A-Neutronics, Inc.

POM PDU

Per outlet control, per outlet current monitoring, and total current monitoring

User Manual

Model# ANI-15115-08MSH

Ver. 1.1

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1. Introduction

The PDU is an Internet ready device designed and equipped with an intelligent current-meter (True RMS) that will indicate the total power consumption of a power strip, per outlet power consumption, and per outlet control.

The PDU offers an easy set up and user-friendly communication software. This software provides the ability to remotely monitor and evaluate current power consumption.

Features:

- Built-in web server manager monitors the current consumption of the power strip in real time.
- Built-in true RMS current meter.
- Easy setup, meter can also display the IP address directly.
- Homepage support SSL.
- **Provides per outlet power consumption and control.**
- Provides audible alarm when the power consumption goes beyond the user defined threshold of current setting.
- Sends an email and traps when the power consumption exceeds the trigger value of current setting.
- Provided software utility, can monitor multiple PDU's at the same time.
- Supports SNMP with the provided MIB for the PDU to be monitored by your NMS.
- Real time control of each outlet of the PDU.
- Indicate power outlets ON/OFF circuit status with front panel LED's.
- Supports power ON/OFF sequence.
- Schedule control.
- User-defined group level outlet control.
- Auto reboot a locked device by pinging the IP address.
- Supports network time protocols.
- *Optional accessory to support temperature and humidity detection.

	PER OUTLET CONTROL	TOTAL PDU CURRENT MONITORING	PER OUTLET CURRENT MONITORING	TIME SCHEDULE PER OUTLET	TIME REFERENCE VIA TIME SERVER	TEMPERATURE & HUMIDTY OPTION
ANI-15115-08MTH		✓				
ANI-15115-08SWH	✓	✓				
ANI-15115-08MSH	✓	✓	✓	✓	✓	✓

2. PDU Package

The standard PDU package contains a Power Distribution Unit with supporting hardware and software. The components of the package are:

- Power Distribution Unit.
- Rack mount Brackets. (rack screws not provided)
- CD-ROM, it contains:

  User Manual.

  PDU Software.

  MIB: Management Information Base for Network. (PDUMIB.mib)

  Adobe Acrobat Reader.

  Quick Start Guide

3. Function

Interface

Functions	Description
Ethernet	RJ45 port for network communication port.
Audible Alarm	Warning- 1 beep in 1 second. Overload- 3 beeps in 1 second. Note: The audible alarm will keep beeping until the current returns to normal and the current is lower than the threshold of 0.5 amps.
Function Button	• Press and release to turn off the warning beep. The overload beeping can not be cancelled. • Hold the button and release after 1 beep. The meter will show the current information, *temperature, and humidity in sequence. • Hold the button and release after 2 beeps. The meter will show the IP address. • Hold the button and release after 4 beeps. It will change the IP from DHCP or fixed IP. • Hold the button and release after 6 beeps. It will reset the PDU back to factory setting.
Meter	3 digits to display current, IP Address, and *temperature and humidity
ID	The identification of power bank or PDU.
LED Indicator	SSL (yellow): Light on means that web access is protected by SSL. DHCP (green): Light on means that PDU gets IP address through DHCP.

	PDU (green): Indicate each output power status. Status (red): Indicate each circuit status.
ENV	RJ11 for option ENV probe attached to detect *temperature and humidity.
Circuit Breaker	Overload power protection.

4. Installation

This section will provide a quick instruction to install the PDU.

Rack Mount Instructions

A) Elevated Operating Ambient - If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Consideration should be given to installing the equipment in an environment compatible with the maximum ambient temperature specified by the manufacturer.

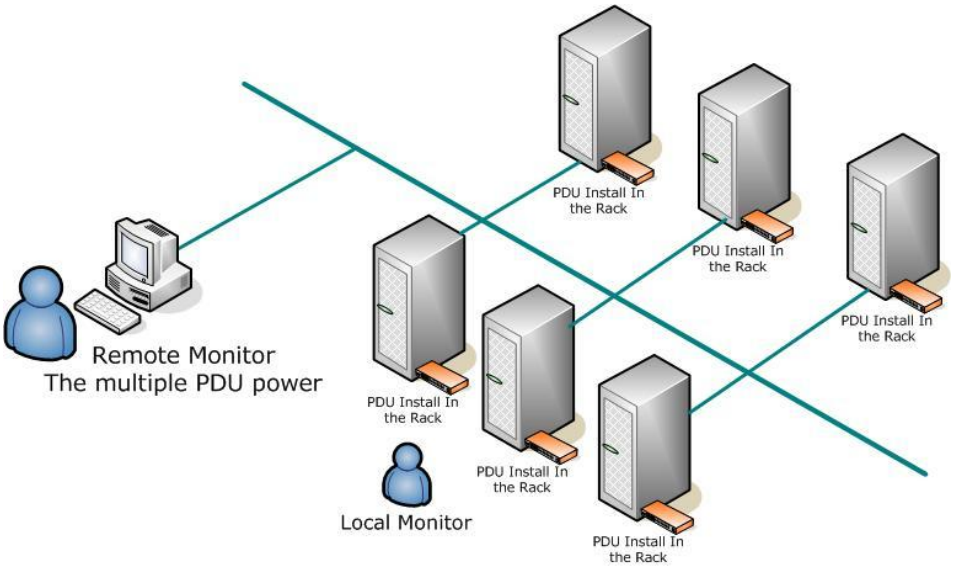
B) Reduced Air Flow - Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

C) Mechanical Loading - Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

D) Circuit Overloading - Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of the circuits might have on over current protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

E) Reliable Grounding – Installation should be in accordance with all governing entities to include but not limited to your local electric code, etc.

Diagram



Hardware

1. Install mounting brackets.

2. The PDU comes with brackets for mounting in a rack. To mount the PDU into a rack perform the following procedure:

3. Attach the mounting brackets to the unit, using the four retaining screws provided for each of the brackets.

4. Choose a location for the brackets.

5. Align the mounting holes of brackets with the notched hole on the vertical rail and attach with the retaining screws.

6. Connect input and output power.

7. Connect Ethernet cable to the PDU.

8. Switch on the PDU.

Note 1:

The default setting IP address is DHCP. If PDU can not get the IP address from DHCP server, the IP address will stay at 192.168.0.216

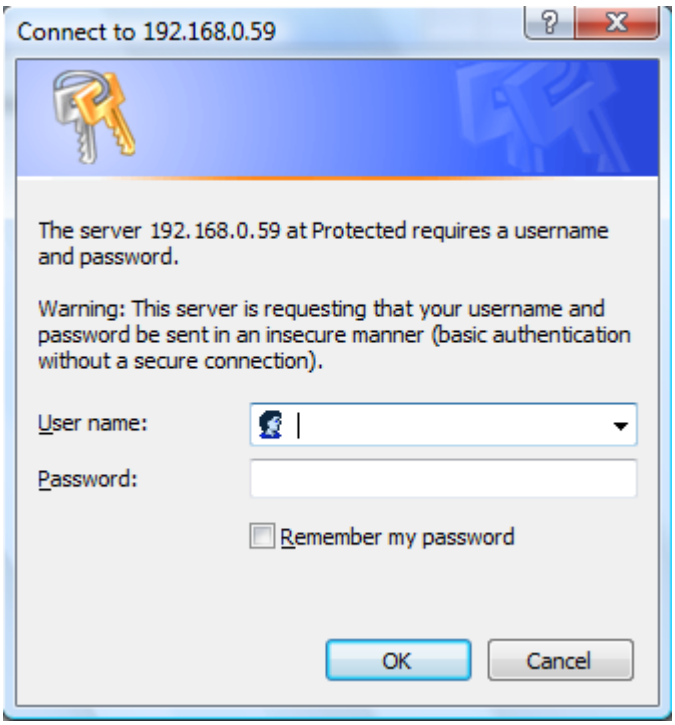
5. Web Interface

Login:

Input the PDU IP address in web browser.

User Name: snmp.

Password: 1234.



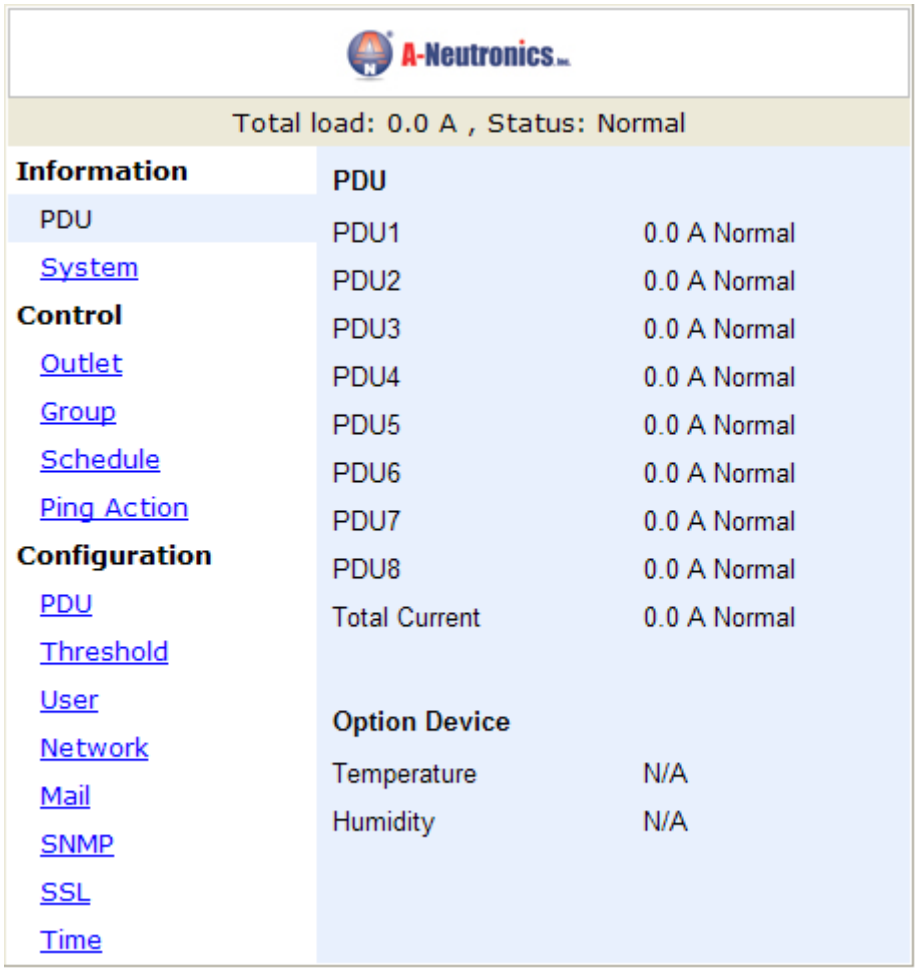
Note 1:

The default setting IP address is DHCP. If PDU can not get the IP address from DHCP server, the IP address will stay at 192.168.0.216

Information: PDU

Display total PDU and each outlet power consumption.

With the optional device plugged in - ENV probe, it will display *temperature and humidity information.



Information: System

Indicates PDU system information, including:

Model No.

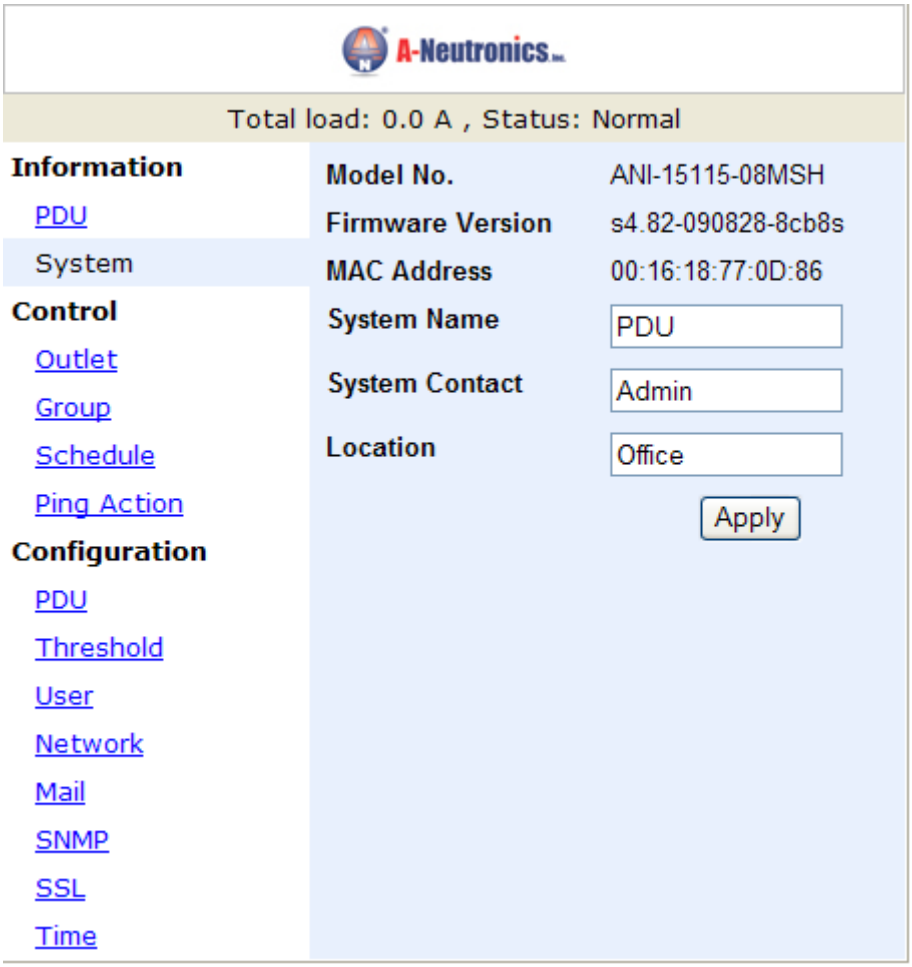
Firmware Version

MAC Address

System Name

System Contact

Location



Control: Outlet

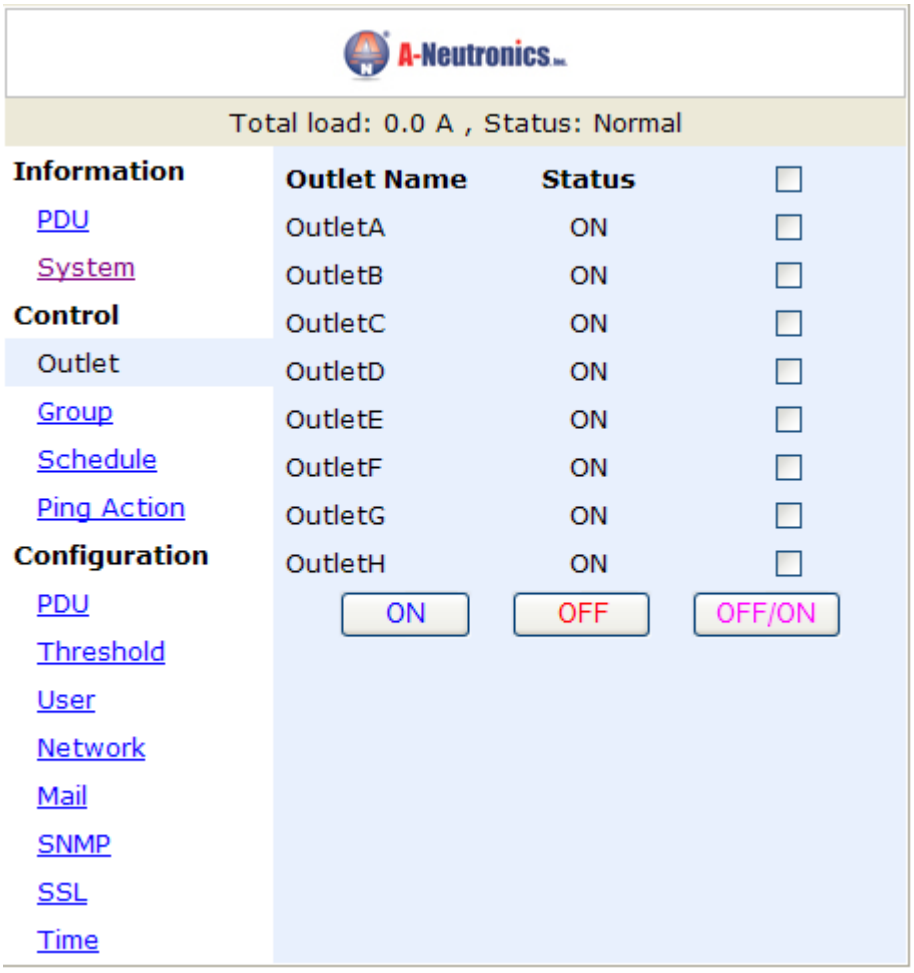
Indicate PDU outlet on/off status and control outlet.

Select the outlet by checking the box and then click ON or OFF button to control output power for PDU

ON: Press the icon to turn on the assigned outlets.

OFF: Press the icon to turn off the assigned outlets.

OFF/ON: Press the icon to reboot the assigned outlets.



Control: Group

Control outlet power for multiple outlets.

Setting: Enter setting mode.

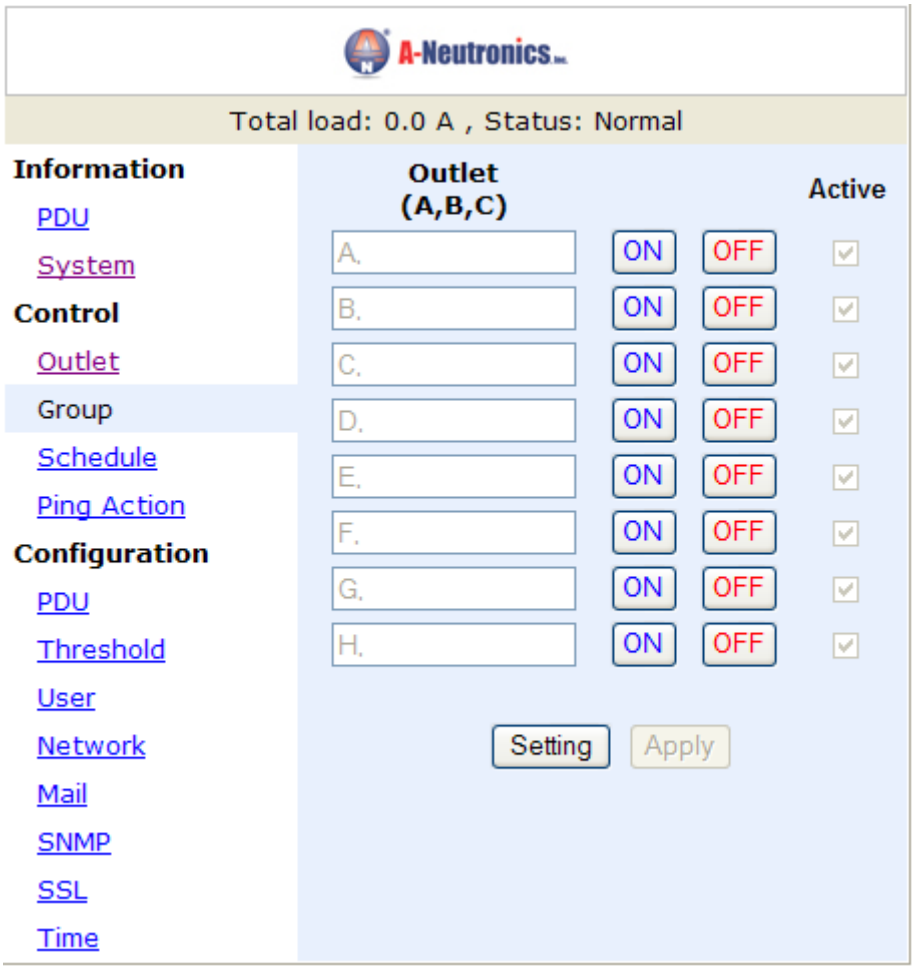
Outlet: Assign the outlet in a group.

Note: The outlet number needs to be in alphabetical order.

ON: Press icon to turn on the assigned group.

OFF: Press icon to turn off the assigned group.

Active: Enable it to be a controllable group.



Control: Schedule

Control the assigned outlet by pre-set schedule.

The Begin time and End time must have a minimum of 1 minute separation. For example Begin 13:17 End 13:18. You cannot have Begin 13:17 and End 13:17.

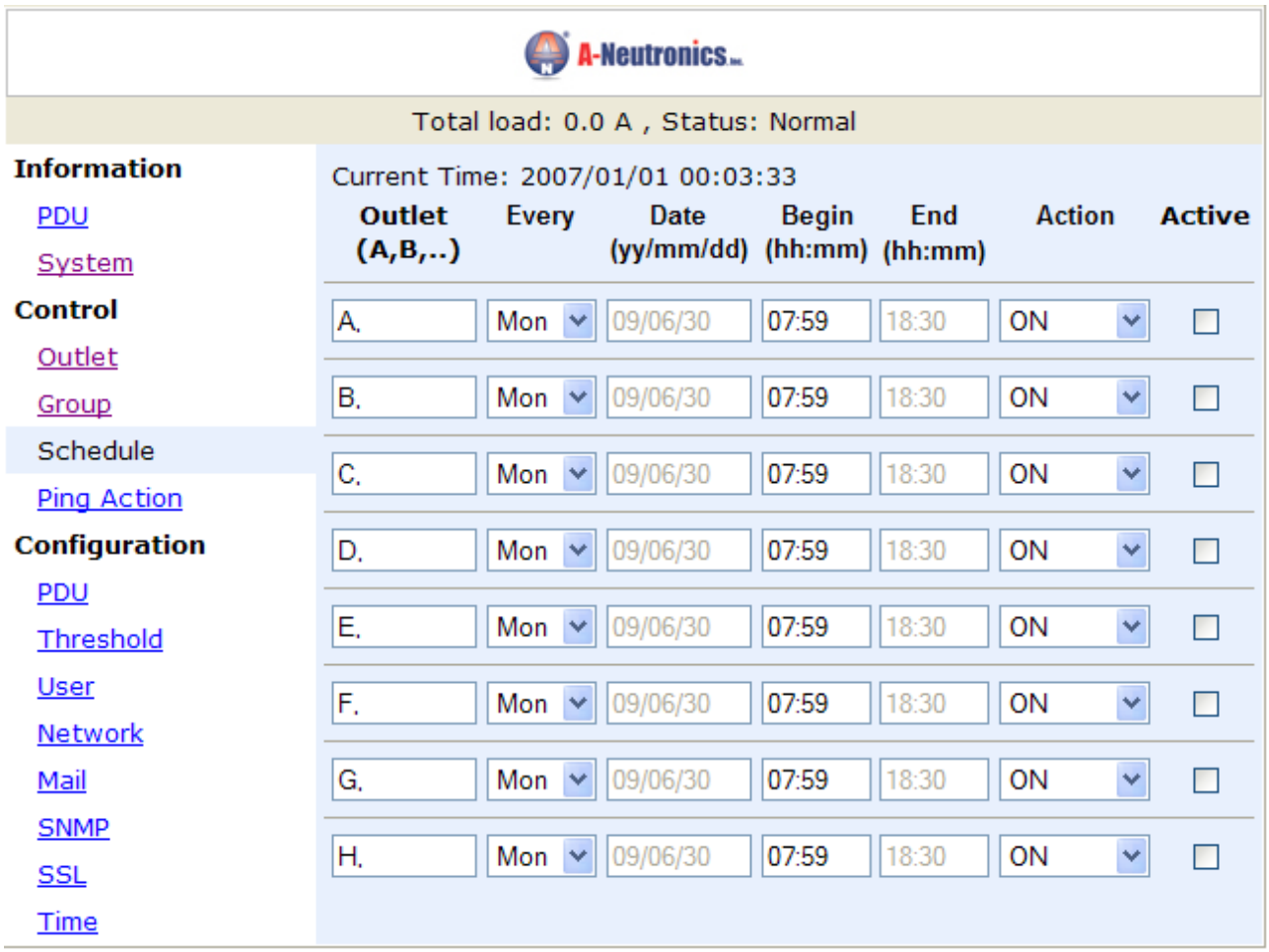
Outlet: Assign the outlet to be controlled in this schedule.

Every: Set week's day, assigned day or every day.

Date: When "sgl" is selected at the column of "Every", input the date here.

Action:	Begin:	End:
ON	Turn on outlet at this time	None
OFF	Turn off outlet at this time	None
OFF/ON	Turn off outlet at this time	Turn on outlet at this time
ON/OFF	Turn on outlet at this time	Turn off outlet at this time

Active: Enable the assigned schedule control.



Control: Ping Action

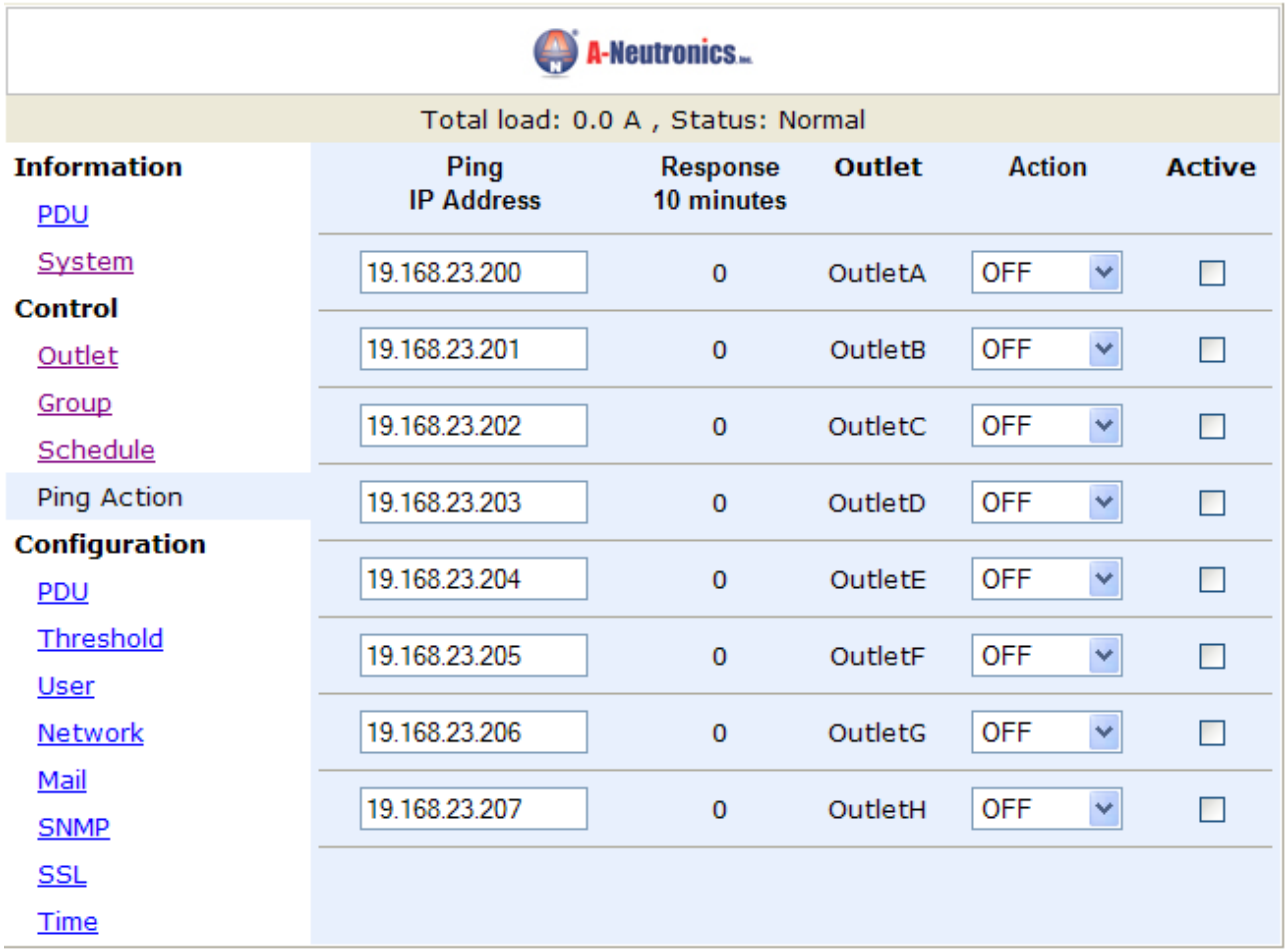
Automatically reboot the locked device by pinging its IP

Ping IP Address: Set the device IP to be monitored by ping from PDU.

Response 10 minutes: PDU will ping the assigned IP address each minute one time. If the equipment has not responded, then the number will be increased one time. When the continual 10 minutes have not obtained the response, the number will display 10 and PDU will carry out the assigned action automatically.

Action: Select outlet action to "OFF" or "OFF/ON"

Active: Enable this function.



Configuration: PDU

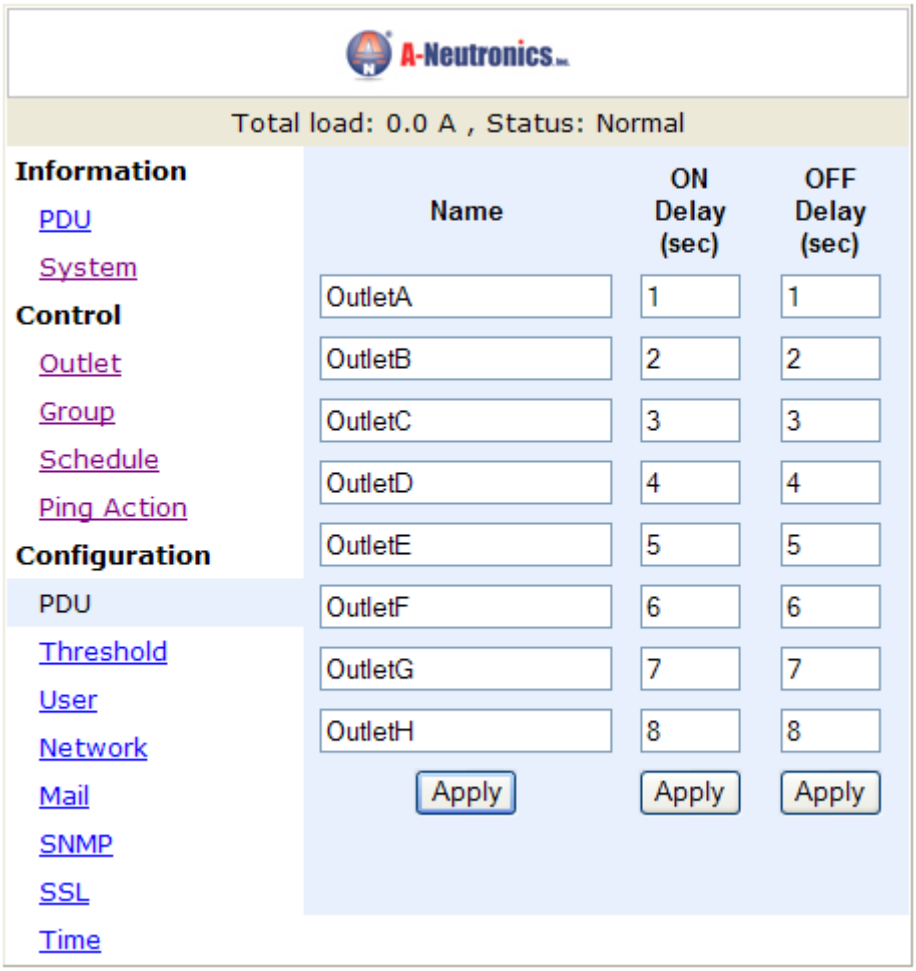
Set the outlet name and delay time.

Name: Rename the outlet.

ON: Set delay time for power on sequential.

OFF: Set delay time for power off sequential.

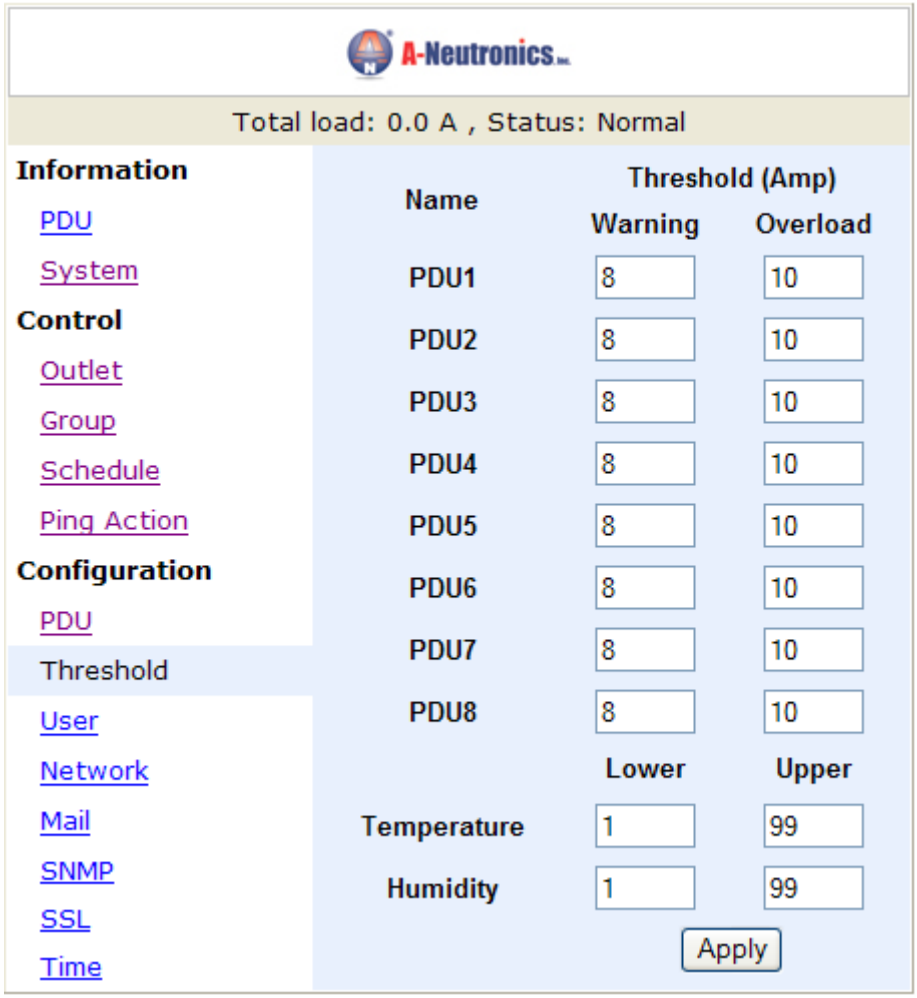
Note: Enter a value between 0 and 255 seconds.



Configuration: Threshold

Set the warning and overload threshold for each circuit.

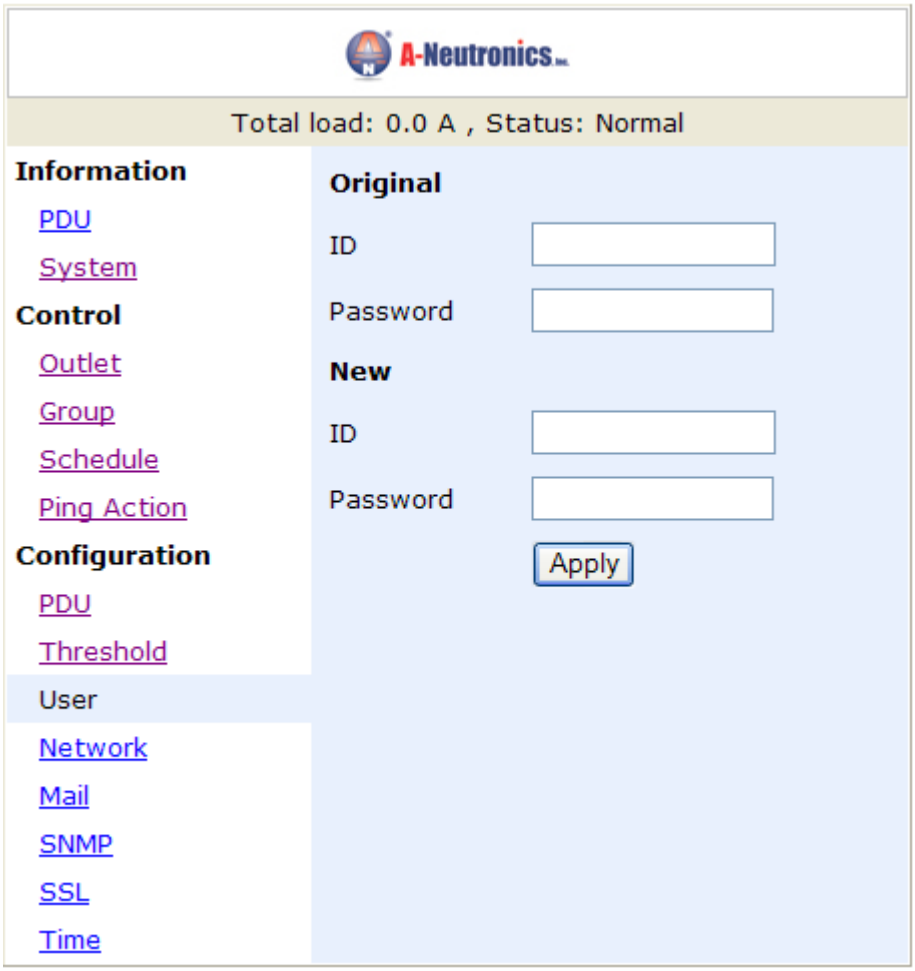
Set lower and upper threshold for *temperature and humidity.



Configuration: User

Change ID and password.

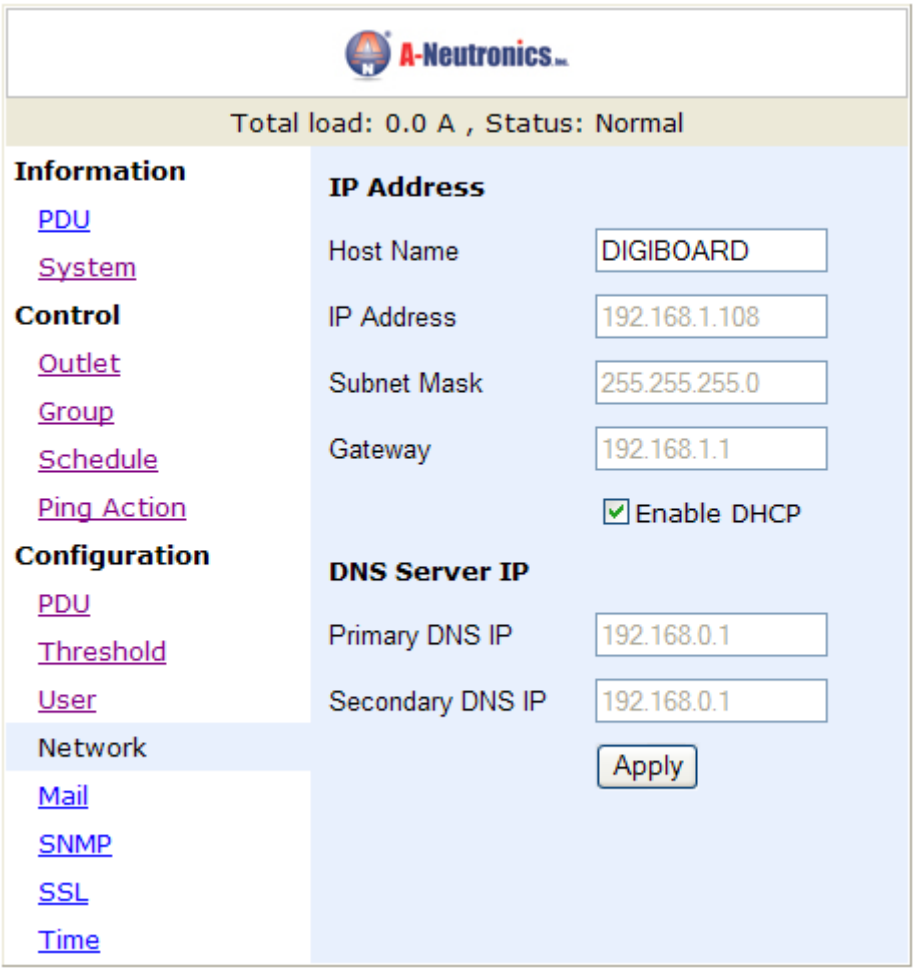
Default ID is snmp and password is 1234.



Configuration: Network

PDU network information

Enable DHCP: Change the way to get IP address for PDU.



Configuration: Mail

When event occurs, PDU can send out an email message to pre-defined account.

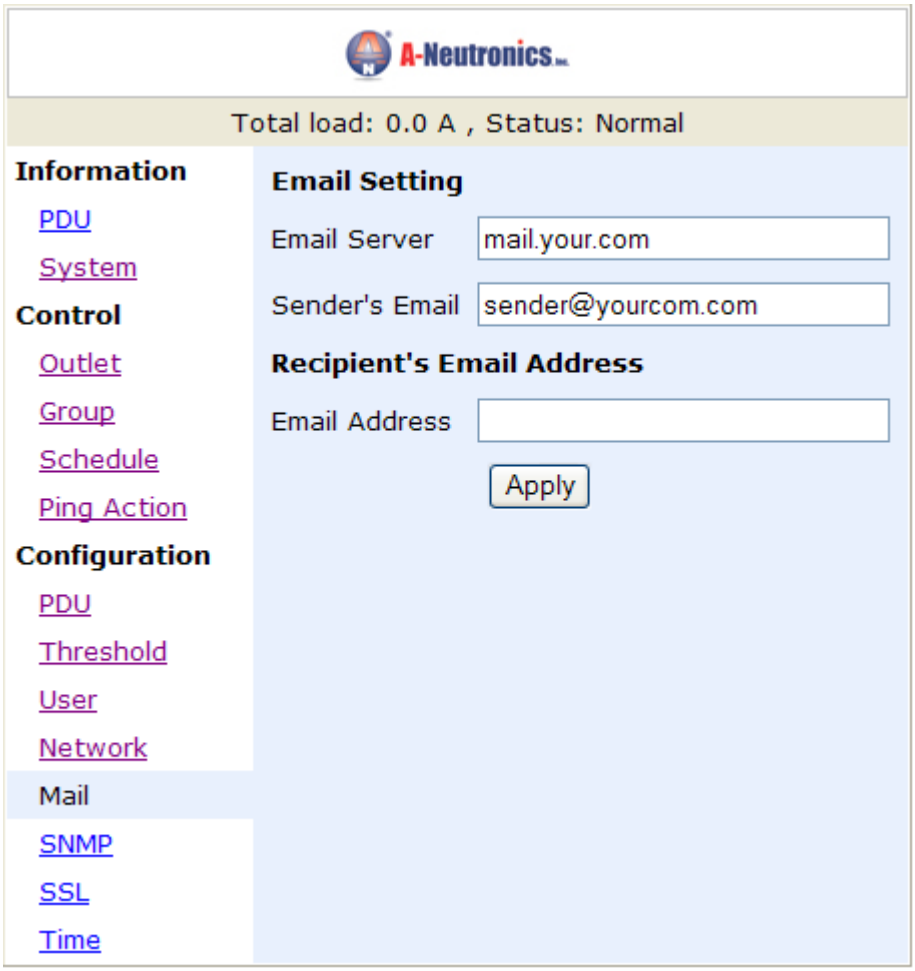
Email Server: The Email Server only supports the domain name, not IP address.

Sender's Email: Input the sender email address.

Email Address: Input the recipient email address.

The message in the email:
Indicate OutletA~H-XXXXXXXX status in order
X=0 : means the power off.
X=1 : means the power on.

Note: Make sure DNS server can resolve the Email Server's domain name.

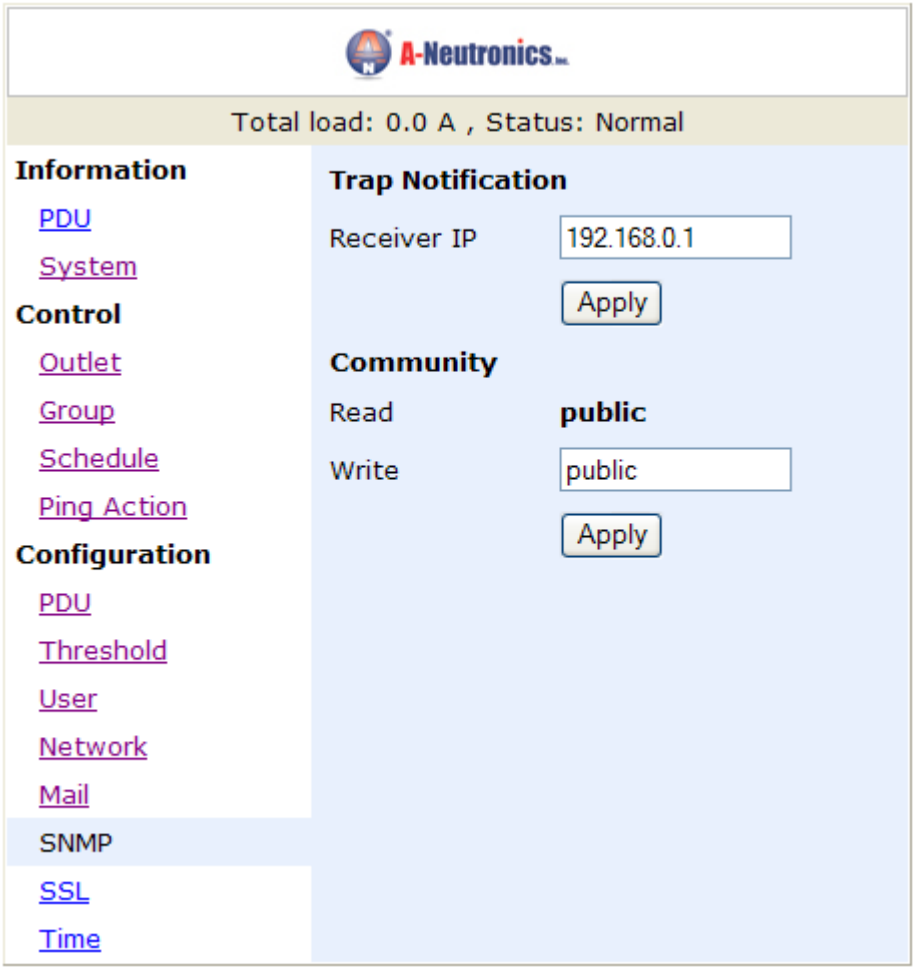


Configuration: SNMP

When event occurs, PDU can send out trap message to pre-defined IP address.

Trap Notification: Set receiver IP for trap.

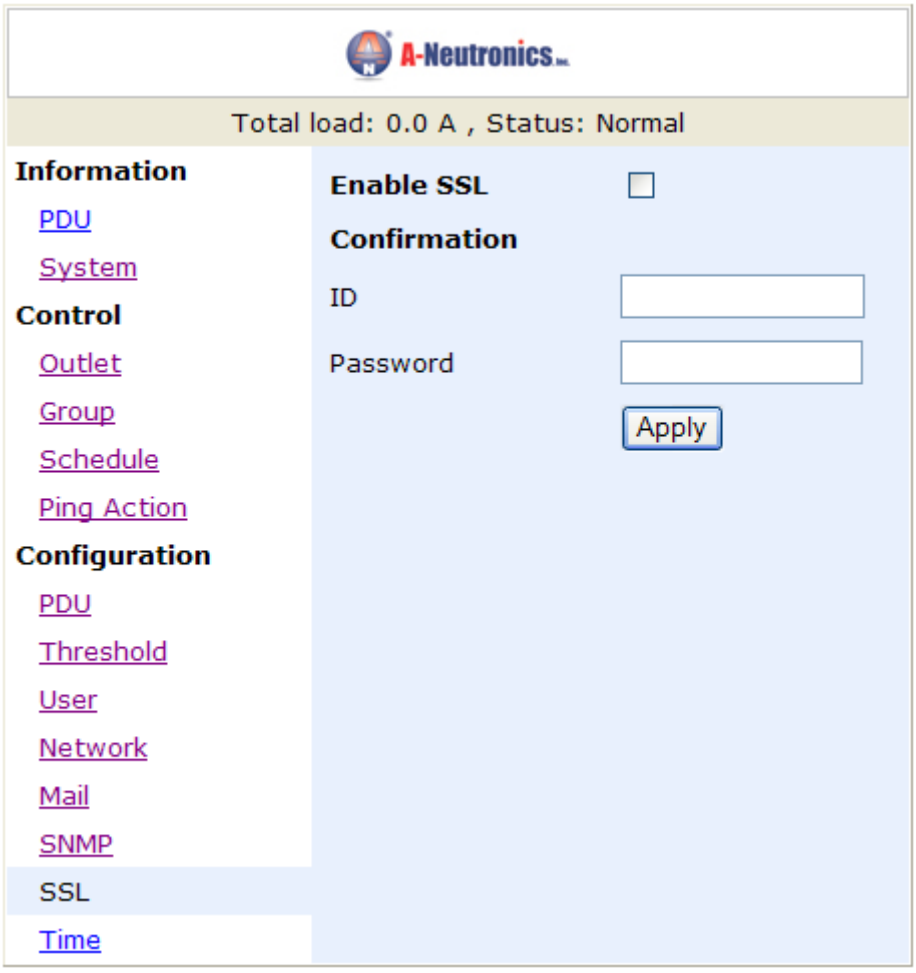
Community: Set SNMP community.
Read Community is public and fixed.
Default Write Community is "public" and can be modified by user.



Configuration: SSL

Enable SSL for web communication.

User must input the correct ID and password to enable SSL function. The ID and password must be the same as the "User" Setting.

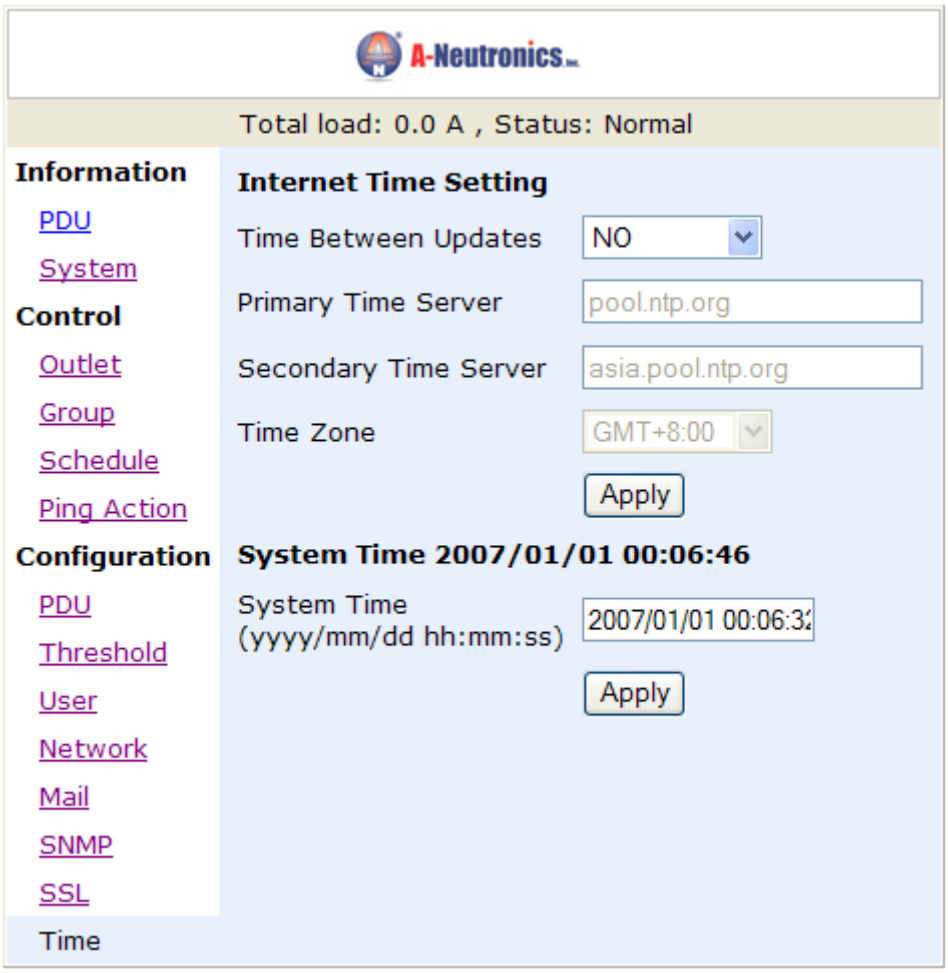


Configuration: Time

Set the time for schedule control.

Internet Time Setting: Get time from the assigned network time server.

System Time: Input time manually.



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