

# Manual

## PDU TG-1021

Desktop PDU





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## 1. Introduction

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

The PDU offers an easy set up and user-friendly communication software. This software provides the function that assistant manager to remotely monitor the multiple PDU power consumption to realize the total current power consumption and utilization for the enterprises.

### Features:

- Built-in web server, manager can real time to control power.
- Homepage support SSL.
- Provide per outlet power consumption.
- Send the email and traps when outlet is turned on and off.
- Provide utility, it can monitor a large amount of PDU at the same time.
- Support the SNMP and provide MIB for the PDU to be monitored by NMS.
- Real time to control outlets of PDU.
- Indicate outlets status with LED.
- Schedule control
- Auto reboot the locked device by pinging its IP
- Support network time protocols



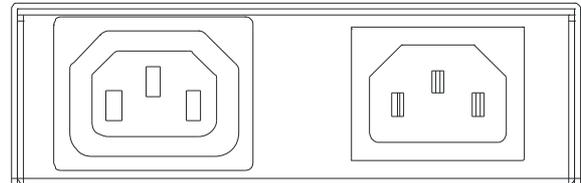
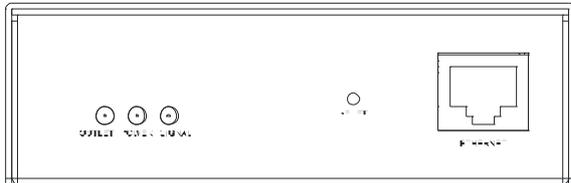
## 2. PDU Package

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

- Network Power Manager
- CD-ROM, it contains:
- User Manual.
- Management Utility
- MIB: Management Information Base for Network. (PDUMIB.mib)
- Adobe Acrobat Reader.

## 3. Function

### Interface



Functions	Description
Ethernet	RJ45 port for network communication port.
Reset Button	<ul style="list-style-type: none"> <li>Press and hold the key after 6 beeping; it can reset Network Power Manager back to default setting.</li> </ul>
LED Indicator	<p>OUTLET (green): Light on means outlet is turned on.</p> <p>POWER (red): Light on means input power is working normally.</p> <p>SIGNAL (yellow): Flash after reset is pressed.</p>



## 4. Installation

The default setting for the way to get IP address is fixed IP. It is 192.168.0.200

**Note:**

TO SETUP THE NETWORK SYSTEM FOR PDU, STRONGLY RECOMMEND TO BUILD UP THE POWER MONITORING NETWORK SYSTEM ISOLATED WITH THE OTHERS, IN ORDER TO KEEP THE STABILITY OF GETTING POWER INFORMATION AND SYSTEM OPERATION.



## 5. Web Interface

### Login:

Input the PDU IP address in web browser.

Default ID is snmp.

Password is 1234.





## Information: System

Indicate PDU system information, including:

- Model No.
- Firmware Version
- MAC Address
- System Name
- System Contact
- Location

PDU		
<b>Information</b>	<b>Model No.</b>	NPS-1023J-01N1
<a href="#">System</a>	<b>Firmware Version</b>	s4.82-120215-1s
<b>Control</b>	<b>MAC Address</b>	00:16:18:77:38:74
<a href="#">Outlet</a>	<b>System Name</b>	<input type="text" value="PDU"/>
<a href="#">Schedule</a>	<b>System Contact</b>	<input type="text" value="Admin"/>
<a href="#">Ping Action</a>	<b>Location</b>	<input type="text" value="Office"/>
<b>Configuration</b>		<input type="button" value="Apply"/>
<a href="#">PDU</a>		
<a href="#">User</a>		
<a href="#">Network</a>		
<a href="#">Mail</a>		
<a href="#">SNMP</a>		
<a href="#">SSL</a>		
<a href="#">Time</a>		



## 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.

Information	PDU	Status
<a href="#">System</a>	OutletA	ON <input type="checkbox"/>
<b>Control</b>		
<b>Outlet</b>	<input type="button" value="ON"/>	<input type="button" value="OFF"/> <input type="button" value="OFF/ON"/>
<a href="#">Schedule</a>		
<a href="#">Ping Action</a>		
<b>Configuration</b>		
<a href="#">PDU</a>		
<a href="#">User</a>		
<a href="#">Network</a>		
<a href="#">Mail</a>		
<a href="#">SNMP</a>		
<a href="#">SSL</a>		
<a href="#">Time</a>		



## Control: Schedule

Control the assigned outlet by pre-set schedule.

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

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

**Date:** When select "sgl" at column of "Every", need to input the truly 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.

**PDU**

	Current Time: 2007/01/01 00:13:59						
Information	Outlet (A,B,..)	Every	Date (yy/mm/dd)	Begin (hh:mm)	End (hh:mm)	Action	Active
<a href="#">System</a>							
<b>Control</b>							
<a href="#">Outlet</a>	A,	Mon ▾	09/06/30	07:59	18:30	ON ▾	<input type="checkbox"/>
Schedule	A,	Mon ▾	09/06/30	07:59	18:30	ON ▾	<input type="checkbox"/>
<a href="#">Ping Action</a>							
<b>Configuration</b>							
<a href="#">PDU</a>	A,	Mon ▾	06/01/01	00:07	00:07	OFF ▾	<input type="checkbox"/>
<a href="#">User</a>	A,	Mon ▾	06/01/01	00:07	00:07	OFF ▾	<input type="checkbox"/>
<a href="#">Network</a>	A,	Mon ▾	06/01/01	00:07	00:07	OFF ▾	<input type="checkbox"/>
<a href="#">Mail</a>	A,	Mon ▾	06/01/01	00:07	00:07	OFF ▾	<input type="checkbox"/>
<a href="#">SNMP</a>	A,	Mon ▾	06/01/01	00:07	00:07	OFF ▾	<input type="checkbox"/>
<a href="#">SSL</a>							
<a href="#">Time</a>	A,	Mon ▾	06/01/01	00:07	00:07	OFF ▾	<input type="checkbox"/>



## Control: Ping Action

Automatically reboot the locked device by ping its IP

**Ping IP Address:** Set the device IP that want 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 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.

PDU					
Information	Ping IP Address	Response 10 minutes	Outlet	Action	Active
<a href="#">System</a>					
<b>Control</b>	<input type="text" value="19.168.23.200"/>	0	OutletA	OFF ▾	<input type="checkbox"/>
<a href="#">Outlet</a>					
<a href="#">Schedule</a>					
Ping Action					
<b>Configuration</b>					
<a href="#">PDU</a>					
<a href="#">User</a>					
<a href="#">Network</a>					
<a href="#">Mail</a>					
<a href="#">SNMP</a>					
<a href="#">SSL</a>					
<a href="#">Time</a>					



## 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:** The maximum delay time is 255 seconds.

Name	ON Delay (sec)	OFF Delay (sec)
OutletA	1	1

**Note :** After PDU is plugged into main power, PDU system will start to sequentially turn on the output socket according to the pre-set delay time in PDU web interface. The factory default setting for delay time is one second for each outlet; therefore the 8 ports PDU will take 8 seconds, 24 ports PDU will take 24 seconds to complete start-up procedure.

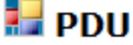
Before the sequence procedure is completed, if a PDU is unplugged from the power source, the outlets which are not turned on will be regarded as remaining at the power-off status. Next time the PDU is plugged into main power, these outlets will not be automatically turned on. These outlets can only be turned on by web interface.



## Configuration: User

Change ID and password.

Default ID is snmp and password is 1234.



<b>Information</b> <a href="#">System</a>	<b>Original</b> ID <input type="text"/> Password <input type="text"/>
<b>Control</b> <a href="#">Outlet</a> <a href="#">Schedule</a> <a href="#">Ping Action</a>	<b>New</b> ID <input type="text"/> Password <input type="text"/>
<b>Configuration</b> <a href="#">PDU</a> <b>User</b> <a href="#">Network</a> <a href="#">Mail</a> <a href="#">SNMP</a> <a href="#">SSL</a> <a href="#">Time</a>	<input type="button" value="Apply"/>



## Configuration: Network

PDU network information

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

PDU	
<b>Information</b>	<b>IP Address</b>
<a href="#">System</a>	Host Name: DIGIBOARD
<b>Control</b>	IP Address: 192.168.0.200
<a href="#">Outlet</a>	Subnet Mask: 255.255.255.0
<a href="#">Schedule</a>	Gateway: 192.168.0.254
<a href="#">Ping Action</a>	<input type="checkbox"/> Enable DHCP
<b>Configuration</b>	<b>DNS Server IP</b>
<a href="#">PDU</a>	Primary DNS IP: 192.168.0.254
<a href="#">User</a>	Secondary DNS IP: 192.168.0.254
<b>Network</b>	<input type="button" value="Apply"/>
<a href="#">Mail</a>	
<a href="#">SNMP</a>	
<a href="#">SSL</a>	
<a href="#">Time</a>	



## Configuration: Mail

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

**Email Server:** The Email Server only support to be input 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.

The screenshot shows a web-based configuration interface for a PDU. At the top, there is a logo with the text 'PDU'. Below the logo, the interface is divided into two main sections. On the left is a navigation menu with the following items: 'Information' (with a sub-link 'System'), 'Control' (with sub-links 'Outlet', 'Schedule', and 'Ping Action'), 'Configuration' (with sub-links 'PDU', 'User', 'Network', 'Mail', 'SNMP', 'SSL', and 'Time'), and 'Mail' (which is currently selected and highlighted). The main content area on the right 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' with an empty field. 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:** 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.

 **PDU**

<b>Information</b> <a href="#">System</a>	<b>Trap Notification</b> Receiver IP <input style="width: 150px;" type="text" value="192.168.0.1"/> <input type="button" value="Apply"/>
<b>Control</b> <a href="#">Outlet</a> <a href="#">Schedule</a> <a href="#">Ping Action</a>	<b>Community</b> Read <b>public</b>
<b>Configuration</b> <a href="#">PDU</a> <a href="#">User</a> <a href="#">Network</a> <a href="#">Mail</a> <b>SNMP</b> <a href="#">SSL</a> <a href="#">Time</a>	Write <input style="width: 150px;" type="text" value="public"/> <input type="button" value="Apply"/>



## 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 with the setting in "User".

The screenshot shows a web-based configuration interface for a PDU. At the top, there is a header with a logo and the text "PDU". Below the header, the interface is divided into two main sections. On the left is a navigation menu with the following items: "Information" (with a sub-link "System"), "Control" (with sub-links "Outlet", "Schedule", and "Ping Action"), and "Configuration" (with sub-links "PDU", "User", "Network", "Mail", "SNMP", "SSL", and "Time"). The "SSL" link is currently selected and highlighted. The main content area on the right is titled "Enable SSL" and contains a checkbox that is currently unchecked. Below this, there is a "Confirmation" section with two input fields: "ID" and "Password". An "Apply" button is located at the bottom right of the form area.



## Configuration: Time

Set the time for schedule control.

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

**System Time:** Input time manually.

PDU	
<b>Information</b>	
<a href="#">System</a>	
<b>Control</b>	
<a href="#">Outlet</a>	
<a href="#">Schedule</a>	
<a href="#">Ping Action</a>	
<b>Configuration</b>	
<a href="#">PDU</a>	
<a href="#">User</a>	
<a href="#">Network</a>	
<a href="#">Mail</a>	
<a href="#">SNMP</a>	
<a href="#">SSL</a>	
<b>Time</b>	
<b>Internet Time Setting</b>	
Time Between Updates	NO
Primary Time Server	pool.ntp.org
Secondary Time Server	asia.pool.ntp.org
Time Zone	GMT+8:00
	<input type="button" value="Apply"/>
<b>System Time 2007/01/01 00:12:43</b>	
System Time (yyyy/mm/dd hh:mm:ss)	2007/01/01 00:12:39
	<input type="button" value="Apply"/>