



**OPERATING MANUAL  
AC POWER DISTRIBUTION UNITS  
VIGILANT SERIES**

**[WWW.UNIPOWERTELECOM.COM](http://WWW.UNIPOWERTELECOM.COM)**

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## 1. Introduction

The VIGILANT Series is a family of Internet ready Power Distribution Units (PDU) designed and is equipped with an intelligent current-meter (True RMS) that will indicate the total power consumption of the connected loads.

These PDUs offer easy to set up user-friendly communication software which provides the functions to assist network manager in remotely monitoring multiple PDU power consumption for the entire enterprise.

### Features:

- Built-in web server, the network manager can monitor the current consumption of the PDU in real time.
- Build-in true RMS current meter.
- Easy setup, the meter can display the IP address directly.
- Homepage supports SSL.
- Provides an audible alarm when power consumption is in excess of preset warning and overload limits.
- Can send emails and SNMP Alarm Traps when the power consumption exceeds the above limits.
- The supplied software utility can monitor a large number of PDUs at the same time.
- SNMP support with provided MIB allows for the PDU to be monitored by a NMS.
- Real time to control of individual outlets.
- LED outlets status indication.
- Power on sequencing.

## 2. PDU Package

The standard package contains a VIGILANT Series PDU with supporting hardware and software. The components of the package are:

- Power Distribution Unit.
- Rack mount Brackets.
- CD-ROM containing:
  - User Manual.
  - PDU Software.
  - MIB: Management Information Base for Network. (PDUMIB.mib)
  - Adobe Acrobat Reader.

### 3. Function

#### Interface

True RMS Current  
Meter



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 is also at least 0.5A lower than the alarm threshold.
Function Button	<ul style="list-style-type: none"> <li>● Press and release to turn off the warning beep. The overload beep cannot be cancelled.</li> <li>● Press and hold the key for 1 beep; the meter shows the total current.</li> <li>● Press and hold the key for 2 beeps; the meter shows the IP address</li> <li>● Press and hold the key for 4 beeps; sets DHCP ON or OFF. Note that VIGILANT Series PDUs are shipped with DHCP set to ON.</li> <li>● Press and hold the key for 6 beeps; Resets the PDU back to it's default settings.</li> </ul>
Meter	3 digits to display current or IP Address.

LED Indicator	SSL (yellow): Light on means web access is protected by SSL.  DHCP (Green): Light on means the PDU gets its IP address through DHCP.  A - H (Green): Indicates the status of each outlet.
Circuit Breaker	Overload power protection. Push to reset.

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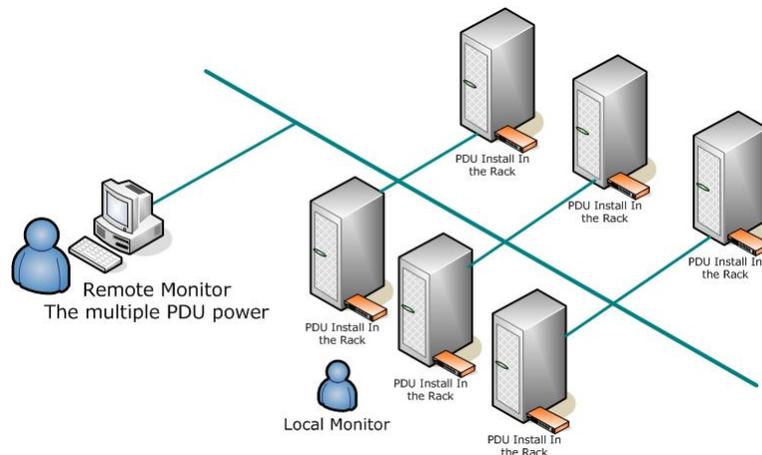
## 4. Installation

This section provides quick instructions 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. Therefore, 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 Earthing - Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g. use of power strips).

### Diagram



## Hardware

1. Install mounting brackets.

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

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

Choose a location for the brackets.

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

2. Connect input and output power.
3. Connect Ethernet cable to the PDU.
4. Switch on the PDU.

### **Note 1:**

The default setting for obtaining an IP address is via DHCP. If a DHCP server is not available the IP address can be programmed as desired manually using a PC set to the same network segment and connected with a cross-over Ethernet cable. The default IP address is 192.168.0.216.

### **Note 2:**

TO SETUP THE NETWORK SYSTEM FOR VIGILANT PDUs, IT IS STRONGLY RECOMMENDED TO BUILD UP THE POWER MONITORING NETWORK ISOLATED FROM ANY OTHERS.

## 5. Web Interface

### Login:

Enter the PDU IP address in a web browser in the format `http://192.168.0.216`

Default ID is `snmp`.

Password is `1234`.



**Information: PDU**

Displays the total PDU load current as well as the WARNING and OVERLOAD threshold settings.

 <b>PDU</b>	
Total load: 0.0 A , Status: Normal	
<b>Information</b> <a href="#">PDU</a> <a href="#">System</a>	<b>PDU</b> PDU                      0.0 A Normal
<b>Control</b> <a href="#">Outlet</a>	<b>Threshold</b> Warning                  8.0 A Overload                  10.0 A
<b>Configuration</b> <a href="#">PDU</a> <a href="#">Threshold</a> <a href="#">User</a> <a href="#">Network</a> <a href="#">Mail</a> <a href="#">SNMP</a> <a href="#">SSL</a>	

### Information: System

Indicates PDU system information, including:

Model No.

Firmware Version

MAC Address

System Name

System Contact

Location

 <b>PDU</b>		
Total load: 0.0 A , Status: Normal		
<b>Information</b> <a href="#">PDU</a> System	<b>Model No.</b> <b>Firmware Version</b> <b>MAC Address</b>	XXXXXXXXXXXX s4.82-091012-1cb08s 00:16:18:77:04:51
<b>Control</b> <a href="#">Outlet</a>	<b>System Name</b> <b>System Contact</b>	<input type="text" value="PDU"/> <input type="text" value="Admin"/>
<b>Configuration</b> <a href="#">PDU</a> <a href="#">Threshold</a> <a href="#">User</a> <a href="#">Network</a> <a href="#">Mail</a> <a href="#">SNMP</a> <a href="#">SSL</a>	<b>Location</b>	<input type="text" value="Office"/> <input type="button" value="Apply"/>

### Control: Outlet

Indicates PDU outlet on/off status and controls each outlet.

Select the outlet by checking the box and then click ON or OFF button to control the outlet.

**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.

 **PDU**

Total load: 0.0 A , Status: Normal

Information	Outlet Name	Status	
<a href="#">PDU</a>	OutletA	ON	<input type="checkbox"/>
<a href="#">System</a>	OutletB	ON	<input type="checkbox"/>
<b>Control</b>	OutletC	ON	<input type="checkbox"/>
Outlet	OutletD	ON	<input type="checkbox"/>
<b>Configuration</b>	OutletE	ON	<input type="checkbox"/>
<a href="#">PDU</a>	OutletF	ON	<input type="checkbox"/>
<a href="#">Threshold</a>	OutletG	ON	<input type="checkbox"/>
<a href="#">User</a>	OutletH	ON	<input type="checkbox"/>
<a href="#">Network</a>	<div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="border: 1px solid #ccc; padding: 5px 15px; background-color: #e0e0e0;">ON</div> <div style="border: 1px solid #ccc; padding: 5px 15px; background-color: #e0e0e0;">OFF</div> <div style="border: 1px solid #ccc; padding: 5px 15px; background-color: #e0e0e0;">OFF/ON</div> </div>		
<a href="#">Mail</a>			
<a href="#">SNMP</a>			
<a href="#">SSL</a>			

### Configuration: PDU

Sets the outlet name and delay time.

**Name:** Rename the outlet.

**ON:** Set delay time for power on sequencing.

**OFF:** Set delay time for power off sequencing.

Click on the appropriate **APPLY** button to lock in the new settings.

Note: The maximum delay time is 255 seconds.

 **PDU**

Total load: 0.0 A , Status: Normal

	Name	ON Delay (sec)	OFF Delay (sec)
<b>Information</b> <a href="#">PDU</a> <a href="#">System</a>	OutletA	1	1
<b>Control</b> <a href="#">Outlet</a>	OutletB	2	2
<b>Configuration</b> PDU	OutletC	3	3
<a href="#">Threshold</a>	OutletD	4	4
<a href="#">User</a>	OutletE	5	5
<a href="#">Network</a>	OutletF	6	6
<a href="#">Mail</a>	OutletG	7	7
<a href="#">SNMP</a>	OutletH	8	8
<a href="#">SSL</a>	<input type="button" value="Apply"/>	<input type="button" value="Apply"/>	<input type="button" value="Apply"/>

### Configuration: Threshold

Sets the warning and overload threshold.

Click on the **APPLY** button to lock in the new settings.

 **PDU**

Total load: 0.0 A , Status: Normal

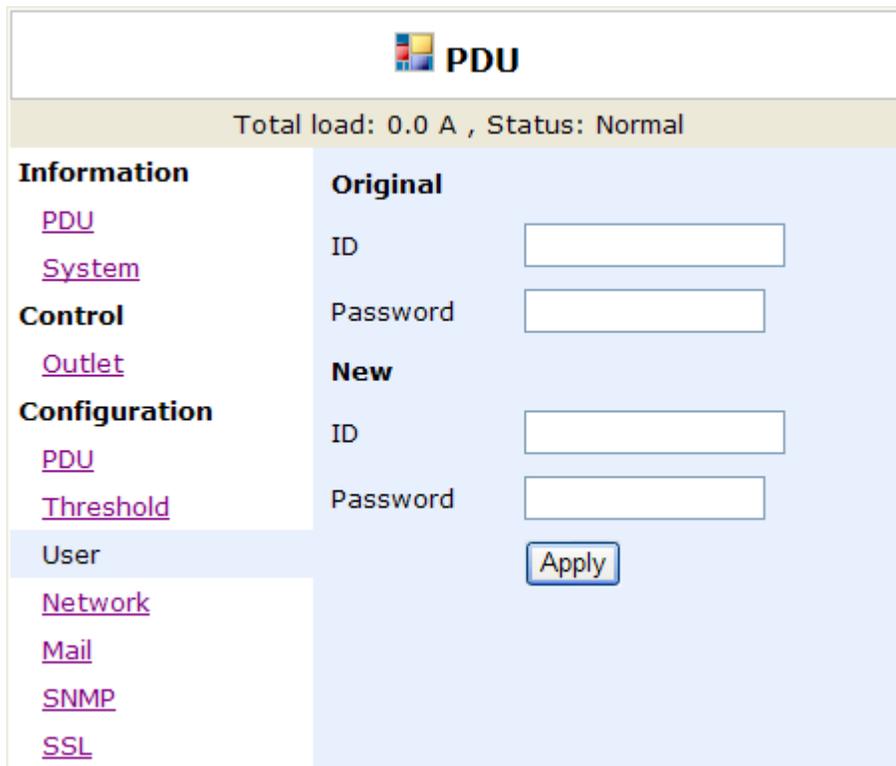
<b>Information</b> <a href="#">PDU</a> <a href="#">System</a>	<table border="0" style="width: 100%;"> <tr> <td style="width: 30%;"></td> <td colspan="2" style="text-align: center;"><b>Threshold (Amp)</b></td> </tr> <tr> <td style="text-align: right;"><b>Name</b></td> <td style="text-align: center;"><b>Warning</b></td> <td style="text-align: center;"><b>Overload</b></td> </tr> <tr> <td style="text-align: right;">PDU</td> <td style="text-align: center;"><input type="text" value="8"/></td> <td style="text-align: center;"><input type="text" value="10"/></td> </tr> </table>		<b>Threshold (Amp)</b>		<b>Name</b>	<b>Warning</b>	<b>Overload</b>	PDU	<input type="text" value="8"/>	<input type="text" value="10"/>
	<b>Threshold (Amp)</b>									
<b>Name</b>	<b>Warning</b>	<b>Overload</b>								
PDU	<input type="text" value="8"/>	<input type="text" value="10"/>								
<b>Control</b> <a href="#">Outlet</a>	<input type="button" value="Apply"/>									
<b>Configuration</b> <a href="#">PDU</a> <div style="background-color: #e0e0e0; padding: 2px;">Threshold</div> <a href="#">User</a> <a href="#">Network</a> <a href="#">Mail</a> <a href="#">SNMP</a> <a href="#">SSL</a>										

## Configuration: User

Change ID and password.

Default ID is **snmp** and password is **1234**.

Click on the **APPLY** button to lock in the new settings.



The screenshot shows a web interface for a PDU. At the top, there is a header with a logo and the text "PDU". Below the header, a status bar indicates "Total load: 0.0 A , Status: Normal". The main content area is divided into two columns. The left column is a navigation menu with sections: "Information" (containing links for PDU and System), "Control" (containing a link for Outlet), "Configuration" (containing links for PDU, Threshold, and User), "Network", "Mail", "SNMP", and "SSL". The "User" link is highlighted. The right column contains configuration fields. Under the heading "Original", there are input boxes for "ID" and "Password". Under the heading "New", there are input boxes for "ID" and "Password". At the bottom of the right column is an "Apply" button.

## Configuration: Network

PDU network information

**Enable DHCP:** When checked the PDU will obtain it's IP from the server.

Click on the **APPLY** button to lock in the new settings.

 **PDU**

Total load: 0.0 A , Status: Normal

<b>Information</b>  <a href="#">PDU</a> <a href="#">System</a> <b>Control</b> <a href="#">Outlet</a> <b>Configuration</b> <a href="#">PDU</a> <a href="#">Threshold</a> <a href="#">User</a> <b>Network</b> <a href="#">Mail</a> <a href="#">SNMP</a> <a href="#">SSL</a>	<b>IP Address</b> Host Name <input style="width: 100%;" type="text" value="DIGIBOARD"/> IP Address <input style="width: 100%;" type="text" value="192.168.0.85"/> Subnet Mask <input style="width: 100%;" type="text" value="255.255.255.0"/> Gateway <input style="width: 100%;" type="text" value="192.168.0.254"/> <input checked="" type="checkbox"/> Enable DHCP <b>DNS Server IP</b> Primary DNS IP <input style="width: 100%;" type="text" value="192.168.0.254"/> Secondary DNS IP <input style="width: 100%;" type="text" value="0.0.0.0"/> <input type="button" value="Apply"/>
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### Configuration: Mail

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

**Email Server:** Enter the Mail Server's Domain Name.

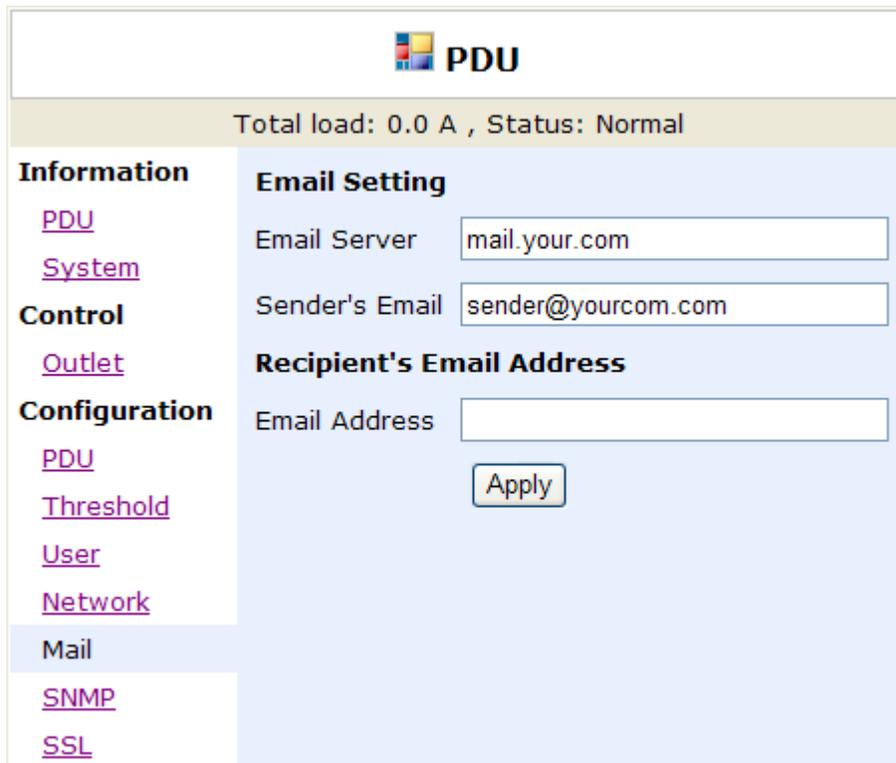
**Sender's Email:** Enter the sender email address.

**Email Address:** Enter the recipient email address.

Click on the **APPLY** button to lock in the new settings.

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

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



The screenshot shows the PDU configuration web interface. At the top, it displays the PDU logo and the current status: "Total load: 0.0 A , Status: Normal". On the left side, there is a navigation menu with categories: Information, Control, Configuration, and Mail. Under "Information", there are links for PDU and System. Under "Control", there is a link for Outlet. Under "Configuration", there are links for PDU, Threshold, User, and Network. The "Mail" category is currently selected. The main content area is titled "Email Setting" and contains three input fields: "Email Server" (with the value "mail.your.com"), "Sender's Email" (with the value "sender@yourcom.com"), and "Recipient's Email Address" (which is empty). Below these fields is an "Apply" button.

### Configuration: SNMP

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

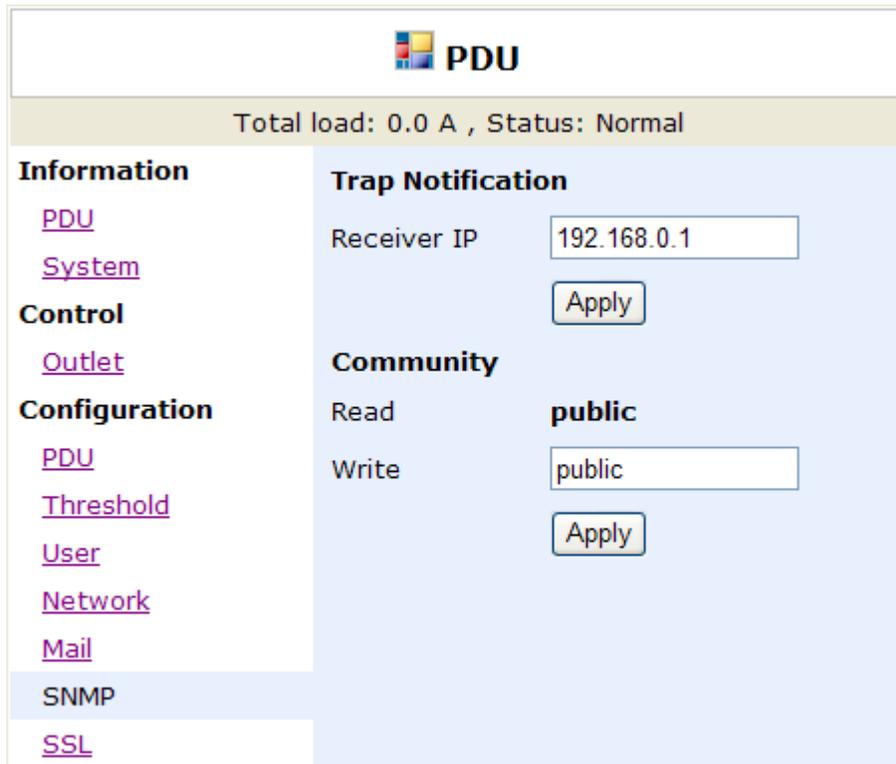
**Trap Notification:** Sets receiver IP for alarm traps.

**Community:** Sets the SNMP community.

Read Community is "public" and "fixed".

Default Write Community is "public" and can be modified by the user.

Click on the appropriate **APPLY** button to lock in the new settings.



The screenshot shows a web interface for a PDU. At the top, there is a header with a logo and the text "PDU". Below the header, a status bar indicates "Total load: 0.0 A , Status: Normal". The main content area is divided into two columns. The left column contains a navigation menu with sections: "Information" (links: PDU, System), "Control" (link: Outlet), "Configuration" (links: PDU, Threshold, User, Network, Mail, SNMP, SSL), and "SSL". The right column is titled "Trap Notification" and "Community". Under "Trap Notification", there is a "Receiver IP" field with the value "192.168.0.1" and an "Apply" button. Under "Community", there are "Read" and "Write" fields. The "Read" field has the value "public" and is marked as "fixed". The "Write" field has the value "public" and an "Apply" button.

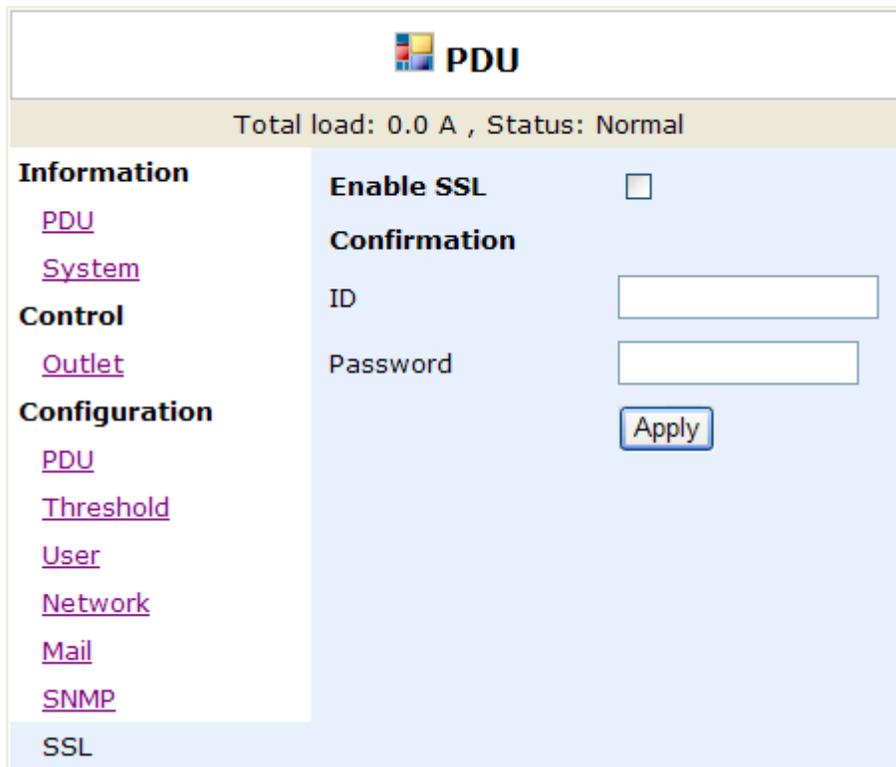
### Configuration: SSL

Enables SSL for web communication.

User must enter the correct ID and password to enable SSL function.

These must be the same as the settings in "User".

Click on the **APPLY** button to lock in the new settings.



The screenshot shows a web interface for a PDU. At the top, there is a header with a logo and the text "PDU". Below the header, a status bar indicates "Total load: 0.0 A , Status: Normal". The main content area is divided into two columns. The left column contains a navigation menu with sections: "Information" (with links for PDU and System), "Control" (with link for Outlet), "Configuration" (with links for PDU, Threshold, User, Network, Mail, and SNMP), and "SSL" (which is currently selected). The right column displays the "Enable SSL" configuration. It features a checkbox labeled "Enable SSL" which is currently unchecked. Below this is a "Confirmation" section with two input fields: "ID" and "Password". At the bottom of the right column is an "Apply" button.

