USER'S GUIDE



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Preface

About this Manual

Congratulations on purchasing a PDU. This user manual provides detailed descriptions of the hardware components and how to use the product. Read this manual carefully and follow the instructions before installing.

Copyright Information

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Preface

Safety Instructions

Follow these safety instructions to avoid injury to yourself and damage to the PDU.

- To reduce the risk of fire or electric shock, install the unit in a temperaturecontrolled indoor area free of conductive contaminants. Do not place the unit near liquids or in an excessively humid environment.
- Do not allow liquids or foreign objects to enter the unit.
- The unit does not contain any user-serviceable parts.
- Do not open the unit.
- Servicing, maintenance, and repair for this equipment must be performed by qualified service personnel. Remove rings, watches and other jewelry before servicing the unit.
- Before maintenance, repair or shipment, the unit must be completely switched off and unplugged and all connections must be removed.
- Before plugging in the power cord of the device, make sure that the power source rating matches the power rated indicated on the product labels.
- Use a harmonized and certified power cord when connecting any device to the outlets.
- The digital output can only connect switches, indicators, or other output devices that are normally open or normally closed.

Preface

Safety Notices

Caution:

This unit has been provided with a real time clock circuit. There is a danger of explosion if the battery is incorrectly replaced. Replace only with a 3V Lithium cell (CR1220) or equivalent type. Discard used batteries according to the manufacturer's instructions.

Caution: Rack-Mo

Rack-Mounted Equipment – The unit is intended to be rackmounted, the Installation Instructions shall contain wording to address the following concerns when the unit is mounted in a rack system.

"The equipment is to be installed in an environment with maximum ambient temperature must not exceed 60°C."

"The openings on the enclosure are for air convection hence protected the equipment from overheating. DO NOT COVER THE OPENINGS."

"Lay this equipment on a reliable surface when installing. A drop or fall could cause injury."

"The equipment shall be installed according to specification as nameplate. Make sure the voltage of the power source when connecing the equipment to the power outlet. The current of load and output power of loads should not be over the specification."

"This equipment must be connected to the reliable earth before using."

The PDU, is an intelligent power strip designed to power monitor the input and circuit breaker consumption and auto email history report to supervisor for power bill charge. At the same time, provides the useful ability of managing power for any combination of network equipment connected to it. Users can control the power on/off for any device connected to the PDU remotely, using a console or Ethernet connections.

It's also equipped with a console port for connecting upto 8 EMD (Environmental Monitoring Device) in cascade for sensing temperature and humidity along with two alarms that can be activated when either of the sensors shows unusual values.

Features

- To calculate the power consumption on hourly basis, and have an accumulation of daily
- Provide detail data-logging for statistical analysis and diagnostic then auto email daily history report
- Daisy-chaining can cascade up 16 power strips
- Sequential power-up on the outlets / Allows users to configure the sequence in which power is turned on or off for each outlet
- Intelligently turn on/off devices based on event occurrence or planned schedule
- Event notification by pop-up/Sending Trap or E-Mail for events notification
- Upto 42 power outlets that can be turned on or off in multiple ways, with easy monitoring of current consumption
- Set over-current watchdog for each outlet (Threshold settings for overcurrent warnings and alerts)
- Versatile sensors supported through EMD (Environmental Monitoring Device) inputs, 8 sensors can be deployed in cascade
- Comprehensive power management and flexible configuration through web browser, NMS, Telnet, SNMP V1,2,3
- Support Secure Socket Layer V3 and Secure Shell V2 protocols
- Administrator and multiple users with password protection for doublelayer security
- Address-specific IP security masks to prevent unauthorized access
- User-friendly interface to display input and output status
- Upgrade utility for easy firmware upgrade
- Models available in 220-250V and 380-415V

Package Contents

Make sure the PDU package has the following items. If any of theitems are missing or damaged, contact your nearest service center or vendor.

- 1. PDU
- 2. IPFIX001 (x2)
- 3. IPFIX002 (x2)
- 4. IPFIX003 (x2)
- 5. Screws (x6)
- 6. Power share special patch cord



Hardware Components

The following sections provide descriptions about the front panel components and how to use them.

	Component	Description
1.	Inlet	Power lead to be connected to the Data Centre power source
2.	Breaker	Prevent excessive current flow to protect the system
3.	OLED Display	Display input Power Data
4.	Mounting Options	Different choice of mounting options

OLED Display

The front panel of the PDU has a colored OLEDscreen that provides information about the PDU power status.



This section provides information about setting up the PDU, connecting power, and connecting devices to it before users start using it for power management. Read this section carefully to learn how to connect various devices to the PDU.

Rack Mounting

The PDU can be installed in most standard racks. After attaching the ears to each side of the device, position the device in the rack and align the holes in the ears (mounting brackets) with the hole in the rack.



Hotswap replaceable IEX GIGA Controller

The GIGAIEX PDUs provides an easy replacement of its controller.

If the controller is failing, just simply send the controller back to forrepair or replacement.

How to replace a controller:

1- PDU is not required to be powered off.

Loosen the screws at two sides of the IEX GIGA controller, and lift it up.

- 2- Disconnect the PDU's controller cable from the controller.
- 3- Get a new IEX GIGA controller and install it back into the PDU in the reverse order.

Note: the limit torque to fix the controller is 0.8N.m-1.0N.m



Making Connections

The PDU is a versatile product that can be connected to several different types of input and output devices. This makes it a useful tool for connecting devices to it and to monitor the power through its user interface.

IEXv.5 PDU is manufactured with the most advanced hot-swap, field replaceable SNMP IP controller. It is built with dual Gigabit Ethernet ports, an OLED full colour screen, cascading multi-sensor ports, enhanced security, sophisticated alarming and power monitoring across the whole power chain.



The following procedure describes the basic steps needed to set up the PDU:

- 1. To set up the hardware, connect power to the power inlet and output devices to the power outlets. Connect devices with normally open or normally close conditions to the digital output ports, and an EMD to the console port.
- 2. To configure the Power Strip, users can use the console or LAN port. Connect the device to a console and a LAN to enable its configuration through the console or browser menu.
- 3. After connecting to a console, use a console application such as Telnet or HyperTerminal to access the console menu. Select the TCP/IP submenu under the Network Management to set up the IP address and select the General Setting submenu under the System Management to set up the system date/time. This IP address will be used while accessing the web interface to configure the PDU parameters.
- 4. After connecting to LAN, open a browser from a PC in the network and use the IP address specified through the console menu to open the web interface for system configuration.
- The following sections provide instructions about how to make various connections.

Connecting Input Power

The PDU has different IEC309 power inlets for supplying and managing power for the output devices. For each inlet, connect the power cord to the power inlet and plug the other end into a power outlet as shown:



Connecting Output Devices

The Power strips can have a different number of outlets for connecting devices such as workstations, servers, and printers. Connect the power connectors of the devices to each of the power outlets.



The PDUs are available in the following sockets: 220V/16A: IEC C13/C19 combo 220V/10A IEC C13, IEC C13 (Lock), AS/NZS 3112 220V/16A SEV T13, SEV T23, CEE7, IEC C19, IEC C19 (lock), SEV T23 220V/13A: UK BS1363 220V/15A: AS/NZS 3112 120V/15A: NEMA 5-15P 120V/20A: NEMA5-20P

Connecting EMD

An Environmental Monitoring Device (EMD) that is connected to sensors for detecting temperature, humidity, and two digital inputs can be connected to the PDU with the console port. The EMD can also be connected to alarms or indicators and controlled through the web browser. Up to 8 EMD can be connected in cascade to monitor the temperature and humidity in different parts of the racks.

1. Connect the EMD to the console port as shown:

After connecting the EMD, open a web browser from a PC and enable environmental sensors on the web user interface, then the temperature and humidity status is automatically displayed on the System Overview page.



Summary Overv	view Power Managem	ent Settings	Log Ad	vanced E	xternal Links		2
vironment Monitorir	B.						
		¢.	urrent Informati	on			
EMD 1			EMD	2			
Humidity (%)	46.2	Normal	Hur	nidity (%)		Normal	
Temperature (*C)	0 27.9 100	Normal	Ten	perature ("C)		Normal	
Alarm-1	Normal		Alar	nei.	Normal		
Alarm-2	Alarm		Alar	m-2	Alarm		
Location Name			Loc	tion Name			
Address	1		Add	ress	1		
FMD 3			EMD	4			
Humidity (%)		Normal	Hur	nidity (%)		Normal	
Temperature (*C)		Normal	Terr	perature (°C)		Normal	
Alarm-1	Normal		Alar	m=1.	Normal		
Alarm-2	Alarm		Alar	m-2	Alarm		

Connecting the Console

Users can control the output devices and manage the power status through mini USB port with a PC.

Refer to on page 21 to learn how to use the console with a console application such as HyperTerminal or Telnet.

Connecting to a LAN/WAN

The PDU has two 10/100/1000 RJ-45 network ports that enables users to monitor and manage the power outlets over the network. The PDU has a graphic user interface that allows users to control the device through a web browser.

Connect the device to a free port on the router using an Ethernet cable as shown. Users can control the device from PC, laptop, mobile phone, or PDA which is connected to the router network.





Using LCM operational butons:

The following sections describe the LCM functional operation of the PDU.

The PDU has four buttons to launch particular applications and display the on-screen.

lcon	Buton	Description
	Down	Press the Down button to navigate through the menu options.
	Up	Press the Up button to navigate through the menu options.
Ð	Set	Press the Set button to access the menu options and confirm user selection.
ESC	ESC	Press the ESC button to cancel any configuration or leave to up menu.

There are two kinds of LCM operation screen for the single and three phase as shown following.

User can configure the Screen Direction, of this PDU from the buttons. Regarding to turn on/off outlet, if this PDU has support network function, user can set the whole outlet configuration from **Outlet Control** webpage. The **Outlet Control** page displays.





Using the (RCM) Residual Current Monitoring:

When a residual current device is triggered, besides the LCM keep flashing will display the "WARNING" signal as shown.



Users can set the related setting of residual current from the Inlet Configuration webpage as shown.

- 1. Alarm there holds a setting range for 3mA to 50mA, There holds default setting is 20mA, when residual current greater than or equal to threshold value, an alarm is triggered.
- 2. When DC residual current is greater than or equal to 5mA, an alarm is triggered.
- 3. When AC residual current is greater than or equal to 20mA, an alarm is triggered.
- 4. When the alarm threshold value setting is less than or equal to 5mA, If DC residual current or AC residual are active, an alarm is triggered.
- 5. When the alarm threshold value setting is less than or equal to 20mA, If AC residual current is active, an alarm is triggered and DC residual current will be ignored.



The PDU provides a graphic user interface that can be viewed from a web browser such as Internet Explorer. This enables users to access and control the device outlets and subsequently, its output devices remotelyfrom users' desktop, laptop, PDA, or even users' mobile phones. This section provides instructions about how to use the web interface to configure and control the PDU remotely.

Summary Overview-System Overview

Start a web browser such as Internet Explorer from the host PC or laptop and enter the IP address of the Power Strip in the address bar. For details about setting the IP address of the system. You will be prompted to enter a Username and Password. Click Go and the main status page of the PDU web interface is displayed.

The default settings are:

DHCP: Enabled

IP Address: 192.168.1.250

Subnet Mask: 255.255.255.0

Gateway: 192.168.1.10

Username: admin

Password: admin

Firmware Ver	sion	PWT_v	3.30.11				
PDU Type		3 phase	PDU 250V 32A				
Marile PD.	SLAVE 1	PDU SLAV	E 2 PDU SLAVE	3 PDU SLAVE 4 PDU	SLAVE 5 PDU SLAVE	6 PDU SLAVE 7 PDU	14
				Input Status			
Master PDU							
Phase	Voltage(V)	Active Power (W)	Apparent Power (VA)	Circuit Breaker 1 (A)	Circuit Breaker 2 (A)	Total Current (A)	Status
11	113.7	0	0	_		_	Normal
				3.50	⁰ 6.00 ¹⁶	° 9.50 ⁵²	
L2	114.7	0	0	0 5.50 50 0 3.50 38	6.00 16	• 9.50 ¹² • 9.50 ¹²	Warning
L2 L3	114.7 114.3	0	0	• 3.50 24	6.00 10 6.00 10	• 9.50 ³²	Warning

The main page shows a graphic representation of the Power Strip outlets and inputs status as described below:

- The panel shows the various menus and submenus. Click any menu to display the menu options, expand the menu items, and modify the menu options as required.
- The right panel shows the current status of the Power strip.

Summary Overview-Alarm List

The "Alarm List" page shows the list of Alarms, which were set by the user. PDU will follow the rules of an alarm to send out notification to the user.

Summary Overview	Power Management	Settings	Log	Advanced	External Links	2	⊕
Alarm List							
			Alarm I	iet			
Number of Active Alarms : 0							
Alarm ID	Alarm Time			Alarm Dese	cription		
XXX.XX	XXXX/XXX/X	xx		XXXXXXXXX			

Summary Overview-Network Connection

The Network Connection page shows a list of user's connections.

Summary Overview	Power Management	Settings	Log	Advanced	External Links	2	⊕
Network Connect							
			Network C	onnect			
Total TCP Connection : 1							
Source Host Address	Connection T	уре		Username			
172.31.1.91	HTTP			admin			

Power Management-Outlet Grouping

This page shows the group list and let user enable Outlet Group.

User can add/delete/modify the group list. The group list is up to 8 groups. Take Group_1 for example, I have set Outlet_1 of PDU_A, Outlet_3 of PDU_B and Outlet_4 of PDU_C into Group_1. When I set action to Outlet_3 of PDU_B and apply, Action will apply to all PDUs of Group1.



Power Management-Outlet Control

This page let user trigger action by drop-down list. After you select an action and click "Apply", server will accord to the instruction to complete the task remotely.

Click "See Details" to open the page as shown:

In this page, you can set "How many seconds delay" when Power ON/OFF Delay action are triggered.

You can also set the seconds of "Reboot Duration".



After set, you can click "Apply" to apply to this Outlet or click "Apply to All Outlet" to make this setting apply to all Outlets.

	Outlet 1 Power Monitor
Name Master PDU	C C
State ON	
Status Normal	
Power On Delay	Immediated Power On
	O Wait 1 Seconds (1-7200)
Power Off Delay	O Immediated Power Off
	Wait 7200 Seconds (1-7200)
Reboot Duration	5 Seconds (5-60)
Current (A)	0.00
Power (W/VA)	Active 0.00
Active/Apparent	Apparent 0.00
Voltage (V)	112.3
Energy (KW/h)	<u>0 kWh (from 07/08/2020 11:19:19</u>)
0 12	20 0 1k 5k
Current (A) Power (W)
Ove	er Current Alarm (A) Over Power Alarm (W)
Critical	16.0 2500
Warning	13.0 2000
	Apply Apply to All Outlet

Take Outlet4 for example (Set Power ON/ OFF Delay=3 seconds /Reboot Duration=10 seconds), when you select Action "Off Delay" and click Apply. Outlet4 will power off after 3 seconds.

I f you select Action " Power Cycle Immediate" and click Apply, Outlet4 will reboot and this procedure will cost 10 seconds.

If you select Action "Power Cycle Delay" and click Apply, Outlet4 will reboot and t h i s p r o c e d u r e w i l l c o s t 1 6 seconds.(Include 3 seconds for "Power ON Delay", 3 seconds for "Power Off Delay" and 10 seconds for "Reboot Duration").

Power Management-Inlet Configuration

This page lets the user configure Inlet load. You can set the condition of "Critical" and "Warning". (The value of "Critical" must be larger than "Warning").

When Inlet Power is over the condition you set, the light of status will become the corresponding colour.(Red means "Critical", Yellow means "Warning" and Green means "Normal") And you will receive the notification mail if you have set it in Email Notification.

Sumr							
			Phase Load	Management			
PDU A							
Phase	Current(A) Total(CB1/CB2)	Voltage(V)	Frequency (Hz)	Power Factor(%)	Power(W/VA) Active/Apparent	Reactive Power (var)	Status
1	0.00(0.00/0.00)	112.7	59.92	0.0	0.00	0.0	Normal
2	0.00(0.00/0.00)	113.4	59.90	0.0	0.00	0.0	Warning
3	0.00(0.00/0.00)	113.0	59.90	0.0	0.00	0.0	Critical
			Config	uration			
			Config	uration			
			Config	uration Ove Al	er Current Jarm (A)	Over Total Current Alarm (A)	Over Voltage Alarm (V)
PDU A			Config	uration Ove Al	er Current larm (A) CB2	Over Total Current Alarm (A)	Over Voltage Alarm (V)
PDU A	Over Load Alarm(kv	r) Load Balance Alar	Config m(%)	Uration Ove 0ve 1 16 2 16	er Current Jarm (A) 16	Over Total Current Alarm (A) 32	Over Voltage Alarm (V) 250
PDU A Critical	Over Load Alarm(kw 5.8	r) Load Balance Alar 100	Config m(%) Critical	Uration Over 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	er Current Jarm (A) 16 16	Over Total Current Alarm (A) 32 32	Over Voltage Alarm (V) 250 250
PDU A Critical Warning	Over Load Alarm(kw 5.8 4.6	r) Load Balance Alar 100 50	Config m(%) Critical	Uration Ove A 1 16 2 16 3 16	er Current Jarm (A) 16 16 16	Over Total Current Alarm (A) 32 32 32	Over Voltage Alarm (V) 250 250 250
PDU A Critical Warning	Over Load Alarm(ky 5.8 4.5	r) Load Balance Alar 100 50	Config m(%) Critical	Uration Ove A 1 16 2 16 3 16 	er Current arm (A) 16 16 16	Over Total Current Alarm (A) 32 32 32 32	Over Voltage Alarm (V) 250 250 250 250
PDU A Critical Warning	Over Load Alarm[kv 5.8 4.5	r) Load Balance Alar 100 50	Config m(%) Critical Warning	Uration Ove A 1 16 2 16 3 16 4 1 16 2 16	er Current arm (A) 16 16 16 16 16	Over Total Current Alarm (A) 32 32 32 32 32 32 32	Over Voltage Alarm (V) 250 250 250 250 250 250

Power Management-Environment Monitoring

This page shows the status of EMD and lets users set the alarm configuration. You can set the "Alarm Condition" of "Critical" and "Warning". (The value of "Critical" must be larger than "Warning") It will follow the Email Notification rule you set to send out mails.

Summary Over	view Power Management Settings	Log Advanced Ext	ternal Links	2 🕀
Environment Monitorir	Ig			
	Curr	ent Information		
EMD 1		EMD 2		
Humidity (%)	0 46.2 80 Normal	Humidity (%)	Normal	
Temperature (°C)	• 27.9 100 Normal	Temperature (*C)	Normal	
Alarm-1	Normal	Alarm-1	Normal	
Alarm-2	Alarm	Alarm-2	Alarm	
Location Name		Location Name		
Address	1	Address	1	
EMD 3		EMD 4		
Humidity (%)	Normal	Humidity (%)	Normal	
Temperature ("C)	Normal	Temperature (°C)	Normal	
Alarm-1	Normal	Alarm-1	Normal	
Alarm-2	Alarm	Alarm-2	Alarm	
Location Name		Location Name		

	-							
Alarm-1	Normal	0		Alarm-1		Normal		
Alarm-2	Alarm			Alarm-2		Alarm		
Location Name				Location Nan	10			
Address	1			Address		1		
			EMD	O Configuration				
EMD1	EMD2	EMD3	EMD4	EMD5	EMD6	EMD7	EMD8	N)
EMD1	EMD2	EMD3	EMD4	EMD5	EMD6	EMD7	EMD8	M
EMD1	EMD2	EMD3	EMD4	EMD5	EMD6	EMD7	EMD8	M
EMD1	EMD2	EMD3	EMD4	EMD5 Sensor	EMD6	EMD7	EMD8	IN umidity (%)
EMD1 EMD1 Enabled EMD Address	EMD2.	EMD3	EMD4	EMD5 Sensor Sensor Nat	EMD6	EMD7 Temperature (*	EMD8 C) Ht	M umidity (%)
EMD1 EMD1 Enabled EMD Address Application FW Ve	EMD2.	EMD3	EMD4	EMD5 Sensor Sensor Nar	EMD6 ne High	EMD7 Temperature (*	EMD8	umidity (%) 80
EMD1 EMD1 Enabled EMD Address Application FW Ve LT Close	EMD2.	EMD3	EMD4	EMD5 Sensor Sensor Nar Critical	EMD6 ne High Low	EMD7 Temperature (*	C) Hu	₩ umidity (%) 80 5
EMD1 EMD1 EMD3 EMDAddress Application FW Ve LT Close Location Name	EMD2 rsion Disable	EMD3	EMD4	EMD5 Sensor Sensor Nar Critical	EMD6 ne High Low High	EMD7 Temperature (*	C) Hu	10) umidity (%) 80 5 70
EMD1 EMD1 EMD1 Enabled EMD Address Application FW Ve LT Close Location Name Alarm-1	EMD2 rsion Disable	EMD3	EMD4	EMD5 Sensor Sensor Nar Critical Warning	EMD6 me High Low High Low	EMD7 Temperature (* 75	C) Hu	2000 (%) 2000 (%) 200

PDU supports 8 EMD sensors in cascade each one with 2 digital inputs of . you can set 2 alarms for each EMD sensor. There are 3 options(Normal Open/Normal Close/Disable) of the EMD sensor. If you set "Normal Open", the EMD sensor will become "Warning"(Yellow light) when closed.

Network-TCP/IP

This page lets users enable DHCP and set an IP address manually.

	Summary Overview	Power Management	Settings	Log	Advanced	External Links	8	Ð
Net	work Connect							
Net	WORK CONNECT			Network Co	onnect			
Тс	otal TCP Connection : 1							
	Source Host Address	Connection	Гуре		Username			
	172.31.1.91	HTTP			admin			

Network Management-Accessible IP SeEng

This page lets users add/delete/modify accessible IP list.

	IPv4 Setting		IPv6 Setting
Enabled DHCP		Enabled IPv6	- Alexandra -
IP address	172.31.33.72	Configuration	Automatic 🔻
Subnet Mask	255.255.0.0	IP address	255.255.0.0
Gateway Address	172.31.0.1	Prefix Length	172.31.0.1
Primary DNS Server	10.35.1.100	Router Address	10.35.1.100
Secondary DNS Server	10.39.7.250	Primary DNS Server	10.39.7.250
		Secondary DNS Server	10.39.7.250

Network Management-Security

This page lets users enable DHCP and set an IP address manually.

Summary Overview	Power Management	Settings	Log	Advanced	External Links	8
Security						
	Network Access F	rotection				SSL Secure Certificate
Enable Network Access Pr	otection					You can upload a secure certificate issued by a
SSH						trusted provider.
In 1 minute + , after unsucc	essful attempts for 5 times	+ , block the	IP for 5 mil	nutes 🔻		After you uploaded a secure certificate successfully, you can access the
						administration interface by SSL connection and there will not be any alert or error message.
In 1 minute + , after unsucc	essful attempts for 5 times	+ , block the	IP for 5 min	nutes 🔻		Certificate file : 📄 📄 🛛 Upload
HTTP(S)						
In 1 minute + , after unsucc	essful attempts for 5 times	* , block the	IP for 5 min	nutes 🔻		Upgrade progress: Writing Image to flash
	Apply					

Network Management-Network Service

This page lets the user set SSH/SSL/Ping/RADIUS Setting. If a user wants to add Radius User(from Settings menu), they have to "Enable RADIUS" on this page first.

Vetwork Service			
	Network Service		
SSH	ModBus/TCP		
Allow SSH Connection	Enabled ModB	us/TCP	
Port Number 22	Port Number	502	
SSL	RADIUS Setting		
Enabled Secure Connection(SSL)	Enabled RADIU	JS	
Port Number 22	Server IP Address	22	
Force Secure Connection(SSL) Only	Port Number	22	
	Secret Key	22	
Ping	Timeout Interval	22 Seconds	
Allow Ping Echo	Retry Times	22	

Network Management-SNMP Segments

This page lets users set the SNMP Agent.

Summary Overview	Power Management	Settings	Log	Advanced	External Links	 •
SNMP Setting						_
			SNMP A	gent		
Enable SNMP Service						
Port Number	XXX					
SNMP Version	vi v					
Community Read	XXX					
Community Write	XXX					
			Apply	v		

Network Management-SNMP Trap Segmenting

This page lets users add/delete/modify SNMP trap settings.



SiGns-General Segmenting

This page lets the user set General Settings.

Summary Overview	Power Management	Settings	Log	Advanced	External Links	8	
General Setting							
		Sy	stem Admin	istration			1
System Name							
System Contact							
System Location							
Log Interval	60 Seco	nds					
Web Refresh Interval (3 ~ 60)	15 Seco	nds					
Log Per Page	10						
Web Timeout Interval (Sec)	15 Seco	nds					
			Apply				
			Data and T	lime			
Current Date and Time	2020/09/26 09:57:4	7					
Time Zone	[GWT +01:00]Brussels, C	openhagen, Marc	drid, Paris	*			
Date Format	yyyy/mm/dd	٣					
Time Setting	24HR ¥						

User management

This page lets the user enable new users and passwords.

Summary Overview	Power Management	Settings L	og Advanced	External Links		2	⊕
User Setting							
			ocal User				
					• •	<u>ين</u>	
Username			Privilege				
		Ra	adius User				
					• •	<u>ين</u>	
Username			Privilege				
Authent	ication Configuration						

SiGns-Maintenance

This page lets the user set Reset/Upgrade/Reboot.



SeGments-Import/export

This page lets users import/export XML file to restore/download the configuration.



The section provides information about seEng up the LDAP step by step.

Step 1: To set up the PDU, please configure the related LDAP parameters on the **SeEng** of **Network Service** webpage as shown screen. For example, to enable LDAP, enter Host IP and Port Number...etc.

LDAP Setting		
Enabled LDAP		
Host	172.31.35.186	
Port Number	389	
TLS Connection		
Base DN	dc=qetest,dc=com	1

Step 2: Please press " icon to add LDAP user then configure the related LDAP parameters on the **SeEng** of **User SeEng** webpage as shown screen. For example, set LDAP Username, select Privilege to "Outlet Manager" and select the related outlets.

Q	Jsername		ldapuser001		
P	rivilege		Outlet Manage	4 4	W.
U.					181
#	Outlet	# 1	Outlet	ŧ	Outlet
# 1	Outlet outlet 01	#	Outlet outlet 02	# 3	Outlet outlet 03
# 1	Outlet outlet 01 outlet 04	#	Outlet Outlet 02 Outlet 05	#	Outlet outlet 03 outlet 06

Step 3: After configured LDAP parameter, please logout and close web browser. To enter LDAP username and password then login web browser.

Firmware Ve	ersion	PWT_v0.3	0a32	_			
PDU Type		3 phase Pi	DU 250V 32A	User Login	1		
POU		_		Login			H
Phase	Voltage(V)	Active Power(W)	Apparent Power(VA)	Circuit Breaker 1(A)	Circuit Breaker 2(A)	Total Current(A)	Status
u	115.9	13.1	19.8	in the second	ā.ce ti		Critical

Step 4: To check the login LDAP username on the **Network Connect** of **Summary Overview** webpage as shown screen.

	Network Connect	
Total TCP Connection : 1		
Source Host Address		Username
172.31.34.222	нттр	ldapuser001

Step 5: The LDAP user can control the related outlets on the **Outlet Control** of Power Management webpage.

et Control							
PBU:							
			1	PDU			
PDU							
Outlet ID	Outlet Name	Current	Power (W/VA) Active/Apparent	Full power monitor	Action	State	Status
1	Coutlet 01	0.00	0.0/0.0	Detail	No Action *	OFF	Normal
2	outlet 02	0.00	0.0/0.0		No Action *	ON	Normal
3	outlet 03	0.00	0.0/0.0		No Action 7	OFF	Normal
4	Outlet 04	0.00	0.0/0.0	Detail	No Action *	OFF	Normal
5	outlet 05	0.00	0.0/0.0		No Action *	ON	Normal
6	outlet 06	0.00	0.0/0.0		No Action *	ON	Normal
7	Outlet 07	0.00	0.0/0.0	Detail	No Action *	OFF	Normal

The section provides information about seEng up the TACACS+ step by step.

Step 1: To set up the PDU, please configure the related TACACS+ parameters on the **SeEng** of **Network Service** webpage as shown screen. For example, to enable TACACS+, enter Host IP and Port Number...etc.

TACACS+ Setting	
Enabled TACACS+	
Host	172.31.35.184
Port Number	49
Secret Key	******
Timeout(Sec)	5
Retry Count	3
Authentication Mode	ASCII 🔻

Step 2: Please press "I icon to add TACACS+ user then configure the related TACACS+ parameters on the **SeEng** of **User SeEng** webpage as shown screen. For example, set TACACS+ Username, select Privilege to "Outlet Manager" and select the related outlets.

L	Jsername		tacuser001		
P	Privilege		Outlet Manage	ń	٣
DU.					K
DU	-	_			K
90 -	Outlet	#	Outlet	#) Outlet
9U #	Outlet outlet 01	#	Outlet outlet 02	#	Outlet 0:
0U # 1 4	Outlet outlet 01 outlet 04	#	Outlet outlet 02 outlet 05	# 3 6	Outlet 0: outlet 0:

Step 3: After configured TACACS+ parameter, please logout and close web browser. To enter TACACS+ username and password then login web browser.

Overview Firmwate Version PVU*_v0.30x32 POU Type 3 phase POU 250V 33A 1 1 1 1 1 1 1 1 1 1 1				_		
Firmware Version PVUT_00.20x32 PDU Type 3 phase PDU 250V 32A User Legin Image:		Overview		_		
PDU Type 3 phase PDU 250V 32A	Firmware Version	PWT_v0.30a32				
	PDU Type	3 phase PDU 250V	32A	User Login		
			1	tacuser001		_
	100		۵			- 11
						_
700				Login		
Phase Voltage(V) Active Power(W) Apparent Power(VA) Circuit Breaker 3(A) Circuit Breaker 2(A) Total Current(A) Status	FDU					
			-		1	

Step 4: To check the login TACACS+ username on the **Network Connect** of **Summary Overview** webpage as shown screen.

	Network Connect	
Total TCP Connection : 1		
Source Host Address	Connection Type	Username

Step 5: The TACACS+ user can control the related outlets on the **Outlet Control** of **Power Management** webpage.

Summary	Overview Power	Management	Setting Log	Advanced	External Links		tacuser001 Logor
utiet Control							
_						_	
PDO				_		_	
				DU			
PDU							
Outlet ID	Outlet Name	Current	Power (W/VA) Active/Apparent	Full power monitor	Action	State	Status
1	outlet 01	0.00	0.0/0.0		No Action *	ON	Normal
2	Outlet 02	0.00	0.0/0.0	Detail	No Action	ON	Normal
3	outlet 03	0.00	0.0/0.0		No Action *	OFF	Normal
	outlet 04	0.00	0.0/0.0		No Action .*	ON	Normal
~							
5	outlet 05	0.00	0.0/0.0	Detail	No Action *	ON	Normal
5	outlet 05 outlet 06	0.00	0.0/0.0	Detail	No Action *	ON ON	Normal
5 6 7	outlet 05 outlet 06 outlet 07	0.00 0.00 0.00	0.0/0.0 0.0/0.0 0.0/0.0	Detail	No Action *	ON ON ON	Normal Normal Normal

SiGns-Radius User

This page lets power admin to Add/Delete/Modify Radius users.

You have to Enable RADIUS and set ready in the Network Service. Then you can add a Radius User and set outlet control for this user. The Grouping & Schedule function also supports radius users.

Network Service		
	Network Service	
SSH	ModBus/TCP	
Allow SSH Connection	Enabled ModBus/TCP	
Port Number 22	Port Number 502	
SSL	RADIUS Setting	
Enabled Secure Connection(SSL)	Enabled RADIUS	
Port Number 22	Server IP Address 22	
Force Secure Connection(SSL) Only	Port Number 22	
	Secret Key 22	
Ping	Timeout Interval 22 Seconds	
Allow Ping Echo	Retry Times 22	

NOTE: If there are 2 users with the same name both existed in Local User & Radius User, Local user will become a priority in PDU.

SeGNGS-LOCal User



This page shows the user list and admin that can add/delete/modify it. The list can be upto 8 users. There are 4 kinds of privileges for the user account, the definition is as below:

Privilege	Definition
Power Admin	Users can manage all functions.
Admin	Admin users cannot manage [User Management], [Outlet Grouping], [FW Upgrade & Inlet/Outlet Upgrade], [Reset Default] function, and the others can still manage.
Supervision	Supervision users only manage [Power Monitoring] beside [Outlet Grouping], [Inlet/outlet upgrade] function.
User	Cannot manage any function. Read only.

Log and Notification-System Log

This page shows the system log

	Summary Overview Power Management Settings Log Advanced External Links	8	⊕
s	System I ne		
	alanu zo ^p		
	System Log		
	From 08/19/2020 To 08/19/2020		
	Apply Clear All		
	Show 10 * entries per page		
	Date & Time Description		
	08/20/2020 10:55:27 XXX		
	< << page 0 / 0 >> >		

Log and Notification-Event Log

This page shows the warnings and alarms history log.

SL	ummary Overview	Power Management	Settings	Log	Advanced	External Links	2	•
Event Log								
				Event Lo)g			
From	08/19/2020	To 08/19/2020						
Device	All 🔻	Severity All Events 🔻						
	Apply	Clear All						
Show	10 v entries pe	er page						
Date and	d Time 👿	Se	verity 🔽			Event		
08/20/2	020 10:55:27	x	XXXXXX			XXX		
				< << page 0 /	0>> >			

SiGns-Configure SMTP Server

This page let user configure SMTP server.

Summary Overview	Power Management	Settings Log	Advanced	External Links	8
SNMP Setting					
		SNMP A	gent		
Enable SNMP Service					
Port Number	XXX				
SNMP Version	v1 *				
Community Read	XXX				
Community Write	XXX				
		Appl	У		
		SNMP Trap	Setting		
					⊕ ⊖ €
Receiver Address	Event Level		Trap Version	Description	

SeGments-Email Notification SeEngs

This page lets the user set Email notification settings. Click "+" to set a new setting. Input "Receiver Address", select "Email Type"/"Event Level" and "Description", then click "Apply" to save settings. You can send a test mail to confirm the setting is correct or not through clicking "Send Test". After setting well, you will get a notification email when the event has been triggered.

Summary Overview	Power Management Settings	Log Advanced	External Links	2
mail Settings				
		Configure SMTP Server		
SMTP Server		XXXX		
Port Number	25			
Sender Email Address	XXXXX @XXX XXX			
Prefix	1000			
Enable SMTP Authentication				
UserName	XXX			
Password	********			
		Apply		
	E	mail Notification Setting		
				⊕⊖ Ę
Receiver Address	Email Type	Event Level	Description	
☐ xxx.xxx xxx	XXX	XXXX	X	
Ξ.				

Log and Notification-Inlet History Log

This page shows the inlet history log. You can set the log interval in General Setting under the System Management.

				Inlet Hist	ory Log				
From 08/19/2020	To 08/1	19/2020							
Device All	Ŧ								
Apply	Clear All								
Show 10 * entr	es per page								⊬ G
Date and Time 🔽	Device Name	Pwr.W	Pwr:Max.W	Ph1 I.A	Ph2 LA	Ph3 I.A	Ph1 Max.A	Ph2 I Max.A	Ph3 I Max.A
08/20/2020 10:55:27	PDU A	0.0	0.0	0.00	0.00	0.00	112.3	99.9	59.81

Log and Notification-Environment History Log

This page shows the environment history log. You can set the log interval in General Setting under System Management.

		Environment Log		
From 08/19/2020	To 08/19/2020			
Device All 🔻				
Apply	Clear All			
Show 10 • entries per	page			K B
Date and Time 🛒	Device 🕎	Temp.C	Hum.%RH	
08/20/2020 10:55:27	XXX	XXX	XXX	

The section provides information about seEng up the Daisy Chain step by step.

Step 1: To set up the PDU, connect RJ45 serial cable from Cascading port of the Master PDU to Cascading port of the Slaver PDU.



Step 2: The related parameters of the Master and Slaver PDU will display in the System Overview, Inlet Configuration, Outlet Control, Environment Monitoring, Outlet Group and Schedule ...etc. For more the details of the Master and Slaver PDU, please check the related webpage as below.

The **System Overview** of **System Overview** webpage as shown screen.



The Inlet Configuration of Power Management webpage as shown screen.

	Powern	our again is not	Serting Log	Advanced	external Links		admin	Logoul
Inlet Configuration								
POU(M)	PDU2(11)	_	_	_	_	_		
			Phase Load	Management				
PDU(M)								
Power	13.0W Norm	al						
Phase 1 Energy	2.285 kWh(from 14	1/02/2022 17:20:3	21					
Phase 1 Energy Phase	2.285 KWh(from 14 Current(A) Total(CB1/CB2)	Voltage(V)	2) Frequency (Hz)	Power Factor(%) (CB1/CB2)	Power(W/VA) Active/Apparent	Reactive Power (var)	Status	
Phase 1 Energy Phase 1	2.285 KWb(from 14 Current(A) Total(CB1/CB2) 0.16(0.08/0.08)	Voltage(V) 115.9	2) Frequency (Hz) 59.85	Power Factor(%) (CB1/CB2) 66.3/66.6	Power(W/VA) Active/Apparent 13.0/19.8	Reactive Power (var) 0.4	Status Critical	
Phase 1 Energy Phase 1	2.285 KWb(from 14 Corrent(A) Total(CB1/CB2) 0.16(0.08/0.08)	Voltage(V) 115.9	2) Frequency (Hz) 59.85	Power Factor(%) (CB1/CB2) 66.3/66.6	Power(W/VA) Active/Apparent 13.0/19.8	Reactive Power (var) 0.4	Status Critical	
Phase 1 Energy Phase 1	2.286 kWb(from 14 Corrent(A) Total(CB1/CB2) 0.16(0.08/0.08)	Voltage(V) 115.9	2) Frequency (Hz) 59.85 Confi	Power Factor(%) (CB1/CB2) 66.3/56.6 guration	Power(W/VA) Active/Apparent 13.0/19.8	Reactive Power (var) 0.4	Status Critical	
Phase 1 Energy Phase 1	2.286 KWh(from 14 Current(A) Total(CB1/CB2) 0.16(0.08/0.08)	Voltage(V) 115.9	23 Frequency (Hz) 59.85 Confi	Power Factor(%) (CE1/CB2) 66.3/56.6 guration	Power(W/VA) Active/Apparent 13.0/19.8	Reactive Power (var) 0.4	Status Critical	

The **Outlet Control** of **Power Management** webpage as shown screen.

utlet Control							
PDU(M)	PD42(51)	_				_	
				Marcal .			
			PL.	n) (m)			
PDU(M)							
			Power (W/VA) Active/Apparent				
1	outlet 01 (G123)	0.00	0.0/0.0	Detail	No Action 🔻	ON	Normal
2	outlet 02	0.00	0.0/0.0	Detail	No Action	ON	Normal
3	outlet 03	0.00	0.0/0.0	Detail	No Action T	OFF	Normal
4	outlet 04	0.00	0.0/0.0	Detail	No Action 🔻	OFF	Normal
5	outlet 05	0.00	0.0/0.0	Desail	No Action *	ON	Normal
6	outlet 06	0.00	0.0/0.0	Detail	No Action V	ON	Normal
7	outlet 07	0.00	0.0/0.0	Detail	No Action	OFF	Normal
				-			

The **Environment Monitoring** of **Power Management** webpage as shown screen.

	Summary Overvi	ew Power Management	Setting		Advanced	External Links		8 edmin	tanguage
En	wironment Monitoring								
	POU(M) P	DU2[51]	_	_	_		_	Ň.	
			PDU(I	VI) - Curren	Information				
	EMD1								
	EMD1-H(%)	57.1	Normal						
	EMD1-T(°C)	21.5 No.	Warning						
	Alarm-1	Normal							
	Alarm-2	Normal							
	Address.	1							
	Location Name								

Summary Overview	Power Mar	nagement	Setting	Log	Advance	id E	xternal Links
				Ad	d		1
Outlet Grouping	_	Outlet Gro	oup Name				
_			2(51)				K
Grp#	Name			1.1			
□ 1	s12	-#	Outlet		Outlet		Outlet
2	G123	1	outlet 01	2	outlet 02	3	outlet 03
		4	outlet 04	5	outlet 05	6	outlet 06
Purpose and benefits of outlet g	roups.	7	outlet 07	8	outlet 08		
You can ensure that outlets turn The outlets use the delay period	on, turn off in a sync is of the lowest-numb			Aj	pply		

The **Outlet Group** of **Power Management** webpage as shown screen.

The **Schedule** of **Power Management** webpage as shown screen.

Schedule Durite Action Schedule Durite Action • One Time Action Daily Action • Die Time Action Outlet Action • Die Time Action Outlet Action • Die Time Action • Die Time Action • Die Time Action • Die Time Action • Die Time Action • Die Time Action • Couldet • Couldet • Outlet		T	Add	admin Log
Content Recent Rece	ledule		Schedule Dutlet Action	
Index Name Cutlets 1 OH Enabled 6123; 2 OH Inabled 6123; 3 OH Name 900(M)_sould: 02,012; 4 OH Time 2,002;02; at 0; (HeCMM) 0223; 6 OH FOU(M)_sould: 02,012; 7 West Outlet 00416; Outlet	-		Company Company	000
1 Ore Exabled G125; 2 ONE Name PDUM, souther 02;11 3 dawy Action Do Inmediate G123; 4 dawy Time 22/02//022 at OHEMMIN 6 dawy Counter POUMM_souther 02;11 7 week J Outlet Dutlet J Outlet		Name	Schedule A One Time Action	
2 ONT Name POU(M)_soulde 02,s12 3 daily Action 0s issuestate 4 daily Time 23/02/002 at (PecMM) 0523.2 5 s12 recently POU(M)_soulde 02,s12 POU(M)_soulde 02,s12 6 daily POU(M)_soulde 02,s12 POU(M)_soulde 02,s12 7 week Juice 1 Outlet S	🗆 1	one	Enabled	G123;
B daily Action Do is immediate • G523/P000(M)_posher 02312; 4 daily Time 23,027/032 at (PecMM) 0532; 5 s.1	□ 2	ONE	Name	PDU(M)_potlet 02;s12;
A datip A	3	daily	Action On immediate	G123;PDU(M)_outlet 02;s12;
5 s12 POUMA_outlet 02s13 6 daily POUMA_outlet 02s13 7 week # Outlet # Outlet # Outlet	□ 4	daily2	curie volocitors at fractated	G123;
6 daily 7 week POUMIC a Outlet Outlet Coutlet Coutlet	🗆 s	\$17	PSUM PDUISI)	PDU(M)_outlet 02;s12;
7 week Outlet # Outlet # Outlet G123/POU(M]_subject outlet Outlet outlet Dist2:	6	daily		PDU(M)_outlet 02;s12;
outlet 01	07	week	# Outlet # Outlet # Outlet	G123;PDU(M)_outlet 02, outlet 03:s12:

The **Event Log** of **Log** webpage as shown screen.

	Summary Overview	Power Managem	ent Setting	Log	Advanced	External Links	8 admin		(Hangaa
6	vent Log								
	~								
				Event L	og				
	From: 23/02/2022	To:							
	Device: All	• Event Level:	Information						
s	how 10 * entries per p	Cher Al						₿	
	Date&Time	Event Level 🚺 🛛 E	ent Description						
	23/02/2022 16:26:01	Information O	atlet (PDU2:2_out)	et 01) turned o	n by schedule (a	nonymous)			
	23/02/2022 16:26:01	Information 0	tiet (PD(12-2 out)	et 02) turned o	n by schedule (a	noovmous)			

The Inlet History Log of Log webpage as shown screen.

	Summary Overview	Power Manage	ment	Setting	Log	Advanced	External Lin	ka		admin		Languag
Inlet	History Log											
				1	olet History	lor					_	
					iner maron j							
,	From: 23/02/2022	To:										
1	Device: All											
	FOUINI	Cour/										
Sho	ow 10 * entries per	page								E	₽	
	Date&Time 🔽	Device Name	Pwr.W	Pwr Max.W	y Philip	A Ph2 LA	Ph3 I.A	Ph11Max.A	Ph21 Max.A	Ph3 I Max.A	Ene	
1	23/02/2022 16:38:09	PDU(M)	13	14.2	0.16	-	**	0.18	1			
1	23/02/2022 16:38:09	PDU2(51)	0	0	0.02	0	0.02	0.02	0	0.02		
4	23/02/2022 16:37:08	PDU(M)	12.9	14.2	0.16			0.18	-			

The **Outlet History Log** of **Log** webpage as shown screen.

	Summary Overview	Power Manag	ement Sett	ing Log	Advanced	External Un	ka		8 admin	[→ togout	u
0	utlet History Log										
				Outiet I	listory Log						1
17											1
	From: 23/02/2022	To:									
	Device: All	• Outlet:	Alt								
	PDU(M) PDU2(51)		All								
	Show 10 * entries per	page							K	Ð	
	Date&Time 🔽										
	23/02/2022 16:39:10	PDU(M)	outlet 01	0	0	0	0	99.9	59.87		
	23/02/2022 16:39:10	PDU(M)	outlet 02	0	0	0	0	99.9	59.87		
	23/02/2022 16:39:10	PDU(M)	outlet 03	0	0	0	0	99.9	59.89		
	23/02/2022 16:39:10	PDU(M)	outlet 04	0	0	0	0	99.9	59.89		

The **Environment Log** of **Log** webpage as shown screen.

Summary Overview	Power Management Settin	E Log Advanced	External Links	admin Logout La
Environment Log				
		Environment Log		
From: 23/02/2022	To: 23/02/2022			
Device: All	* EMD: All *			
Show 10 * entries per page	Cheer All			E D
Date&Time	Device Name	EMD Name	Temp.C	Hum.%RH
23/02/2022 16:41:12	PDU(M)	EMD1	21.6	56.9
23/02/2022 16:41:12	PDU2(51)	EMD1	22	54.5
23/02/2022 16:40:11	PDU(M)	EMD1	21.5	57.1

Summary Overview	Power Management	Setting	Log	Advanced	External Links		admin	[-> Logout	tane
Inlet & Outlet Upgrade									
, i	irmware Update								
Firmware File:	*								
	- Abbay								
		In	nage Info	rmation					
Image Type				Image Version					
Inlet/Outlet				v1.0.9					
		Inlet & O	Dutlet Up	grade Progress					
				Abertion	eter.	Provide			
simp	soard Address 1	ype:		version	Status	percent			
PDU2(5		_	-	_	_		IN.		Ľ
PDU(M)		Inle	et & Outi	er pevice.					

The Inlet & Outlet Upgrade of Advanced webpage as shown screen.

The **EMD Upgrade** of **Advanced** webpage as shown screen.

Summa	ary Overview	Power Management	Setting Log	Advanced	External Links	admin tagout
EMD Upgrade	>					
	Fi	rmware Update				
Firm	ware File:	2				
		Арріу				
			Image II	iformation		
Image Version	n					
						-
			EMD Upgr	ade Progress		
Srimp	E	MD Address V	ersion	Туре	Status	Percent
PDU(M).	PDU2(51)					18

The section provides information about seEng up the Wi-Fi step by step.

Step 1: To set up the PDU, plug the Wi-Fi dongle into USB-A (1 or 2) port.



Step 2: To configure the related Wi-Fi parameters on the **Wi-Fi SeEng** of **Advanced** webpage as shown screen. For example, to enable Wi-Fi Control, enter Wi-Fi SSI: TOTOLINK_A1004...etc

			WIFI Configure
WIFI Control	Enable	v	
WIFI SSID	TOTOLINK_A	1004	
WIFI Password			
WIFI Encryption	WPA2-PSK	7	
WIFI Security	AES	×	
			Apply

Step 3: After configured Wi-Fi parameters, the related Wi-Fi status is automatically displayed on the **Wi-Fi Status**. For example, to enable Wi-Fi Control, enter Wi-Fi SSI: TOTOLINK_A1004...etc as shown screen

		WIFI Status
WIFI Connect Status	Connection	
WIFI IP Address	172.31.1.33	
WIFI Network Mask	255.255.0.0	
WIFI Gateway	172.31.0.1	
WIFI MAC	00:1A:EF:46:99:31	
		Reconnect

Step 4: Please access the Wi-Fi IP address (example IP: 172.31.1.33) from web browser and make sure the Wi-Fi dongle has workable.

		1.000					100			
1	Summa	ary Overview	Power Manag	ement Setting	Log	Advanced	Etternal Links			
Suctor	n Ovani	-								
Synce	noren									
1000			Overview							
Firm	ware Versi	on	PWT_v0.3)a32						
PDU	Туре		3 phase Pl	U 250V 32A						
					_			_	_	
	:000								0	
					Input S	tatus				
	บบ									
Ph	ase	Voltage(V)	Active Power(W)	Apparent Power(VA)	Circuit Br	eaker/1(A)	Circuit Breaker 2(A)	Tota	sl Current(A))
	ac	117.0	12.0	10.0	-	7.4				,
	*	447.5	14.4	40,0	6.08	ш	8.08 ¹²	0,16	63	
	Power St	are	Inactive							
	_				Outlet S	tatus				

Step 5: Please use the ping command to Wi-Fi IP address (example IP: 172.31.1.33) then make sure the Wi-Fi dongle has workable.

-					
🔍 命令	;提示字元 - ping 17	72.31.1.33 -t			
Micros((c) Mi	oft Windows [] crosoft Corpo	版本 10.0. ration. 著∙	19043.928 作權所有,] 並保留一切	J權利。
C:\Use:	rs\phoebe.DESH	(TOP-A42VP)	II>ping 1'	72.31.1.33	-t
Ping 1' 回覆自	72.31.1.33 (偵 172.31.1.33:	〕用 32 位元 位元組=32	組的資料 時間<1ms): TTL=64	
回覆自同覆自	172.31.1.33: 172.31.1.33:	位元組=32 位元組=32	時間<1ms 時間<1ms	TTL=64 TTL=64	
回覆百回覆百	172.31.1.33: 172.31.1.33:	位元組=32 位元組=32	時間<1ms 時間<1ms	TTL=64 TTL=64	
回覆目	172.31.1.33:	位元組=32	時間<1ms	TTL=64	

The section provides information about seEng up the Power Share step by step.



ONLY USE THE SPECIAL PATCH CABLE SUPPLIED BY THE MANUFACTURER, CONNECT A STANDARD PATCH CABLE WILL DAMAGE THE ELECTRONICS

Step 1: To set up the PDU, connect Power Sharing cable (orange color) from Power Share port of the PDU A to Power Share port of the PDU B.



Step 2: After connecting power sharing cable, open a web browser from a PC, then the status of the power share is automatically displayed on the **System Overview** webpage. If PDU A is master PDU then the status of power share will display **Active/Main Power** on the **System Overview** webpage.

ystem Overview						
	Overview					
Firmware Version	PWT_v0.30a	32				
PDU Type	3 phase PDU	250V 32A				
		_			-11	
PDU						N
			Input Status			
PDU						
Phase Voltage(V)	Active Power(W)	Apparent Power(VA)	Circuit Breaker 1(A)	Circuit Breaker 2(A)	Total Current(A)	Statu
L1 117.3	12.8	19.7	-		31.03	Critica
			0.08	0.08	0.16	
Power Share	Active / Main Power					

Step 3: When PDU A has utility power fail, the status of power share will display **Active/Backup Power** on the **System Overview** webpage.

	Summary Overview	Power Management	Setting	Log	Advanced	External Links	8 admin	[→ Logout	Languag
Sy	stem Overview								
		Overview		1					
F	firmware Version	PWT_v0.30a32							
P	РОЧ Туре	3 phase PDU 250V 32/	д.						
			_				_	_	
	PDU			_			 11		
				Input S	tatus			_	
	PDU								
	Power Share	Active / Backup Power							
				Outlet 9	tatus				
				CAND INFO				-	
				CIMID INTO	mauon				
	EMD1								

Step 4: At the same, the information of inlet phase load management will not display on the Inlet **Configuration** of the **Power Management** webpage.

	Summary Overview	Power Management	Setting Log	Advanced	External Links	2 admin	[→ Logout L
Inle	et Configuration						
			_	_			
	PDU					101	
			Phase Load	Management			
	PDU						
			Confi	guration			
	PDU						
		Over Load Alarm(W)					
	Critical	3520					
	Warning	88					
		Over Current Alarm (A) C81	Ovi 082	er Total Current Alarm (A)	Over Voltage Alarm (V)	Under Power Factor Alarm (%) ces ces	
	Critical	1 5.50	32.00	63.00	250.0	30.0 80.0	
	Warning	00.36	36.00	53.00	100.0	40.0 00.0	

Step 5: Another, there are some outlets information will not display on the **Outlet Control** of **Power Management** webpage

Summary Overview	Power Management	Setting	Log	Advanced	External Links	admin	[→ Lagout	() Language
Outlet Control								
		_	_	_		_	-	
			PDU					
PDU								

Step 6: The related alarm will be occurred on the **Alarm List** of **Summary Overview** webpage. The alarm will be "PDU (PDU:1) power off".

		Alarm List
Number of Active	Alarms : 4	
Alarm ID	Alarm Time	Alarm Description
56	22/02/2022 11:09:14	Inlet (PDU:1) phase1 pf branch2 was lower than warning set point
57	22/02/2022 11:09:14	Inlet (PDU:1) phase1 pf branch2 was lower than critical set point
3	22/02/2022 13:45:26	(PDU:1) EMD1(EMD-1) temperature was higher than high warning set point
62	24/02/2022 10:22:17	PDU (PDU:1) power off

Step 7: The related log and trap will be recorded on the **Log** of **Event Log** webpage and NMS. The log and trap will be "warning: Inlet (PDU:1) Active/Main Power change to Active/Backup Power ".

			Event Log
From:	24/02/2022	To:	24/02/2022
Device:	All	 Event Leve 	el: Information 🔻
		Apply Clea	r All
Show 10 T	entries per pa	ge	
Date&Time	2	Event Level 🔽	Event Description
24/02/202	2 10:22:18	Information	Inlet (PDU:1) phase1 voltage had returned from warning to normal
24/02/202	2 10:22:17	Warning	Inlet (PDU:1) Active/Main Power change to Active/Backup Power
24/02/202	2 09:57:29	Warning	Inlet (PDU:1) phase1 voltage was higher than warning set point
24/02/202	2 09:57:28	Information	Inlet (PDU:1) Active/Backup Power change to Active/Main Power
24/02/202	2 09:45:17	Information	Inlet (PDU:1) phase1 voltage had returned from warning to normal

pduInletPowerS	ShareMainLose		172.31.34.249	2022-03-01 16	56:42	
Source: Trap OID: Variable Bindi	172.31.34.249 pduInletPowerSh ngs:	Timestamp: areMainLose	3703 hours 53 minut	es 34.67 seconds	SNMP Version: Community:	2 public
Name: Value:	.1.3.6.1.2.1.1.3.0 [TimeTicks] 370	3 hours 53 minutes	34.67 seconds (1333401	467)		
Name: Value:	snmpTrapOID [OID] pduInletPc	werShareMainLos	ð			
Name: Value:	pduTraps [OctetString] Inle	t (PDU:1) Active/M	fain Power change to Ac	tive/Backup Power		
Description:	Warning Active N	fain Power change	to Active/Backup Power			

Step 8: When PDU A has utility power restore, the status of power share will display **Active/Main Power** on the **System Overview** webpage.

	Overview					
Firmware Version	PWT_v0.30	la32				
PDU Type	3 phase PD	U 250V 32A				
		_				
PDU						N
			input status			
PDU						
Phase Voltage	(V) Active Power(W)					
L1 117.3	12.8	19.7				Critical
			0.08	0.08	0.16	
Power Share	Active / Main Power					

Step 9: The related log and trap will be recorded on the **Log** of **Event Log** webpage and NMS. The log and trap will be "Information: Inlet (PDU:1) Active/Backup Power change to Active/Main Power".

			Event Log	ş
From:	24/02/2022	То:	24/02/2022	
Device:	All	 Event Leve 	el: Information V	
		Apply Clear	All	
Show 10 T	entries per pa	ge		
Date&Time		Event Level 🔽	Event Description	
24/02/2022	10:30:47	Warning	Inlet (PDU:1) phase1 voltage was high	er than warning set point
24/02/2022	10:30:46	Information	Inlet (PDU:1) Active/Backup Power ch	ange to Active/Main Power
24/02/2022	10:22:18	Information	Inlet (PDU:1) phase1 voltage had retur	rned from warning to normal
24/02/2022	10:22:17	Warning	Inlet (PDU:1) Active/Main Power chan	ge to Active/Backup Power
24/02/2022	09:57:29	Warning	Inlet (PDU:1) phase1 voltage was high	er than warning set point
and the second second second	hare Main Paratr		172 27 24 249 2022 02 24 0	0.47-27
Autoretes	uareivianityesed			Z-1-+1
Source:	172.31.34.248	Timestamp: Share) (ain Pasotra	4571 hours 17 minutes 58.48 seconds	SNMP Version: 2
Variable Bindin	igs:	MAR COLUMN COURSE		- pasa
Name:	1.3.6.1.2.1.1	3.0		
Value:	[TimeTicks] 4	571 hours 17 minutes	58.48 seconds (1645667848)	
Name:	snmpTrapOID	i)		
Value:	[OID] pduInie	tPowerShareMainRes	otre	
Name:	pduTraps			
Value:	[OctetString]	inlet (PDU:1) Active 5	Backup Power change to Active/Main Power	
Description:	Informational	Active Backup Power	change to Active Main Power.	

Step 10: When user remove power sharing cable, the status of power share will display **Inactive** on the **System Overview** webpage.



Step 11: The related alarm will be occurred on the **Alarm List** of **Summary Overview** webpage. The alarm will be "PDU Power Share disconnected".

		Alarm List
Number of Active	Alarms : 4	
Alarm ID	Alarm Time	Alarm Description
56	22/02/2022 11:09:14	Inlet (PDU:1) phase1 pf branch2 was lower than warning set point
57	22/02/2022 11:09:14	Inlet (PDU:1) phase1 pf branch2 was lower than critical set point
37	24/02/2022 10:30:48	Inlet (PDU:1) phase1 voltage was higher than warning set point
63	24/02/2022 10:55:45	PDU (PDU:1) Power Share disconnected

Step 12: The related log and trap will be recorded on the **Log** of **Event Log** webpage and NMS. The log and trap will be "Warning: Inlet (PDU:1) Active/Main Power change to Inactive".

							Event I	og			
From:	24/02/2022		To:		24/02/2022						
Device:	AII	٣	Event Lev	el:	Information	Ŧ					
		Apply	Clea	r All							
Show 10 *	entries per pag	e									
Date&Time	▼	Event I	Level 🔽	Event	t Description						
24/02/2022	10:55:45	Wa	rning	Inlet	(PDU:1) Activ	e/Main F	Power ch	ange to Ina	ctive		
24/02/2022	10:55:34	Infor	mation	(PDU	:1) EMD1(EM	D-1) tem	perature	had returr	ed from h	igh warnin	g to normal
										•	-
odu Inlet Dou	rerShareBac	Innel				3	201 2010	80.08	100000	1999 - 1998 -	0.20.45
setullitett on		IC 11111	ase			1172 3	31 34 (248	2022	-02-24 1	(PSIPAS)
L.Y.		Rupt	ose			172.3	31.34.2	248	2022	-02-24 1	0:30:45
Source:	172.31.34.2	248 Ti	ose mestamp	4571 seco	hours 18 r	172.3 ninutes	31.34.2 18.46	SNMP	2022 Versior	-02-24 3 (Engi 0x8000	neID: 1F888021
Source: Trap OID:	172.31.34.2 pduInletPov	248 Ti verSh	ose mestamp areBackuj	4571 seco pLose	l hours 18 r nds	172.3	31.34.	SNMP User:	2022 Versior	-02-24 1 3 (Engi 0x8000 test123	neID: 1F88802 4
Source: Trap OID: Variable Bi	172.31.34.2 pduInletPov ndings:	248 Ti verSh	ose mestamp areBackuj	4571 seco pLose	hours 18 r nds	172.3	18.46	SNMP User:	2022 Versior	-02-24 3 (Engi :: 0x8000 test123	neID: 1F88802 4
Source: Trap OID: Variable Bi Name:	172.31.34.2 pduInletPov ndings: .1.3.6.1.2.1	248 Ti verSh	mestamp areBackuj	:4571 seco pLose	i hours 18 r nds	172.3	31.34.	SNMP User:	2022 Version	-02-24 3 (Engi 0x8000 test123	neID: 1F88802 4
Source: Trap OID: Variable Bi Name: Value:	172.31.34.2 pduInletPov ndings: .1.3.6.1.2.1 [TimeTicks	248 Ti verSh .1.3.0] 457	mestamp areBackup 1 hours 1:	24571 seco pLose 8 minu	i hours 18 r nds ites 18.46 s	172.2 ninutes econds	18.46 (1645)	SNMP User: 569846)	2022 Version	-02-24 3 (Engi 0x8000 test123	neID: 1F88802 4
Source: Trap OID: Variable Bi Name: Value: Name:	172.31.34.2 pduInletPov ndings: .1.3.6.1.2.1 [TimeTicks snmpTrapC	248 Ti verSh .1.3.0] 457	mestamp areBackup 1 hours 1	, 4571 seco pLose 8 minu	i hours 18 r nds utes 18.46 s	ninutes econds	18.46 (1645)	SNMP User: 569846)	2022 Version	-02-24 3 (Engi 0x8000 test123	neID: 1F88802 4
Source: Trap OID: Variable Bi Name: Value: Name: Value:	172.31.34.2 pduInletPov ndings: .1.3.6.1.2.1 [TimeTicks snmpTrapC [OID] pduI	248 Ti werSh .1.3.0] 457 DID nletPo	mestamp areBackup 1 hours 1:	#571 seco pLose 8 minu Backu	i hours 18 r nds utes 18.46 s npLose	ninutes econds	18.46 (1645)	SNMP User: 569846)	2022 Version	-02-24 3 (Engi 0x8000 test123	neID: 1F88802 4
Source: Trap OID: Variable Bi Name: Value: Name: Value: Name:	172.31.34.2 pduInletPov ndings: .1.3.6.1.2.1 [TimeTicks snmpTrapC [OID] pduI pduTraps	248 Ti werSh .1.3.0] 457 DID nletPo	mestamp areBackup 1 hours 1: owerShare	4571 seco pLose 8 minu Backu	hours 18 r nds utes 18.46 s upLose	ninutes	13.46 18.46 (1645)	SNMP User: 569846)	Version	-02-24 3 (Engi 0x8000 test123	neID: 1F88802 4