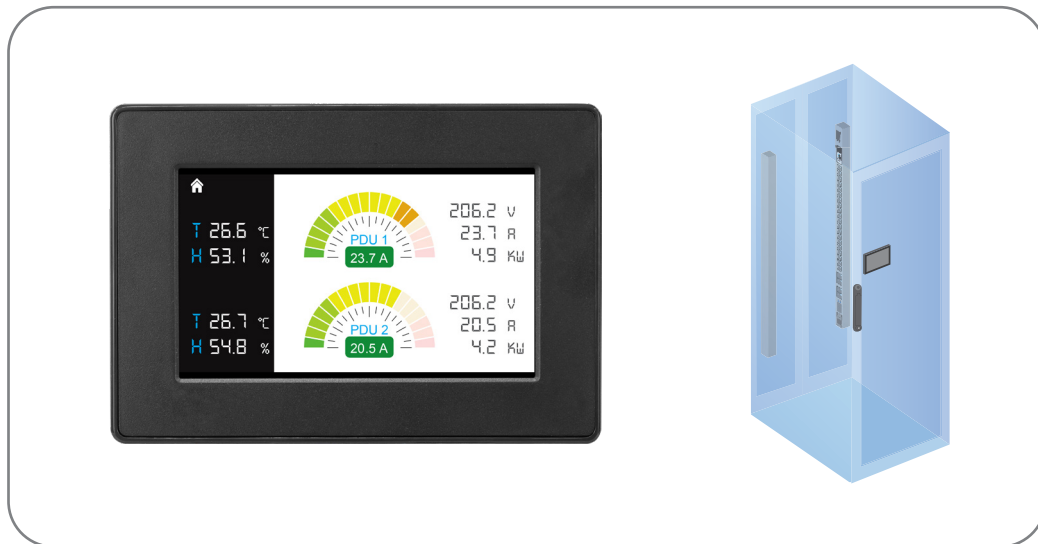


User Manual

IP-ED-01 4.3" Door Mount PDU Panel



Designed and manufactured by Austin Hughes



Legal Information

First English printing, February 2020

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.

Contents

Part I. Overview	P.1
< 1.1 > Package Content	
< 1.2 > Structure Diagram	
< 1.3 > Product Highlights	
Part II. Installation	P.3
Part III. How to Use	P.7
< 3.1 > Introduction	
< 3.2 > Power Monitoring for 3-Phase PDU	
< 3.3 > Power Monitoring for 1-Phase PDU	
< 3.4 > Sensor Monitoring	

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

How To Clean Your LCD Monitor



Caution :

- To avoid the risk of electric shock, make sure your hands are dry before unplugging your monitor from or plugging your monitor into an electrical outlet.
- When you clean your monitor, do not press down on the LCD screen. Pressing down on the screen can scratch or damage your display. Pressure damage is not covered under warranty.
- Use only cleansers made specifically for cleaning monitors and monitor screens. Cleansers not made to clean monitors and monitor screens can scratch the LCD display or strip off the finish.
- Do not spray any kind of liquid directly onto the screen or case of your monitor. Spraying liquids directly onto the screen or case can cause damage which is not covered under warranty.
- Do not use paper towels or abrasive pads to clean your monitor. Using an abrasive pad or any wood based paper product such as paper towels can scratch your LCD screen.

Cleaning Your Monitor

To clean your LCD safely, please follow these steps :

- ① Disconnect the power cord.
- ② Gently wipe the surface using a clean, dry microfiber cloth. Use as little pressure as possible.

Cleaning Tough Marks and Smudges

To remove tough marks and smudges, please follow these steps :

- ① Disconnect the power cord.
- ② Spray a small amount of non-abrasive cleanser on a microfiber cloth.

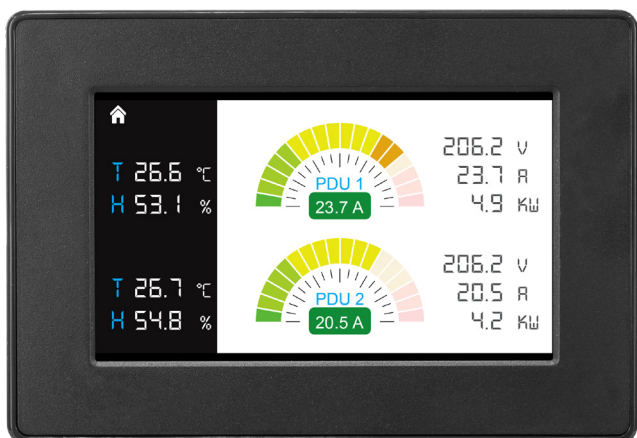


Caution : Do not spray or apply any liquids directly onto the monitor. Always apply the solution to your microfiber cloth first, not directly on the parts you are cleaning.

- ③ Gently wipe the surface. Use as little pressure as possible.
- ④ Wait until your monitor is completely dry before plugging it in and powering it up.

Part I. Overview

< 1.1 > Package Content

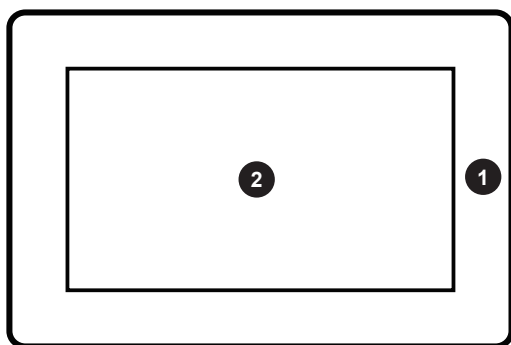


4.3" Door Mount PDU Panel (IP-ED-01)

- 1 x LCD panel
- 2 x RJ-11 connection cable (open end, 2m)
- 4 x RJ-11 jack
- 1 x Screw mounting set

< 1.2 > Structure Diagram

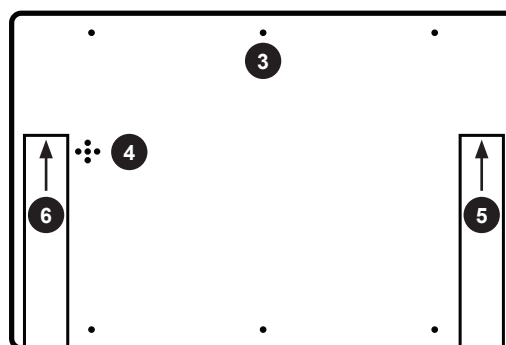
Front View



Dimension (W x H x D) : 133 x 90 x 17 mm

- ① Front bezel
- ② 4.3" touchscreen color panel

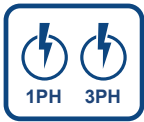
Rear View



- ③ 6 x Mounting hole
- ④ Buzzer
- ⑤ Connection port to PDU 1
- ⑥ Connection port to PDU 2

Part I. Overview

< 1.3 > Product Highlights



2 x InfraPower PDU Connection

- > Supports 1-Phase & 3-Phase rack iPDU
- > Connection via 2 x RJ-11 cables (Included)



PDU & Sensor Display and Alarm

- > Displays power & sensor status
- > Alarm notification
- > Viewable while doors in closed position



Easy Retrofit

- > No cut-out / damage required to doors
- > Screw mounting kit (Included)



Smart and Stylish Look

- > Upgrade standard third party racks
- > Provide invaluable information display



4.3" Color LCD

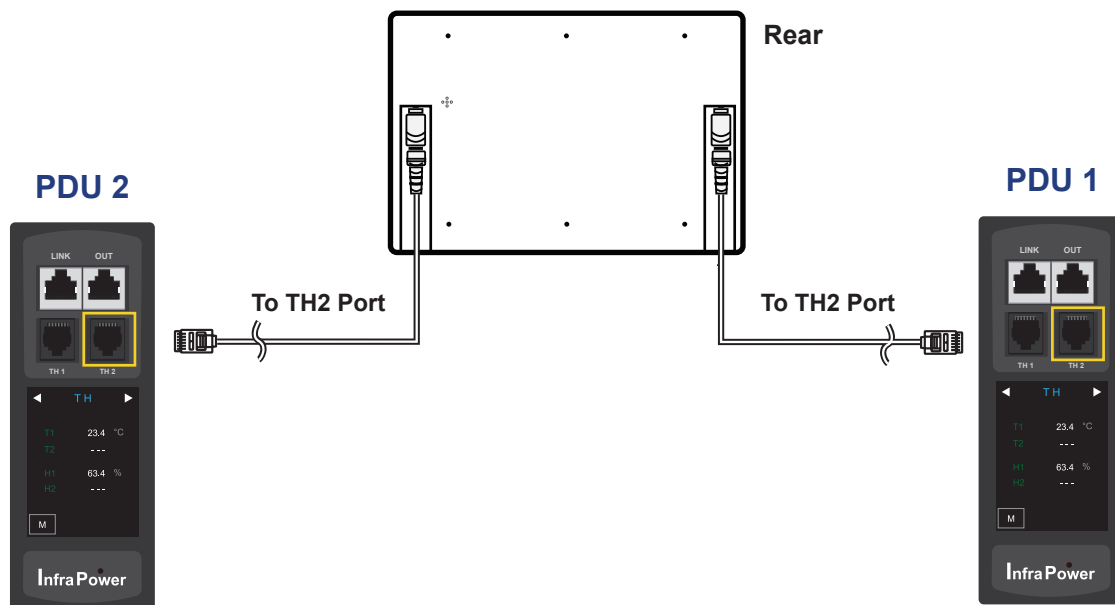
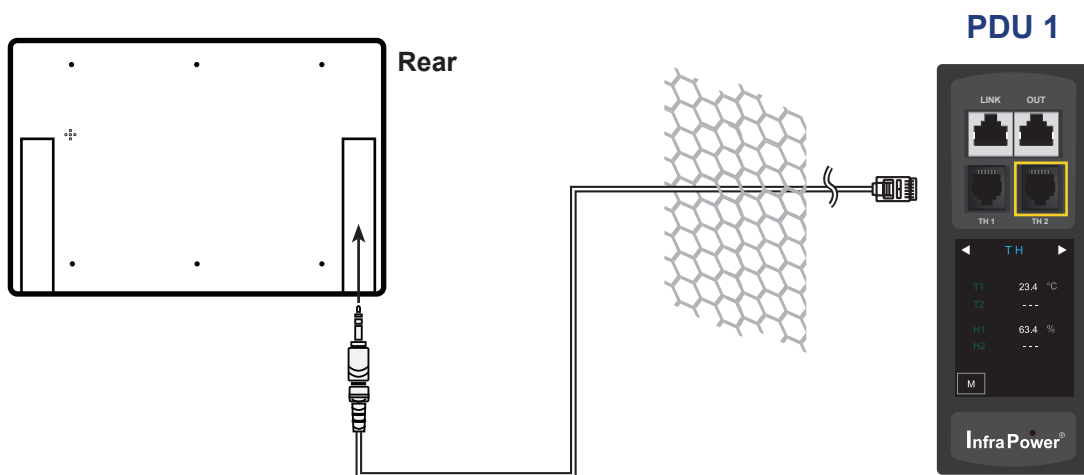
- > Resistive touchscreen
- > Panel resolution 480 x 272



Plug & Play

- > No driver or software required
- > Easy to install and use

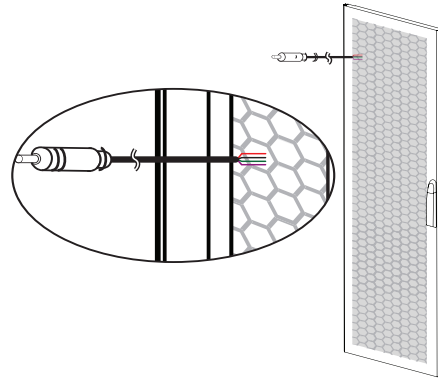
Part II. Installation



Part II. Installation

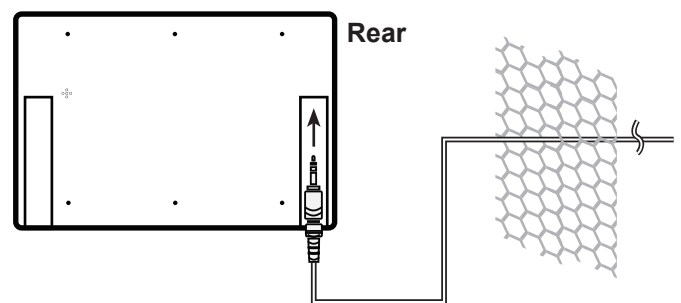
Step < 1 >

- Pass through the connection cable (open end) to inner side of door



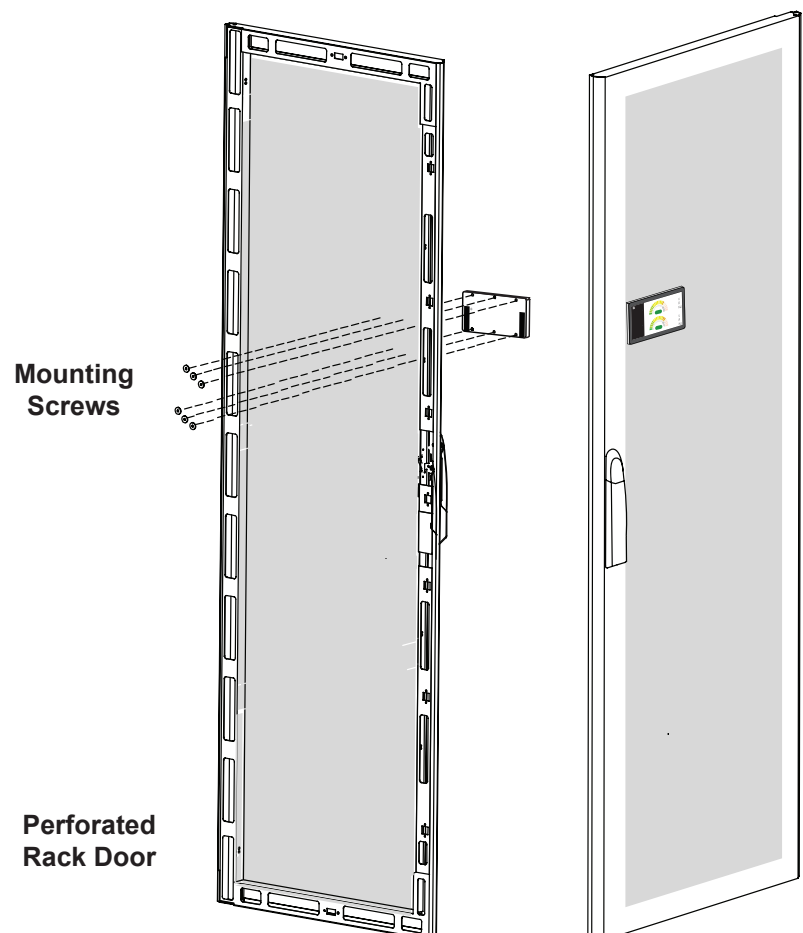
Step < 2 >

- Connect the cable to display panel.



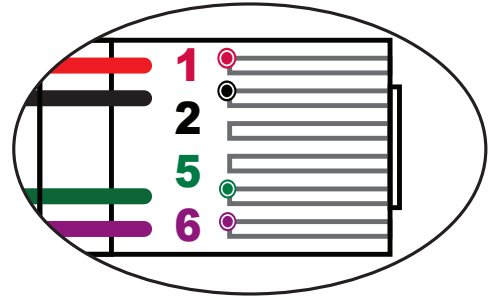
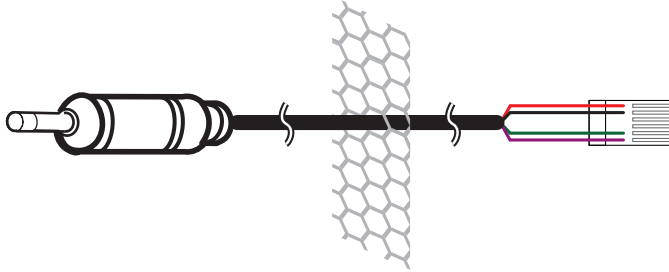
Step < 3 >





- Place the door mount PDU panel to the desired position.
- Fix the panel with screw set.



Step < 4 >

- Insert the 4 mini color wires into the bundled RJ-11 connector and secure the wires using the crimping tools.

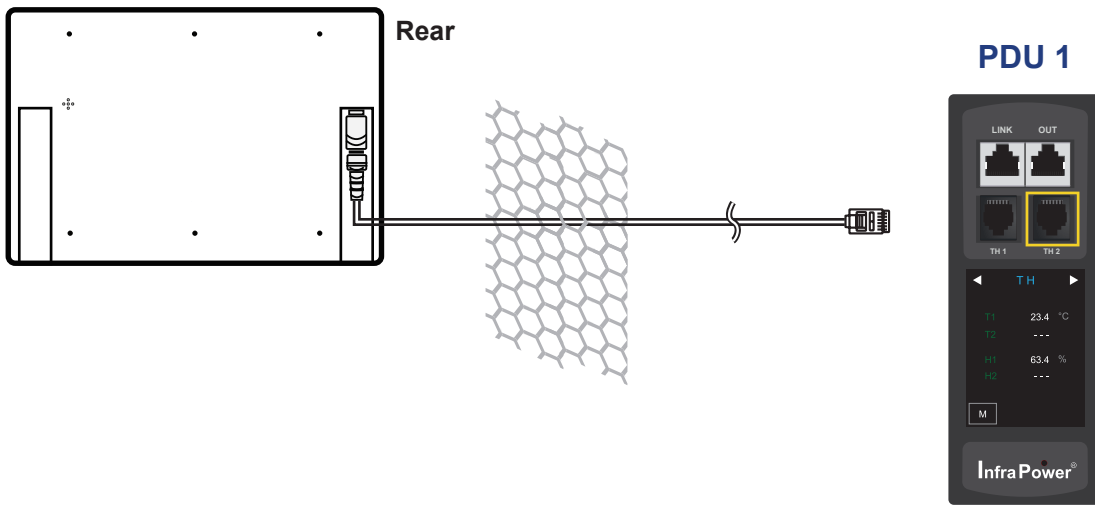


Code	Color	
1	Red	
2	Black	
5	Green	
6	Purple	

- ⚠ Please ensure the pin assignment matches at both sides. Otherwise, the 4.3" PDU display will NOT work properly.

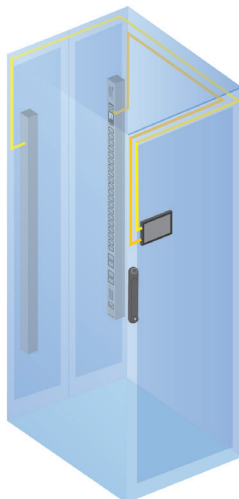
Step < 5 >

- Connet the RJ-11 cable to TH2 Port.



Step < 6 >

- Complete.



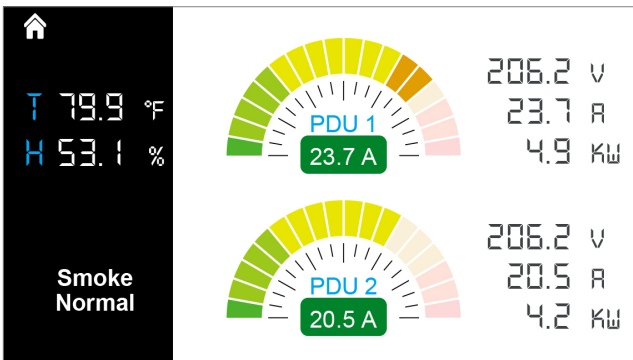
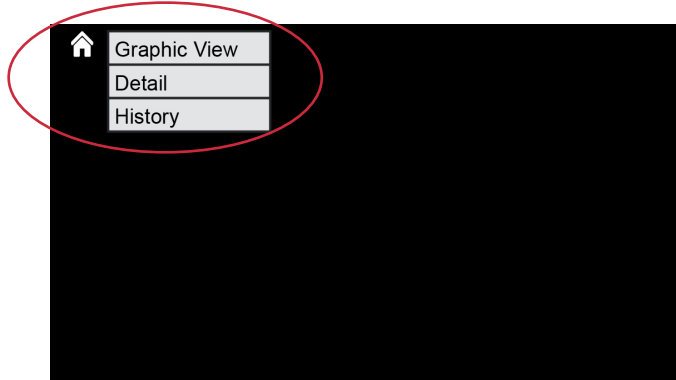
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Part III. How to Use

< 3.1 > Introduction

IP-ED-01 provides 3 monitoring pages. It allows user to select the page by touching the home icon.

Touch Buttons



Graphic View

Provide a sharp and highly visible reading for Current (Amp), Voltage (Volt), Power (KW) and sensor status for PDU 1 & PDU 2. If current is over the threshold, user can be alerted by the alarm signal in display & beep sound.

Home	PDU 1	PDU 2
	Cir.A	Cir.A
Voltage	211.10 v	Voltage 211.10 v
Frequency	50.00 Hz	Frequency 50.00 Hz
Amp	8.90 A	Amp 10.80 A
Power Factor	0.90	Power Factor 0.90
Active	3.50 kW	Active 4.80 kW
Apparent	3.89 kVA	Apparent 5.34 kVA
Energy	269.30 kWh	Energy 723.90 kWh
Leakage	0.00 mA	Leakage 0.00 mA

Detail

Detailed reading of Current (Amp), Voltage (Volt), Power (kW), Power Factor, Energy Consumption (kWh). If current is overloaded, user can be alerted by the alarm signal in display & beep sound.



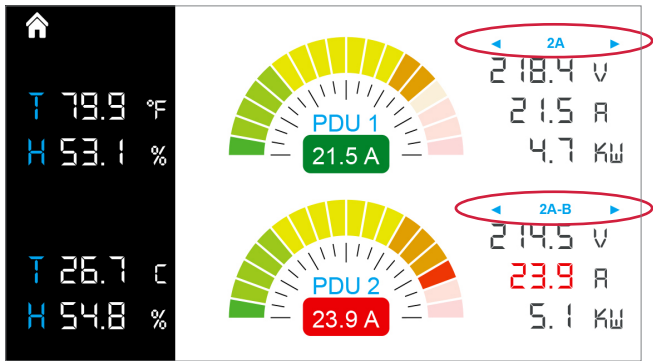
History

Amp figures of individual PDU per 5 sec time interval.

Part IV. How to Use

< 3.2 > Power Monitoring for 3-Phase PDU

Graphic View



PDU 1 Touch Button

To select graphic view page of individual phase.

PDU 2 Touch Button

Detail

**3-Phase PDU : 208V 20A / 30A
400V 16A / 32A**

PDU 1		PDU 2	
3A		2A	
Voltage	205.10 v	Voltage	207.00 v
Frequency	60.00 Hz	Frequency	60.00 Hz
Amp	14.10 A	Amp	6.02 A
Power Factor	0.98	Power Factor	0.97
Active	2.81 kW	Active	1.21 kW
Apparent	2.87 kVA	Apparent	1.25 kVA
Energy	987.90 kWh	Energy	912.87 kWh
Leakage	0.00 mA	Leakage	0.00 mA

PDU 1 Touch Button

PDU 2 Touch Button

To select Bank 1A / 2A / 3A

**3-Phase PDU : 208V 50A / 60A
400V 63A**

PDU 1		PDU 2	
2A		3B	
Voltage	206.00 v	Voltage	205.00 v
Frequency	60.00 Hz	Frequency	60.00 Hz
Amp	6.30 A	Amp	13.20 A
Power Factor	0.98	Power Factor	0.98
Active	1.27 kW	Active	2.65 kW
Apparent	1.30 kVA	Apparent	2.70 kVA
Energy	987.90 kWh	Energy	830.46 kWh
Leakage	0.00 mA	Leakage	0.00 mA

PDU 1 Touch Button

PDU 2 Touch Button

To select Bank 1AB / 2AB / 3AB

History

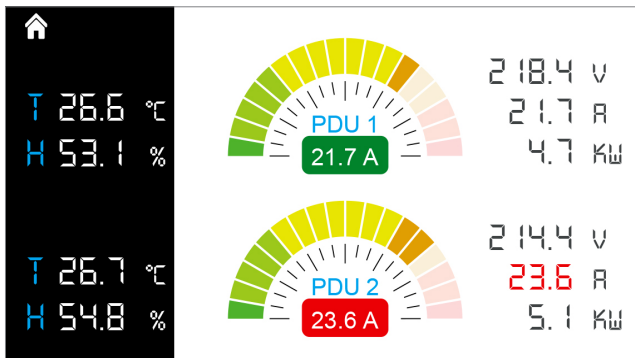
Touch Button



To select Amp diagrams (individual phase per time interval) of PDU 1 & PDU 2.

< 3.3 > Power Monitoring for 1-Phase PDU

Graphic View



Detail

1-Phase (Dual Circuit) - 110V / 208V / 230V

PDU 1		PDU 2	
Cir.B		Cir.B	
Voltage	211.10 v	Voltage	211.10 v
Frequency	50.00 Hz	Frequency	50.00 Hz
Amp	9.50 A	Amp	14.50 A
Power Factor	0.90	Power Factor	0.90
Active	3.50 kW	Active	4.80 kW
Apparent	3.89 kVA	Apparent	5.34 kVA
Energy	269.30 kWh	Energy	723.90 kWh
Leakage	0.00 mA	Leakage	0.00 mA

PDU 1 Touch Button

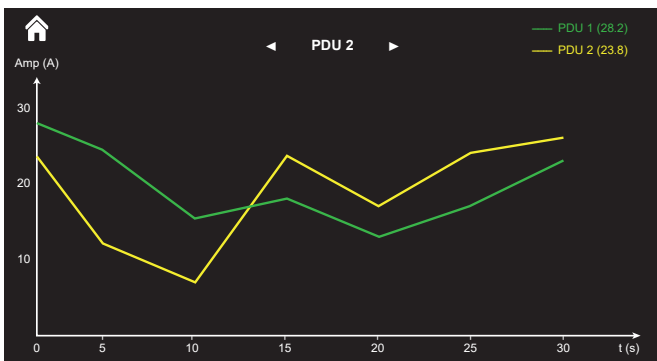
PDU 2 Touch Button

To select Circuit A / B

1-Phase (Single Circuit) - 110V / 208V / 230V

PDU 1		PDU 2	
Voltage	211.10 v	Voltage	211.10 v
Frequency	50.00 Hz	Frequency	50.00 Hz
Amp	4.10 A	Amp	13.80 A
Power Factor	0.90	Power Factor	0.90
Active	0.78 kW	Active	2.62 kW
Apparent	0.87 kVA	Apparent	2.91 kVA
Energy	128.93 kWh	Energy	542.80 kWh
Leakage	0.00 mA	Leakage	0.00 mA

History



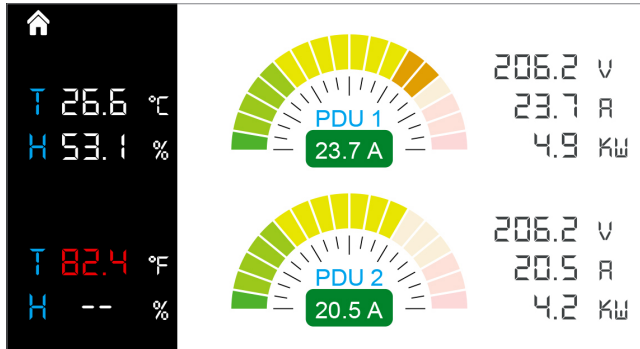
Amp diagram (strip level, per time interval) of PDU 1 & PDU 2.

* Same curve diagrams (PDU x 2) will be shown whether selecting PDU 1 or PDU 2

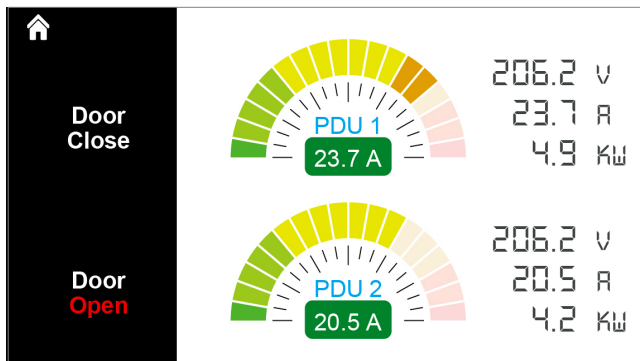
Part III. How to Use

< 3.4 > Sensor Monitoring

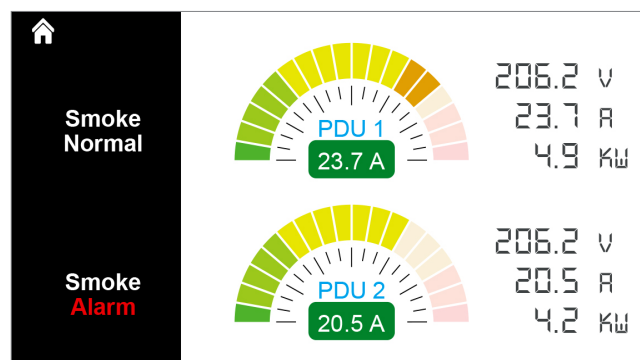
IP-ED-01 detects all sensors which connected to PDU such as temperature & humidity sensor, temperature sensor, door sensor & smoke sensor. User can be alerted by the alarm signal in display & beep sound.



Temperature & Humidity / Temperature



Door Status



Smoke

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