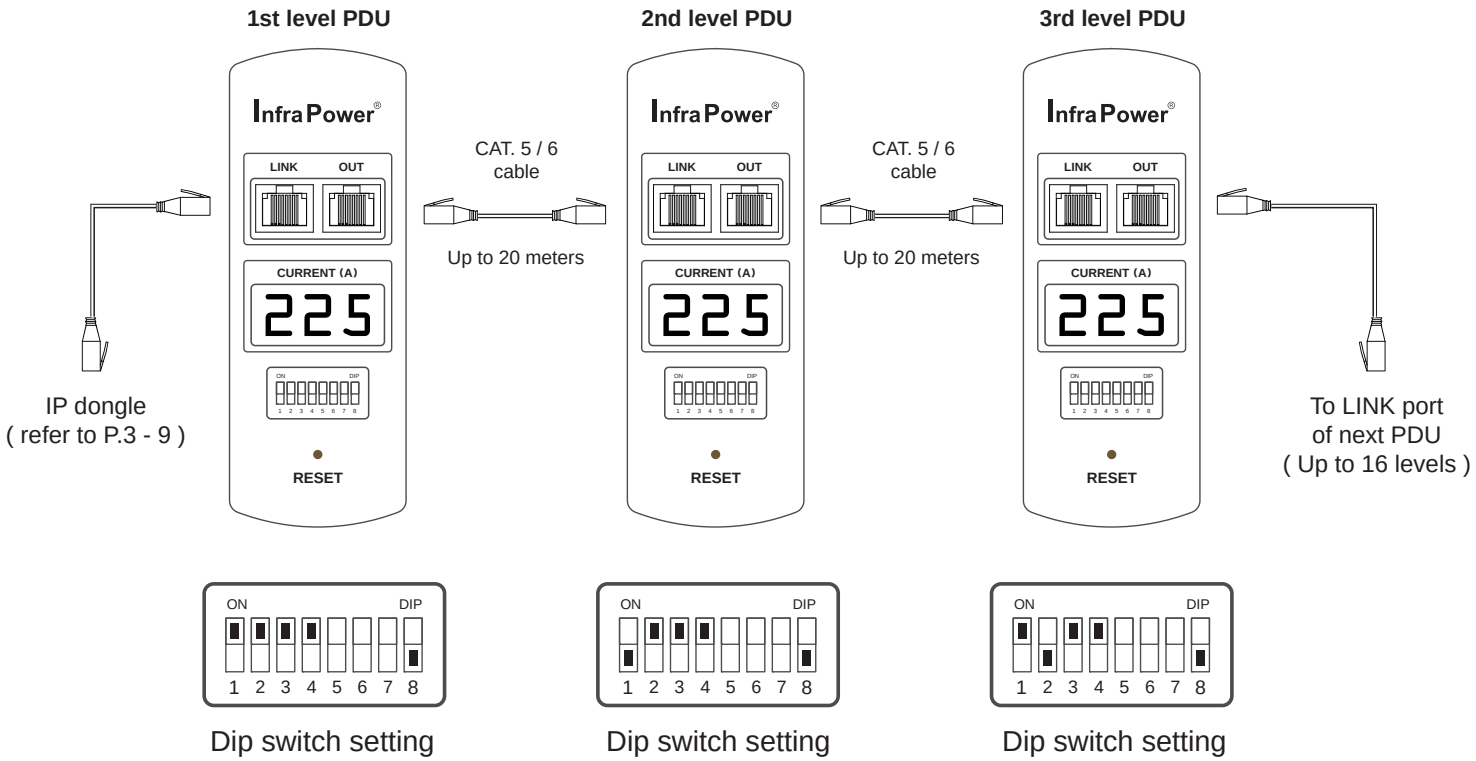


■ For rackmount PDU, ❷ ❸ ❹ on the front panel left , ❶ on the rear panel

Cascaded PDUs setting

Using the dip switch no. 1, 2, 3, 4 & 8 to setup each PDU level as below :

Cascaded PDUs	Dip switch no.				
	1	2	3	4	8
1st PDU	On	On	On	On	Off
2nd PDU	Off	On	On	On	Off
3rd PDU	On	Off	On	On	Off
4th PDU	Off	Off	On	On	Off
5th PDU	On	On	Off	On	Off
6th PDU	Off	On	Off	On	Off
7th PDU	On	Off	Off	On	Off
8th PDU	Off	Off	Off	On	Off
9th PDU	On	On	On	Off	Off
10th PDU	Off	On	On	Off	Off
11th PDU	On	Off	On	Off	Off
12th PDU	Off	Off	On	Off	Off
13th PDU	On	On	Off	Off	Off
14th PDU	Off	On	Off	Off	Off
15th PDU	On	Off	Off	Off	Off
16th PDU	Off	Off	Off	Off	Off



- The PDU can be cascaded up to 16 levels
- For IP PDU access simply connect 1 x IP dongle - IPD-01
- 1 x IP dongle allows access to 16 levels

Meter display setting

Using the dip switch no. 5 & 7 to setup each PDU meter display as below :

Current display	Dip switch no.	
	5	7
Circuit A + Circuit B	Off	Off
Circuit A only	On	Off
Circuit B only	On	On

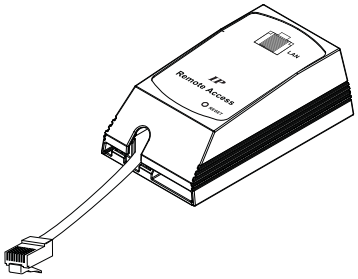
Audio alarm

Using the dip switch no. 6 to setup each PDU audio alarm as below :

	Dip switch 6
Enable	Off
Disable	On

< 1.2 > IP dongle installation & connection

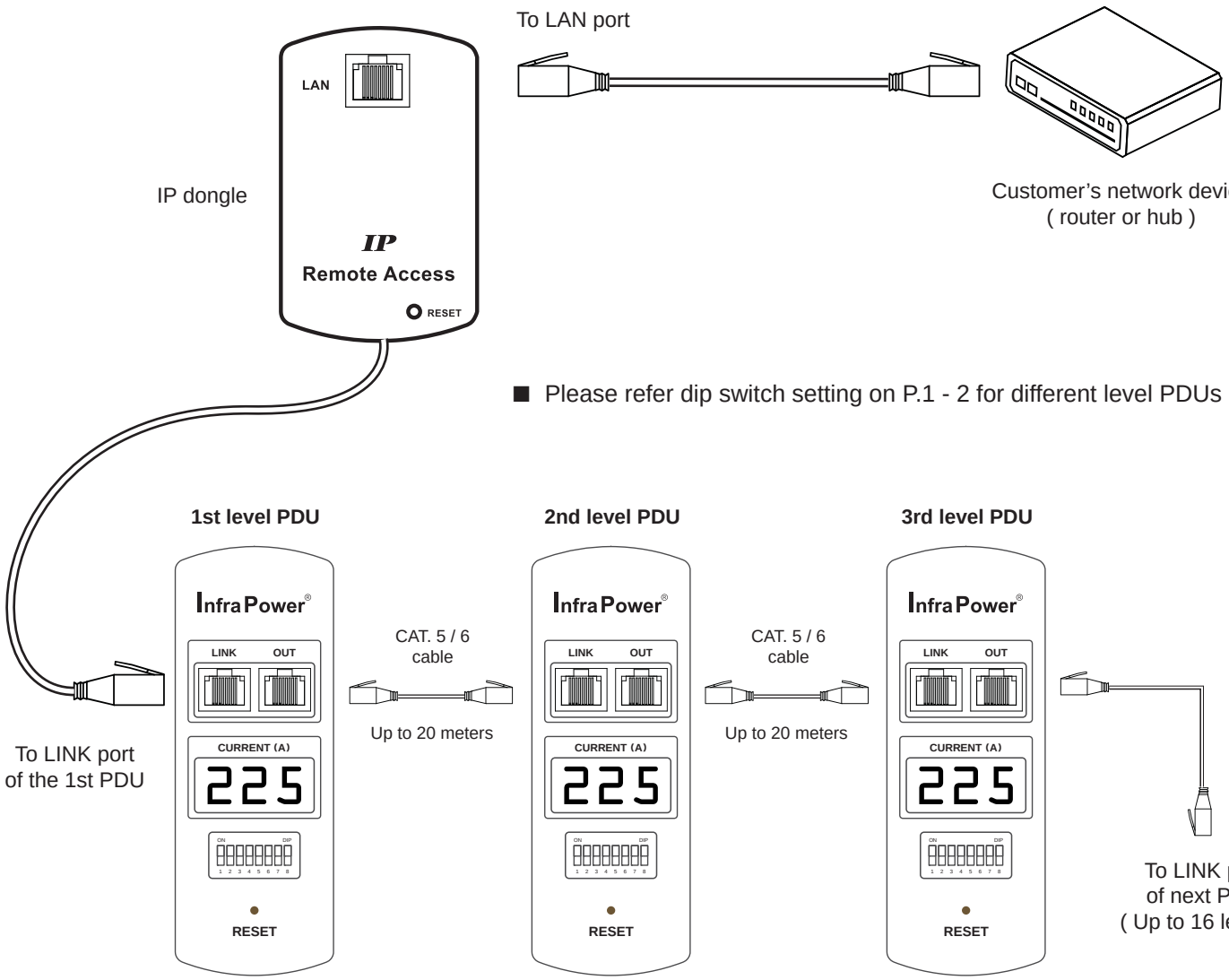
To remote PDU over IP, users can order IP dongle :

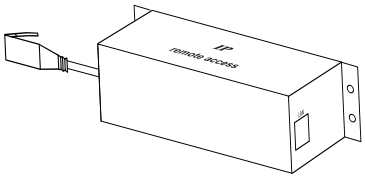


IPD-01 IP dongle for vertical PDU

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

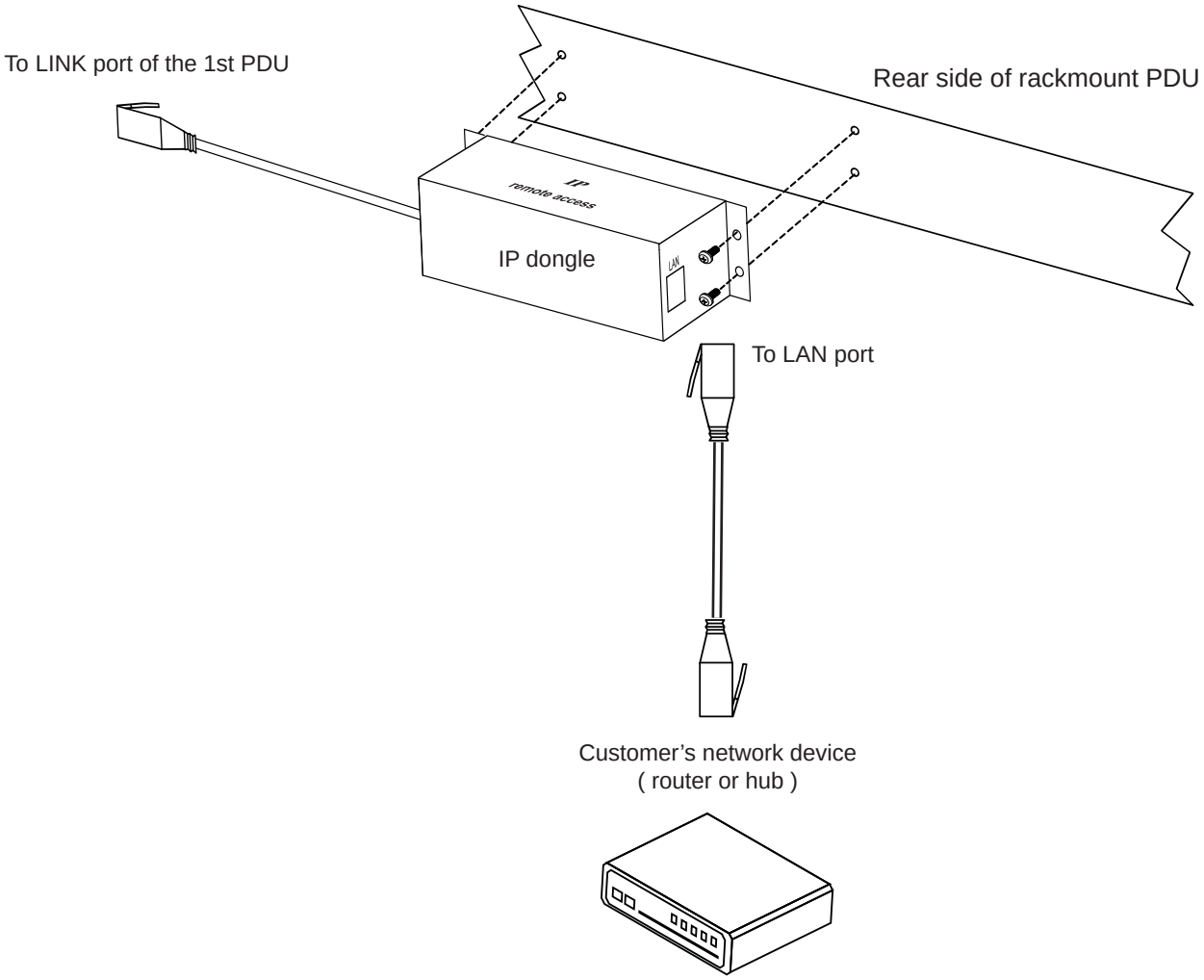




I**PD-H01** IP dongle for rackmount PDU

Horizontal IP dongle installation steps :

- fix the IP dongle on the rear side of rackmount PDU with 4 screws
- 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



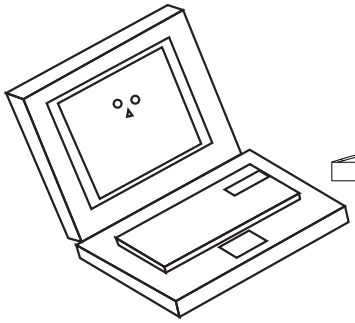
< 1.3 > IP dongle configuration

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

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

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

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**.



CAT. 5 / 6 cable

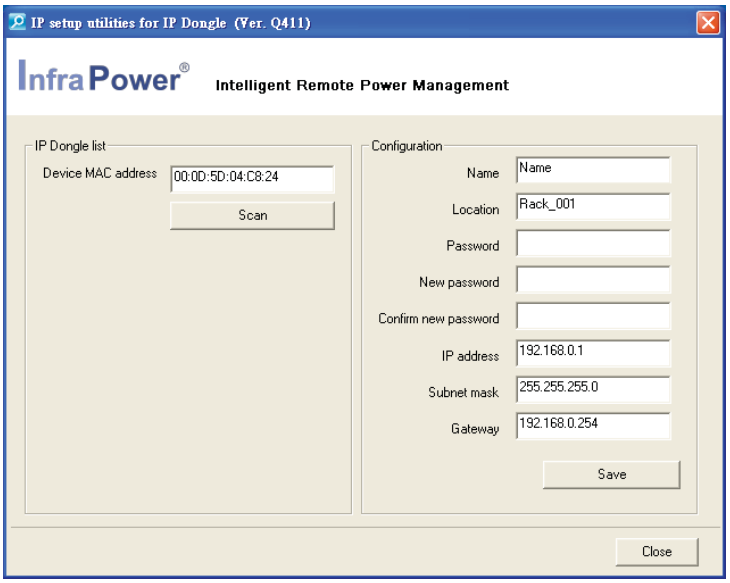
To notebook computer LAN port

To IP dongle LAN port

IP dongle on 1st level PDU

Ensure the PDU in power ON status

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



4. Click **Scan** to search the connected IP dongles
5. Enter the device name (min. 4 char. / max. 16 char.) in the device name field. **The default is Name.**
6. Enter the location in the location field (min. 4 char. / max. 16 char.). **The default is Rack_001.**
7. Enter the password for security in the password field (min. 8 char. / max. 16 char.). **The default is 00000000.**
8. Re-enter the new password in the Confirm new password field.
9. Change the desired IP address / Subnet mask / Gateway, then click **Save** to confirm the setting to IP dongle.
10. The default IP address is as below:

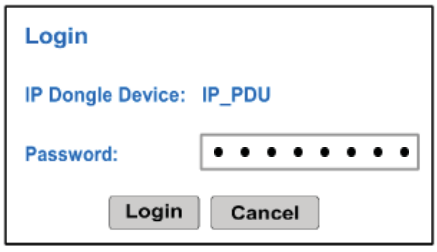
    IP address : 192.168.0.1
    Subnet mask : 255.255.255.0
    Gateway : 192.168.0.254

< 1.4 > PPS-01 IP dongle GUI Software

Each IP dongle provides a built-in GUI software, PPS-01, which allows user, via an I.E. web browser, to see PDU's data and remotely manage the PDU over a TCP/IP Ethernet network.

Each I.E. supports ONLY one IP dongle. If the user installs more IP dongles, multi windows will be required.

PPS-01 is a management software but with very limited features. The user can use advanced software, InfraPower Manager IPM-01.



Step 1. Open Internet Explorer (I.E.), version 6.0 or above
Step 2. Enter the configured IP dongle address into the I.E. address bar
(Refer to set up IP utilities p.5)
Step 3. Enter password (Refer to set up IP utilities P.5)

< Status >

- Status of all connected PDUs
- Aggregate current on each PDU
- Latest loading on each circuit of PDU
- Alarm threshold setup

- Data refresh every 10 seconds
- Disable **Refresh** during data input

IP Dongle Device : IP_PDU
Location : PDU_level
Refresh Off

PDU ID	Model	PDU Location	Status	Total Load	Circuit A Max	Load	Alarm	Circuit B Max	Load	Alarm
01	V16-IEC32A / MT	New_location	Normal	0 A	16 A	0 A	13 A	16 A	0 A	13 A
02	V16-IEC32A / MT	New_location	Normal	0 A	16 A	0 A	13 A	16 A	0 A	13 A
03	V16-IEC32A / MT	New_location	Normal	0 A	16 A	0 A	13 A	16 A	0 A	13 A
04	V16-IEC32A / MT	New_location	Normal	0 A	16 A	0 A	13 A	16 A	0 A	13 A
05	V20-IEC16A / MT	New_location	Normal	0 A	16 A	0 A	13 A	--	--	A
06	V20-IEC16A / MT	New_location	Normal	0 A	16 A	0 A	13 A	--	--	A
07	V20-IEC16A / MT	New_location	Normal	0 A	16 A	0 A	13 A	--	--	A
08	V20-IEC16A / MT	New_location	Normal	0 A	16 A	0 A	13 A	--	--	A
09	V16-IEC16A / MT	New_location	Normal	0 A	16 A	0 A	13 A	--	--	A
10	V16-IEC16A / MT	New_location	Normal	0 A	16 A	0 A	13 A	--	--	A
11	V16-IEC16A / MT	New_location	Normal	0 A	16 A	0 A	13 A	--	--	A
12	V16-IEC16A / MT	New_location	Normal	0 A	16 A	0 A	13 A	--	--	A
13	V20-IEC32A / MT	New_location	Normal	0 A	16 A	0 A	13 A	16 A	0 A	13 A
14	V20-IEC32A / MT	New_location	Normal	0 A	16 A	0 A	13 A	16 A	0 A	13 A
15	V20-IEC32A / MT	New_location	Normal	0 A	16 A	0 A	13 A	16 A	0 A	13 A
16	V20-IEC32A / MT	New_location	Normal	0 A	16 A	0 A	13 A	16 A	0 A	13 A

Apply Cancel

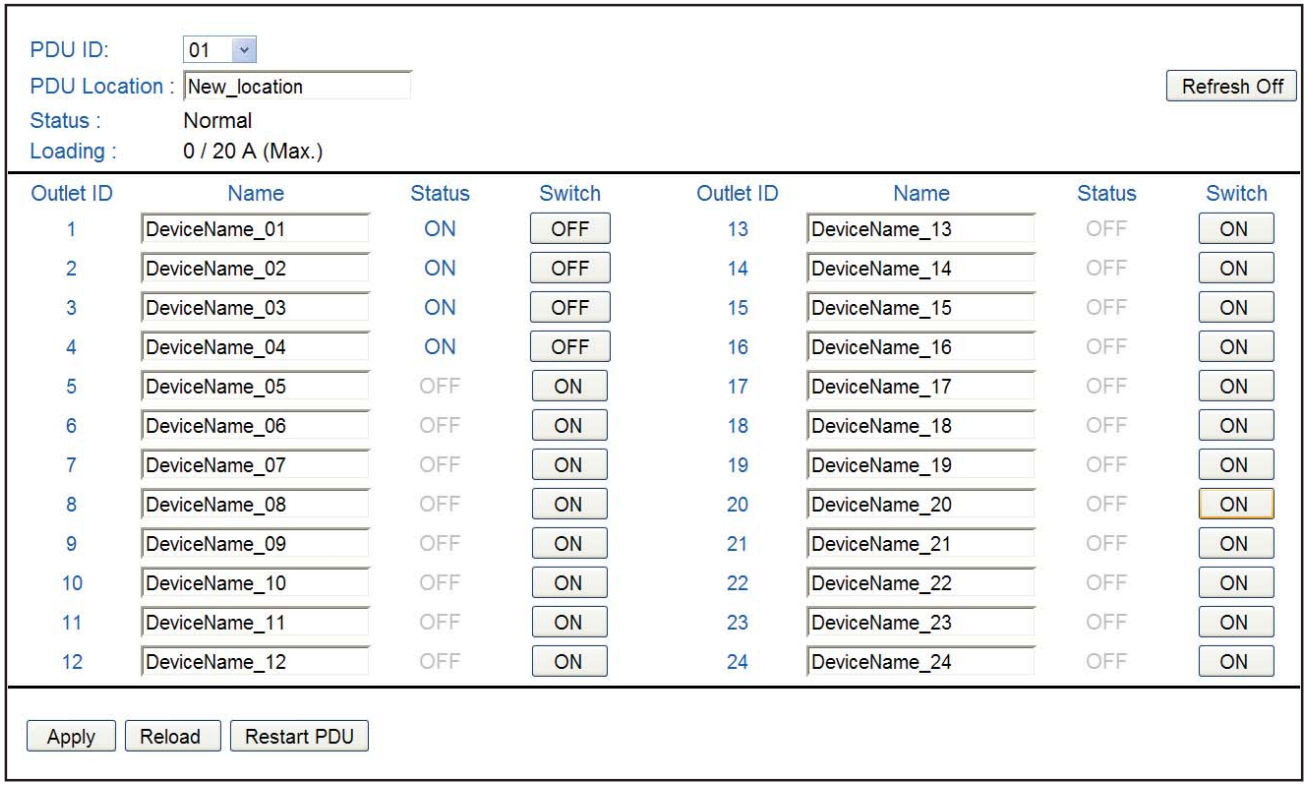
Apply : save the changes

Cancel : quit without changes

< Details >

- On / Off status of each outlet
- Remote on / off outlet (MTS switched PDU only)
- Rename outlet device, PDU and location
- Aggregate current on the PDU

- Data refresh every 10 seconds
- Disable **Refresh** during data input



Apply : save the changes

Restart PDU : restart the PDU meter (outlets are still activated)

Reload : reload the PDU information

< Setup >

- IP dongle configuration setting
- Password setting
- Network setting
- Hardware information provided

Apply : save the changes

Default : reload the IP dongle to factory default
(Press **Default** > **Apply**)

Restart : restart the IP dongle

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