Simply Better Connections

PE4102AJ / PE4102AJ2 / PE4102G

2-Outlet eco PDU Power Controller User Manual

Compliance Statements

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Warning

Operation of this equipment in a residential environment could cause radio interference.

Achtung

Der Gebrauch dieses Geräts in Wohnumgebung kann Funkstörungen verursachen.

KCC Statement

유선 제품용 / A 급 기기 (업무용 방송 통신 기기)
이 기기는 업무용 (A 급) 전자파적합기기로서 판매자 또는 사용자는 이 점을 주의하시기 바라며 , 가정 외의 지역에서 사용하는 것을 목적으로 합니다 .

Industry Canada Statement
This Class A digital apparatus complies with Canadian ICES-003.

CAN ICES-003 (A) / NMB-003 (A)

VCCI Statement

この装置は、クラスA機器です。この装置を住宅環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。 VCCI－A

RoHS
This product is RoHS compliant.

User Information

Online Registration

Be sure to register your product at our online support center:

International	http://eservice.aten.com

Telephone Support

For telephone support, call this number:

International	886-2-8692-6959
China	86-400-810-0-810
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988 1-949-428-1111

User Notice

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed *as is*. Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.

Product Information

For information about all ATEN products and how they can help you connect without limits, visit ATEN on the Web or contact an ATEN Authorized Reseller. Visit ATEN on the Web for a list of locations and telephone numbers:

International	http://www.aten.com
North America	http://www.aten-usa.com

Package Contents

Check to make sure that all the components are in working order. If you encounter any problem, please contact your dealer.

PE4102AJ

- 1 PE4102AJ 2-Outlet eco PDU Power Controller
- 1 user instructions

PE4102AJ2

- 1 PE4102AJ2 2-Outlet eco PDU Power Controller
- 1 user instructions

PE4102G

- 1 PE4102G 2-Outlet eco PDU Power Controller
- 1 power cord
- 1 user instructions

Contents

***Chapter 3.*Basic Operation and First Time Setup**

***Chapter 4.*Browser Operation**

Appendix

About This Manual

This user manual is provided to help you get the most from the 2-Outlet eco PDU Power Controller. It covers all aspects of installation, configuration and operation for the following models:

Model Number	Product Name
PE4102AJ	100-120 V 15A 1U 2-Outlet PDU (NEMA)
PE4102AJ2	100-120 V 15A 1U 2-Outlet PDU (NEMA)
PE4102G	100-240 V 10A 1U 2-Outlet PDU (IEC)

An overview of the information in the manual is provided below.

Chapter 1, Introduction, introduces you to the unit/system. It presents purpose, features and benefits are presented, and its front and back panel components are described.

Chapter 2, Hardware Setup, provides step-by-step instructions for setting up your installation, and explains some basic operation procedures.

Chapter 3, Basic Operation and First Time Setup, explains the procedures that the administrator employs to set up the eco PDU Power Controller network environment, and change the default username and password.

Chapter 4, Browser Operation, describes how to log in to the eco PDU Power Controller with an Internet browser, and explains the layout and components of the user interface.

Chapter 5, Telnet Commands, describes how to connect to and access the eco PDU Power Controller's using Telnet.

Chapter 6, RESTful APIs, specifies how the authorized client configures and controls ATEN device via RESTful APIs.

An Appendix, at the end of the manual provides technical and troubleshooting information.

Note:

- Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit and/or connected devices.
- The product may be updated, with features and functions added, improved, or removed since the release of this manual. For an up-to-date user manual, visit http://www.aten.com/global/en/.

Conventions

This manual uses the following conventions:

`Monospaced`	Indicates text that you should key in.
[ ]	Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
1.	Numbered lists represent procedures with sequential steps.
¨	Bullet lists provide information, but do not involve sequential steps.
>	Indicates selecting the option (on a menu or dialog box, for example), that comes next. For example, Start > Run means to open the *Start* menu, and then select *Run*.
⚠	Indicates critical information.

Chapter 1
Introduction

Overview

Engineered to be an intelligent power distribution solution, the PE4102AJ / PE4102AJ2 / PE4102G Eco PDU Power Controller ships with 2 power outlets in an NEMA / IEC socket configuration. It provides secure, centralized, intelligent, and remote power management of data center IT equipment to minimize operating costs.

The PE4102AJ / PE4102AJ2 / PE4102G features the remote power control function, allowing you to control devices attached to the PDU at the PDU device level from practically any location via a TCP/IP connection. The power sequence design eliminates the risks of power inrush, guaranteeing reliable operation and protecting the overall system health. With the support for eco DC software, it provides an easy method for managing multiple devices, offering an intuitive and user-friendly Graphical User Interface that allows you to configure a PDU device and reboot the device in case any equipment lock-up occurs. Additionally, the auto ping and auto reboot functions ensure devices remain responsive by automatically detecting connection issues and rebooting when necessary. Administrators can switch on/off or set a delay time for each power outlet or individual power outlet group whenever, wherever.

The PE4102AJ / PE4102AJ2 / PE4102G boasts a slim, compact form factor and supports desk mount, wall mount, ensuring easy installation in confined spaces. It is a smart eco PDU power controller tailored for hospitality or retail applications, such as digital signage and video walls, for edge computing devices, including routers, servers, and cameras, or for any data center environments where there is no need to keep the servers powered on at all times.

Features

Power Distribution

- Space-saving slim form factor
- NEMA (PE4102AJ / PE4102AJ2) / IEC (PE4102G) power outlets
- Separates power for the unit's operation and its power outlets—the user interface remains accessible even when an overload condition trips the device's circuit breaker

Remote Access

- Remote power control via TCP/IP and a built-in 10/100 Ethernet port
- Network Interfaces: TCP/IP, UDP, HTTP, HTTPS, SSL, SMTP, ARP, NTP, DNS, SNMP V1&V2&V3, auto sense, Ping, Telnet, Modbus (over TCP/IP)
- Works with web-based eco DC software
- Supports IMAP and POP3 email protocols—allows users to switch PE4102's outlets on/off via email
- Schedule control

Operation

- Local and remote power outlet control (On, Off, Power Cycle) by individual outlets
- Power-on sequencing—users can set the power on sequence and delay time for each port to allow equipment to be turned on in a proper order
- Easy setup and operation via a browser-based user interface
- Receives heartbeat signals from connected devices through PMonitor to verify normal operation and automatically reboots them if no signal is received
- Outlet lock functionality—use of the front panel Power Control Button for the outlet can be disabled to prevent inadvertent button presses

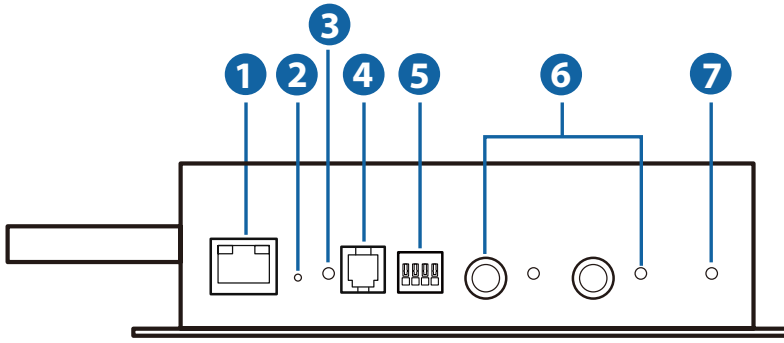
Security

- Two-level password security
- Strong security features include password protection and advanced encryption technologies—TLS1.2 & 1.3
- Remote authentication support: RADIUS

Components

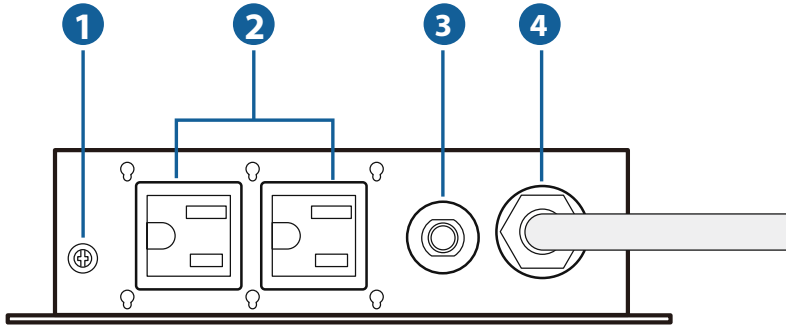
PE4102AJ

Front View



No.	Component	Description
1	LAN port	Connects the unit to the Internet via an Ethernet cable.
2	reset button (recessed)	Press this button with a paper clip or ballpoint pen to reboot the unit. Press and hold the button for more than 3 seconds to restore all device settings to the factory defaults.
3	sensor LED	The external sensor plug into this RJ-11 port, and the sensor LED lights orange when a sensor is connected to the sensor port.
4	sensor port	
5	dry-contact port	The external door sensor plug into this door sensor dry-contact port.
6	power control buttons & LEDs	Each power control button controls the power status of its corresponding AC output port as follow: ◆ Pressing and holding the button in for more than 3 seconds switches the power to its corresponding port on of off. ◆ The LEDs light green to indicate that there is electricity going to its corresponding outlet.
7	device power LED	The device power LED lights orange to indicate the unit is powered up and ready to operate.

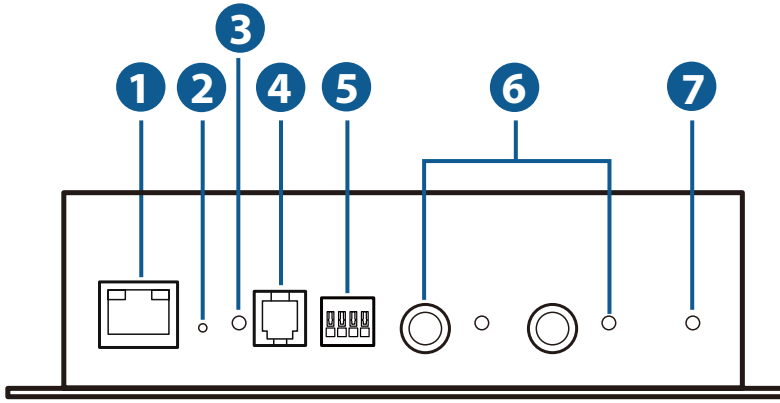
Rear View



No.	Component	Description
1	grounding terminal	Connects to a suitable grounding object.
2	power outlet sockets	Electrical appliances plug in here.
3	circuit breaker	Protects the PDU from damage caused by excess current from an overload or short circuit.
4	power cable	Power cord (attached) for the PE4102AJ.

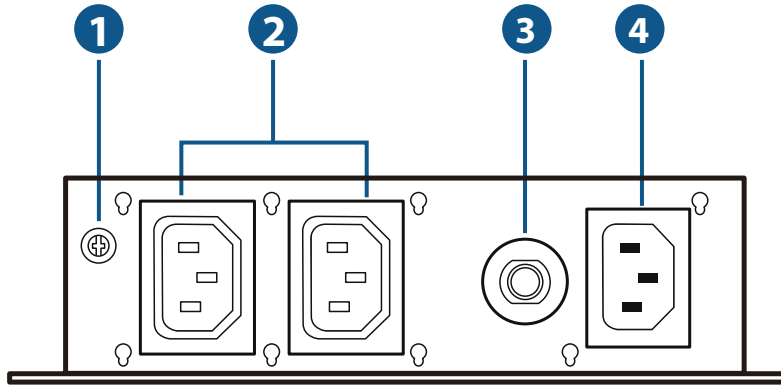
PE4102G

Front View



No.	Component	Description
1	LAN port	Connects the unit to the Internet via an Ethernet cable.
2	reset button (recessed)	Press this button with a paper clip or ballpoint pen to reboot the unit. Press and hold the button for more than 3 seconds to restore all device settings to the factory defaults.
3	sensor LED	The external sensor plug into this RJ-11 port, and the sensor LED lights orange when a sensor is connected to the sensor port.
4	sensor port	
5	dry-contact port	The external door sensor plug into this door sensor dry-contact port.
6	power control buttons & LEDs	Each power control button controls the power status of its corresponding AC output port as follow: ◆ Pressing and holding the button in for more than 3 seconds switches the power to its corresponding port on of off. ◆ The LEDs light green to indicate that there is electricity going to its corresponding outlet.
7	device power LED	The device power LED lights orange to indicate the unit is powered up and ready to operate.

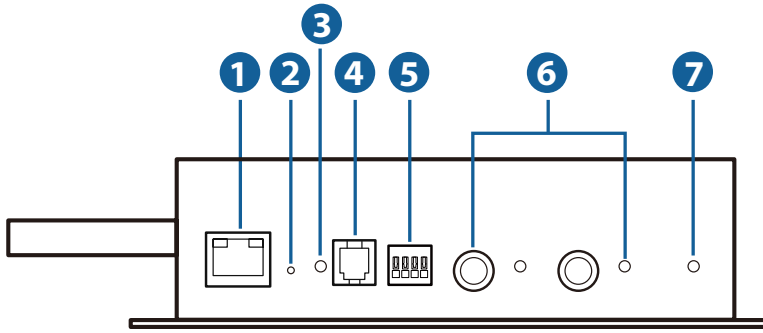
Rear View



No.	Component	Description
1	grounding terminal	Connects to a suitable grounding object.
2	power outlet sockets	Electrical appliances plug in here.
3	circuit breaker	Protects the PDU from damage caused by excess current from an overload or short circuit.
4	power inlet	The power cord of the package content plugs in here.

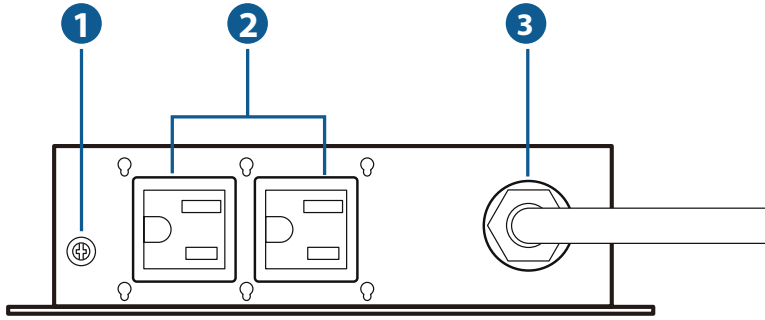
PE4102AJ2

Front View



No.	Component	Description
1	LAN port	Connects the unit to the Internet via an Ethernet cable.
2	reset button (recessed)	Press this button with a paper clip or ballpoint pen to reboot the unit. Press and hold the button for more than 3 seconds to restore all device settings to the factory defaults.
3	sensor LED	The external sensor plug into this RJ-11 port, and the sensor LED lights orange when a sensor is connected to the sensor port.
4	sensor port	
5	dry-contact port	The external door sensor plug into this door sensor dry-contact port.
6	power control buttons & LEDs	Each power control button controls the power status of its corresponding AC output port as follow: ◆ Pressing and holding the button in for more than 3 seconds switches the power to its corresponding port on of off. ◆ The LEDs light green to indicate that there is electricity going to its corresponding outlet.
7	device power LED	The device power LED lights orange to indicate the unit is powered up and ready to operate.

Rear View



No.	Component	Description
1	grounding terminal	Connects to a suitable grounding object.
2	power outlet sockets	Electrical appliances plug in here.
3	power cable	Power cord (attached) for the PE4102AJ2.

This Page Intentionally Left Blank

Chapter 2
Hardware Setup

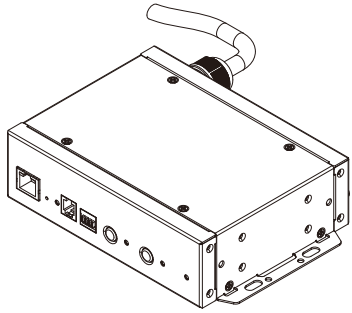
Important safety information regarding the placement of this device is provided on page 107. Please review it before proceeding.

Mounting

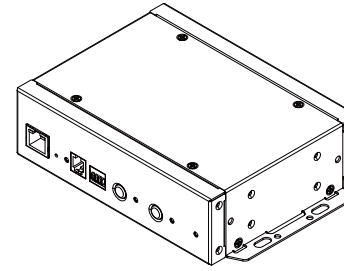
Desktop Mount

Attach the supplied footpads to the underside of the unit, and place it on a stable, level surface that can support both its weight and the weight of the connected cables.

PE4102AJ / PE4102AJ2



PE4102G

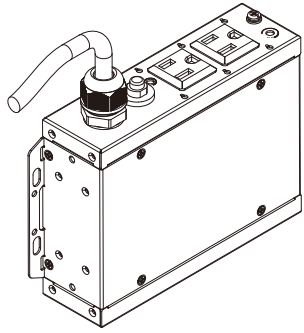


Wall Mount

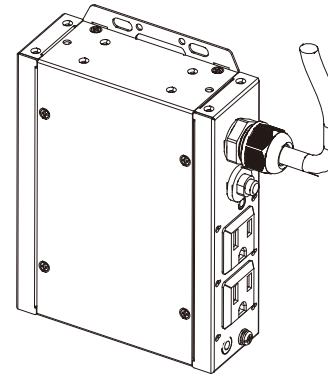
1. Decide a suitable orientation based on your application needs:
   - Horizontal: The outlets are facing upward.
   - Vertical: The outlets can face either left or right.

■ **PE4102AJ**

Horizontal Mount

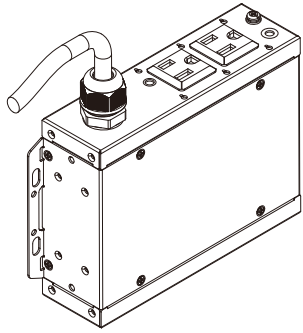


Vertical Mount

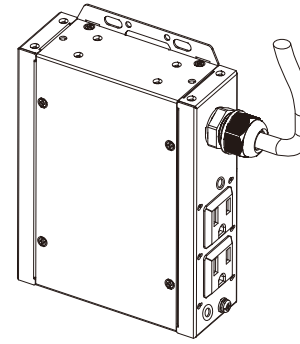


■ **PE4102AJ2**

Horizontal Mount

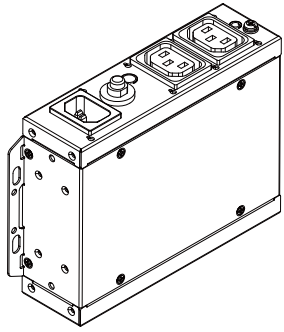


Vertical Mount

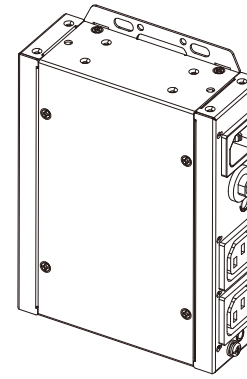


■ **PE4102G**

Horizontal Mount



Vertical Mount



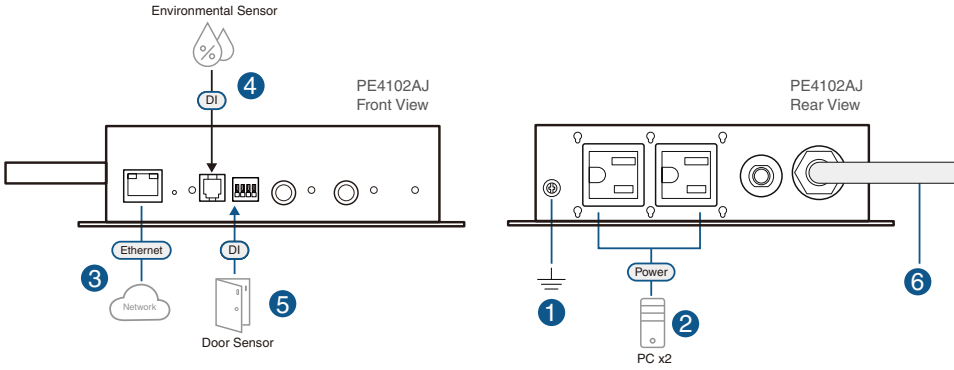
2. Align the mounting brackets with the desired location on the wall. Mark and drill holes as needed, then secure the unit in place using user-supplied screws.

Note: Use four user-supplied screws (4.0 mm × 18.0 mm) to ensure secure mounting.

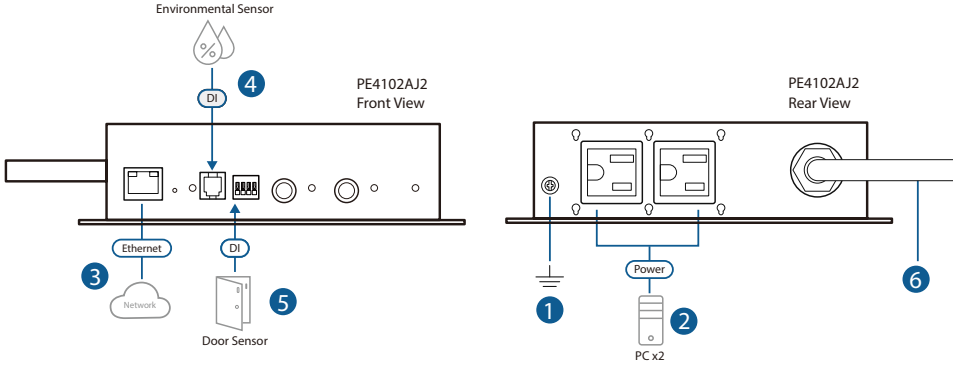
Installation

To set up your 2-Outlet eco PDU Power Controller installation, refer to the installation diagram and the procedure below.

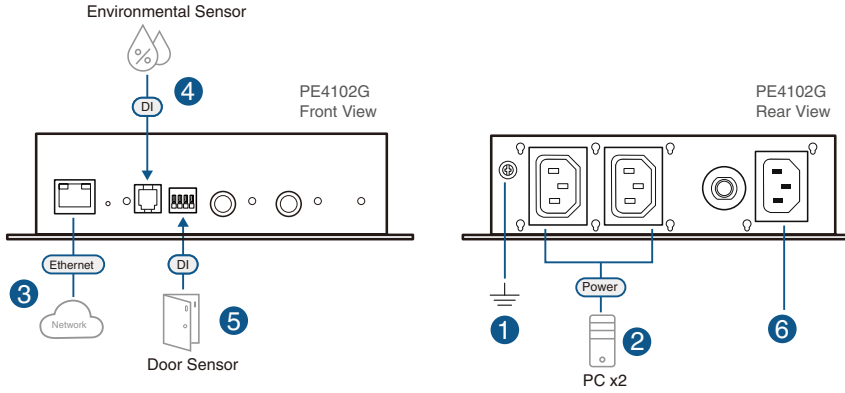
■ PE4102AJ



■ PE4102AJ2



■ PE4102G



Note: Make sure all the equipment you are connecting to the unit is turned off and disconnected from the power source.

1. Ground the PE4102 by connecting one end of a grounding wire to the grounding terminal and the other end to a suitable grounded object.

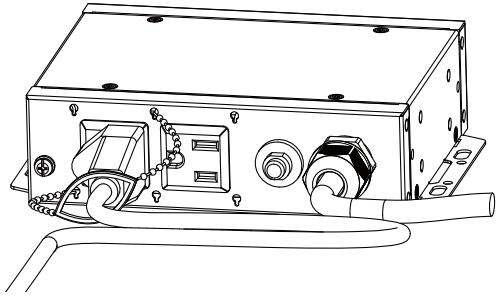
   Note: Do not omit this step. Proper grounding helps prevent damage to the unit from power surges or static electricity.

2. For each device you want to connect, use its power cable to connect the device's AC power inlet to any available outlet on the controller. Use ATEN Lok-U-Plug cable holders to secure the connections. For details, see *Securing the Cable*, page 18.
3. Connect an Internet-enabled LAN cable into the unit's LAN port.
4. (Optional) To use a temperature sensor, humidity sensor, or pressure sensor, connect it to the RJ-11 sensor port.
5. (Optional) To use a door sensor or a leak detector, connect it to the dry-contact port.
6. Supply the unit with power.
   - **PE4102AJ / PE4102AJ2**: Plug the power cord to an AC power source.
   - **PE4102G**: Use the supplied power cord to connect the unit's power inlet socket to an AC power source.
7. Power on the connected devices.

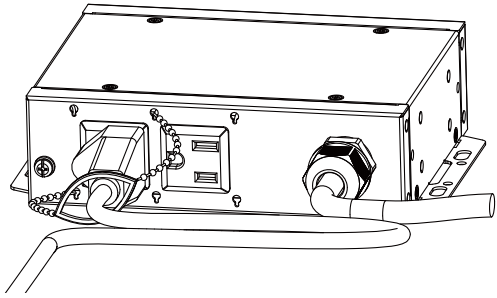
Securing the Cable

For added safety, use ATEN Lok-U-Plug cable holders to secure the cables from your attached devices in place onto the 2-Outlet eco PDU Power Controller. Secure the cable holders using the specially designed holes around the individual power outlets, as shown below:

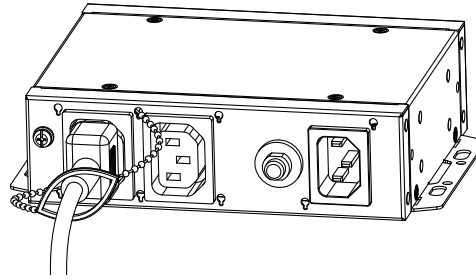
- **PE4102AJ**



- **PE4102AJ2**



- **PE4102G**



Note:

- Lok-U-Plug Cable Holders and their Installation Tools are optional and sold separately.
- Use only the ATEN Lok-U-Plug cable holders that have been specifically designed to work with the eco PDU. Using any other kind of cable securing device could be highly dangerous.

This Page Intentionally Left Blank

Chapter 3
Basic Operation and First Time Setup

Operation Methods

The eco PDU Power Controller provide three methods to access and manage your installation: Browser, eco DC Energy Management Software and SNMP.

Note: The following sections of this chapter contain information concerning Browser operation. For eco DC operation, please refer to the separate eco DC User Manual. The eco DC software and User Manual can be downloaded from the ATEN website.

Browser

The eco PDU Power Controller can be accessed and controlled via any supported Internet browser from any platform. See *First Time Setup*, page 20, and the following sections in this chapter, for full details.

eco DC

The eco DC Energy Management Software. eco DC provides you with an easy method for managing multiple devices, offering an intuitive and user-friendly Graphical Interface that allows you to configure a PDU device and monitor power status of the equipment connected to it. eco DC Energy Management Software can be downloaded from the ATEN website, along with a separate eco DC User Manual.

SNMP

The eco PDU supports any 3rd party V3 SNMP Manager Software. SNMP Management Information Database (MIB) files for the eco PDU device can be found on the software.

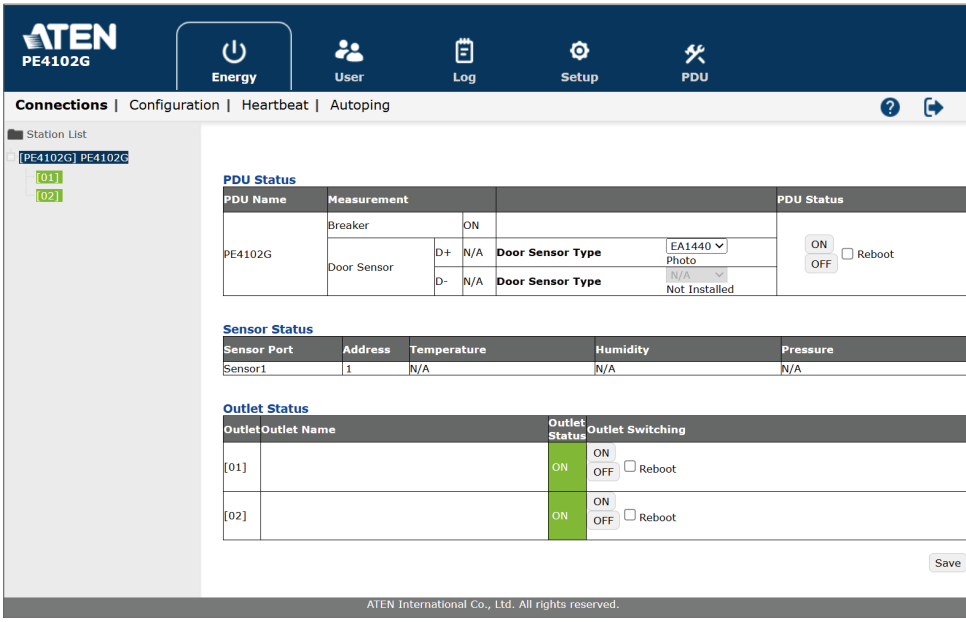
First Time Setup

Once the eco PDU installation has been cabled up, the next task the administrator needs to perform involve configuring the network parameters, changing the default super administrator login settings, and adding users.

The way to accomplish this is to log in via web browser.

Note: Since this is the first time you are logging in, use the default username: *administrator*; and the default password: *password*. For security purposes we recommend changing them to something unique (see *Changing the Administrator Login*, page 22).

After you successfully log in, the eco PDU Energy/Connections page appears:

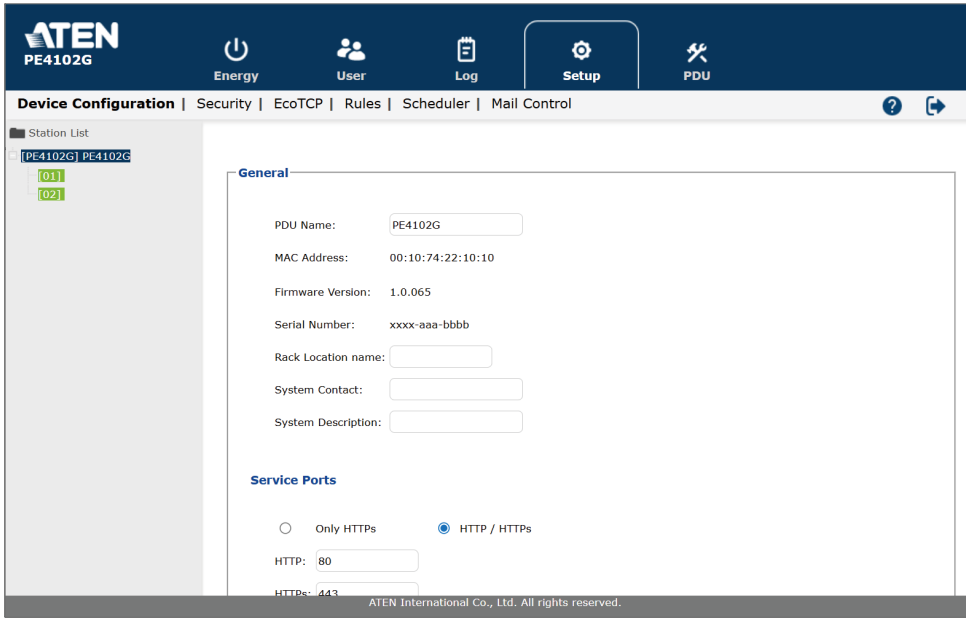


Note: Operation details are discussed in *Energy*, page 28, in the next chapter. For further setup information, continue with this chapter.

Network Configuration

To configure the network settings, do the following:

1. Click the **Setup** tab.
2. The interface displays the **Device Configuration** page. A screen similar to the one below appears:



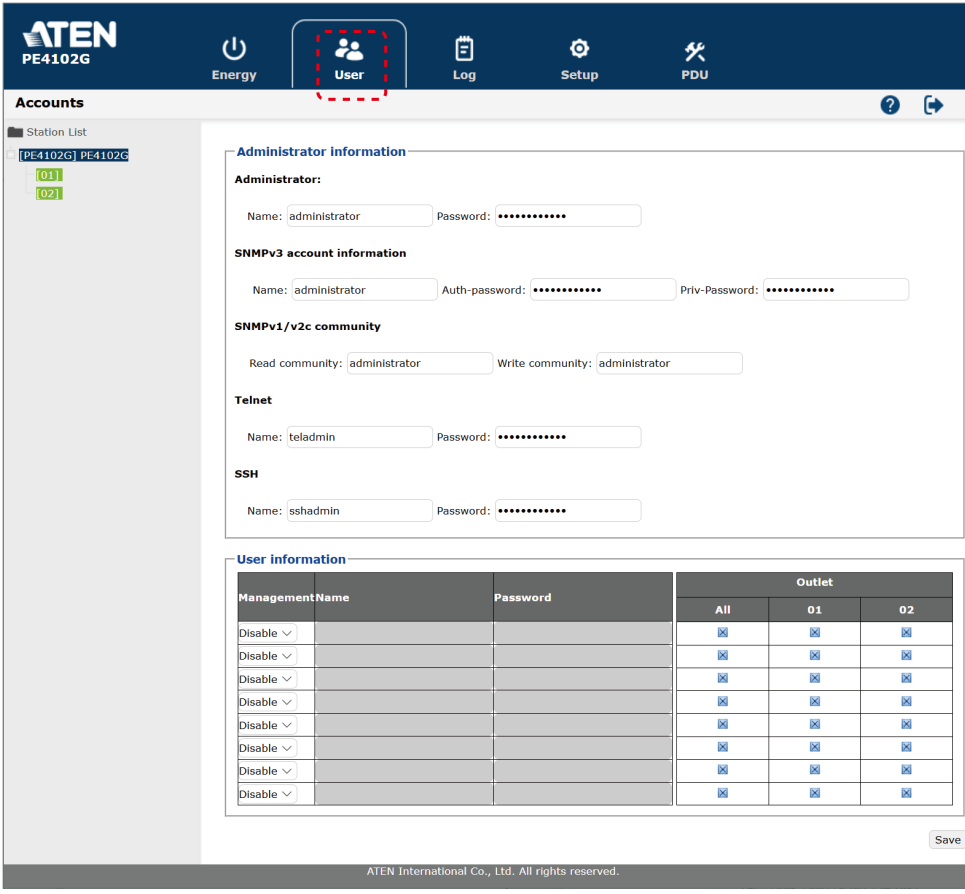
3. Fill in the fields according to the information provided under *Device Configuration*, page 51.

Changing the Administrator Login

To change the default administrator username and password, do the following:

1. Click the **User** tab.

   The *Accounts* page has a detailed list of users—with more information about them—in the large central panel:



2. In the **Administrator Information** section, reset the name and password fields to something unique, then click **Save** (at the bottom of the page.)

Note: If you forget the administrator name or password, press and hold the reset button for more than 3 seconds to restore all device settings to the factory defaults. See *reset button (recessed)*, page 4 PE4102AJ, and *reset button (recessed)*, page 6 for PE4102G in *Components* for full details.

Moving On

After setting up the network and changing the default administrator username and password, you can proceed to other administration activities—including adding users. This is covered in the next chapter.

Chapter 4
Browser Operation

Logging In

The eco PDU Power Controller can be accessed via a supported Internet browser from any platform.

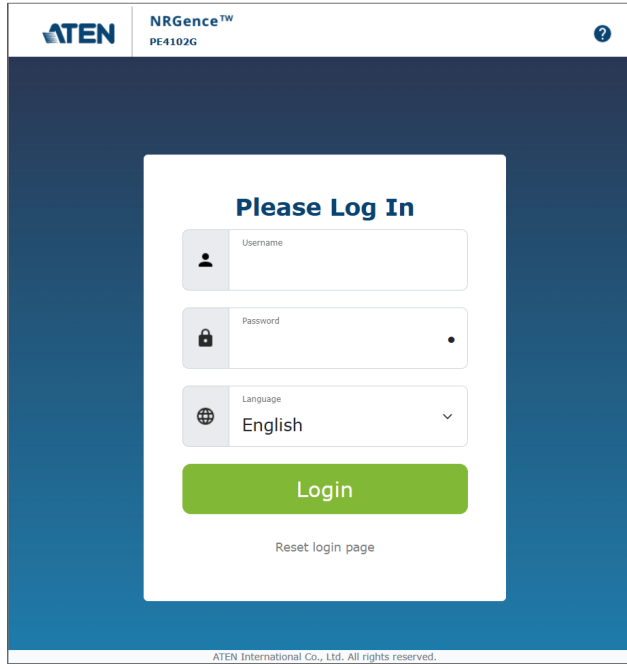
Note: Browsers must support SSL 2048 and 4096 bit encryption.

To access the eco PDU Power Controller:

1. Open a web browser and enter the device's IP address in the address bar.

   Note: The IP address can be obtained from the administrator, or refer to *IP Address Determination*, page 87 for instructions on setting it up yourself.

2. If a Security Alert dialog box appears, accept the certificate—it can be trusted. The Login page appears:

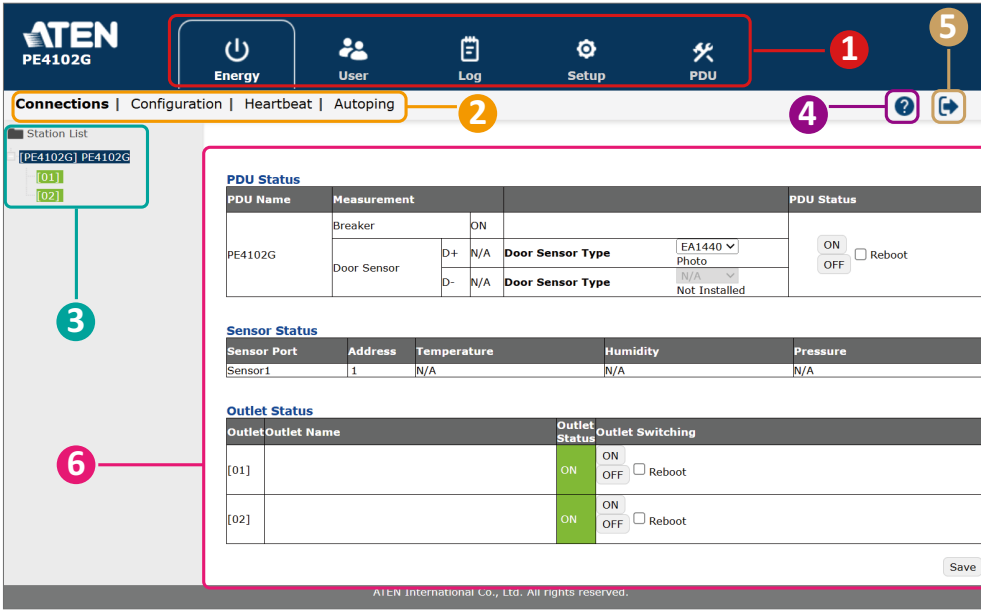


3. Enter the username and password assigned by the administrator, and select the desired language from the following options: English (default), Traditional Chinese, Simplified Chinese, Japanese, German, Italian, Spanish, French, Russian, Korean, and Portuguese.

4. Click Login to bring up the browser Main Page.

The eco PDU Main Page

After you have successfully logged in, the eco PDU Power Controller Main Page comes up with the Energy *Connections* page displayed:



Note: The screen depicts an administrator's page. Depending on a user's type and permissions, not all of these elements appear.

Page Elements

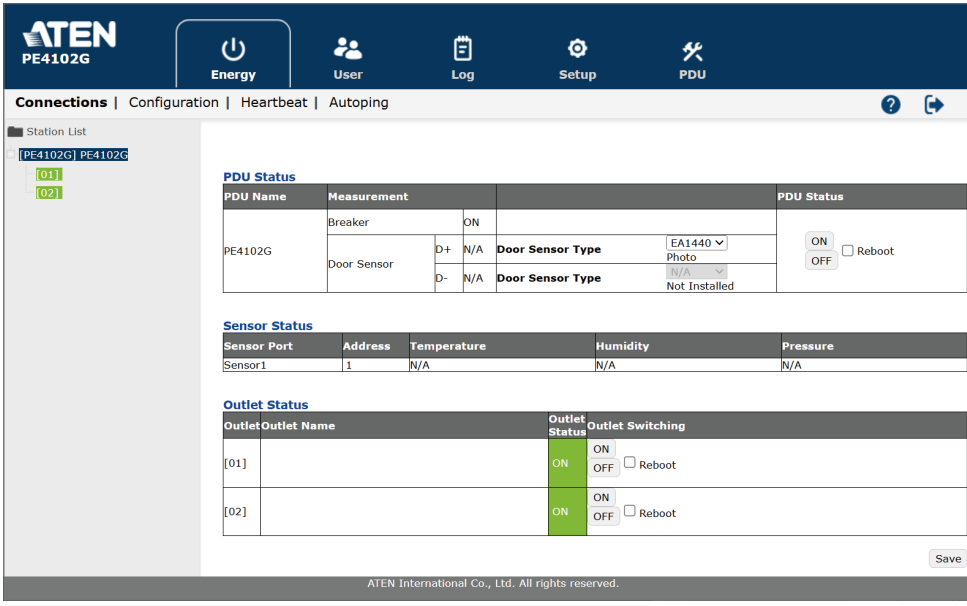
The web page interface components are described in the table, below:

No.	Item	Description
1	Tab Bar	The tab bar contains the eco PDU Power Controller's main operation categories. The items that appear in the tab bar are determined by the user's type, and the authorization options that were selected when the user's account was created.
2	Menu Bar	The menu bar contains operational sub-categories that pertain to the item selected in the tab bar. The items that appear in the menu bar are determined by the user's type, and the authorization options that were selected when the user's account was created.
3	Sidebar	The Sidebar provides a tree view listing of outlets that relate to the various tab bar and menu bar selections.
4	Help	Connects to on-line help at the ATEN website for the device's configuration and operation.
5	Logout	Click this button to log out of your eco PDU Power Controller session.
6	Interactive Display Panel	This is your main work area. The screens that appear reflect your menu choices and Sidebar node selection.

Energy

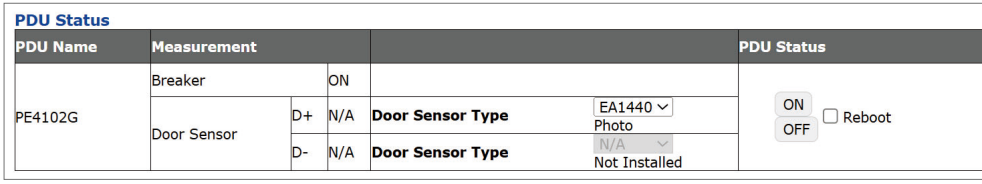
Connections

When you log in to the eco PDU Power Controller, the interface opens with its default selection of the *Energy* tab; and the *Connections* menu. The contents of the **PDU Status**, **Sensor Status**, and **Outlet Status** sections are displayed in the main panel.



PDU Status

The eco PDU Power Controller supports PDU device level monitoring. The **PDU Status** section allows you to set up a power management configuration for the PDU device as a whole:



- **Breaker On / Off**

  This field indicates the breaker status.

  On: Breaker status is normal

  Off: Breaker is switched off and you have to manually switch the breaker to **On**.

- **Door Sensor Type**

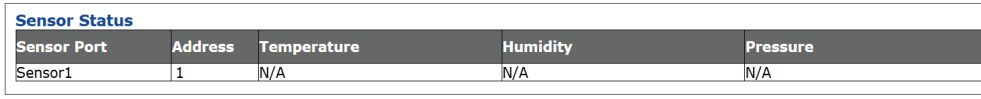
  You can choose a door sensor type for the connected door sensor by checking the available radio buttons.

- **PDU Status (On / Off / Reboot)**

  You can manually turn the device On and Off from this page by clicking the buttons. To Reboot the device, enable the Reboot checkbox and click on **Off**.

Sensor Status

If you have sensors installed in your installation, use these fields to set the maximum, minimum and fluctuation threshold settings for Temperature, Humidity, and Differential Pressure.



Sensor Status

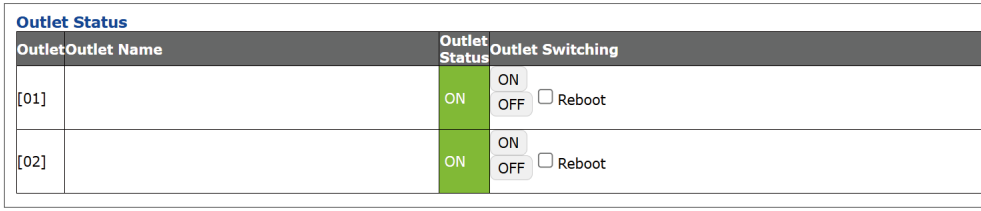
Sensor Port	Address	Temperature	Humidity	Pressure
Sensor1	1	N/A	N/A	N/A

Make sure to click **Save** button (located at the bottom of the page) once you have finished making your Sensor Status settings.

Note: Sensors are optional accessories. Check with your dealer for information about eco DC software.

Outlet Status

The eco PDU Power Controller supports on, off and reboot control from the outlet status column for each outlet.



Outlet Status

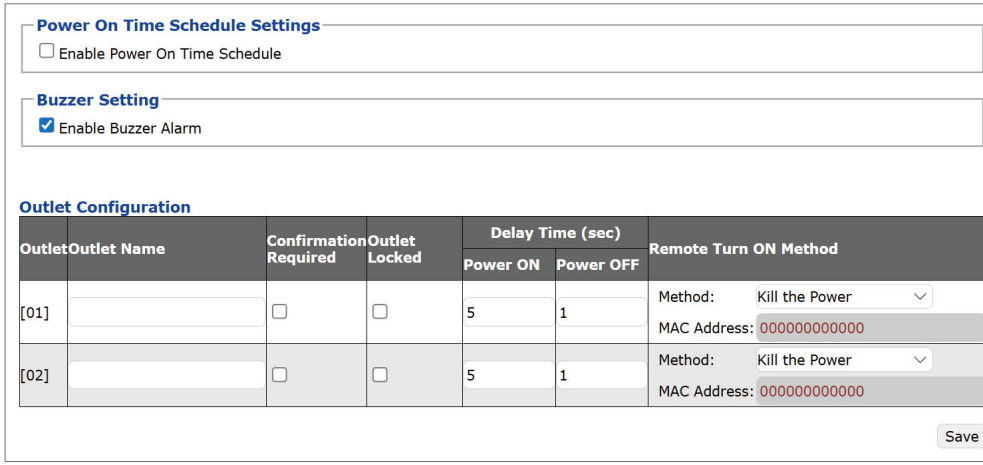
Outlet	Outlet Name	Outlet Status	Outlet Switching
[01]		ON	ON OFF Reboot
[02]		ON	ON OFF Reboot

- **On / Off / Reboot**

  You can manually turn the outlet On and Off from this page by clicking the buttons. To Reboot the outlet, enable the Reboot checkbox and click on Off.

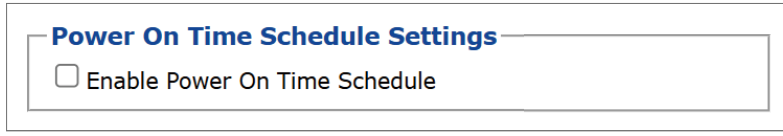
Configuration

The *Configuration* page is used to configure the settings of the eco PDU Power Controller at the individual power outlet level.



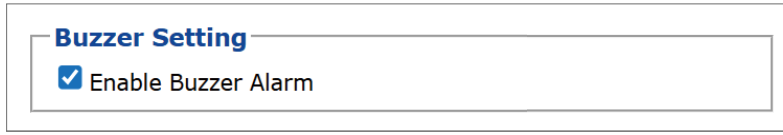
Power On Time Schedule Settings

Check the **Enable Power On Time Schedule** box to use the *Power ON Delay* setting to set the amount of time the eco PDU waits before powering on an outlet. See *Power ON Delay* in the table on the next page.



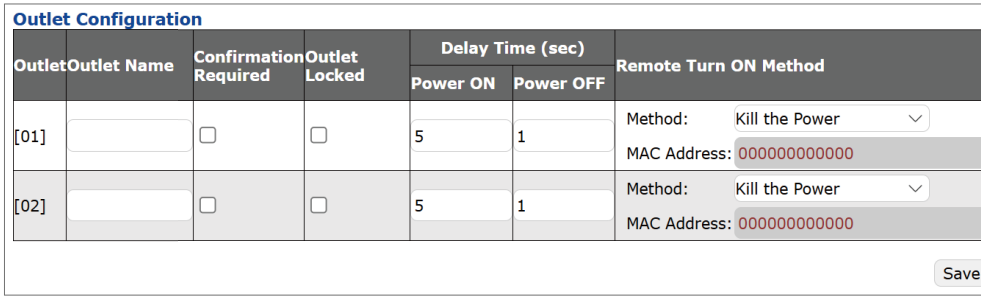
Buzzer Setting

Checking the **Enable Buzzer Alarm** box sounds an alarm and sends SNMP trap or e-mail alerts when a threshold setting exceeds the minimum or maximum setting.



Outlet Configuration

The *Outlet Configuration* section lets you set the power management settings for each outlet on the PDU.



Control/Display	Description
Outlet	Shows the port number of the listed outlet.
Outlet Name	Each outlet can be given a distinctive name. The maximum number of characters is 48.
Confirmation Required	If this option is enabled (there is a check in the checkbox), a dialog box comes up asking you to confirm a power operation before it is performed. If it is disabled (there is no check in the checkbox), the operation is performed without confirmation.
Outlet Locked	To lock the power control buttons on the unit to prevent accidental button press, enable this function by checking the checkbox and then click on **Save** (located at the bottom of the page). See *power control buttons & LEDs*, page 4.
Delay Time (sec) Power ON	Sets the amount of time the eco PDU waits after the Power Button is clicked (see *Outlet Status*, page 30), before it turns on the power to the outlet. You must check the *Enable Power On Time Schedule Setting* box for this setting to take effect. See *Power On Time Schedule Settings*, page 31, for details. **Note:** The default delay time is 5 seconds; the maximum is 999 seconds. When a series of outlets are scheduled to be powered up, they turn on in sequence with a default delay of 10 milliseconds between each outlet.

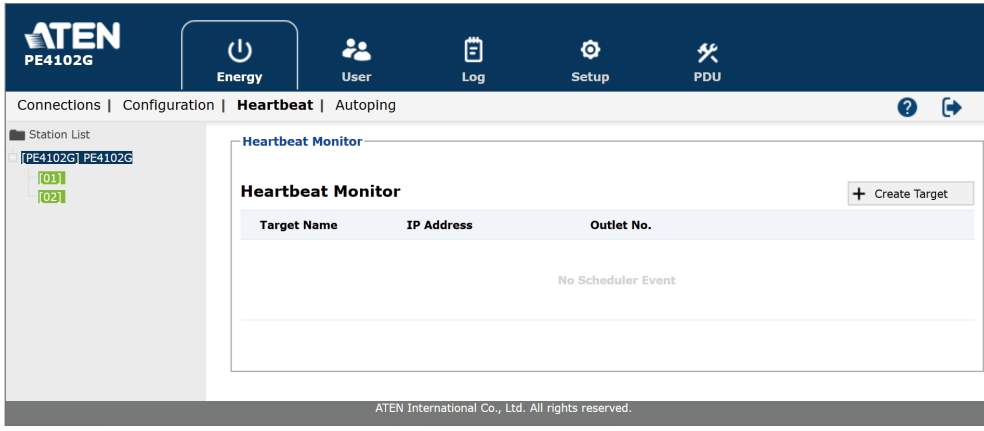
Control/Display	Description
Delay Time (sec) Power OFF	Sets the amount of time the eco PDU waits after the Power Button is clicked (see *Outlet Status*, page 30), before it turns off the power to the outlet. For the *System after AC Back* option (see below), after the delay time expires, the eco PDU waits another fifteen seconds, then shuts the computer down. The default delay time is 1 second. The maximum delay time is 999 seconds.
Remote Turn ON Method	Use the drop-down menu to select one of the choices, below: ◆ **Wake on LAN** This is a Safe Shutdown and Restart option. If this is selected, when an Outlet is turned Off, the eco PDU first sends a message to the computer telling it to prepare for a shutdown; it then waits for the amount time set in the *Power Off Delay* field to give the OS time to close down before the computer is powered down to standby mode. Likewise, when the Outlet is turned On, the eco PDU waits for the amount time set in the *Power On Delay* field, then sends an Ethernet message to the computer connected to the Outlet telling the computer to turn itself On. **Note:** For Safe Shutdown and Restart, the computer must be running Windows (98 or higher), or Linux, and the *Safe Shutdown* program (available by download from our website), must be installed and running on the computer. *(Continues on next page.)*

Control/Display	Description
Remote Turn ON Method	*(Continued from previous page.)* ◆ **System after AC Back** This is a Safe Shutdown and Restart option. If this is selected, when an Outlet is turned Off, the eco PDU first sends a message to the computer telling it to prepare for a shutdown; it then waits for the amount time set in the *Power Off Delay* field to give the OS time to close down before the computer is powered down. When the Outlet is turned On, the eco PDU waits for the amount time set in the *Power On Delay* field, then sends power to the server. When the server receives the power, it turns itself on. **Note:** For Safe Shutdown and Reboot, the computer must be running Windows (98 or higher), or Linux, and the *Safe Shutdown* program (available by download from our website), must be installed and running on the computer. ◆ **Kill the Power** If this option is selected, the eco PDU waits for the amount time set in the *Power Off Delay* field, and then turns the Outlet's power Off. Turning the power off performs a cold (non-safe) shutdown.
MAC Address	In order to use either of the Safe Shutdown and Restart methods the MAC address of the computer connected to the outlet must be filled in here.

When you have finished making your configuration settings, click **Save**.

Heartbeat

The *Heartbeat* page helps you to monitor the connected devices by setting your target device(s) to send the data packet to the eco PDU Power Controller. You can define the mechanisms to instruct the eco PDU Power Controller to monitor the connected device(s) and control when the outlet(s) is rebooted.



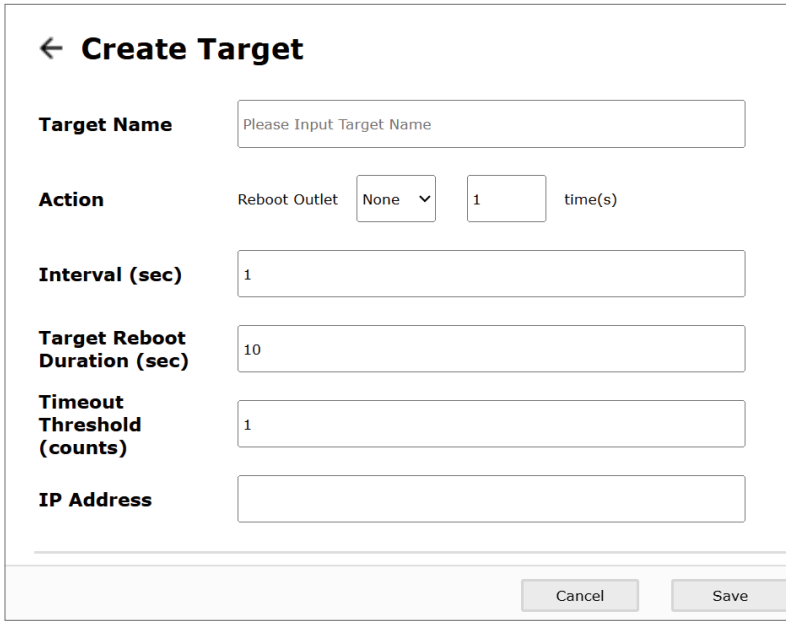
Make sure to install the ATEN utility, Power Monitor, to your PC before configuring **Heartbeat Monitor** settings. You can download the Power Monitor installer from the *Support and Downloads* tab of the product page.

Software & Drivers

OS	Description	Ver.	Release Date	File Name
MIB File				
	PG MIB File (PG & PE_ATB)	v1.2.113	2024-12-20	PG_MIB_v1.2.113.zip
Other				
Linux	PMonitor	v1.1.107	2013-03-08	PMonitor_linux_v1.1.107.zip
Windows	PMonitor	v1.0.081	2012-02-10	PMonitorSrv_v1.0.081.zip

Create a New Target

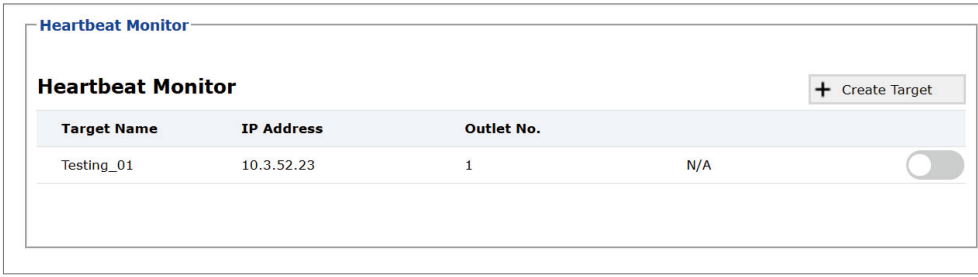
To create a new target, click on the **+Create Target** button to enter *Create Target* page, and fill in the following fields:



Item	Description
Target Name	Enter the name for the target device.
Action	Select the outlet to be rebooted, and define how many times you'd like to reboot the selected outlet. “None” means no outlet will be rebooted.
Interval (sec)	Set the period between two data packets receive events.
Target Reboot Duration (sec)	Set the delay time to instruct the eco PDU Power Controller to wait after the selected outlet is successfully rebooted. The eco PDU Power Controller will not start to receive data packets from the target device till the delay time is reached.
Timeout Threshold (counts)	Determine the number of times that the eco PDU Power Controller performs the action “Interval (sec)” and receives no data packets before rebooting the selected outlet.

Item	Description
IP Address	Enter the IP address of the target device.
Cancel / Save	Click on Save button to finish your settings, or click on Cancel button to discard the changes.

Save your settings, and now the target is created and listed on the *Heartbeat Monitor* list.

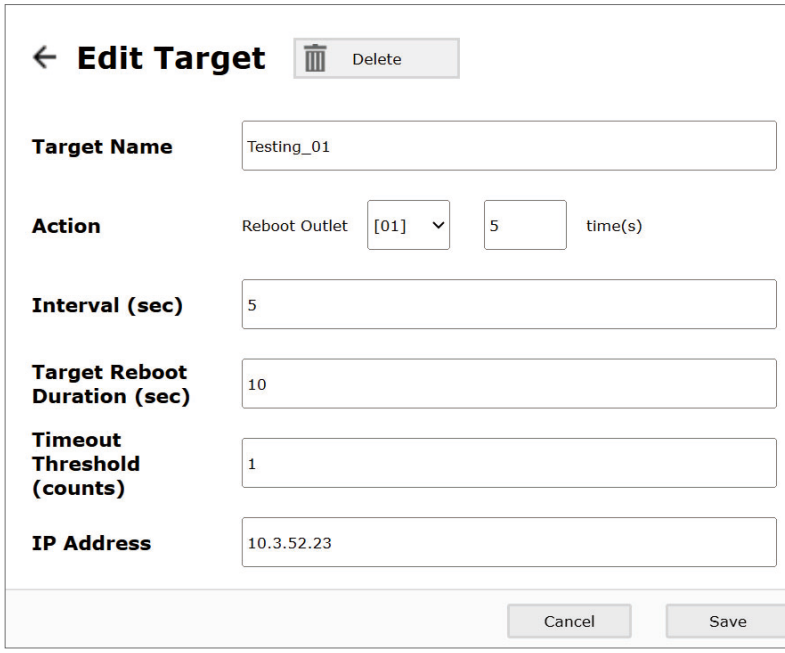


Monitor, Edit, and Delete a Target

Heartbeat Monitor list delivers the following information:

Item	Description
Target Name	The name of the target device
IP Address	The IP address of the target device
Outlet No.	The outlet you selected to reboot once the criteria are triggered
Online / Offline / N/A	The status of the target device
Switch	The switch button to enable or disable the control and monitoring mechanisms

To edit or delete a target, click on the target to be edited to enter the *Edit Target* page.

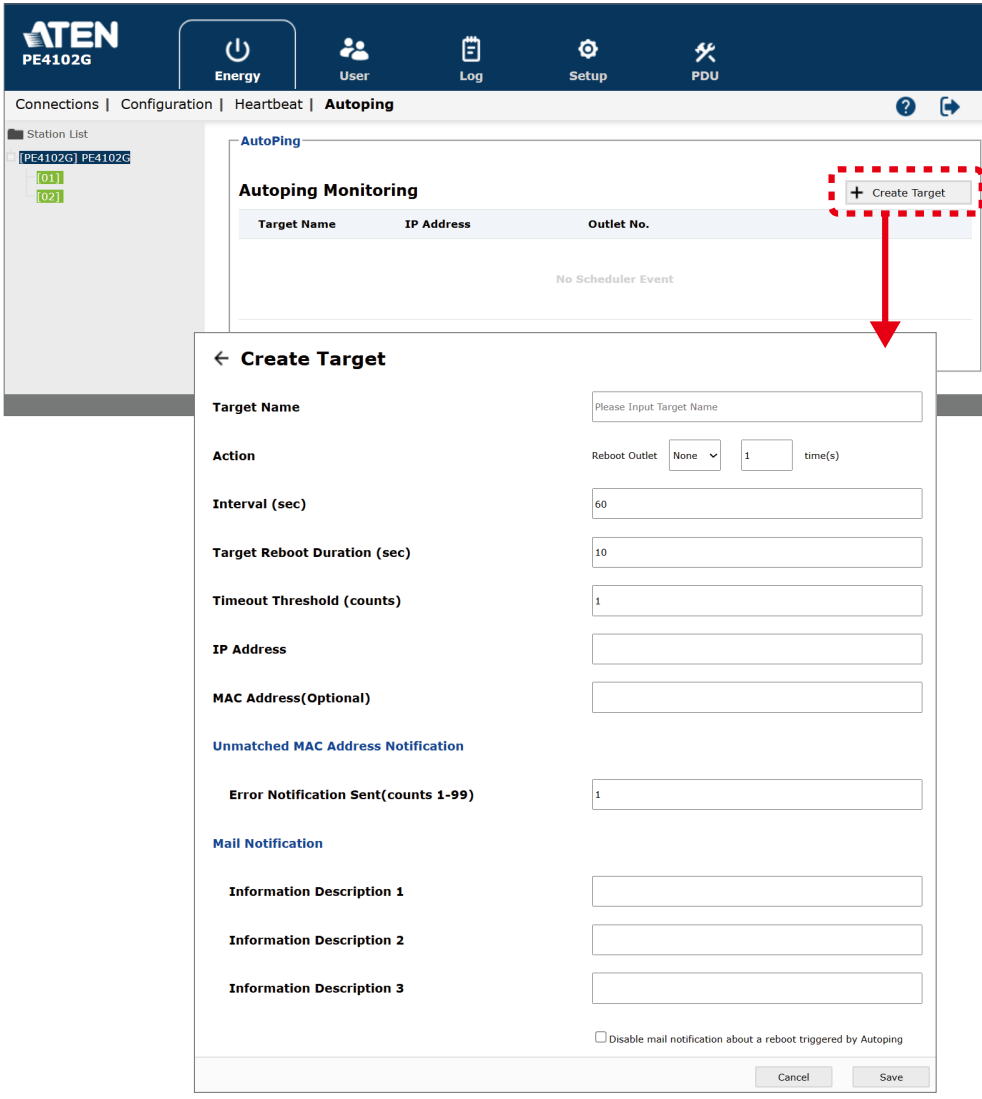


On the *Edit Target* page, you may:

- Make changes of the settings and click on **Save** button to apply the changed settings.
- Click on **Cancel** button to discard your changed settings.
- Click on **Delete** button to remove the target from *Heartbeat Monitor* list.

Autoping

Autoping Monitoring defines the mechanism the eco PDU Power Controller uses to ping a device and reboot the outlet when the target becomes unreachable. To enable this setting, you must first create a target



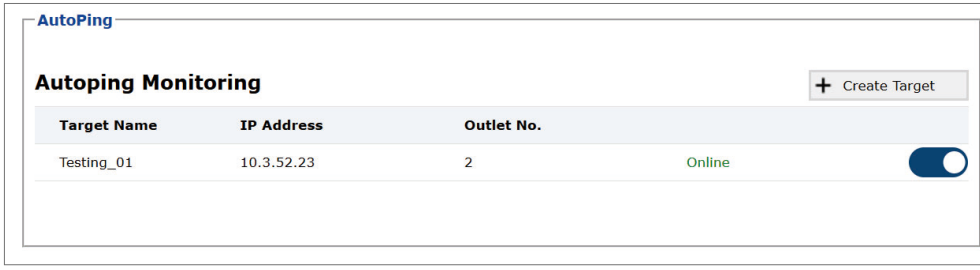
Create a New Target

To create a new target, click on the **+Create Target** button to enter *Create Target* page, and fill in the following fields:

Item	Description
Target Name	Enter the name for the target device.
Action	Specify the maximum number of times the eco PDU Power Controller reboots the outlet of the target device after consecutive ping failures. Select None if no outlet reboot is required.
Interval (sec)	Enter the interval, in seconds, between each auto-ping sent to test the network device.
Target Reboot Duration (sec)	Set the delay time for the eco PDU Power Controller to wait after the target outlet is successfully rebooted. The controller does not resume pinging until this delay time has elapsed.
Timeout Threshold (counts)	Specify the number of consecutive failed ping attempts (based on the interval setting) before the eco PDU Power Controller reboots the target outlet.
IP Address	Enter the IP address of the device to be pinged.
MAC Address (Optional)	Enter the MAC address of the target device. This enables MAC verification for error notification.
Unmatched MAC Address Notification	
Error Notification Sent (counts 1-99)	Specify the number of repeated error notifications to be sent when the MAC address does not match the configured value. When this setting is enabled, email notifications are generated as shown in the example below.
Mail Notification	
Information Description	Enter up to three custom text strings. These will appear in the body of the notification email when an error is triggered.
Disable mail notification about a reboot triggered by Autoping	Select this option to suppress intermediate reboot notifications during an Autoping cycle. For example, if the outlet is set to reboot y times, notifications for the intermediate on/off events are not sent. Only the final “unreachable” notification will be delivered.

Item	Description
Cancel / Save	Click Save to apply the settings, or click Cancel to discard changes.

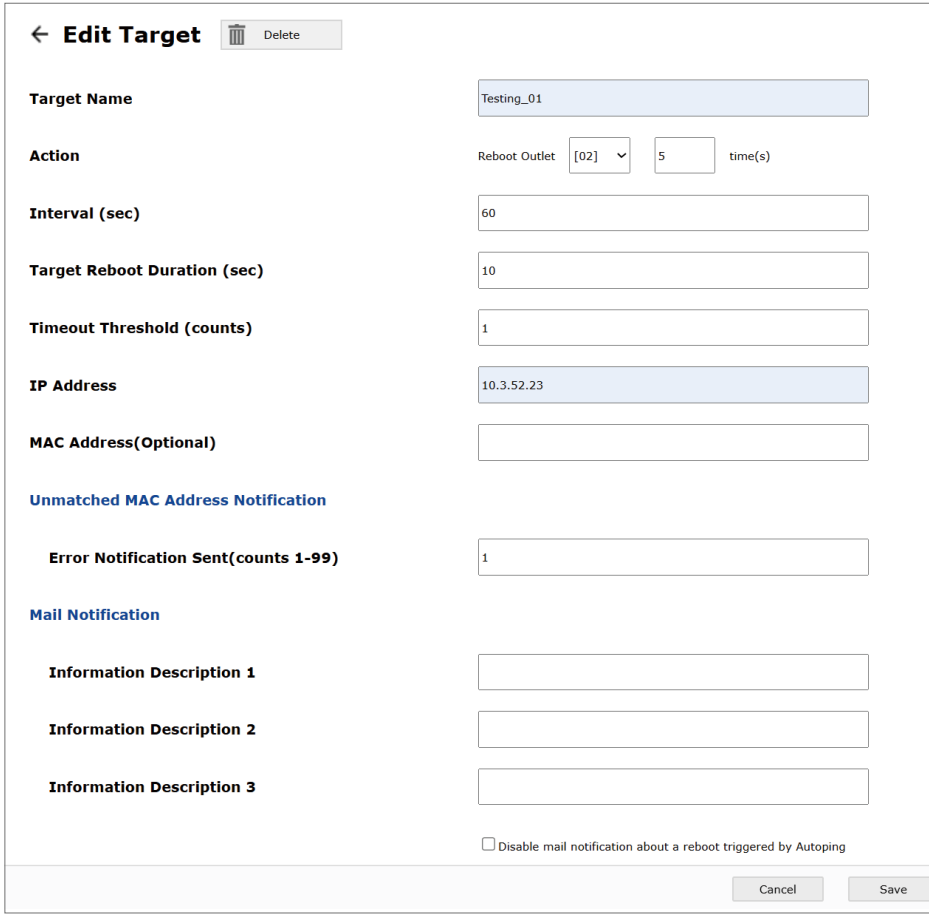
Once the autoping target is created, it is listed on the Autoping Monitoring list with the following information displayed:



Item	Description
Target Name	The name of the target device
IP Address	The IP address of the target device
Outlet No.	The outlet you selected to reboot once the criteria are triggered
Online / Offline / N/A	The status of the target device
Switch	The switch button to enable or disable the control and monitoring mechanisms

Monitor, Edit, and Delete a Target

To edit or delete a target, click on the target to be edited to enter the *Edit Target* page.



On the *Edit Target* page, you may:

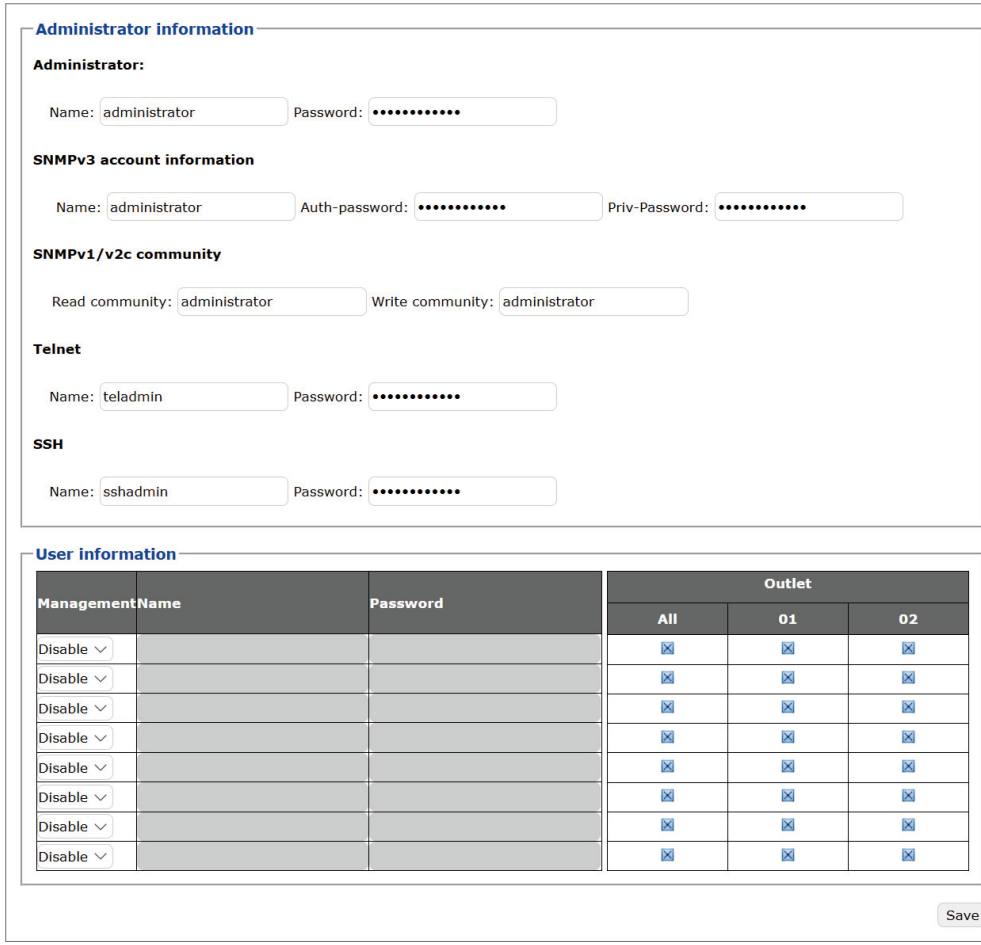
- Make changes of the settings and click on **Save** button to apply the changed settings.
- Click on **Cancel** button to discard your changed settings.
- Click on **Delete** button to remove the target from *Heartbeat Monitor* list.

User

When you select the *User* tab the screen comes up with *Administrator Information* and *User Information* displayed in the main panel. The eco PDU Power Controller supports one administrator account and up to eight user accounts.

Note: 1. Each account can support 2 login sessions.

2. The eco PDU Power Controller supports a total of 3 concurrent login sessions.



Note: There is a pre-installed administrator account. It can be used to set up the device and to begin creating users. The username for this account is *administrator*; the password is *password*. For security purposes, we strongly recommend changing these to something unique.

Administrator Information

This section is used to set the administrator name and password. Only administrators can view this section. For details, see *Changing the Administrator Login*, page 22.

SNMPv3 Account Information

- Enter values for **Name**, **Auth-Password** and **Priv-Password** for SNMPv3 authentication, if required.

SNMPv1/v2c Community

- Enter values **Read community** and **Write community** for SNMPv1/V2c authentication, if required.

Telnet

- Use the Name and *Password* fields to change the account used to login via Telnet sessions.

SSH

- Enter values in the required fields to change the account used to login via SSH.

When you have finished making your configuration settings, click **Save**.

User Information

To add a user, do the following:

1. Select the Enable or Disable in the Management drop-down menu.
2. Key in a name and password in the Name and Password fields.
3. Set the outlet-by-outlet permissions of the user in the Outlet field.
4. Click *Save* to save your settings.

Note: Values must be entered in both the Name and Password fields in order to enable an account.

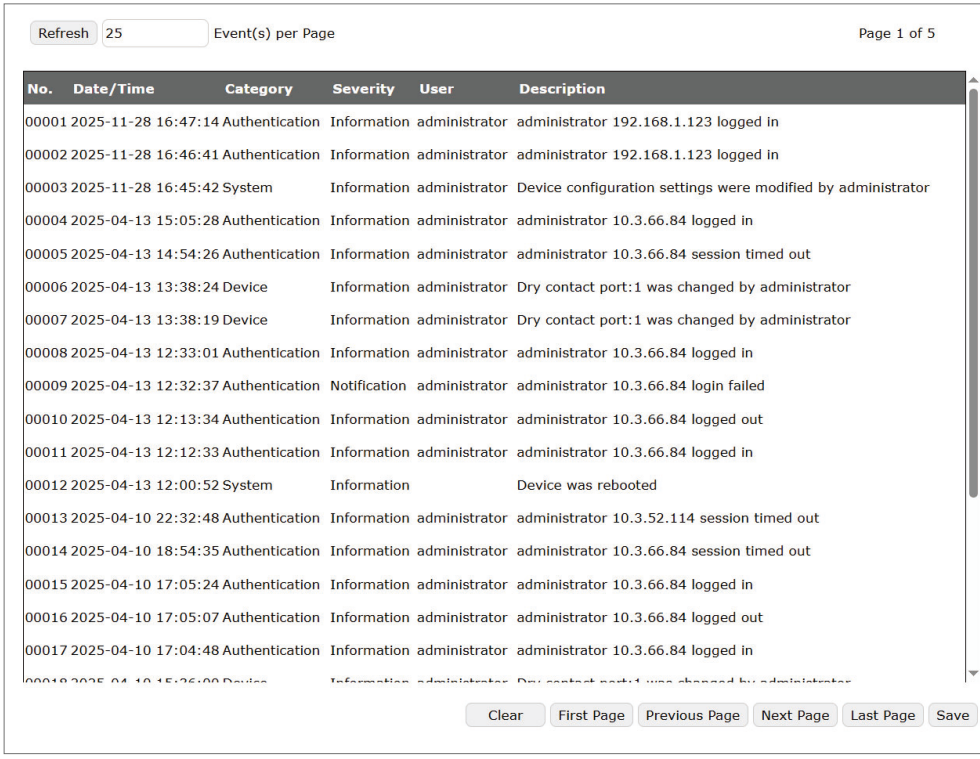
The various options are explained in more detail in the following table:

Field	Description	
Management	The Management field allows you to Enable or Disable a user's account: ◆ **Enable**: Stores the user account (see *User Information*, page 45 ◆ **Disable**: Disables the user account	
Name	From 1 to 16 characters are allowed depending on the Account Policy settings. See *Account Policy*, page 63.	
Password	From 1 to 16 characters are allowed depending on the Account Policy settings. See *Account Policy*, page 63.	
Outlet	This field allows you to set the outlet-by-outlet permissions of the user. Click on the user/port icon to cycle through the three permissions options, as follows:	
		User has complete access to this outlet.
		User has read-only access to this outlet.
		User has no access to this outlet.

When you have finished making your configuration settings, click **Save**.

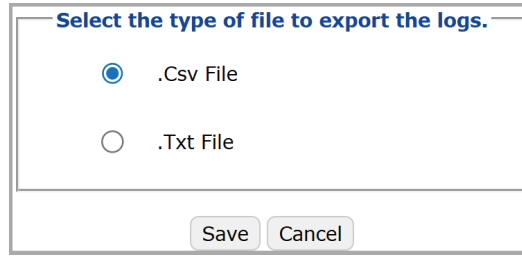
Log

The *Log* tab keeps a record of transactions that take place on its installation, and stores up to 1024 events at one time. The *System Log* page provides a powerful array of filters and functions that allow you to view and export the log file data, as well as be informed by email of specified events as they occur.



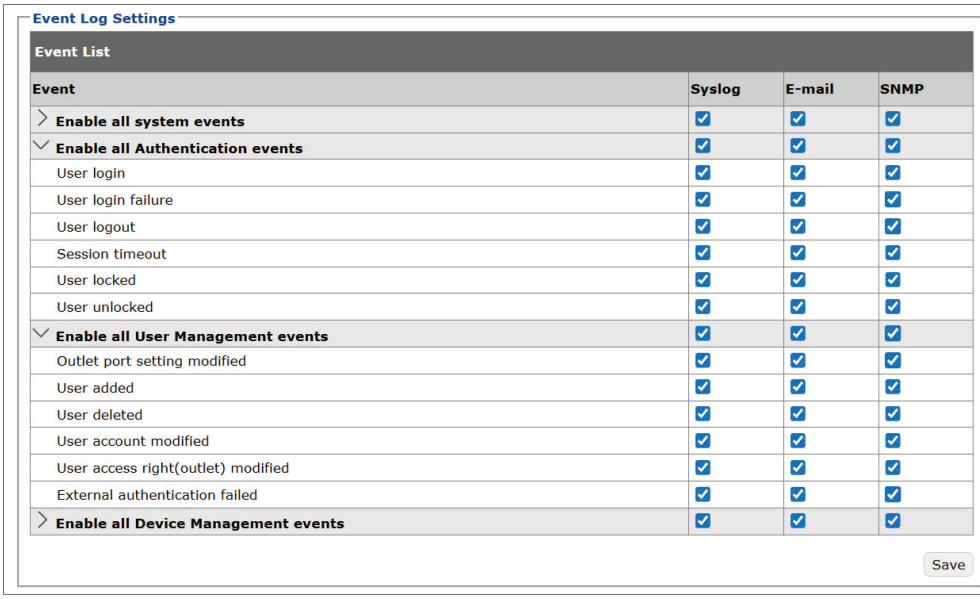
System Log

- Clicking on a device in the Sidebar displays its log events in the main panel's log event list.
- Clicking the **Refresh** button brings the log list up to date with the latest events.
- The entry box to the right of the Refresh button lets you set the number of events to display per page. Simply key in the number of your choice.
- The top right of the main panel shows the total number of pages in the log file, and what page you are currently viewing.
- The buttons on the bottom row function as follows:
  - **Clear**: Click to erase the contents of the log event list
  - **First Page**: Click to go to the first page of the log event list
  - **Previous Page**: Click to move to the previous page of the log event list
  - **Next Page**: Click to move to the next page of the log event list
  - **Last Page**: Click to move to the last page of the log event list
  - **Save**: Click to save the contents of the log event list to file. Select .csv or .txt type, can click **Save**.



Notification Settings

The *Notification Settings* page is used to specify which of the eco PDU Power Controller's components will receive notification of a log event. When you click the Notification Settings menu item, a page similar to the one below appears:



- The event categories are listed in the left column.
  - When you first open the page, only the main category items appear. (Main category item rows have a gray background.)
  - Sub-category items are nested under the main category headings. Click the arrow in front of the main category headings to display the subcategory items. (Sub-category item rows have a white background.)
- Click the checkboxes under the column headings to select which component(s) will receive notification of the log events.
  - Clicking on a main category heading's row automatically selects all the sub-category items nested below it.
  - If you only want to set notification for some of the sub-category events, don't put a check in the main category row. Instead, drop down the sub-category list, and only check the sub-category events you want.

- When you have finished making your setting choices, click Save. When a specified log event occurs, notification of that event will be sent to the selected component.
- Reset Digital Output: If an event has been triggered that changes the digital output sensor from Low to High, click this button to return the sensor to the Low state.

When you have finished making your configuration settings, click **Save**.

Setup

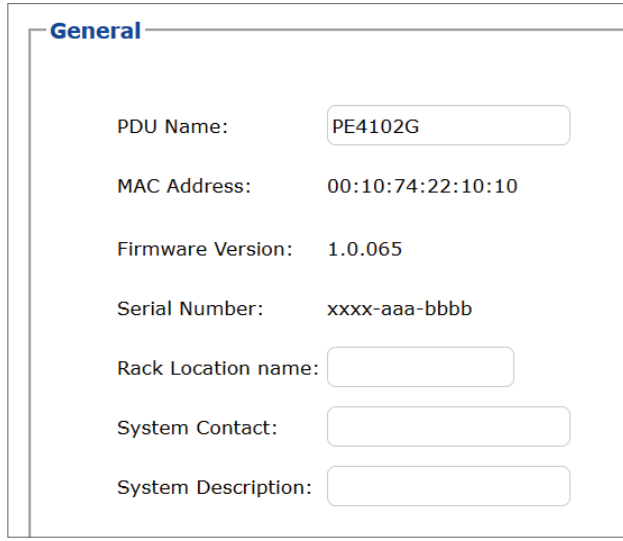
The Setup tab provides access to configuration and security functions for the eco PDU Power Controller. It includes the following pages:

- **Device Configuration**:
  Configure system parameters for the eco PDU Power Controller.
  See *Device Configuration*, page 51 for reference.
- **Security**:
  Manage access control and security settings. See *Security*, page 61.
- **EcoTCP**:
  Enable communication between the eco PDU Power Controller and the ecoDC software by specifying the EcoDC IP and port number.
  See *EcoTCP*, page 70.
- **Rules**:
  Create and manage rules for device operation. See *Rules*, page 71.
- **Scheduler**:
  Schedule power on, power off, or reboot events. See *Scheduler*, page 73.
- **Mail Control**:
  Configure email-based control by sending CLI commands. This function is disabled by default. See *Mail Control*, page 76 for reference.

Device Configuration

This page presents information about the selected device, as described in the following sections:

General



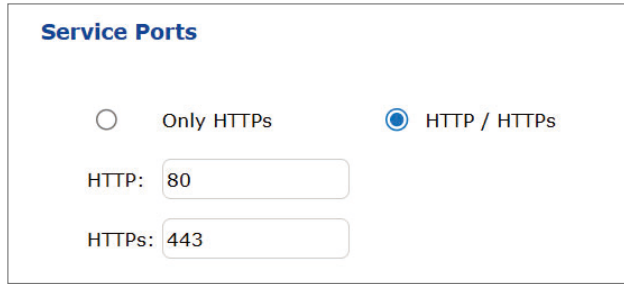
Item	Meaning
PDU Name	This field lets you give the device a unique name. Simply delete whatever is in the text box and key in the name of your choice. Click **Save** (located at the bottom of the page) to save the new name.
MAC Address	This item displays the eco PDU Power Controller's MAC address.
Firmware Version	This item displays the current firmware version number. You can reference it to see if there are newer versions available on the ATEN website.
Serial Number	This item displays the serial number of the PE4102 eco PDU Power Controller you are logged in to.
Rack Location Name	This field lets you give the rack location a unique name for easy reference.

Item	Meaning
System Contact	This field lets you specify the system contact information (sysContact, OID 1.3.6.1.2.1.1.4). The information can be retrieved through SNMP commands for management purposes, such as identifying the administrator or support personnel responsible for the device.
System Description	This field lets you specify the system description (sysDescr, OID 1.3.6.1.2.1.1.1). The information can be retrieved through SNMP commands and is typically used by network management systems (NMS) to obtain general information about the device, such as its model, software version, and function.

Service Ports

As a security measure, if a firewall is being used, the administrator can specify the port numbers that the firewall will allow. If a port other than the default is used, users must specify the port number as part of the IP address when they log in. If an invalid port number (or no port number) is specified, the eco PDU Power Controller will not be found.

Select whether to allow only secure browser logins, as show below:



An explanation of the fields is given in the table below:

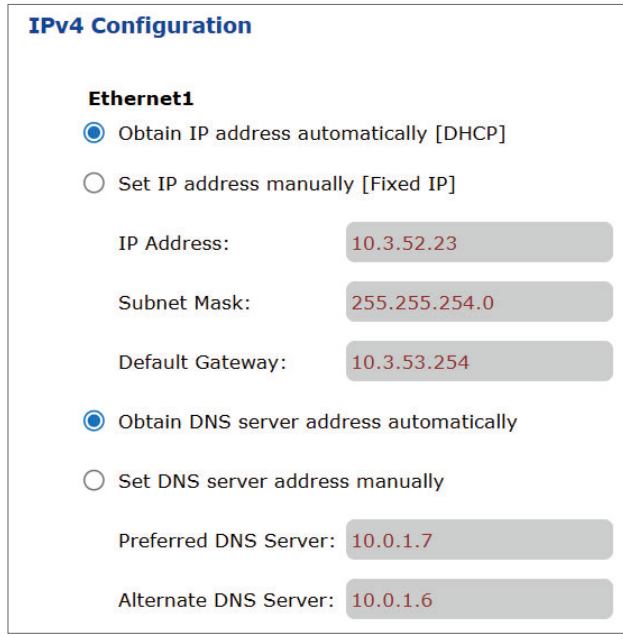
Field	Explanation
HTTP	The port number for a browser login. The default is 80.
HTTPS	The port number for a secure browser login. The default is 443.

Note: 1. Valid entries for all of the Service Ports are from 1 to 65535.

2. The service ports cannot have the same value. You must set a different value for each one.
3. If there is no firewall (on an Intranet, for example), it doesn't matter what these numbers are set to, since they have no effect.

IPv4 Configuration

The PDU Power Controller's IPv4 IP and DNS addresses (the traditional method of specifying IP addresses) can either be assigned dynamically (DHCP), or a fixed IP address can be specified.



- For dynamic IP address assignment, select the *Obtain IP address automatically* radio button. (This is the default setting.)
- To specify a fixed IP address, select the *Set IP address manually* radio button and fill in the IP address with values appropriate for your network.
- For automatic DNS Server address assignment, select the *Obtain DNS Server address automatically* radio button.

- To specify the DNS Server address manually, select the *Set DNS server address manually* radio button, and fill in the addresses for the Preferred and Alternate DNS servers with values appropriate for your network.

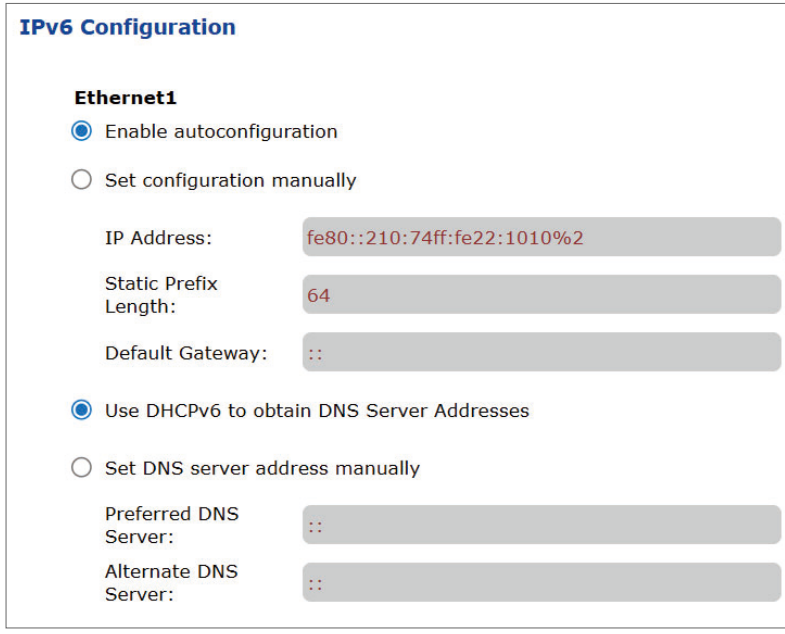
Note: 1. If you choose *Obtain IP address automatically*, when the device starts up it waits to get its IP address from the DHCP server. If it hasn't obtained the address after one minute, it automatically reverts to its factory default IP address (192.168.0.60.)

2. If the device is on a network that uses DHCP to assign network addresses, and you need to ascertain its IP address, see *IP Address Determination*, page 110, for information.

3. Specifying the Alternate DNS Server address is optional.

IPv6 Configuration

The eco PDU Power Controller's IPv6 IP and DNS addresses (the traditional method of specifying IP addresses) can either be assigned automatically (DHCP), or manually, by specifying a fix IP address.



- For dynamic IP address assignment, select the Enable autoconfiguration radio button. (This is the default setting.)
- To specify a fixed IP address, select the Set configuration manually radio button and fill in the IP address with values appropriate for your network.
- For automatic DNS Server address assignment, select the Use DHCPv6 to obtain DNS Server Addresses radio button.
- To specify the DNS Server address manually, select the Set DNS server address manually radio button, and fill in the addresses for the Preferred and Alternate DNS servers with values appropriate for your network.

Note: 1. If you choose *Obtain IP address automatically*, when the device starts up it waits to get its IP address from the DHCP server. If it hasn't obtained the address after one minute, it automatically reverts to its factory default IP address (192.168.0.60.)

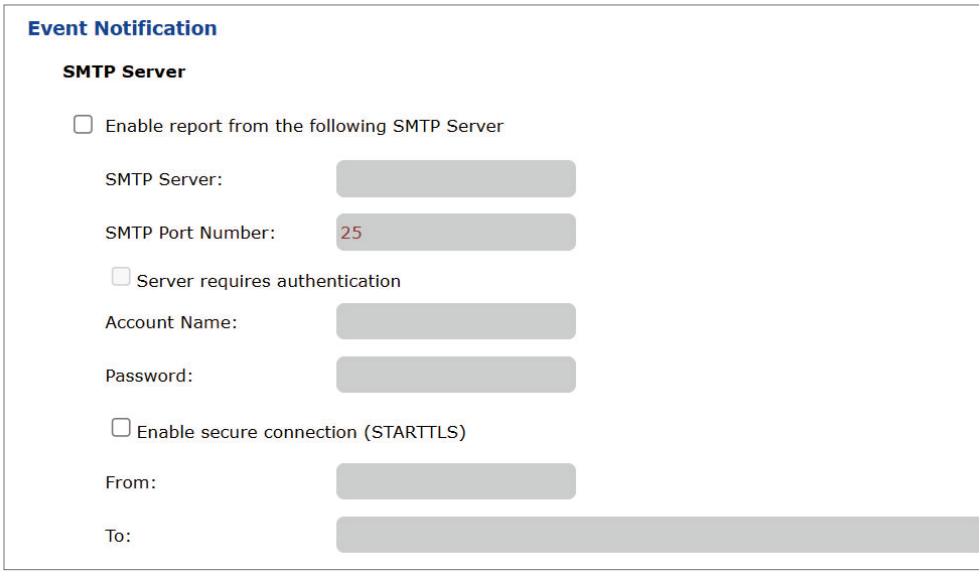
2. If the device is on a network that uses DHCP to assign network addresses, and you need to ascertain its IP address, see *IP Address Determination*, page 110, for information.

3. Specifying the Alternate DNS Server address is optional.

Event Notification

The Event Notification section includes three parts: SMTP Server, SNMP Trap Receivers, and Syslog Server. Each part is described in the following sections.

- **SMTP Server**



To have the eco PDU Power Controller email reports from the SMTP server to you, do the following:

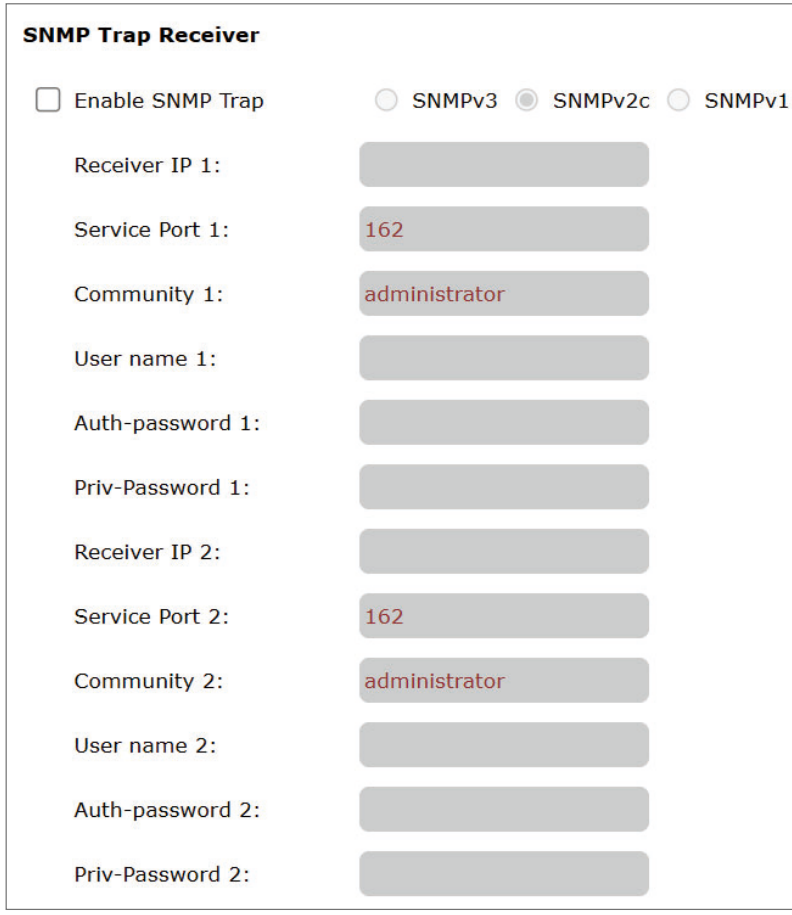
1. Enable the *Enable report from the following SMTP Server*, and key in the IP address and Port number of your SMTP server.
2. If your server requires authentication, put a check in the *My server requires authentication* checkbox.
3. Key in the appropriate account information in the *Account Name*, *Password*, and *From* fields.

   Note: Only one email address is allowed in the *From* fields, and it cannot exceed 64 characters.

4. Key in the email address (addresses) of where you want the event reports sent to in the *To* field.

Note: If you are sending the report to more than one email address, separate the addresses with a comma. The total cannot exceed 256 characters.

- **SNMP Trap Receivers**



Up to four SNMP management stations can be specified. If you want to use SNMP trap notifications, do the following:

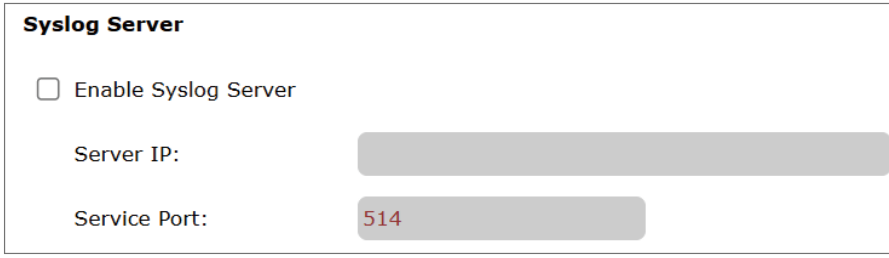
1. Check *Enable SNMP Trap*.
2. Select which version of SNMP you want to use.

3. Key in the IP address(es) and the service port number(s) of the computer(s) to be notified of SNMP trap events. The valid port range is 1–65535. The default port number is 162.

   Note: Make sure that the port number you specify here matches the port number used by the SNMP receiver computer.

4. Key in the community value(s) if required for the SNMP version.
5. Key in the auth/privacy password(s) that correspond to each of the stations.

- **Syslog Server**

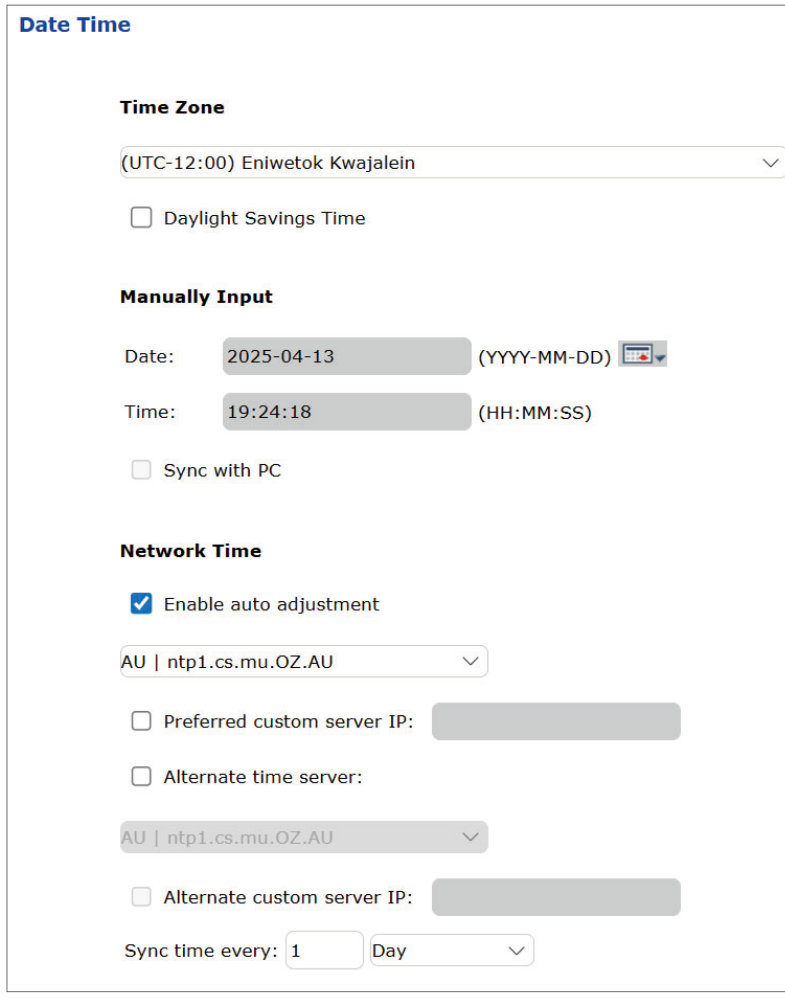


To record all the events that take place on eco PDU devices and write them to the eco PDU Power Controller's Syslog server, do the following:

1. Check **Enable Syslog Server**.
2. Key in the IP address and the port number of the Syslog server. The valid port range is 1-65535. The default port number is 514.

Date/Time

The Date/Time dialog page sets the eco PDU Power Controller time parameters:



- **Time Zone**
  - To establish the time zone that the eco PDU Power Controller is located in, drop down the *Time Zone* list and choose the city that most closely corresponds to where it is at.

- If your country or region employs Daylight Saving Time (Summer Time), check the corresponding checkbox.

- **Manual Input**

  Use this section to specify the eco PDU Power Controller's date and time manually.

  - Click the calendar icon and click the calendar entry for the date.
  - Key the time into the Time field, using the HH:MM:SS (hours, minutes, seconds) format.

  Note: This section is only enabled when *auto adjustment* (in the *Network Time* section) is disabled (the checkbox is unchecked).

  As an alternative to specifying the date and time by entering them into the date and time fields, you can click to put a check in the **Sync with PC** checkbox, in which case the eco PDU will take its date and time settings from the locally connected PC.

- **Network Time**

  To have the time automatically synchronized to a network time server, do the following:

  1. Check the *Enable auto adjustment* checkbox.
  2. You can configure the time server in either of the following ways:
     - Select a server from the time server list.
     - Select Preferred custom server IP and enter the server's IP address.
  3. If you want to configure an alternate time server, check the **Alternate time server** checkbox, and repeat step 2 for the alternate time server entries.
  4. Key in your choice for the number of days between synchronization procedures.

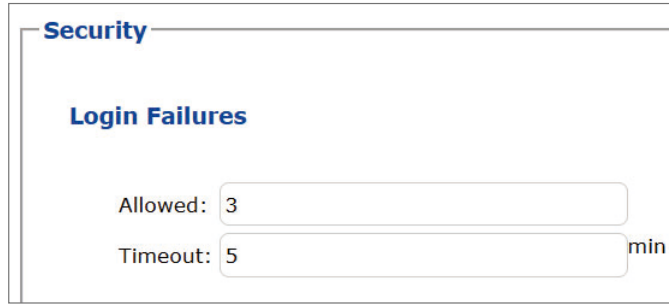
Finishing Up

When you have finished making your settings on this page, click **Save**.

After you have saved your changes, if you want to synchronize immediately, click **Adjust Time Now**.

Security

The *Security* page controls access to the eco PDU Power Controller device.



Login Failures

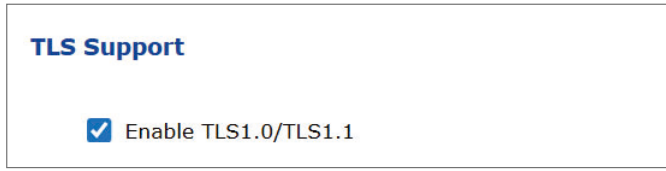
- **Allowed**:
  Enter the number of the allowed failed login attempts.
- **Timeout**:
  Enter the period that the account is locked out after the allowed failed login attempts.

Working Mode

- If **Enable Telnet Server** is checked, the eco PDU Power Controller is accessible via a Telnet sessions using the Telnet username and password (see *Telnet*, page 44)
- If **Enable Modbus** is checked, the eco PDU Power Controller is accessible and the measurements of the eco PDU Power Controller such as current, voltage, power, temperature, humidity, and pressure can be read via the Modbus communications protocol.

- If **Enable SSH** is checked, the eco PDU Power Controller is accessible and the measurements of the eco PDU Power Controller such as current, voltage, power, temperature, humidity, and pressure can be read via the SSH cryptographic network protocol.

TLS Support



- If **TLS Support** is checked, the eco PDU Power Controller is accessible on older computers or older web browsers that support TLS1.0 or TLS1.1 data encryptioin.

IPInstaller Setting

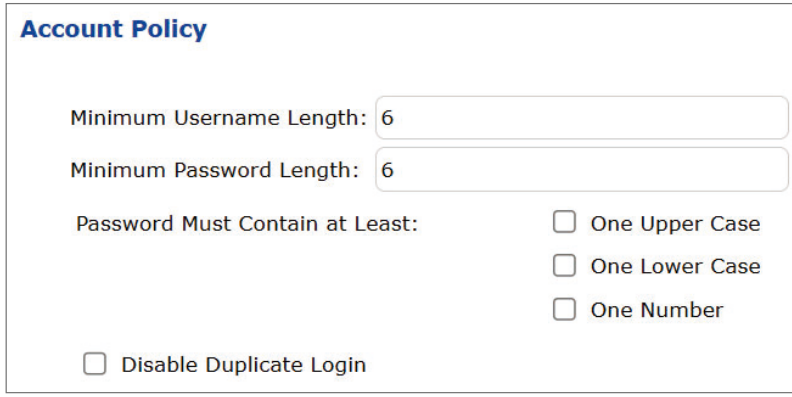
- If **Disable** is checked, the IP address of the eco PDU Power Controller cannot be found by the IP Installer software.
- If **Read-only** is checked, the IP address of the eco PDU Power Controller can be found but not configurable by the IP Installer software.
- If **Read-write** is checked, the IP address of the eco PDU Power Controller can be found and configurable by the IP Installer software.

Session Timeout

- If **Enable Web Session Timeout** *in* is checked, a user's web session will logout due to inactivity after the number of **Minute(s)** entered (1–5) is surpassed.

Account Policy

The Account Policy section governs policies in regard to usernames and passwords.



Check a policy and enter the required information in the appropriate fields.

Item	Description
Minimum Username Length	Sets the minimum number of characters required for a username. Acceptable values are from 1 to 16.
Minimum Password Length	Sets the minimum number of characters required for a password. Acceptable values are from 1 to 16.
Password Must Contain At Least	Checking any of these items requires users to include at least one of the specified items in their password. **Note:** This policy does not affect existing user accounts. Only new user accounts created after this policy has been enabled, and users required to change their passwords are affected.
Disable Duplicate Login	Check this to prevent users from logging in with the same account at the same time.

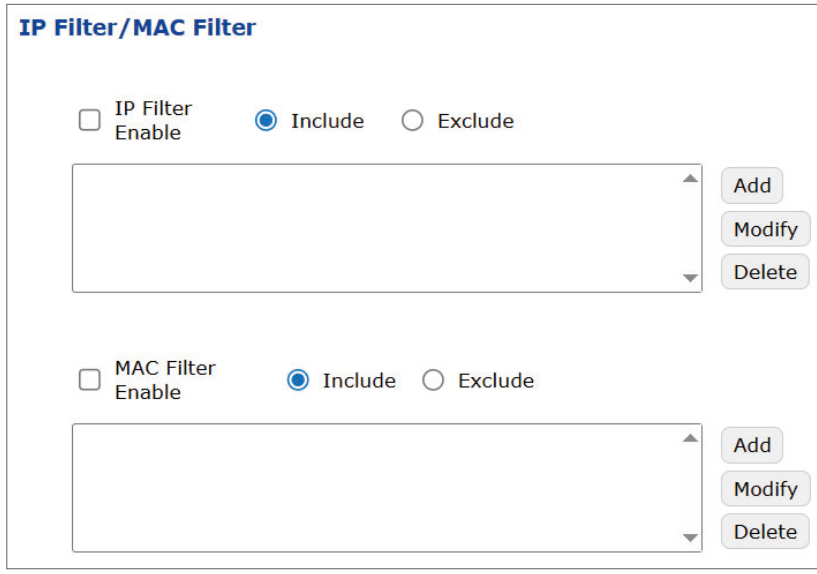
IP Filter / Mac Filter

If any filters have been configured, they appear in the IP Filter and/or MAC Filter list boxes.

IP and MAC Filters control access to the eco PDU Power Controller based on the IP and/or MAC addresses of the client computers attempting to connect. A maximum of 5 IP filters and 5 MAC filters are allowed.

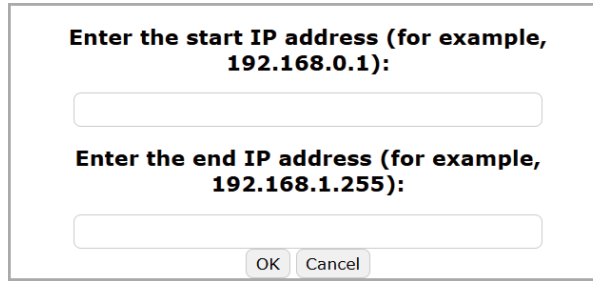
To enable IP and/or MAC filtering, click to put a check mark in the **IP Filter Enable** and/or **MAC Filter Enable** checkbox.

- If the include button is checked, all the addresses within the filter range are allowed access; all other addresses are denied access.
- If the exclude button is checked, all the addresses within the filter range are denied access; all other addresses are allowed access.



- **Adding Filters**
  - To add an **IP filter**, do the following:

1. Click **Add**. A dialog box similar to the one below appears:

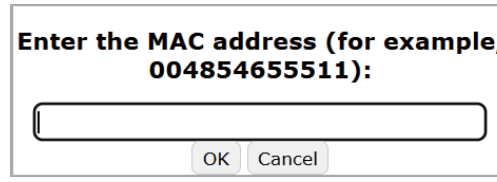


2. Specify the start filter address in the dialog box (for example, 192.168.0.200), then click **OK**.
3. To filter a single IP address, key in the same address as the start IP. To filter a continuous range of addresses, key in the end number of the range (for example, 192.168.0.225).
4. After filling in the address, click **OK**.

Repeat these steps for any additional IP addresses you want to filter.

  - To add a **MAC filter**, do the following:

1. Click **Add**. A dialog box similar to the one below appears:



2. Specify the MAC address in the dialog box (for example, 001074670000), then click **OK**.

Repeat these steps for any additional MAC addresses you want to filter.

- **IP Filter / MAC Filter Conflict**

  If there is a conflict between an IP filter and a MAC filter—for example, where a computer's IP address is allowed by the IP filter but its MAC address is excluded by the MAC filter—then that computer's access is blocked.

  In other words, if either filter blocks a computer, then the computer is blocked, no matter what the other filter is set to.

- **Modifying Filters**

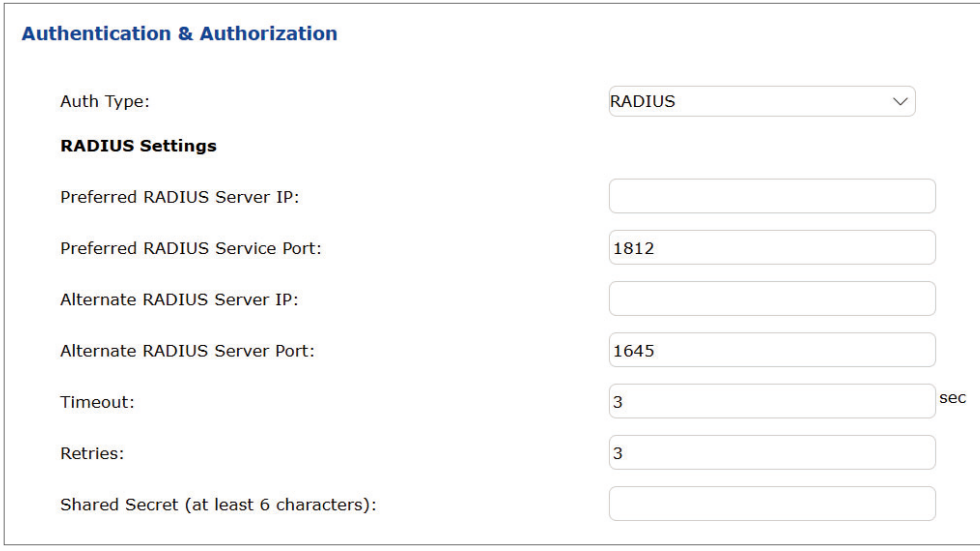
  To modify a filter, select it in the IP Filter or MAC Filter list box and click **Modify**. The Modify dialog box is similar to the Add dialog box. When it comes up, simply delete the old address(es) and replace it with the new one(s).

- **Deleting Filters**

  To delete a filter, select it in the IP Filter or MAC Filter list box and click **Delete**.

Authentication & Authorization

The Authentication & Authorization page is used to set up login authentication and authorization management from external sources.



- **RADIUS Settings**

  To allow authentication and authorization for the eco PDU device through a RADIUS server, do the following:

  1. Check **Enable**.
  2. Fill in the IP addresses and service port numbers for the Preferred and Alternate RADIUS servers. The default port number for the Preferred server is **1812**; the default port number for the Alternate server is **1645**.

  Note: Make sure that the port numbers you specify here match the port numbers used by the RADIUS servers.

  3. In the **Timeout** field, set the time in seconds that the eco PDU device waits for a RADIUS server reply before it times out.
  4. In the **Retries** field, set the number of allowed retries for attempting to connect to the RADIUS server.
  5. In the **Shared Secret** field, key in the character string that you want to use for authentication between the eco PDU device and the RADIUS Server.
  6. On the RADIUS server, set the entry for each user as follows:

     `su/administrator` or `su/user`

  Where `administrator` / `user` represents the username given to the user when the account was created on the eco PDU device. The user's access rights are the ones assigned for the eco PDU device, as well. (See *User Information*, page 45.)

  Note: `su/user` supports view ports only; `su/administrator` supports all eco PDU functions.

Private Certificate

When logging in over a secure (SSL) connection, a signed certificate is used to verify that the user is logging in to the intended site. For enhanced security, the **Private Certificate** section allows you to use your own private encryption key and signed certificate, rather than the default ATEN certificate.

There are two methods for establishing your private certificate: generating a self-signed certificate; and importing a third-party certificate authority (CA) signed certificate.

- **Generating a Self-Signed Certificate**

  If you wish to create your own self-signed certificate, a free utility—openssl.exe—is available for download over the web.

- **Obtaining a CA Signed SSL Server Certificate**

  For the greatest security, we recommend using a third party certificate authority (CA) signed certificate. To obtain a third party signed certificate, go to a CA (Certificate Authority) website to apply for an SSL certificate. After the CA sends you the certificate and private encryption key, save them to a convenient location on your computer.

- **Importing the Private Certificate**

  To import the private certificate, do the following:

  1. Click **Browse** to the right of *P***rivate Key**; browse to where your private encryption key file is located; and select it.
  2. Click **Browse** to the right of **Certificate**; browse to where your certificate file is located; and select it.
  3. Click **Upload** to complete the procedure.

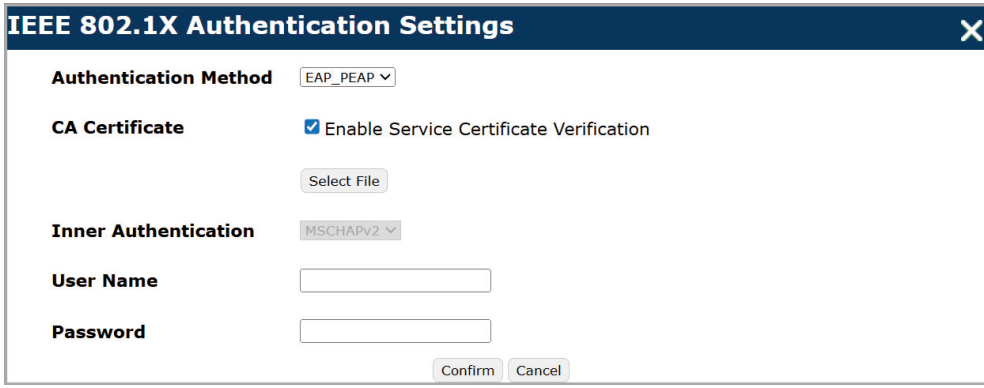
Note: 1. Clicking **Restore Default** returns the device to using the default ATEN certificate.

2. Both the private encryption key and the signed certificate must be imported at the same time.

When you have finished making your settings on this page, click **Save**.

Ethernet Authentication

To configure 802.1X settings, select the IEEE 802.1X Authentication checkbox for the Ethernet port, and then click Settings to open the **IEEE 802.1X Authentication Settings** window.



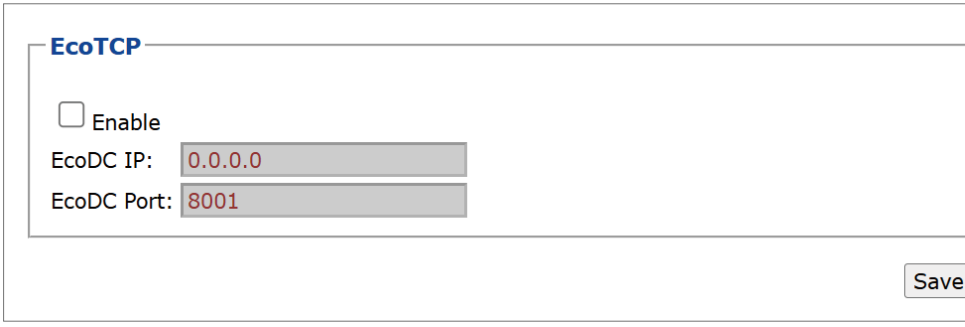
The IEEE 802.1X Authentication Settings allows the eco PDU Power Controller to connect to a network that requires 802.1X port-based access control. By configuring the authentication method, certificates, and credentials, the device can be validated by the authentication server before gaining network access.

Item	Description
Authentication Method	Select the Extensible Authentication Protocol (EAP) method used for 802.1X authentication. Supported options include EAP-PEAP, EAP-TTLS, and EAP-TLS.
CA Certificate	Upload a certificate authority (CA) file and enable service certificate verification to ensure that the authentication server is trusted.
Inner Authentication	For PEAP or TTLS, select the inner authentication protocol (e.g., MSCHAPv2) used to validate user credentials.
User Name	Enter the account name required for 802.1X authentication.
Password	Enter the corresponding password for the user account.
Confirm / Cancel	Click Confirm to apply the settings, or Cancel to discard any changes.

EcoTCP

The **EcoTCP** page enables the communication between ecoDC software and the eco PDU Power Controller.

To enable the EcoTCP, check the **Enable** checkbox and specify the EcoDC IP and the EcoDC Port number.

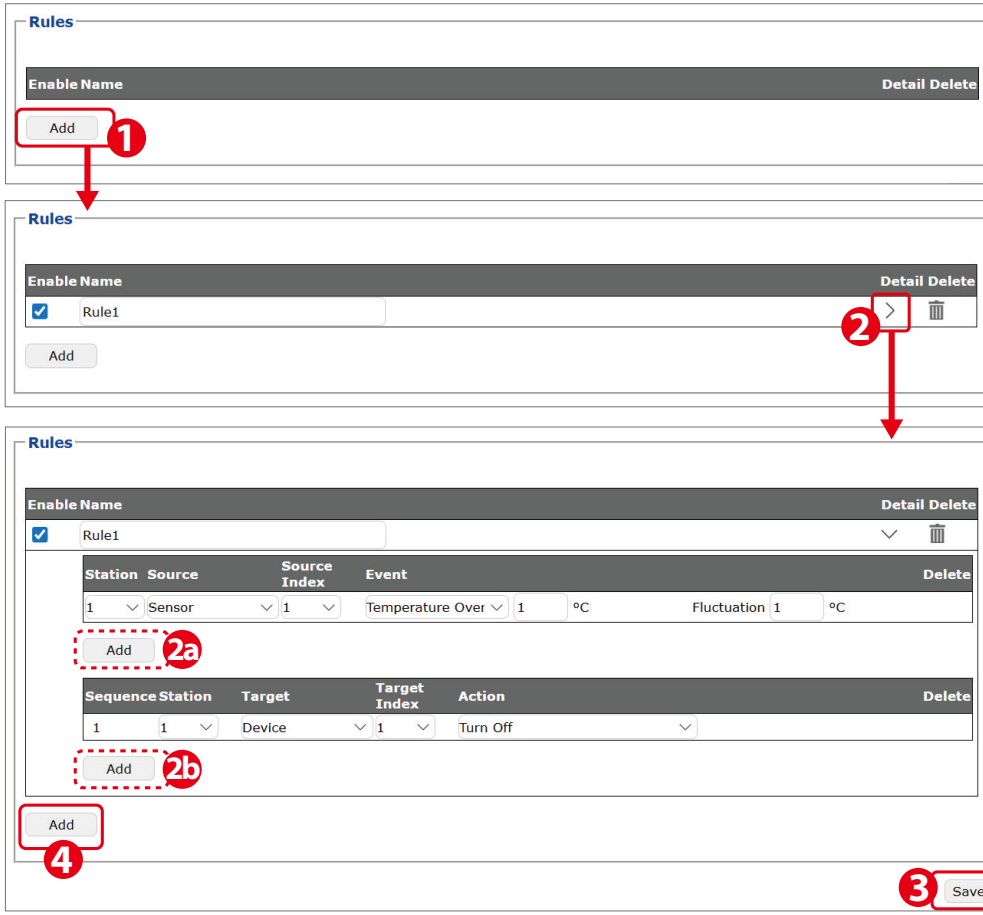


Rules

The Rules page allows you to manage and set rules for the eco PDU Power Controller in your installation.

Adding a New Rule

To add a new rule, do the following:

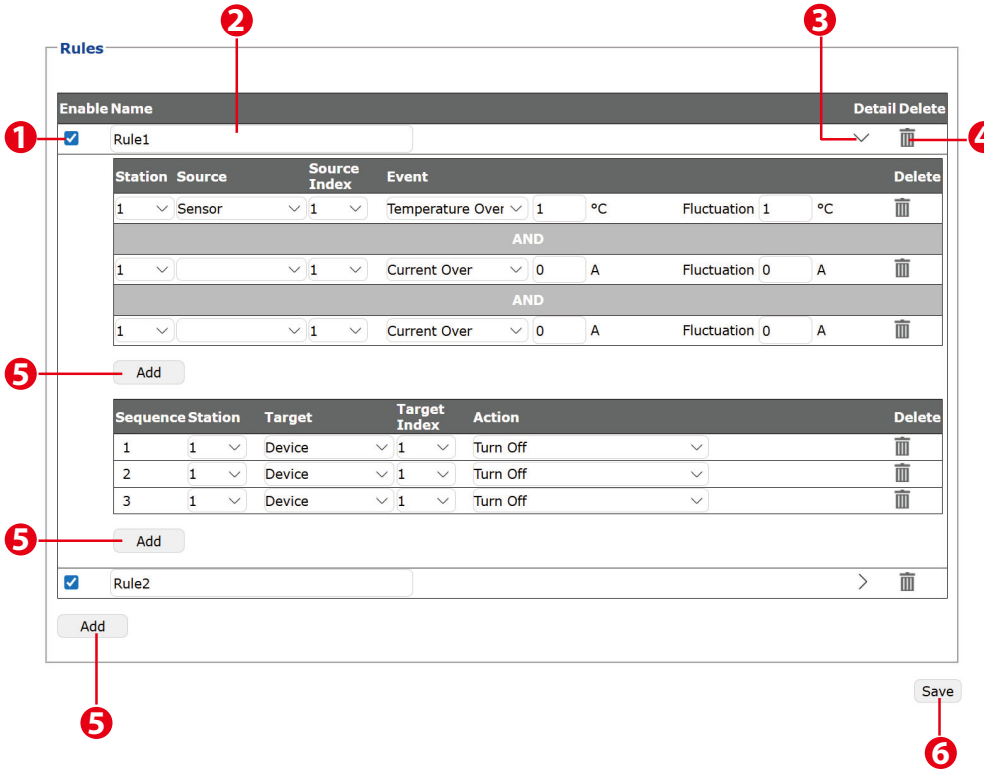


1. Click on the Add button to continue.
2. Click the Detail button to expand the fields to specify the rule.
   a) To add more station, click Add
   b) To add more sequence, click Add.

3. Click on the Save button to finish.
4. To add more rules, repeat the aforementioned steps.

Editing the Rules

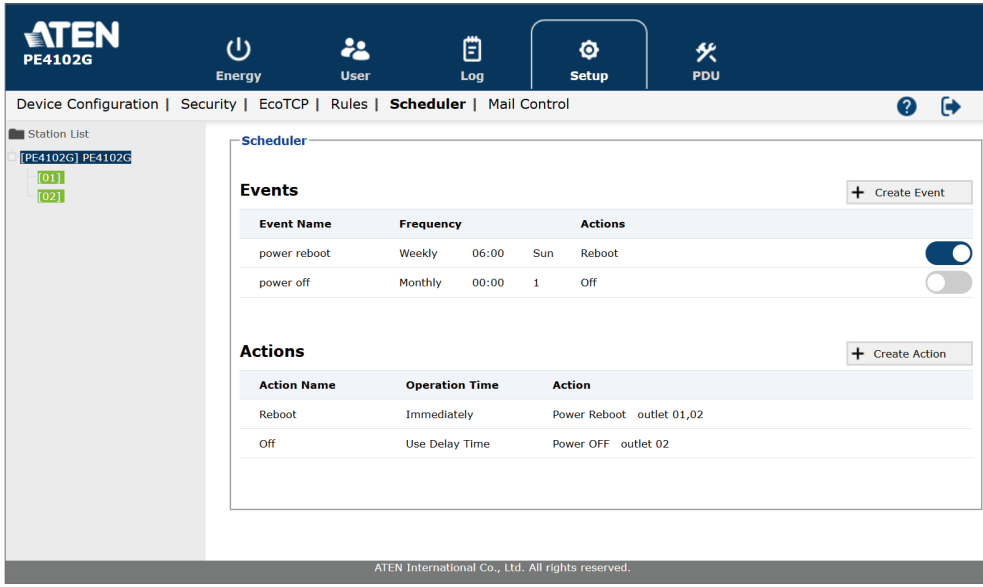
You can edit the rules using the elements:



No.	Item	Description
1	Enable	Check to enable the rule you configured for your eco PDU Power Controller.
2	Name	Enter the name for the rules.
3	Detail	Click to bring up more options to configure the rules.
4	Delete	Click the bin icon to remove the rules.
5	Add	Click to add more Station Source, Sequence Station, or Rules.
6	Save	Click to save the changes you just made.

Scheduler

Use the *Scheduler* page to power on, power off, or reboot the eco PDU Power Controller.

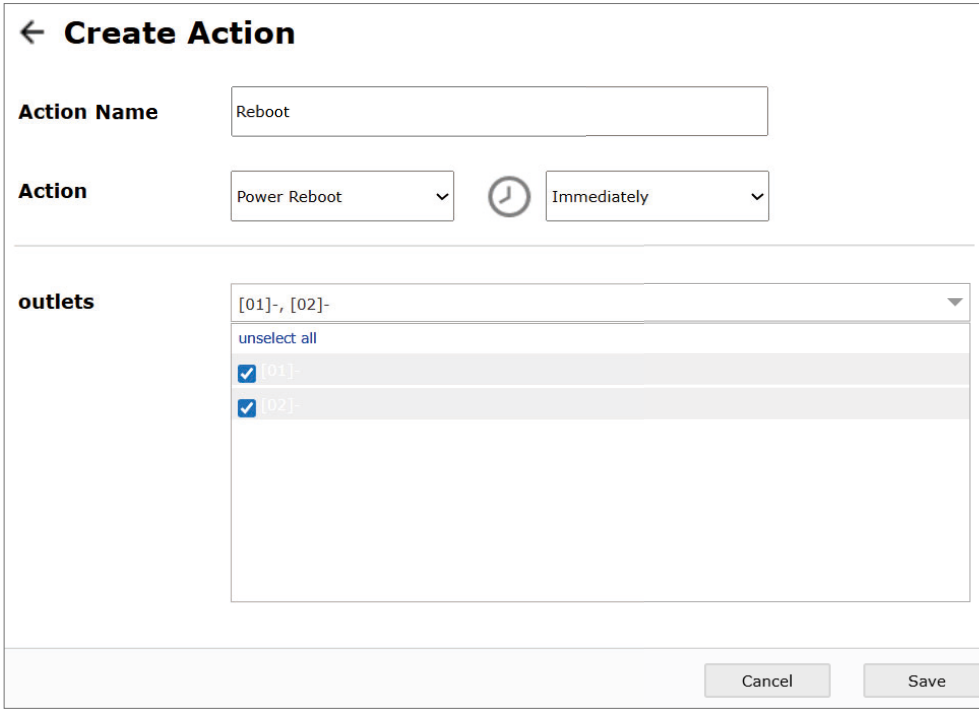


To create an event, follow the steps below.

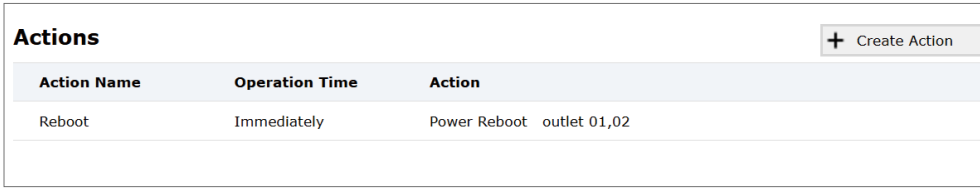
1. Go to **Setup** > **Scheduler**.
2. Create one or more power-on, power-off, and/or reboot actions. These actions will be selectable when configuring an event.

   a) Click **+Create Action**.

b) In the pop-up screen, name the action, and use the drop-down lists to configure the action and the target outlet(s).



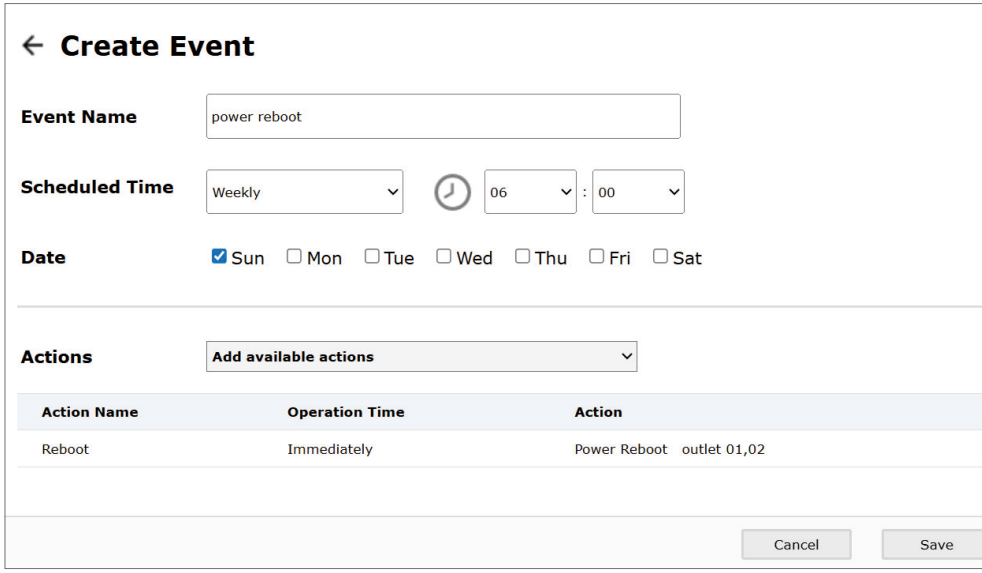
c) Click **Save**. The action is added to the list.



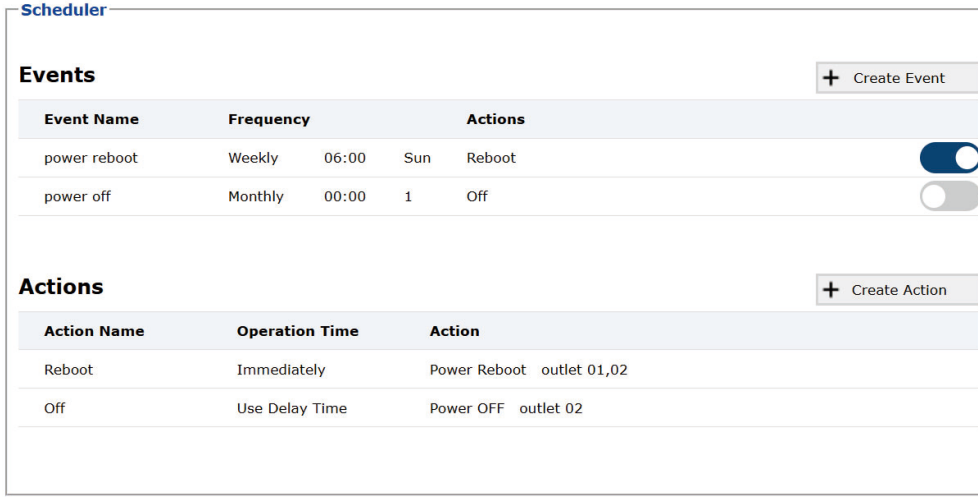
3. Create an event.

   a) Click **+Create Event**.

   b) In the pop-up screen, name the event, and then configure the schedule and action as needed.

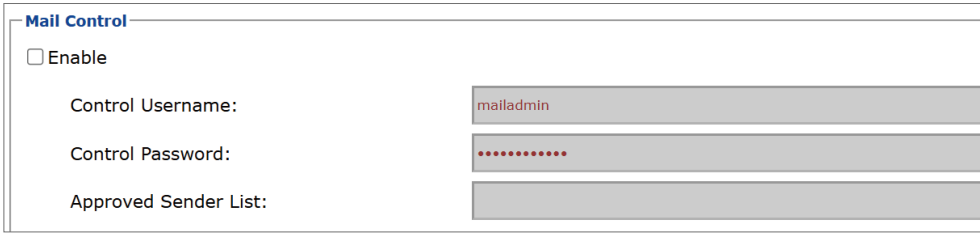


   c) Click **Save**. The event is added to the event list. Use the toggle button to enable/disable created events.



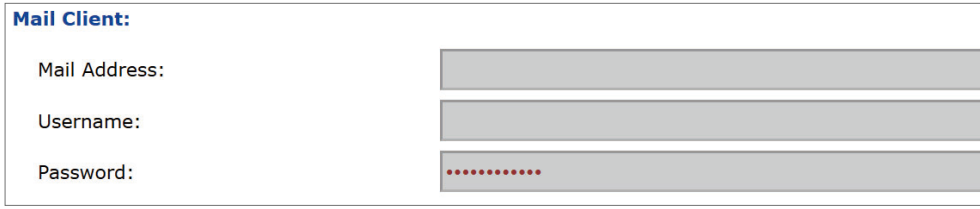
Mail Control

Mail Control is to send the CLI commands by email to control the eco PDU Power Controller. The default setting is disabled.



Item	Description
Enable	Check the checkbox to enable mail control function.
Control Username	Define the username to perform mail control function. This field is required.
Control Password	Set the password of **Control Username**. This field is required.
Approved Sender List	Enter the email address(es) that is allowed to send commands through email to control the eco PDU Power Controller. To add multiple senders, use a comma to separate email addresses. Please note that a space character is not accepted in the entry. Do not enter space characters between email address and comma.

Mail Client

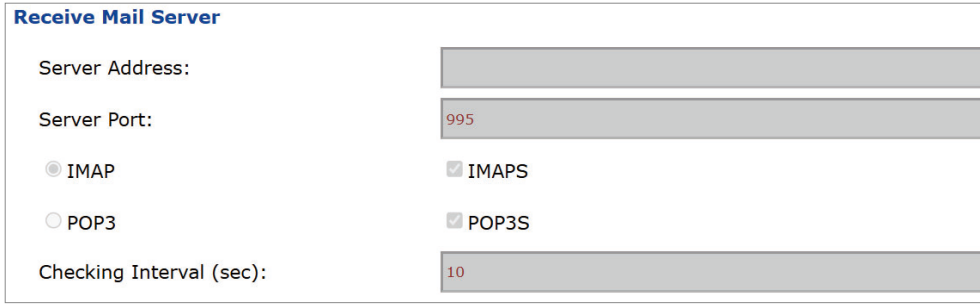


Mail Client is to set the email address that receives the commands from the approved sender(s) and sends the notification emails to the recipients on **Approved Sender List**.

Item	Description
Mail Address	Enter the address of the email account that you'd like to use to send the notification emails and receive the email(s) whose content contains commands to control the eco PDU Power Controller.
Username / Password	Enter the login credentials in your email client.

Receive Mail Server

Fill in the following information to define your mail server of the email account that you set to receive the command email(s).

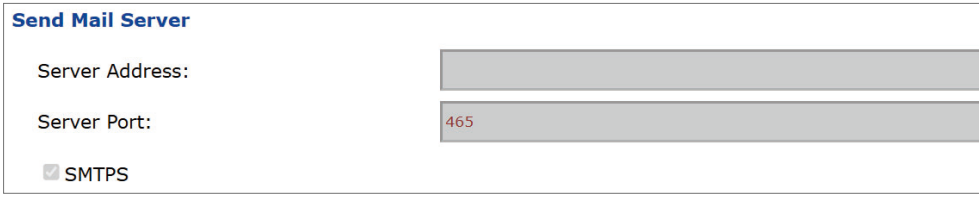


Item	Description
Server Address	Enter server address of the email provider that you use to retrieve the command email(s) from the mail server.

Item	Description
Server Port	Enter the port number that your email server uses.
IMAP / POP3	Click the radio button to select the protocol (methods) used for accessing emails. The options are **IMAP** and **POP3**. To encrypt and secure the incoming mails, enable the checkbox of **IMAPS** / **POP3S** after selecting **IMAP** or **POP3** as the protocol.
Checking Interval (sec)	Set the time you'd like to check for new incoming mails automatically.

Send Mail Server

Specify the information about your outgoing email server.



Item	Description
Server Address	Enter the outgoing email server address of your email provider.
Server Port	Enter the port number that your email server uses.
STMPS	Enable the checkbox to encrypt and secure the outgoing emails.

Commands Sent by Email

Once the *Mail Control* configurations are done, you are able to control the eco PDU Power Controller through email(s) sent from the email address(es) on **Approved Sender List**.

The command script must be one command per line, starts with the control username and control password, and end with the command "`end`".

The following is an example of email content for mail control:

```
mailadmin
mailpwd
sw o01 on
sw o02 on
sw o03 on
sw o04 on
end
```

In this example, "mailadmin" stands for the control username while "mailpwd" is the control password. Please input your control username and control password in your command script. "End" in the last line indicates that the command script ends. For more commands that controls the eco PDU Power Controller, see *Commands*, page 88.

PDU

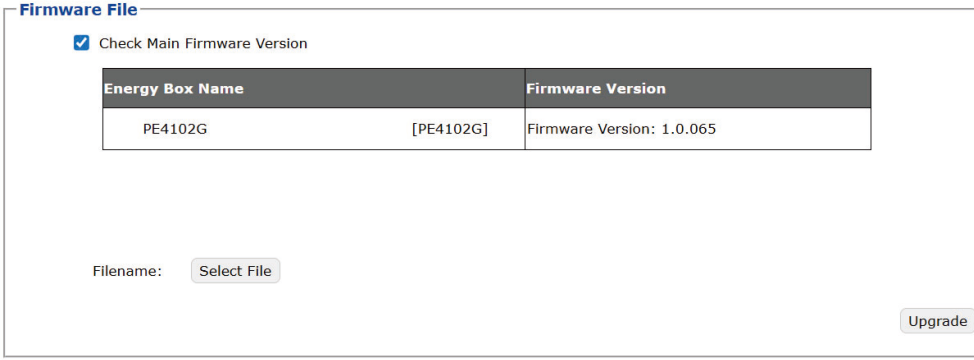
The *PDU* tab is used to upgrade the PE4102AJ / PE4102AJ2 / PE4102G's firmware, and to backup and restore the device's configuration settings.

Upgrade Main Firmware

The **Upgrade Main Firmware** page is used to upgrade the firmware of the eco PDU Power Controller.

Firmware File

When you click the **Upgrade Main Firmware** tab, the display opens with the **Firmware file** menu page, which looks similar to the one below:



A description of the items shown in this panel are given in the table, below:

Item	Description
Check Main Firmware Version	If you enable **Check Main Firmware Version**, the eco PDU's current firmware level is compared with that of the upgrade file. If the current version is equal to or higher than the upgrade version, a popup message appears, to inform you of the situation and stops the upgrade procedure.
Energy Box Name	Lists all of the eco PDU devices. Click to put a check in the checkbox of the device's whose firmware you want to upgrade.
Firmware Version	Displays the eco PDU's current firmware version.

Item	Description
Filename	As new versions of the firmware become available, they are posted on our website and can be downloaded to a convenient location on your computer. Click the **Select File** button to select the downloaded upgrade file.
Upgrade	Click this button to upgrade the firmware of the selected devices.

- **Upgrading the Firmware**

  To upgrade the firmware refer to the screenshot on the preceding page, and do the following:

  1. Go to our website and download the new firmware file to a convenient location on your computer.
  2. Click the **Select File** button; navigate to where the firmware file is located and select it.
  3. Click **Upgrade** to start the upgrade procedure.
     - If you enabled **Check Main Firmware Version** the current firmware level is compared with that of the upgrade file. If the current version is equal to or higher than the upgrade version, a popup message appears, to inform you of the situation and stops the upgrade procedure.
     - If you didn't enable **Check Main Firmware Version**, the upgrade file is installed without checking what its level is.
     - Once the upgrade completes successfully, the switch resets itself.
  4. Log in again, and check the firmware version to be sure it is the new one.

- **Firmware Upgrade Recovery**

  Should the eco PDU's firmware upgrade procedure fail, and the device becomes unusable, the following firmware upgrade recovery procedure will resolve the problem:

  1. Power off the device.
  2. Press and hold the Reset Switch in (see page 4).
  3. While holding the Reset Switch in, power the switch back on.

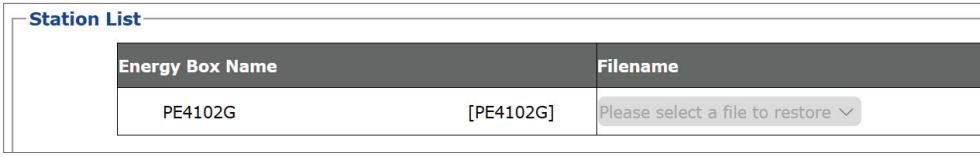
This causes the switch to use the original factory installed main firmware version. Once the switch is operational, you can try upgrading the main firmware again.

Backup/Restore

Selecting *Backup/Restore* on the menu bar gives you the ability to back up the switch's configuration and user profile information:

Station List

Station List lists the eco PDU Power Controller only.



Backup

To backup the device's settings do the following:

1. In the **Password** field, key in a password for the file.

   Note: Entering a password is optional. If you do enter a password, make a note of it, since you will need it to be able to restore the file.

2. Click **Save**.
3. When the browser asks what you want to do with the file, select **Save to disk**; then save it in a convenient location.

Restore

To restore a previous backup, do the following:

1. Click **Select File**; navigate to the file and select it.

   Note: If you renamed the file, you can leave the new name. There is no need to return it to its original name.

2. In the **Password** field, key in the same password that you used to save the file.

   Note: If you did not set a password when you created the backup file, you can omit this step.

3. Select as many of the options that are presented as you wish to restore.
4. Click **Restore**.

   After the file is restored, a message appears to inform you that the procedure succeeded.

This Page Intentionally Left Blank

Chapter 5
Telnet Commands

Remote Terminal Operations

With ATEN eco PDU Power Controller you can log in remotely from a computer using Telnet interface that allows system control through a high-end controller or PC.

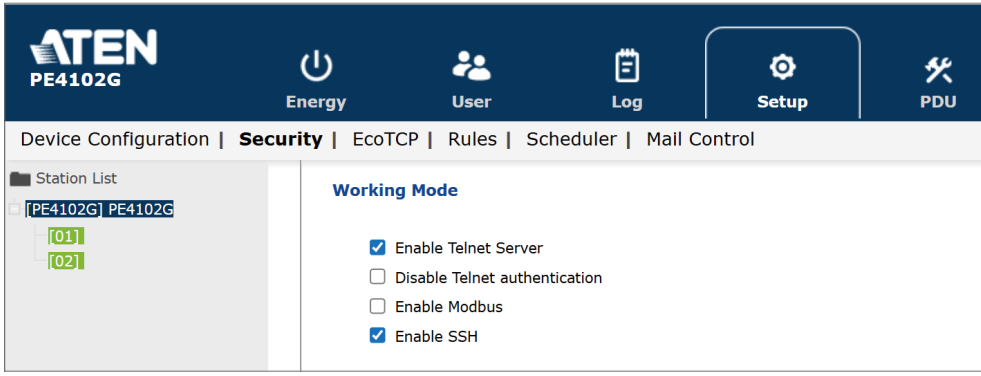
Telnet

Telnet is a program that connects to a device over a network to provide text-based management and control. Telnet provides some of the same management features found in the eco PDU Power Controller's web GUI. You can reference the eco PDU Power Controller's web GUI functions by downloading the user manual from our website (www.aten.com). This can help you as you work your way through the text-based commands used to control the eco PDU that are discussed in this guide.

Telnet is available on all eco PDUs installed with the latest firmware. You can log in to the eco PDU Power Controller via Telnet from any computer connected to the same network.

Setup

Log in to the unit's web GUI, go to the **Setup** tab and click **Security** from the menu bar. Under **Working Mode**, check **Enable Telnet Server** and then click **Save** at the bottom of the page.

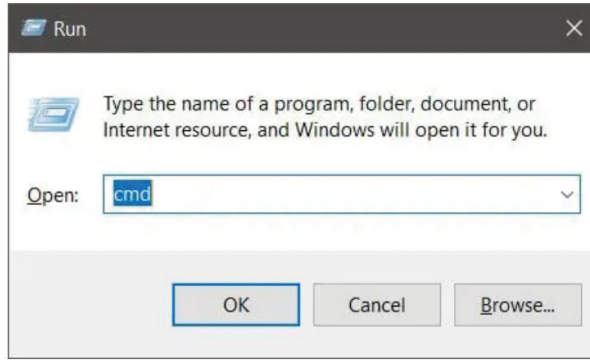


Note: If the *Enable Telnet Server* option is not available, please download the latest firmware from our website.

Logging In

To log in to the eco PDU Power Controller via Telnet:

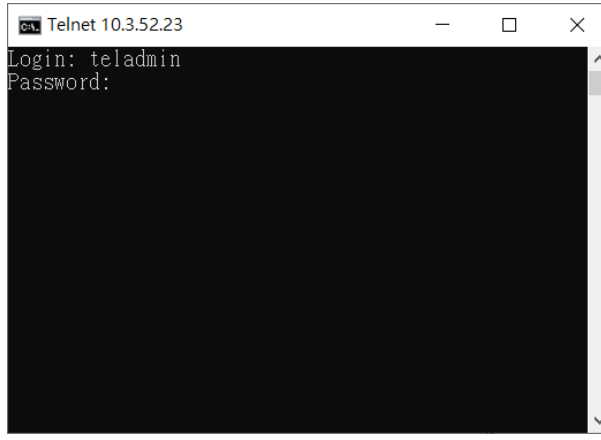
1. On your computer, open the Start menu and select Run.
2. In the dialog box, type `cmd`, and then click OK.



3. At the command prompt, key in *telnet* and the IP Address of the eco PDU Power Controller, as follows:

```
telnet [IP Address]
```

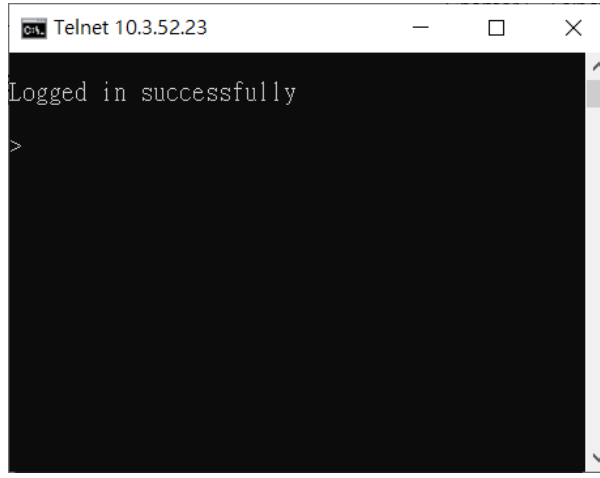
4. Press **Enter**. The login screen appears:



5. At the login prompt, enter the username: **teladmin**; and the password: **telpwd**.

Note: The Telnet username and password can be configured on the User tab of the eco PDU Power Controller's web GUI.

6. When the Telnet session is established, `Logged in successfully` appears along with the command line prompt:



Session Timeout

A live Telnet connection would be terminated if there is no incoming data with 60 Seconds.

Commands

Use the Telnet commands to view and configure the eco PDU Power Controller as described in each section. The text-based command line provides some of the same functions found under the Energy tab of the eco PDU Power Controller's web-based GUI. Commands to view and configure the eco PDU Power Controller are provide in the following sections. You can reference information provided in the user manual for the functions as you use the commands.

Verification

After sending an incorrect command, a verification message appears at the end of the command line.

- **Invalid command or exceed max command length** - the command has the wrong format and/or values. Try typing in the command string again using the correct format and/or values.

Read Power Outlet Status

The Read Power Outlet Status command allows you to view the power status of an outlet on the eco PDU Power Controller.

The formula for Read Outlet Status commands is as follows:

```
Command + Outlet + Number + Option + [Enter]
```

1. For example, if you want to read the status of outlet 01 with a simple return string, type the following:
   `read status o01 simple [Enter]`
2. For example, if you want to read the status of outlet 12 with a format return string, type the following:
   `read status o12 format [Enter]`

The following tables show the possible values for the Read Outlet Status commands:

Command	Description
read status	Read status command

Outlet	Description
o	Outlet command
xx	PDU Outlet number xx: Outlet on PDU (01–04) Example: o02

Option	Description
simple	Return simple string of the selected power outlet status
format	Return format string of the selected power outlet status

The following table lists the available Read Outlet Status commands:

Command	Outlet	Option	Enter	Description
read status	oXX	simple	[Enter]	Read the status of outlet XX with a simple return string. XX: Outlet number (01–04)
read status	oXX	format	[Enter]	Read the status of outlet XX with a format return string. XX: Outlet number (01–04)

Note: 1. Each command string can be separated with a space.
2. The **Option** command string can be skipped and **format** will be used by default.

Switch Outlet Status

The Switch Outlet Status command allows you to change the power status of an outlet on the eco PDU Power Controller.

The formula for Switch Outlet Status commands is as follows:

```
Command + Outlet + Number + Option + Control +
[Enter]
```

1. For example, if you want to switch off outlet 02 immediately, type the following:
   `sw o02 imme off [Enter]`
2. For example, if you want to switch on outlet 01 with the time delay set for the outlet, type the following:
   `sw o01 delay on [Enter]`
3. For example, if you want to reboot outlet 02, type the following:
   `sw o02 reboot [Enter]`

The following tables show the possible values for the Switch Outlet Status commands:

Command	Description
sw	Switch outlet status command

Outlet	Description
o	Outlet command
xx	PDU Outlet number xx: Outlet on PDU (01–04) Example: o02

Option	Description
imme	Switch outlet status immediately
delay	Switch outlet status with pre-configured delay time

Control	Description
on	Switch outlet on
off	Switch outlet off
reboot	Switch outlet off and then switch outlet on

The following table lists the available Switch Outlet Status commands:

Command	Outlet	Option	Control	Enter	Description
sw	oXX	imme delay	on	[Enter]	Switch outlet XX on with option imme or delay. XX: Outlet number (01–04)
sw	oXX	imme delay	off	[Enter]	Switch outlet XX off with option imme or delay. XX: Outlet number (01–04)
sw	oXX		reboot	[Enter]	Switch outlet XX off and on. XX: Outlet number (01–04)

Note: 1. Each command string can be separated with a space.

2. The **Option** command string can be skipped and **delay** will be used by default.

Read Environmental Value

The Read Environmental Value command allows you to view measurements from the eco PDU Power Controller's environmental sensors.

The formula for Read Environmental Value commands is as follows:

```
Command + Outlet + Number + Option + [Enter]
```

1. For example, if you want to read environmental sensor 02 with a simple return string, type the following:
   ```
   read sensor o02 simple [Enter]
   ```
2. For example, if you want to read environmental sensor 01 with a format return sting, type the following:
   ```
   read sensor o01 format [Enter]
   ```

The following tables show the possible values for the Read Environmental Value commands:

Command	Description
`read sensor`	Read environmental sensor value command.

Outlet	Description
`o`	Outlet with environmental sensor installed command
`xx`	PDU Outlet number with environmental sensor installed `xx`: Outlet on PDU (`01`–`04`) Example: `o02`

Option	Description
`simple`	Return simple string of the environmental sensor value on the selected power outlet with environmental sensor installed.
`format`	Return format string of the environmental sensor value on the selected power outlet with environmental sensor installed.

The following table lists the available Read Environmental Value commands:

Command	Sensor	Option	Enter	Description
`read sensor`	`oXX`	`simple` `format`	`[Enter]`	Read the environmental sensor value on the selected power outlet with environmental sensor installed. Outlet `XX` with option `simple` or `format`. `XX`: Outlet number (`01`–`04`).

Note: 1. Each command string can be separated with a space.

2. The **Option** command string can be skipped and **format** will be used by default.

Close Telnet Session

The Close Telnet Session command allows you to disconnect the telnet session from the eco PDU Power Controller.

The formula for the Close Telnet Session command is as follows:

```
Command + [Enter]
```

1. For example, if you want to disconnect the telnet session, type the following:

   ```
   quit [Enter]
   ```

The following table shows the value for the Close Telnet Session command:

Command	Description
quit	Close telnet session command

The following table lists the Close Telnet Session command:

Command	Enter	Description
quit	[Enter]	Disconnects telnet session with the unit.

Reboot PDU Device

The Reboot PDU Device command allows you to reboot the eco PDU Power Controller.

The formula for Reboot PDU Device commands is as follows:

```
Command + [Enter]
```

1. For example, if you want to reboot the eco PDU Power Controller, type the following:

   ```
   reboot [Enter]
   ```

The following tables show the possible values for the Read Environmental Value commands:

Command	Description
reboot	Reboot PDU device command

The following table lists the available Reboot PDU Device command:

Command	Enter	Description
reboot	[Enter]	Reboots the eco PDU Power Controller.

This Page Intentionally Left Blank

Chapter 6
RESTful APIs

Introduction

The ATEN RESTful APIs, called RESTlink, allow each authorized client to configure and control ATEN device via these APIs. All messages in request and response are encoded into JSON.

Responses

Status Codes

ATEN device replies with HTTP status codes to each RESTful request. The following status codes are used to represent the result of requests:

- Success
  - `200 OK`
  - `201 Created`
  - `202 Accepted`
  - `204 No Content`

- Client errors
  - `400 Bad Request`
  - `401 Unauthorized`
  - `403 Forbidden`
  - `404 Not Found`
  - `405 Method Not Allowed`
  - `413 Payload Too Large`

- Server errors
  - `500 Internal Server Error`
  - `501 Not implemented`
  - `503 Service Unavailable`

Response Messages

ATEN device also encloses the detailed description in the HTTP message body. The format and content are as follows.

```
{
   “code” : {error code},
   “message” : “{error description}”
}
```

Status Code	<code>	<message>
200 OK		
201 Created		
202 Accepted		
204 No Content		
400 Bad Request	40000	"The value of <field> is invalid: {value}."
	40001	"The value of <field> is unsupported: {value}."
	40002	"The operation on <field> is disallowed."
	40003	"The field cannot be recognized: <field>."
	40004	"No message content found."
401 Unauthorized	40100	"User account is unauthorized."
403 Forbidden	40300	"The demand on the resource is refused."
404 Not Found	40400	"The resource is not found: {url}."
	40401	"The instance of the resource is not found: {idx}."

Status Code	<code>	<message>
405 Method Not Allowed	40500	"The operation is disallowed."
413 Payload Too Large	41300	"The message is too large."
500 Internal Server Error	50000	"System error."
501 Not Implemented	50100	"API version is unsupported."
503 Service Unavailable	50300	"System is overloaded."
	50301	"System is down for maintenance."
	50302	"Service is not ready."
	50303	"Maximum is exceeded."
	50304	"System is in the recovery mode."

Authentication

To access ATEN device via RESTful APIs, the client must get the authorization in advance through the following two methods: basic authentication and token authentication.

Basic Authentication

In basic authentication, each request must contain a header field of the form `Authorization: Basic <credentials>`, where `<credentials>` is the base64 encoding of username and password joined by a colon.

Token Authentication

Before accessing to ATEN device, client must get a token first. Then all configuration and control to ATEN device are allowed by putting this token in the 'Authentication' header of each request.

API

`/api/v4.0/auth/tokens`

Request

- `POST`:
  request an authorized token for accessing to ATEN device. (Login)

Field	Type	Value	Description
`authorization`	`string`	`base64('username:password')`	Authentication code encoded in base64.

- `DELETE`:
  finish the access to ATEN device. (Logout)

Response

- Success

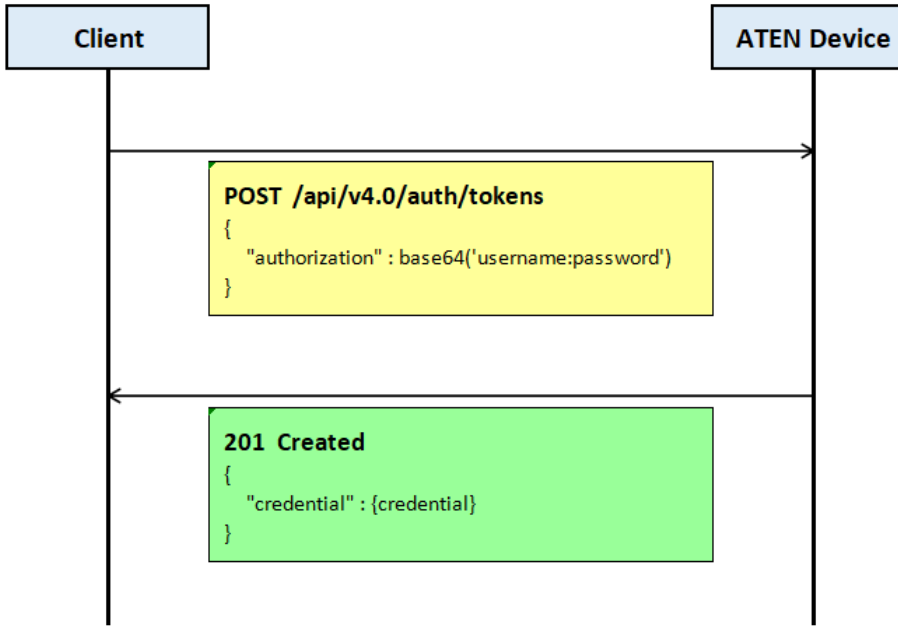
  `201 Created`

Field	Type	Value	Description
`credential`	`string`	`{credential}`	Token

- Failure

  `401 Unauthorized`

Example



System

System APIs are used for getting the general information about the whole system and its peripherals.

Temperature

This API contains temperature sensor status, the value, and the maximum or minimum alert threshold.

API

`/api/v4.0/system/temperatures`

`/api/v4.0/system/temperatures/<id>`

Request

- `GET`:
  get temperature
- `PATCH`:
  modify temperature

Field	Type	Value	Description
`minAlertThreshold`	`number`	`{temperature (°C)}`	Temperature min threshold
`maxAlertThreshold`	`number`	`{temperature (°C)}`	Temperature max threshold

Response

- Success

  200 OK

Field	Type	Value	Description
id	string	{system temperature sensor ID}	Temperature sensor ID
status	number	0	Normal (OK)
		1	NG
		2	Alert (below min)
		3	Warning (in min)
		4	Alert (above max)
		5	Warning (in max)
value	number	{temperature (°C)}	Temperature
minAlertThreshold	number	{temperature (°C)}	Temperature min threshold
maxAlertThreshold	number	{temperature (°C)}	Temperature max threshold

Energy

Energy APIs are used for getting the general information about the voltage, current, outlet, etc.

Outlet

This API contains the outlet name, the status, the outlet switch control, the delay time to turn on or off the outlet, the remote control, etc.

API

```
/api/v4.0/energy/outlets
/api/v4.0/energy/outlets/<id>
```

Request

- GET:
  get outlet informations
- PATCH:
  modify outlet informations

Field		Type	Value	Description
id		string	{outlet ID}	Outlet ID
name		string	{outlet name}	Outlet name
control		object		
	value	number	1	OFF
			2	ON
			3	Reboot
			4	ON immediately
			5	OFF immediately
controlConfirmation		object		Outlet control confirmation setting
	value	number	1	Not need confirmation
			2	Need confirmation
turnONDelay		number	0 ~ MAX_TURN_ON_DELAY_TIME (sec)	Max turn on delay time
turnOFFDelay		number	0 ~ MAX_TURN_OFF_DELAY_TIME (sec)	Max turn off delay time
lock		object		Outlet lock setting
	value	number	1	Lock off
			2	Lock on
remoteControl		object		Outlet remote control setting
	target	string	{target address}	Outlet remote control target MAC
	method	number	0	kill the power
			1	system after AC back
			2	wake on LAN

Response

- Success

  200 OK

Field		Type	Value	Description
id		string	{outlet ID}	Outlet ID
name		string	{outlet name}	Outlet name
	status	number	0	OFF
			1	ON
			2	Pending
			3	POP
control		object		Outlet control setting
	valid	array (number)		Indicates outlet control setting
controlConfirmation		object		Outlet control confirmation setting
	valid	array (number)		Indicates outlet control confirmation setting
	value	number	0	Not support confirmation
			1	Not need confirmation
			2	Need confirmation
turnONDelay		number	-3000	Not support turn on delay time
			0 ~ MAX_TURN_ON_DELAY_TIME (sec)	Outlet turn on delay time
turnOFFDelay		number	-3000	Not support turn off
			0 ~ MAX_TURN_OFF_DELAY_TIME (sec)	Outlet turn off delay time
lock		object		Outlet lock setting
	valid	array (number)		Indicates outlet lock setting
	value	number	0	Not support lock
			1	Lock off
			2	Lock on
remoteControl		object		Outlet remote control setting

Field		Type	Value	Description
	target	string	{target address}	Outlet remote control target MAC
	method	number	0	kill the power
			1	system after AC back
			2	wake on LAN

Appendix

Safety Instructions

General

- This product is for indoor use only.
- Read all of these instructions. Save them for future reference.
- Follow all warnings and instructions marked on the device.
- Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- Do not use the device near water.
- Do not place the device near, or over, radiators or heat registers.
- The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- Never spill liquid of any kind on the device.
- Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- The device is designed for IT power distribution systems with 100V to 230V phase-to-phase voltage.
- To prevent damage to your installation it is important that all devices are properly grounded.
- Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.
- The device is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not attempt

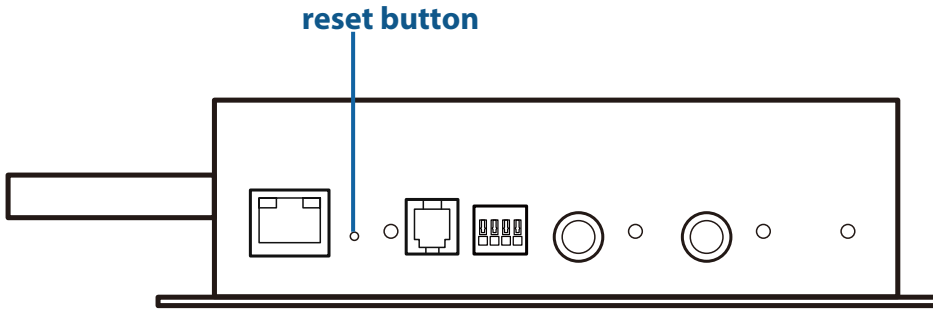
to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes

- If an extension cord is used with this device make sure that the total of the ampere ratings of all products used on this cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).
- Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.
- Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
- The power cord or plug has become damaged or frayed.
- Liquid has been spilled into the device.
- The device has been exposed to rain or water.
- The device has been dropped, or the cabinet has been damaged.
- The device exhibits a distinct change in performance, indicating a need for service.
- The device does not operate normally when the operating instructions are followed.
- Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.
- Do not connect the RJ-11 connector marked “UPGRADE” to a public telecommunication network.

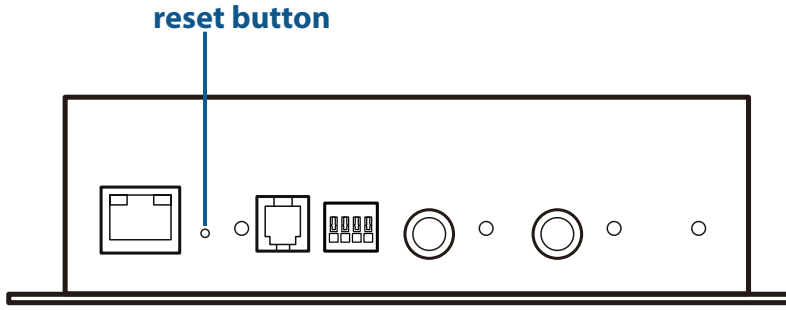
Administrator Login Failure

If you are unable to perform an administrator login (because the username and password information has become corrupted, or you have forgotten it, for example), you can reset the unit to factory default with the following procedure:

1. Pin and hold the reset button for more than 3 seconds by using a paper clip.
   - PE4102AJ / PE4102AJ2



   - PE4102G



2. After you start, you can log in by using the default username: *administrator*; and the default password: *password*.

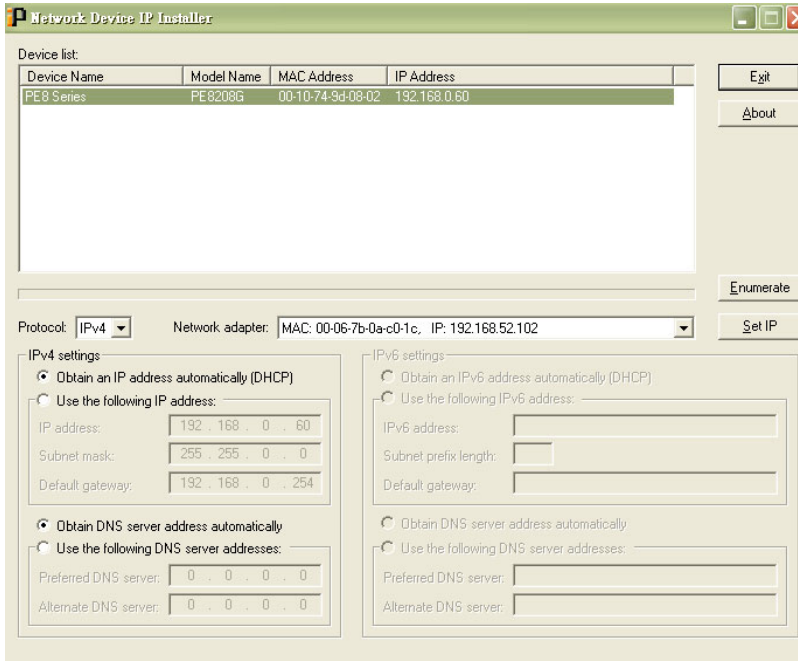
IP Address Determination

If you are an administrator logging in for the first time, you need to access the eco PDU in order to give it an IP address that users can connect to. There are two methods to choose from. In each case, your client computer must be on the same network segment as the eco PDU. After you have connected and logged in you can give the device its fixed network address. (See *Event Notification*, page 42.)

Method 1

For computers running Windows, an IP address can be determined and/or assigned with the IP Installer utility. The utility can be obtained from the *Download* area of our web site or from the software CD. Look under *Driver/SW*, and the model of your device. After downloading the utility to your computer, do the following:

1. Unzip the contents of *IPInstaller.zip* to a directory on your hard drive.
2. Go to the directory that you unzipped the IPInstaller program to and run *IPInstaller.exe*. A dialog box similar to the one below appears:



3. Select the device in the *Device List*.

Note: 1. If the list is empty, or your device doesn't appear, click **Enumerate** to refresh the Device List.

2. If there is more than one device in the list, use the MAC address to pick the one you want. The eco PDU's MAC address is located on its bottom panel.

4. Select either *Obtain an IP address automatically (DHCP)*, or *Specify an IP address*. If you chose the latter, fill the IP Address, Subnet Mask, and Gateway fields with the information appropriate to your network.
5. Click **Set IP**.
6. After the IP address shows up in the Device List, click **Exit** to end the program.

Method 2

1. Set your computer's IP address to 192.168.0.*XXX*

   Where *XXX* represents any number or numbers except 60. (192.168.0.60) is the default address of the eco PDU.)
2. Specify the device's default IP address (192.168.0.60) in your browser, and you will be able to connect.
3. Assign a fixed IP address for the device (see , page 40), that is suitable for the network segment that it resides on.
4. After you log out, reset your computer's IP address to its original value.
5. Once you have logged in, go to Network Settings to set up the permanent IP environment (see , page 40).

Method 3

eco DC allows you to determine/assign an IP address in order to configure a PDU device and monitor power status of the equipment connected to it. eco DC can be obtained from the Download area of the ATEN web site.

Technical Support

International

- For online technical support—including troubleshooting, documentation, and software updates: **http://support.aten.com**
- For telephone support, see *Telephone Support*, page iv

North America

Email Support		support@aten-usa.com
Online Technical Support	Troubleshooting Documentation Software Updates	http://www.aten-usa.com/support
Telephone Support		1-888-999-ATEN ext 4988 1-949-428-1111

When you contact us, please have the following information ready beforehand:

- Product model number, serial number, and date of purchase.
- Your computer configuration, including operating system, revision level, expansion cards, and software.
- Any error messages displayed at the time the error occurred.
- The sequence of operations that led up to the error.
- Any other information you feel may be of help.

Specifications

PE4102AJ

Outlet		2 × NEMA 5-15R
LAN Port		1 × RJ-45 Female with LEDs (Silver / LED: Orange / Green) 10/100M
LED	**Outlet**	2 × Green
	Power	1 × Orange
	Sensor	1 × Orange
Buttons	**Reset**	1 × Semi-recessed Pushbutton
	Select	2 × Select Pushbuttons
Sensor Port		2 × RJ-11
Door Sensor		Phoenix Connector 1 × door sensors + 12V (D1+/D1-/12V/G)
Electrical		
Nominal Input Voltage		100–120 VAC
Maximum Input Current		15 A (Max); 12 A (UL); 15 A (PSE)
Input Frequency		50–60 Hz
Input Connection		NEMA 5-15P
Input Power		1800 VA (Max); 1440 VA (UL)
Outlet Type		2 × NEMA 5-15R
Normal Output Voltage		100–120 VAC
Maximum Output Current (Outlet)		15 A (Max); 12 A (UL); 15 A (PSE)
Maximum Output Current (Bank)		15 A (Max); 12 A (UL); 15 A (PSE)
Maximum Output Current (Total)		15 A (Max); 12 A (UL); 15 A (PSE)
Circuit Breakers		Yes (UL1077, EN60934)
Metering		No

Outlet Switching	Yes
Ethernet Port	10/100M (RJ-45)
Surge Protection	No
Physical Properties	
Housing	Metal
Dimensions (L × W × H)	◆ With wall mount ears: 17.20 × 12.78 × 4.40 cm ◆ Without wall mount ears: 15.00 × 14.59 × 4.40 cm
Weight	0.94 kg
Power Cord Length	1.8 m
Environmental	
Temperature (Operating / Storage)	0–50 ºC / –20–60 ºC
Humidity (Operating / Storage)	0–80% RH, Non-Condensing
Compliance	
EMC Verification	FCC
Safety Verification	PSE

PE4102G

Outlet		2 × IEC C13
Inlet		IEC C14
LAN Port		1 × RJ-45 Female with LEDs (Silver / LED: Orange / Green) 10/100M
LED	**Outlet**	2 × Green
	Power	1 × Orange
	Sensor	1 × Orange
Buttons	**Reset**	1 × Semi-recessed Pushbutton
	Select	2 × Select Pushbuttons
Sensor Port		2 × RJ11
Door Sensor		Phoenix Connector 1 × door sensors + 12V (D1+/D1-/12V/G)
Electrical		
Nominal Input Voltage		100–240 VAC
Maximum Input Current		10 A (Max)
Input Frequency		50–60 Hz
Input Interface		inlet
Input Connection		IEC C14
Input Power		2400 VA (Max)
Outlet Type		2 × IEC 320 C13
Normal Output Voltage		100–240 VAC
Maximum Output Current (Outlet)		10 A (Max)
Maximum Output Current (Bank)		10 A (Max)
Maximum Output Current (Total)		10 A (Max)
Circuit Breakers		Yes (UL1077, EN60934)
Metering		No

Outlet Switching	Yes
Ethernet Port	10/100M (RJ-45)
Surge Protection	No
Physical Properties	
Housing	Metal
Dimensions (L × W × H)	◆ With wall mount ears: 17.00 × 12.78 × 4.40 cm ◆ Without wall mount ears: 15.00 × 12.78 × 4.40 cm
Weight	0.70 kg
Power Cord Length	3 m
Environmental	
Temperature (Operating / Storage)	0–50 ºC / –20–60 ºC
Humidity (Operating / Storage)	0–80% RH, Non-Condensing
Compliance	
EMC Verification	CE-EMC
Safety Verification	CE-LVD

PE4102AJ2

Outlet		2 × NEMA 5-15R
LAN Port		1 × RJ-45 Female with LEDs (Silver / LED: Orange / Green) 10/100M
LED	**Outlet**	2 × Green
	Power	1 × Orange
	Sensor	1 × Orange
Buttons	**Reset**	1 × Semi-recessed Pushbutton
	Select	2 × Select Pushbuttons
Sensor Port		2 × RJ-11
Door Sensor		Phoenix Connector 1 × door sensors + 12V (D1+/D1-/12V/G)
Electrical		
Nominal Input Voltage		100–120 VAC
Maximum Input Current		15 A (Max); 12 A (UL); 15 A (PSE)
Input Frequency		50–60 Hz
Input Connection		NEMA 5-15P
Input Power		1800 VA (Max); 1440 VA (UL)
Outlet Type		2 × NEMA 5-15R
Normal Output Voltage		100–120 VAC
Maximum Output Current (Outlet)		15 A (Max); 12 A (UL); 15 A (PSE)
Maximum Output Current (Bank)		15 A (Max); 12 A (UL); 15 A (PSE)
Maximum Output Current (Total)		15 A (Max); 12 A (UL); 15 A (PSE)
Circuit Breakers		No
Metering		No
Outlet Switching		Yes
Ethernet Port		10/100M (RJ-45)

Surge Protection	No
Physical Properties	
Housing	Metal
Dimensions (L × W × H)	◆ With wall mount ears: 17.20 × 12.78 × 4.40 cm ◆ Without wall mount ears: 15.00 × 14.59 × 4.40 cm
Weight	0.94 kg
Power Cord Length	1.8 m
Environmental	
Temperature (Operating / Storage)	0–50 ºC / –20–60 ºC
Humidity (Operating / Storage)	0–80% RH, Non-Condensing
Compliance	
EMC Verification	FCC
Safety Verification	PSE

ATEN Warranty Policy

The warranty policy may vary by product category and region of purchase. For details, please visit ATEN's official website, select your purchase counties/ regions and then go to the Support Center, or contact your local ATEN sales representative for further assistance.