

The power behind competitiveness

Delta InsightPower SNMP IPv6 for UPS

User Manual



www.deltapowersolutions.com

Save This Manual

This manual contains important instructions and warnings that you should follow during the installation, operation, storage and maintenance of this product. Failure to heed these instructions and warnings will void the warranty.

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Chapter 1 : Important Safety Instructions

1-1 Warnings

- The InsightPower SNMP IPv6 for UPS, hereafter referred to as SNMP IPv6, is designed to work with a UPS and needs to be installed inside the UPS's SNMP slot or inside an external SNMP box. Before installation, ensure that all power sources and critical loads connected to the UPS are disconnected.
- Do not place or use this unit in the presence of flammable substances.
- Do not attempt to disassemble the unit.
- Do not attempt to perform any internal modifications on the unit.
- Do not attempt to fix/ replace internal components. When repair is needed, refer all servicing to the nearest Delta service center or authorized distributor.
- Do not allow any objects or liquids of any kind to penetrate the unit.
- Always follow this User Manual to install and operate this unit.
- Do not play the included CD on a conventional CD player. This could generate loud noise at a level that could result in permanent hearing loss.

1-2 Standard Compliance

• EN 55022: 2006 + A1: 2007, Class B

EN 61000-3-3: 1995+A1: 2001+A2: 2005

• EN 55024: 1998 + A1: 2001 + A2: 2003

IEC 61000-4-2: 1995+A1: 1998+A2: 2000 IEC 61000-4-3: 2006 IEC 61000-4-4: 2004 IEC 61000-4-5: 2005 IEC 61000-4-6: 2007 IEC 61000-4-8: 1993+A1: 2000 IEC 61000-4-11: 2004



Chapter 2 : Introduction

2-1 Product Description

The InsightPower SNMP IPv6 for UPS, hereafter referred to as SNMP IPv6, is a device that provides an interface between an UPS and a network. It communicates with the UPS, acquires its information and remotely manages the UPS via a network system. The SNMP IPv6 supports public protocols including SNMP and HTTP. You can effortlessly configure this SNMP IPv6 using a network system and easily obtain your UPS's status and manage your UPS via the SNMP IPv6.

2-2 Features

• Network UPS management

Allows remote management of the UPS from any workstation through Internet or Intranet.

• Remote UPS monitoring via SNMP & HTTP

Allows remote monitoring of the UPS using SNMP NMS, Delta MIB (Management Information Base) or a Web Browser.

• UPS and system function configuration from any client (password protected)

Set the UPS and system parameters through a Web Browser.

• Event logs & metering data keeping

Provides a history data of the UPS's power events, power quality, status and battery conditions.

Other features and supported protocols include:

- User notification via SNMP Traps and E-mail
- Network Time Protocol
- Telnet configuration
- BOOTP/ DHCP

- HTTPS, SSH, SFTP and SNMPv3 security protocols
- RADIUS (Remote Authentication Dial In User Service) login and local authentication
- Remote event log management through syslog
- IPv4 protocol
- IPv6 protocol (IPv6 Ready Logo Phase 2 (Core for Host, Logo ID 02-C-000624)

2-3 Package Contents

Please carefully verify the SNMP IPv6 and the included accessories. Contact your dealer if any item is missing or damaged. Should you return the items for any reason, ensure that they are carefully repacked using the original packing materials came with the unit.

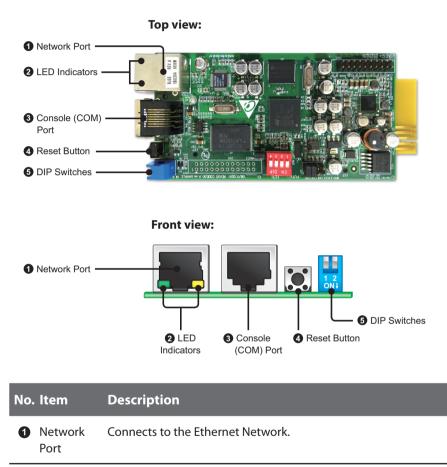


No.	Item	Quantity
0	InsightPower SNMP IPv6 for UPS	1 PC
2	RJ45 to DB9 cable	1 PC
3	Software & User's Manual CD	1 PC
4	Setting Guide for SNMP IPv6 Card's DIP Switches	1 PC
6	Cover	3 PCS



2-4 Interface

The interface includes a NETWORK port, a COM port, LED indicators, a Reset button, DIP switches shown below. For their functions and indications, please refer to the table below.



No. Item Description

2 LED Indicators When the SNMP IPv6 is initializing or upgrading firmware, the two LED indicators flash simultaneously to show its status. Refer to the following:

- **Rapid simultaneous flashing** (every 50ms) : Initialization or firmware upgrade in progress.
- **Slow simultaneous flashing** (every 500ms) : Initialization failed.



WARNING : Do **NOT** remove the SNMP IPv6 or disconnect the UPS's input power during initialization or firmware upgrade! This could result in data loss or damage to the SNMP IPv6.

The green LED indicator shows the network connection status:

- **ON** : Network connection established and the IPv4 address is useable.
- **OFF** : Not connected to a network.
- Flashes slowly (every 500ms) : Faulty IP address.

The yellow LED indicator shows the linking status between the SNMP IPv6 and the UPS:

- Flashes rapidly (every 50ms): UPS linked.
- Flashes slowly (every 500ms): UPS not linked.
- Console (COM)
 Port
 Connects to a workstation with the provided RJ45 to DB9 cable to configure the system.
 Connects to an EnviroProbe (optional) to monitor its connected environment monitoring devices.
 Reset Resets the SNMP IPv6. This does not affect the operation of the UPS.



No. Item Description

6 DIP

Set up operation modes

C	I.	
Swi	tch	les

eτ	up	ope	ratio	n m	oaes.

DIP switches	Operation mode	Description
1 2 ON↓	Normal Mode	The SNMP IPv6 works with the UPS. It provides the UPS's status information and parameters through a network system.
1 2 ON↓	Pass Through Mode	The SNMP IPv6 stops polling the UPS but transfers the communication data between the console port and the UPS.
1 2 ON+	Sensor Mode (with Envi- roProbe	The SNMP IPv6 works with the UPS and an optional EnviroProbe. It provides not only the UPS's status information and parameter readings, but also the EnviroProbe's status information and its environmental parameters such as tem- perature and humidity.
1 2 ON∔	Configura- tion Mode	In this mode, the user can login through the console port and configure the SNMP IPv6's settings. Please refer to 4-4 Configuring through COM Port .

2

For EnviroProbe information, please refer to the Installation Guide included in the package of the EnviroProbe.

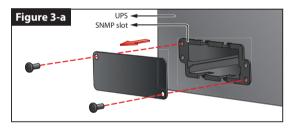
Chapter 3 : Installation

NOTE 🗲

Before installation, please disconnect all power sources and critical loads connected to the UPS. Otherwise, the SNMP IPv6 might have shorting issues to cause UPS shutdown or damage.

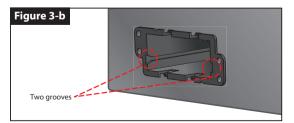
Please install the SNMP IPv6 inside your UPS's SNMP slot. If your UPS does not have any SNMP slot, please install it in an optional external SNMP box.

- Please follow the procedures below to install the SNMP IPv6 into your UPS's SNMP slot
 - Remove the cover and the two screws shown from the UPS's SNMP Step 1 slot (see Figure 3-a).



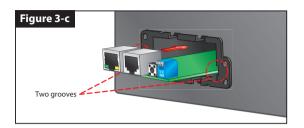
NOTE 📝 Please note that, due to different design, the location of screws for each UPS's SNMP slot might be different.

Step 2 Find the two grooves inside the SNMP slot (see Figure 3-b).





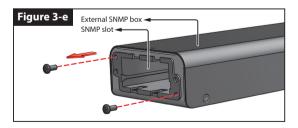
Step 3 Insert the SNMP IPv6 into the grooves (see Figure 3-c).



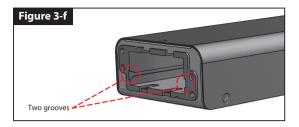
Step 4 There are three covers provided in the SNMP IPv6's package. Please follow the location of screw holes on the SNMP slot to select the suitable cover, and use the two screws that you just removed to fix the cover on the SNMP slot (*see Figure 3-d*).



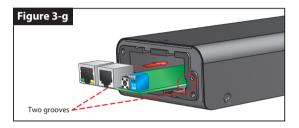
- Please follow the procedures below to install the SNMP IPv6 into an external SNMP box.
 - **Step 1** Remove the two screws shown from the external SNMP box (see Figure 3-e).



Step 2 Find the two grooves inside the external SNMP box (see Figure 3-f).



Step 3 Insert the SNMP IPv6 into the grooves (see Figure 3-g).



Step 4 There are three covers provided in the SNMP IPv6's package. Please follow the location of screw holes on the external SNMP box to select the suitable cover, and use the two screws that you just removed to fix the cover on the external SNMP box (*see Figure 3-h*).





he ba	ackside view of	the external SNMP box is shown as follows.	
No.	ltem	Description	
0	Power Jack	Connects your UPS's output. The input powe should be 12Vdc.	
0	RS232 Port	Use the RS232 cable provided by your UPS to connect your UPS's RS232 port.	
3	10-pin Connector	Connects your UPS's PC board. Please ask quali- fied service personnel to execute such connec- tion. Do not perform the connection yourself.	
lease	refer to the tal	ble below for the external SNMP box's specification	
	Ext	ernal SNMP Box Specifications	
Pov	ver Jack	Input Power 12Vdc	
RS232 Port		D-Sub 9-Pin Male	
10-pin Connector		r Male	
Size	e (W×D×H)	92.4 x 208 x 42 mm	

Chapter 4 : System Configurations

There are different ways you can configure your SNMP IPv6. If a network connection is available at your location, the following methods can be used:

- Web-based interface : The InsightPower SNMP IPv6 for UPS Web offers comprehensive system management and monitoring. Please refer to Chapter 5: InsightPower SNMP IPv6 for UPS Web.
- **EzSetting** : Use the provided program EzSetting to quickly set up your SNMP IPv6. Please refer to *4-2 Configuring with EzSetting*.
- Telnet mode : Configure your SNMP IPv6 in text mode. Please refer to 4-3 Configuring via Telnet.

The above-mentioned methods require network connection. If not available, you can use direct COM port connection to set up your SNMP IPv6. Please see **4-4 Configur-***ing through COM Port*.



- 1. To ensure system security, it is highly recommended that you change your account and password after the first login.
- 2. If you have multiple SNMP IPv6 units installed in your network, we highly suggest that you change the SNMP IPv6's default Host Name to avoid conflicts. Also, it is recommended that you disable BOOTP/ DHCP and manually assign a valid static IP address to the SNMP IPv6.

4-1 Configuring via InsightPower SNMP IPv6 for UPS Web

To set up the SNMP IPv6 via your web browser, please follow the instructions below:

Step 1 Use a CAT5 network cable to connect the SNMP IPv6's Network port to the network. Launch your web browser. In the address bar, enter the SNMP IPv6's default Host Name InsightPower, or default IP address 192.168.1.100. If you are unable to connect, please see Chapter 7: Troubleshooting Q6.



If you have previously changed the SNMP IPv6's Host Name or IP address, connect with the new settings.

- **Step 2** Log in as Administrator (default account/ password: admin/ password, case sensitive).
- Step 3 Specify your preferred display language (default: English) from the dropdown menu on the top right of the page. The SNMP IPv6 remembers your language preference. In the following instructions, English is chosen as the display language.
- Step 4 Click System → Administration → User Manager. Manage your login accounts and passwords under the "Local Authentication" subhead. The access permission for the account types is shown as follows:
 - 1) **Administrator :** Allowed to modify all settings.
 - 2) **Device Manager :** Allowed to modify device-related settings.
 - 3) **Read Only User :** Only allowed to view settings without the permission to make changes.

You can manually specify whether users are allowed to log in from other LANs. If you wish to block login attempts from external connections, select **Only in This LAN**. Otherwise, select **Allow Any**.

- Step 5 Click System → Administration → TCP/ IP to set Host Name, IP address, Subnet Mask and Gateway IP for the SNMP IPv6.
- **Step 6** Click **Time Server** to manually set time and date for the system, or enable automatic time synchronization between the SNMP IPv6 and the time servers.

To completely set up your SNMP IPv6, please refer to **Chapter 5: Insight-Power SNMP IPv6 for UPS Web**.

4-2 Configuring with EzSetting

Included in the provided CD, the EzSetting (compatible with Windows 2000/ 2003/ 2008/ XP/ Vista/ 7) allows you to easily configure your SNMP IPv6 and upgrade firmware on your SNMP devices. Follow the instructions below:

- **Step 1** Use a CAT5 cable to connect the SNMP IPv6's Network port to the network.
- Step 2 Make sure the two DIP switches of the SNMP IPv6 are set to the OFF position (Normal Mode) to enable network communication. Make sure the workstation and the SNMP IPv6 are on the same LAN.
- **Step 3** Insert the provided CD in the CD-ROM drive. From the root directory, launch EzSetting.
- **Step 4** Click **Discover** to search all available SNMP devices on the LAN. A list of devices will be shown.

Then select one of o before to do that ple Configuration" is us networking services	tton to search all of the SN device in the "Device List" v asse provide the account n sed to setup the IP address used to load the device fir device. (Ignore the checkbo	which you would ame and passwo s, netmask, enab mware file then	like to confi ard by press le or disable	ing the "Modify" b	utton.	LAV 172.16.186.104 V Subnet: 172.16.186.0 IPv4 Mask / IPv6 Prefix length: 255.255.254.0
172.016.186.161 172.016.186.186.295 172.016.186.053 172.016.186.135 172.016.186.132 172.016.186.132 172.016.186.132 172.016.186.132 172.016.186.132	Host Name Account EMS1 PDU1 PDU2 SIGHTPOW SIGHTPOW ect All ect All	???????? ????????? ?????????	1.16h	Model/Product EMS2000000 POU113 POU113 GES203NH20098 GES-102R1120	00 00 00 00	Add Add an new item of SNVP device to the Device List manually. Modify Set the account and password for the selected device. Bemove Remove The selected device from the Device List. Batch Upgrade]

- 1. If you want to search SNMP devices in a different domain, change the **Subnet** and **IPv4/ IPv6 Prefix Length** and click **Discover**.
- 2. If the SNMP IPv6 can not be found, check UDP port 3456 on the workstation you are using. Make sure it is open.



Step 5 Select the SNMP IPv6 that you want to modify from the Device List. Click Modify and enter Administrator's account and password (default: admin/ password, case sensitive).

IP & Account			
SNMP Device Ad	ldress		
IP Address:	172 . 16 . 176 . 150		
	Administrator Acco	punt	
Account:	admin	Default: admin	
Password:	****	Default: password	
ок			

Step 6 Click **Configuration** to configure network settings.

Configuration	
System Identification	System Configuration
*Host Name(NetBIOS): IP2	*IP Address: 172 . 16 . 186 . 234
System Contactor:	*Subnet Mask: 255 . 255 . 254 . 0
System Location:	Gateway IP: 172 . 16 . 186 . 254
Date/Time	DNS IP: 172 . 16 . 176 . 188
⊙ *SNTP ○ Manual	BOOTP/DHCP Client: O Enable • *Disable
Time Zone: GMT+08 Beijing, Taipei	HTTP Server: Enable Disable
*1st Time Server Name or IP: 172.16.186.116	Telnet Server: ③ Enable 〇 Disable
2nd Time Server Name or IP:	HTTP Server Port: 80
Set Current Time: Date 07/26/2006 (MM/DD/YYYY)	Telnet Server Port: 23
Time 12:00:00 (hh:mm:ss)	User Limitation
	Administrator: 💿 In The LAN 🛛 Allow Any
Reset to Default OK Cancel	Device Manager:
It is recommended to provide a static "IP Address" and disable the "BOOTP/DHCP Client" option.	Read Only User:
If it is the first time to configure your InsightPower device, pl given a "Time Server" for the device throught "SNTP" protoc	

NOTE Refer to Chapter 5 : InsightPower SNMP IPv6 for UPS Web for complete configurations.

4-3 Configuring via Telnet

- **Step 1** Use a CAT5 network cable to connect the SNMP IPv6's Network port to the network.
- **Step 2** Connect the workstation (Windows or Linux) to the LAN that the SNMP IPv6 is connected to.
- **Step 3** For Windows, launch DOS prompt mode (**Start** \rightarrow **Run** \rightarrow key in **cmd** and press **Enter**). For Linux, launch Shell.
- **Step 4** Enter the following command: **telnet InsightPower** or **telnet IP address** to initiate telnet connection with the SNMP IPv6.
- Step 5 When connection is established, enter Administrator's account and password (default: admin/ password, case sensitive). The Main Menu will appear on the screen. Please refer to 4-5 Configuring via Text Mode for more information.

- 1. The SNMP IPv6 terminates idle connections after 60 seconds.
- Refer to Chapter 5: InsightPower SNMP IPv6 for UPS Web for complete configurations.

4-4 Configuring through COM Port

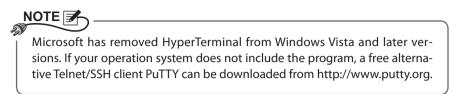
If a network connection is not available at your location, you can still set up the SNMP IPv6 via COM port connection. Please follow the instructions below:

If you are running a non-Windows system, refer to your system's user manual for Telnet clients.

- **Step 1** Use the provided RJ45 to DB9 cable to connect the SNMP IPv6's COM port to the workstations' COM port.
- **Step 2** Make sure the two DIP switches of the SNMP IPv6 are set to the **OFF** position (Normal Mode).



Step 3 For Windows 2000, 2003, 2008 and XP, go to Start \rightarrow Programs \rightarrow Accesso ries \rightarrow Communications and select HyperTerminal.



Step 4 Enter a name, choose an icon for the connection and click **OK**. From the drop-down menu **Connect using**, select the COM port that is connected to the SNMP IPv6.

Connect To
8
Enter details for the phone number that you want to dial:
Country/region: Taiwan (886)
Enter the area code without the long-distance prefix.
Area code: 06
Phone number:
Connect using: COM3
Configure
Detect Carrier Loss Use country/region code and area code Redial on busy
OK Cancel

Step 5 Click **Configure** and set up COM port parameters as follows:

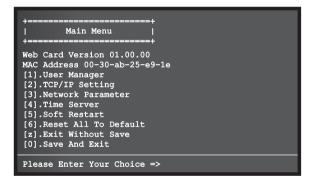
COM3 Properties	? ×
Port Settings	
Bits per second: 2400	-
Data bits: 8	•
Parity: None	•
Stop bits: 1	-
Elow control: None	•
_	<u>R</u> estore Defaults
ОК Са	ancel <u>A</u> pply

Step 6 Click OK to continue. Set the two DIP switches of the SNMP IPv6 to the ON position (Configuration Mode), and HyperTerminal will automatically connect to the SNMP IPv6). If it does not connect, click the telephone icon from the tool bar. When connection is established, log in with Administrator's account/ password (default: admin/ password, case sensitive). Once you are logged in, the Main Menu appears on the screen. Please refer to 4-5 Configuring via Text Mode for more information.

4-5 Configuring via Text Mode

You can configure the SNMP IPv6 via text mode by using Telnet/ SSH clients such as HyperTerminal and PuTTY. In this section, you can find descriptions and default settings.

Main Menu





O User Manager

++ User Manager ++
RADIUS [1].RADIUS Auth: Disable [2].Server: [3].Secret:
[4].Port: 1812
Local Auth Administrator
[5].Account: admin
[6].Password: *******
[7].Limitation: Only in This LAN Device Manager
[8].Account: device [9].Password: *******
[a].Limitation: Only in This LAN Read Only User
[b].Account: user
[c].Password: ******
[d].Limitation: Allow Any
[0].Back To Previous Menu
Please Enter Your Choice =>

No.	ltem	Description	Default
[1]	RADIUS Auth	Specify whether RADIUS login is al- lowed.	Disable
[2]	Server	The RADIUS server name.	
[3]	Secret	The RADIUS secret.	
[4]	Port	The RADIUS port number.	1812
[5]	Administrator Account		admin
[6]	Administrator Password		password
[7]	Administrator Limitation	Restrict Administrator login area.	Only in This LAN
[8]	Device Manager Account	The default account/ password (case sensitive) for the Device Manager. This	device
[9]	Device Manager Password	account is only permitted to change device-related settings.	password

No.	ltem	Description	Default
[a]	Device Manager Limitation	Restrict Device Manager login area.	Only in This LAN
[b]	Read Only User Account	The default account/ password (case sensitive) for Read Only User. This	user
[c]	Read Only User Password	account is only allowed to view set- tings without the permission to make changes.	password
[d]	Read Only User Limitation	Restrict Read Only User login area.	Allow Any

TCP/IP Setting

+	==+
TCP/IP Setting	1
+	==+
[1].IPv4 Address:	
<pre>[2].IPv4 Subnet Mask:</pre>	
<pre>[3].IPv4 Gateway IP:</pre>	
[4].IPv4 DNS or WINS IP	
<pre>[5].DHCPv4 Client:</pre>	
<pre>[6].IPv6 Address:</pre>	fe80::230:abff:fe25:900
[7].IPv6 Prefix Length:	64
<pre>[8].IPv6 Gateway IP:</pre>	::
[9].IPv6 DNS IP:	::
	Enable
[b].Host Name(NetBIOS):	INSIGHTPOWER
[c].System Contactor:	
[d].System Location:	
[e].Auto-Negotiation:	Enable
[f].Speed:	100M
[g].Duplex:	Full
[h].Status Stable:	
[i].Telnet Idle Time:	
[0].Back To Previous Me	nu
Please Enter Your Choice	
Ticabe inter four choice	



No.	ltem	Description	Default
[1]	IPv4 Address	The IPv4 address.	192.168.001.100
[2]	IPv4 Subnet Mask	The IPv4 subnet mask setting.	255.255.255.000
[3]	IPv4 Gateway IP	The IPv4 gateway's IP address.	192.168.001.254
[4]	IPv4 DNS or WINS IP	IPv4 Domain Name Server or WINS IP.	192.168.001.001
[5]	DHCPv4 Client	Enable/ Disable DHCPv4 protocol.	Enable
[6]	IPv6 Address	The IPv6 address.	
[7]	IPv6 Prefix Length	The IPv6 prefix length.	
[8]	IPv6 Gateway IP	The IPv6 gateway's IP address.	
[9]	IPv6 DNS IP	IPv6 Domain Name Server's IP address.	
[a]	DHCPv6	Enable/ Disable DHCPv6 protocol.	Enable
[b]	Host NameThe Host Name for the SNMP(NetBIOS)IPv6.		INSIGHTPOWER
[c]	System Contact	The System Contact information.	
[d]	System Location	The System Location information.	
[e]	Auto- Negotiation	Enable/disable automatic transfer rate (10/ 100Mbps) negotiation.	Enable
[f]	Speed	If the Auto-Negotiation is dis- abled, you can specify the trans- fer rate.	100M
[g]	Duplex	If the Auto-Negotiation is dis- abled, you can specify the duplex mode.	Full
[h]	Status Stable	Status change confirmation check time.	3
[i]	Telnet Idle Time	Telnet connection time-out setting.	60 Seconds

Network Parameter

+======================================	+
Network Parameter	l l
+======================================	ŧ+
[1].HTTP Server:	Enable
[2].HTTPS Server:	Enable
<pre>[3].Telnet Server:</pre>	Enable
<pre>[4].SSH/SFTP Server:</pre>	Enable
<pre>[5].FTP Server:</pre>	Disable
<pre>[6].Syslog:</pre>	Disable
<pre>[7].HTTP Server Port:</pre>	80
[8].HTTPS Server Port:	
[9].Telnet Server Port:	
[a].SSH Server Port:	22
[b].FTP Server Port:	21
[c].Syslog Server1:	
[d].Syslog Server2:	
[e].Syslog Server3:	
[f].Syslog Server4:	
[g].SNMP Get,Set Port: 1	
[0].Back To Previous Menu	
Please Enter Your Choice	=>

No.	ltem	Description	Default
[1]	HTTP Server	Enable/ disable HTTP protocol.	Enable
[2]	HTTPS Server	Enable/ disable HTTPS protocol.	Enable
[3]	Telnet Server	Enable/ disable Telnet protocol.	Enable
[4]	SSH/ SFTP Server	Enable/ disable SSH/ SFTP protocol.	Enable
[5]	FTP Server	Enable/ disable FTP protocol.	Disable
[6]	Syslog	Enable/ disable remote Syslog.	Disable
[7]	HTTP Server Port	HTTP port.	80
[8]	HTTPS Server Port	HTTPS port.	443
[9]	Telnet Server Port	Telnet port.	23
[a]	SSH Server Port	SSH port.	22
[b]	FTP Server Port	FTP port.	21
[c]	Syslog Server 1	The Host Name of remote Syslog Server 1.	
[d]	Syslog Server 2	The Host Name of remote Syslog Server 2.	



No.	ltem	Description	Default
[e]	Syslog Server 3	The Host Name of remote Syslog Server 3.	
[f]	Syslog Server 4	The Host Name of remote Syslog Server 4.	
[g]	SNMP Get, Set Port	The SNMP port.	161

Time Server

You can manually adjust time and date for the SNMP IPv6 or set up automatic time server synchronization. The SNMP IPv6, Windows XP and later versions support SNTP (Simple Network Time Protocol). If you need to start up a time server service on your workstation, please refer to **Chapter 7: Troubleshooting Q1**.

+ Time Server +	
<pre>[1].Time Selection: [2].Time Zone: [3].1st Time Server: [4].2nd Time Server: [5].Manual Date: [6].Manual Time: [0].Back To Previous</pre>	SNTP +0 hr POOL.NTP.ORG 01/01/2000 (MM/DD/YYYY) 00:00:00 (hh:mm:ss) Menu
Please Enter Your Cho	ice =>

No.	ltem	Description	Default	
[1]	Time Selection	SNTP or manual.	SNTP	
[2]	Time Zone	Time Zone Adjust your time zone.		
[3]	1 st Time Server	The first time server for SNTP.	POOL.NTP.ORG	
[4]	2 nd Time Server The second time server for SNTP.			
[5]	Manual Date	Set the date manually.	01/01/2000	
[6]	Manual Time	Set the time manually.	00:00:00	

Soft Restart

Reset the SNMP IPv6. This will not affect the operation of the UPS.

Default Reset

Reset to manufacture default.

Exit Without Saving

Exit and ignore changes.

Save and Exit

Preserve your changes and exit.



Chapter 5 : InsightPower SNMP IPv6 for UPS Web

To configure the SNMP IPv6 via the InsightPower SNMP IPv6 for UPS Web, please follow the steps below:

- **Step 1** Make sure that your SNMP IPv6 is connected to the LAN. Use a CAT5 network cable to connect the SNMP IPv6's Network port to the network.
- Step 2 Launch your web browser. In the address bar, enter the SNMP IPv6's Host Name http:/lnsightPower/ or IP address. For encrypted connection, enter https://InsightPower/ or https://192.168.1.100/.
- **Step 3** When connection is established, the login page appears. Enter your account and password (default: admin/ password).

←→ C ☆ http://192.168.1.100/		
	InsightPower SNMP IPv6 for UPS Login	
	User Name : Password :	
	OK Site IP: 172.16.187.223 Copyright ©, All rights reserved.	

- 1. If you have previously changed the SNMP IPv6's Host Name or IP address, please connect with new settings.
- If the login page is accessible, but you are unable to log in with correct account and password, additional network configuration may be needed. The cause could be the IP subnet of the computer you are logging in to is different from the SNMP IPv6's. To solve this issue, please refer to *Chapter 7: Troubleshooting Q3*.
- The SNMP IPv6 will automatically log off idle connections after 30 minutes.

The InsightPower SNMP IPv6 for UPS Web includes the information of Monitor, Device and System. Please refer to the following sections *5-1~5-3* for more information.

5-1 Monitor

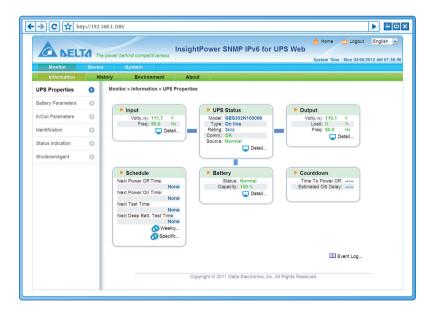
Under the Monitor category, there are Information, History and Environment these three items.

5-1-1 Information

This includes the information of UPS Properties, Battery Parameters, In/ Out Parameters, Identification, Status Indication, and ShutdownAgent. Please note that since different UPSs provide different information, the UPS that you have may not display the same web page.

Our Content of the second s

Go to **Monitor** \rightarrow **Information** \rightarrow **UPS Properties** to see a status overview of the UPS's major parameters. The values will be updated automatically.





Battery Parameters

Go to **Monitor** \rightarrow **Information** \rightarrow **Battery Parameters** to view the information of Battery Status, Battery Measurement, Battery Replacement Date.

· > C 🔂 http	o://192.10	58.1.100/			
A NELT	A The	power behind competitiveness	sightPower	SNMP IPv6 for UPS Web	English
Monitor	Device	System		Gystein Tine - mon 6076020	12 Pair 07:00:1
Information	Hist	tory Environment	About		
UPS Properties	0	Monitor » Information » Battery	Parameters		
Battery Parameters	0				
		Battery Parameters		Replacement Date	
In/Out Parameters	0	Battery Status		Last Battery Replacement Date:	
Identification	0	Battery Status: Normal On Battery Time: 0	Seconds	01/30/2012 (MM/DD/YYYY) Next Battery Replacement Date:	
Status Indication	0	Battery Measurem	ent	01/30/2015 (MM/DD/YYYY)	
ShutdownAgent	0	Battery Capacity: 100 Voltage: 82.1 Temperature: 25	% V *C		
	- 1				

In/ Out Parameters

Go to **Monitor** \rightarrow **Information** \rightarrow **In/ Out Parameters** to view the information of Input Measurement, Bypass Measurement, Output Measurement and Outlet Bank.

	/	sightPov	ver SNMP IPv6 for UPS Web	ff Home	Logout English M
Device	System			System Time	: Mon 03/05/2012 AM 07:59:3
Histo	ry Environment	About			
0	Monitor » Information » In/Out F	arameters			
0					
-	Input Measurement		Output Measurement)
0	Frequency: 60.0	Hz	Output Source: Normal		
0	Voltage: 111.5	v	Voltage: 110.1	V	
× 1			Current: 0.0	A	
0				Watt %	
~	Bypass Measurement)
Ĭ	Frequency: 60.0 Voltage: 111.5 Current: 0.0 Power: 0	Hz V A Watt	Outlet Bank		
	The purce Histo	The power behind competitiveness Device System History Environment Nonitor > Information > In/Out F Pigues: Prequency: Nonitor > Information > In/Out F Competition: Pigues: Pigues: Pigues: Operation: Pigues: Operation: Pigues: Pigues: Pigues: Operation: Pigues: Pigues: Pigues:	InsightPov The power behind competitiveness Divice System History Environment Monitor > Information > Infout Parameters Imput Measurement Frequency: 60.0 Hasping: 111.5 Votage: 111.5 Votage: 111.5 Votage: 111.5 Votage: 111.5	InsightPower SNMP IPv6 for UPS Web Doto System History Environment About Monitor = Information = Infout Parameters • Input Measurement Frequency: 60.0 Votage: 111.5 V • Uutput Measurement Orders: 110.0 Payass Measurement Frequency: 60.0 Votage: 113.5 V • Output Measurement Progenery: 60.0 Votage: 113.5 V • Output Measurement Progenery: 60.0 Votage: 113.5 V Votage: 110.1 Current: 0.0 Power: 0 • Bypass Measurement Progenery: 00.0 Votage: 110.4 Votage: 110.4 Votage: 110.4 Votage: 110.4 Votage: 110.4 Power: 0	

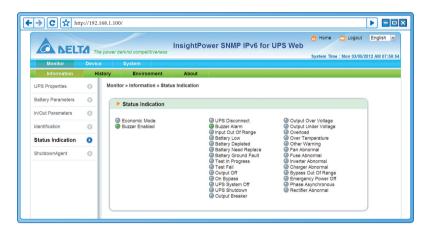
Identification

Go to **Monitor** \rightarrow **Information** \rightarrow **Identification** to view the information of Identification and UPS Rating.

	TA The pow	er behind competitiveness	InsightPo	wer SNMP IPv6 for UPS Web
Monitor	Device	System		
Information	History	Environment	About	
UPS Properties	0 M	onitor » Information » Iden	tification	
Battery Parameters	0			
In/Out Parameters	0	Identification		UPS Rating
in our Parameters	~	Type: On I	302N100098	VA: 3 kVA Power: 2,1 kW
Identification	0	UPS Firmware: 04 Web Firmware: 01.1		Input Voltage: 110 v Output Voltage: 110 v
Status Indication	0			Frequency: 60.0 Hz Battery Voltage: 72 v
ShutdownAgent	0			High Transfer Voltage: 140 v Low Transfer Voltage: 50 v

Status Indication

Go to **Monitor** \rightarrow **Information** \rightarrow **Status Indication** to view the UPS's event list. When an event occurs, its according beacon lights green.



ShutdownAgent

Go to **Monitor** \rightarrow **Information** \rightarrow **ShutdownAgent** to view your designated PCs' shutdown information, including IP Address, OS (operation system), Countdown, Reason and Last Touch.

Please note that the page only appears if:

- Your PCs have connected to a UPS using this SNMP IPv6.
- Your PCs have installed ShutdownAgent 2012 software.



 You have went to System → Administration → SNMP Trap to specify your PCs' IP Addresses in the Target IP bar and selected "ShutdownAgent 2012" from Event Level's pull-down menu.

A NEL	The p	power behind competitivenes	InsightPower SNMP IPv6 for UPS V			Logout English
Monitor	Device	System				
Information	Histo	ory Environment	About			
JPS Properties	0	Monitor » Information » SI	utdownAgent			
Battery Parameters	0	ShutdownAgent				
n/Out Parameters	0					
dentification	0	IP Address	os	Countdown (sec)	Reason	Last Touch (sec)
Status Indication	0	@ 1 172.16.186.78	Invalid		None	8161
ShutdownAgent	0	Invalid	Microsoft Windows Server 2003, Standard Edition Service Pack 2 (build 3790)		None	7
		@ 3 172.16.186.132 Invalid	Invalid		None	8161
		4 172.16.186.63	Invalid		None	8161

5-1-2 History

Event Log

Go to **Monitor** \rightarrow **History** \rightarrow **Event Log** \rightarrow Page 1/2/3/4... to see events that occur. The existing ones are overwritten when the maximum number of entries (1,000) is reached. You can also download the entire event log archive (event_log.xls) recorded during an assigned period of time on your computer.

A NEL	TA The p	ower behind competitiveness InsightPower SNMP IPv6 for UPS Web
Monitor	Device	System
Information	Hist	ory Environment About
Event Log	0	Monitor » History » Event Log » Page1
Data Log	0	▶ Event Log
Configure	0	
		6 Page << 1 2 3 4 5 >> Download All O From 03052012 (MMDD0YYYY) to 03052012 (MMDD0YYYY) (Apply)
		O From 03/05/2012 (###CDYYYY) to 03/05/2012 (###CDYYYY) Apply Date Time Level Event Log
		O From 03/05/2012 (MMDDOWYY) to 03/05/2012 (MMDDOWYY) Apply Date Time Level Event Log 03/05/2012 Gamin Login to the WEB from 172/16/176/14 Event Log
		O From Casto Scot2 (2) gaatcovryvry to Casto Scot2 (2) gaatcovryvry (Apply) Date Time Level Event Log Constraint (1) Constraint (1)
		O From 03005/2012 (MADDOYNYY) to (03065/2012 (MADDOYNYY) (Apply) Date Time Level Event Log 03065/2012 Cr3413 Information ShuddownAgent[[F=127.46.185.0], host=upsos/Nare) communication established 03065/2012 Cr34131 Information ShuddownAgent[[F=127.46.185.0], host=upsos/Nare) communication lost
		O From Casto Scot2 (2) gaatcovryvry to Casto Scot2 (2) gaatcovryvry (Apply) Date Time Level Event Log Constraint (1) Constraint (1)
		O From G305/2012 geat/DOVYMY to G305/2012
		OF From 03:06:2012 (#MCD0YYY) to 03:05:2012 (#MDD0YYY) Apply Date Time Level Event Log 03:05:2012 07:55:46 System admin login to the WEB from 172:16:176:14 03:05:2012 07:55:46 System admin login to the WEB from 172:16:176:14 03:05:2012 07:55:46 System admin login to the WEB from 172:16:176:14 03:05:2012 06:10:11 Warning ShuddownAgent[IP=172:16:186:13; host=upsetNare) communication lost 03:05:2012 05:10:15 Swering No longer typesa active(integration lost) host=upsetNare) communication lost 03:05:2012 05:41:35 Warning ShuddownAgent[IP=172:16:186:32; host=locommunication lost 03:05:2012 06:41:35 Warning ShuddownAgent[IP=172:16:186:32; host=locommunication lost 03:05:2012 06:41:55 Warning ShuddownAgent[IP=172
		O From 03005/012 aux000mmy to 03005/012 aux000mmy (Apply) Date Time Lavel Event Log 03050/012 0755/45 System admin login to the WEB from 172,151,775,141 03050/012 0745/141 Information Boat Ontops and the System 03050/012 061/015 ShutdownAgen(UP=172,451,854,061, hostsupsoftware) communication established 03050/012 061/015 03050/012 061/015 ShutdownAgen(UP=172,451,856,061, hostsupsoftware) communication tost 03050/012 064/35 03050/012 064/435 Winning ShutdownAgen(UP=172,451,856,0, hosts) communication tost 03050/012 03050/012 064/435 Winning ShutdownAgen(UP=172,451,856,0, hosts) communication tost
		OF From 03:06:2012 (#MCD0YYY) to 03:05:2012 (#MDD0YYY) Apply Date Time Level Event Log 03:05:2012 07:55:46 System admin login to the WEB from 172:16:176:14 03:05:2012 07:55:46 System admin login to the WEB from 172:16:176:14 03:05:2012 07:55:46 System admin login to the WEB from 172:16:176:14 03:05:2012 06:10:11 Warning ShuddownAgent[IP=172:16:186:13; host=upsetNare) communication lost 03:05:2012 05:10:15 Swering No longer typesa active(integration lost) host=upsetNare) communication lost 03:05:2012 05:41:35 Warning ShuddownAgent[IP=172:16:186:32; host=locommunication lost 03:05:2012 06:41:35 Warning ShuddownAgent[IP=172:16:186:32; host=locommunication lost 03:05:2012 06:41:55 Warning ShuddownAgent[IP=172

- **Date:** The date when the event occurred.
- **Time:** The time when the event occurred.
- Level: The Event Level of the event occurred.
- Event Log: The description of the event that occurred.
- Download Event Log from UPS

The SNMP IPv6 sends a request to the UPS, collects the event logs saved in the UPS, and replies to the user through network. Please note that this option only appears when the UPS supports this function, and the event logs saved in the UPS may be different from the event logs saved in the SNMP IPv6.

Data Log

Go to **Monitor** \rightarrow **History** \rightarrow **Data Log** to see all saved device data. You can also download the data archive (data_log.xls) recorded during an assigned period of time on your computer.

A	-		Insight	Power SNMI	PIPv6 for L	IPS Web	1	iome 🛄 Logo	ut English
CA NEL	TA The pol	wer behind competitivene	iss	ower ontin	11 10 101 0	of o wet		em Time : Mon 03/	05/2012 AM 08:
Monitor	Device	System							
Information	History	y Environment	About						
Event Log	0 1	Ionitor » History » Data	Log » 03/05/201	2~03/05/2012					
Data Log	0								
	-	Data Log							
Configure	0								
		From 03/05/2012	(MM/DD/YYYY) to 0	3/05/2012 (MM	DD/YYYY) Apply	Download	1		
							_		
				In V	olt	in in	Out		Â
		Date Time	In Freq			Amp Pwr		Out Volt	Out
				Lo	HI				
		03/05/2012 07:53:59						110.0, 0.1, 0.1V	
		03/05/2012 07:43:59						110.0, 0.1, 0.1V	
		03/05/2012 07:33:59						110.1, 0.1, 0.1V	
		03/05/2012 07:23:59		107.0, 0.1, 0.1V				109.8, 0.1, 0.1V	
		03/05/2012 07:13:59						109.8, 0.1, 0.1V	
		03/05/2012 07:03:59						110.0, 0.1, 0.1V	
		03/05/2012 06:53:59						109.9, 0.1, 0.1V	
		03/05/2012 06:43:59						110.1, 0.1, 0.1V	
		03/05/2012 06:33:59						110.1, 0.1, 0.1V	
		03/05/2012 06:23:59		110.6.0.1.0.1V	112.9. 0.1. 0.1V			109.9, 0.1, 0.1V	
								110.0, 0.1, 0.1V	
				110.4, 0.1, 0.1V					
		03/05/2012 06:43:59	59.9, 0.1, 0.1Hz	110.4, 0.1, 0.1V 111.4, 0.1, 0.1V	113.3, 0.1, 0.1V		59.9Hz	110.1, 0.1, 0.1V	
		03/05/2012 06:43:59 03/05/2012 06:33:59	59.9, 0.1, 0.1Hz 59.9, 0.1, 0.1Hz	110.4, 0.1, 0.1V 111.4, 0.1, 0.1V 111.2, 0.1, 0.1V	113.3, 0.1, 0.1V 113.1, 0.1, 0.1V		59.9Hz 60.0Hz	110.1, 0.1, 0.1V	0.0, 0.
		03/05/2012 06:43:59 03/05/2012 06:33:59 03/05/2012 06:23:59	59.9, 0.1, 0.1Hz 59.9, 0.1, 0.1Hz 60.0, 0.1, 0.1Hz	110.4, 0.1, 0.1V 111.4, 0.1, 0.1V 111.2, 0.1, 0.1V 110.6, 0.1, 0.1V	113.3, 0.1, 0.1V 113.1, 0.1, 0.1V 112.9, 0.1, 0.1V		59.9Hz 60.0Hz 59.9Hz	110.1, 0.1, 0.1V 109.9, 0.1, 0.1V	0.0, 0.
		03/05/2012 06:43:59 03/05/2012 06:33:59 03/05/2012 06:23:59 03/05/2012 06:13:59	59.9, 0.1, 0.1Hz 59.9, 0.1, 0.1Hz 60.0, 0.1, 0.1Hz 59.9, 0.1, 0.1Hz	110.4, 0.1, 0.1V 111.4, 0.1, 0.1V 111.2, 0.1, 0.1V 110.6, 0.1, 0.1V 110.4, 0.1, 0.1V	113.3, 0.1, 0.1V 113.1, 0.1, 0.1V 112.9, 0.1, 0.1V 112.3, 0.1, 0.1V		59.9Hz 60.0Hz 59.9Hz 59.9Hz	110.1, 0.1, 0.1V 109.9, 0.1, 0.1V 110.0, 0.1, 0.1V	0.0, 0. 0.0, 0. 0.0, 0.
		03/05/2012 06:43:59 03/05/2012 06:33:59 03/05/2012 06:23:59 03/05/2012 06:23:59 03/05/2012 06:13:59 03/05/2012 06:03:59	59.9, 0.1, 0.1Hz 59.9, 0.1, 0.1Hz 60.0, 0.1, 0.1Hz 59.9, 0.1, 0.1Hz 60.0, 0.1, 0.1Hz	110.4, 0.1, 0.1V 111.4, 0.1, 0.1V 111.2, 0.1, 0.1V 110.6, 0.1, 0.1V 110.4, 0.1, 0.1V 110.4, 0.1, 0.1V	113.3, 0.1, 0.1V 113.1, 0.1, 0.1V 112.9, 0.1, 0.1V 112.3, 0.1, 0.1V 112.3, 0.1, 0.1V		59.9Hz 60.0Hz 59.9Hz 59.9Hz 60.0Hz	110.1, 0.1, 0.1V 109.9, 0.1, 0.1V 110.0, 0.1, 0.1V 109.9, 0.1, 0.1V	0.0, 0. 0.0, 0. 0.0, 0. 0.0, 0.
		03/05/2012 06:43:59 03/05/2012 06:33:59 03/05/2012 06:23:59 03/05/2012 06:13:59 03/05/2012 06:03:59 03/05/2012 05:53:58	59.9, 0.1, 0.1Hz 59.9, 0.1, 0.1Hz 60.0, 0.1, 0.1Hz 59.9, 0.1, 0.1Hz 60.0, 0.1, 0.1Hz 60.0, 0.1, 0.1Hz	110.4, 0.1, 0.1V 111.4, 0.1, 0.1V 111.2, 0.1, 0.1V 110.6, 0.1, 0.1V 110.4, 0.1, 0.1V 110.4, 0.1, 0.1V 110.7, 0.1, 0.1V	113.3, 0.1, 0.1V 113.1, 0.1, 0.1V 112.9, 0.1, 0.1V 112.3, 0.1, 0.1V 112.3, 0.1, 0.1V 112.3, 0.1, 0.1V 112.7, 0.1, 0.1V		59.9Hz 60.0Hz 59.9Hz 59.9Hz 60.0Hz 60.0Hz	110.1, 0.1, 0.1V 109.9, 0.1, 0.1V 110.0, 0.1, 0.1V 109.9, 0.1, 0.1V 109.9, 0.1, 0.1V	0.0, 0. 0.0, 0. 0.0, 0. 0.0, 0. 0.0, 0.
		03/05/2012 06:43:59 03/05/2012 06:33:59 03/05/2012 06:23:59 03/05/2012 06:13:59 03/05/2012 06:03:59 03/05/2012 05:53:58 03/05/2012 05:41:44	59.9. 0.1. 0.1Hz 59.9. 0.1. 0.1Hz 60.0. 0.1. 0.1Hz 59.9. 0.1. 0.1Hz 60.0. 0.1. 0.1Hz 60.0. 0.1. 0.1Hz 59.9. 0.1. 0.1Hz	110.4, 0.1, 0.1V 111.4, 0.1, 0.1V 111.2, 0.1, 0.1V 110.6, 0.1, 0.1V 110.4, 0.1, 0.1V 110.4, 0.1, 0.1V 110.7, 0.1, 0.1V 110.8, 0.1, 0.1V	113.3, 0.1, 0.1V 113.1, 0.1, 0.1V 112.9, 0.1, 0.1V 112.3, 0.1, 0.1V 112.3, 0.1, 0.1V 112.3, 0.1, 0.1V 112.7, 0.1, 0.1V 113.3, 0.1, 0.1V		59.9Hz 60.0Hz 59.9Hz 59.9Hz 60.0Hz 60.0Hz 60.0Hz	110.1, 0.1, 0.1V 109.9, 0.1, 0.1V 110.0, 0.1, 0.1V 109.9, 0.1, 0.1V 109.9, 0.1, 0.1V 112.4, 0.1, 0.1V	0.0, 0. 0.0, 0. 0.0, 0. 0.0, 0. 0.0, 0. 0.0, 0.
		03/05/2012 06:43:59 03/05/2012 06:33:59 03/05/2012 06:23:59 03/05/2012 06:13:59 03/05/2012 06:03:59 03/05/2012 05:53:58	59.9. 0.1. 0.1Hz 59.9. 0.1. 0.1Hz 60.0. 0.1. 0.1Hz 59.9. 0.1. 0.1Hz 60.0. 0.1. 0.1Hz 60.0. 0.1. 0.1Hz 59.9. 0.1. 0.1Hz	110.4, 0.1, 0.1V 111.4, 0.1, 0.1V 111.2, 0.1, 0.1V 110.6, 0.1, 0.1V 110.4, 0.1, 0.1V 110.4, 0.1, 0.1V 110.7, 0.1, 0.1V 110.8, 0.1, 0.1V	113.3, 0.1, 0.1V 113.1, 0.1, 0.1V 112.9, 0.1, 0.1V 112.3, 0.1, 0.1V 112.3, 0.1, 0.1V 112.3, 0.1, 0.1V 112.7, 0.1, 0.1V 113.3, 0.1, 0.1V		59.9Hz 60.0Hz 59.9Hz 59.9Hz 60.0Hz 60.0Hz 60.0Hz	110.1, 0.1, 0.1V 109.9, 0.1, 0.1V 110.0, 0.1, 0.1V 109.9, 0.1, 0.1V 109.9, 0.1, 0.1V	0.0, 0. 0.0, 0. 0.0, 0. 0.0, 0. 0.0, 0. 0.0, 0.

- Date: The date when the data entry is recorded.
- **Time:** The time when the data entry is recorded.



Configure

Go to **Monitor** \rightarrow **History** \rightarrow **Configure** to clear the history data and event log. You can also assign the Save Data Interval.

€→C☆	http://192.168	.1.100/					
ANE	LTA The po	ower behind competitiveness	InsightPow	er SNMP IP	v6 for UPS Web	Home Logout	English x
Monitor	Device	System					
Information	Histor	ry Environment	About				
Event Log	0	Monitor » History » Configure	Ð				
		History Data			Event Log		
Configure	0	Clear History Data Save Data Interval: 10 Apply	v minute(s)		Clear Eve	ent Log	

- Clear History Data: Empty the history data log only.
- Clear Event Log: Empty the event log only.
- **Save Data Interval:** The time interval after which an event/ data entry is recorded.

5-1-3 Environment

Only when an EnviroProbe is used can the Environment page show up. Please note that the SNMP IPv6's DIP switch 1 should be set to the **ON** position and DIP switch 2 should be set to the **OFF** position when you use an EnviroProbe.

The Environment page includes Information and Configuration these two items. You can monitor and set up your EnviroProbe via this Environment page. For EnviroProbe information, please refer to the Installation Guide included in the package of the EnviroProbe.

Information

Go to **Monitor** \rightarrow **Environment** \rightarrow **Information** to see your EnviroProbe's Sensor Information, Input Contacts and Contact Setting.

A NEL	TA The pow	ver behind competitiveness	sightPo	wer SNMP IPv6 fo	r UPS Web	Home Dogout	English 💌
Monitor	Device History	System Environment	About				
Information	0	onitor » Environment » Inform	ation				
Configuration	0	Information)
		Sensor Information		Input Contacts	Contac	t Setting	
		Temperature: 25.6 °C		Smoke(R1): Normal	Smoke(R1)	Normal Open	
		78.0 °F		Fire(R2): Normal	Fire(R2)	Normal Open	
				Leak(R3): Normal	Leak(R3)	Normal Open	
		Humidity: 51 %		Leak(RS): Normal	actual (110)	troutine apoint	

Configuration

Go to **Monitor** \rightarrow **Environment** \rightarrow **Configuration** to configure your EnviroPobe's Warning Threshold, Alarm Threshold, Title and Type. Please see the table below for detailed information.

• 🔶 C 🛧 ht	tp://192.16	8.1.100/			
	TA The p	nower behind competitiveness	ightPower SNMP IPv6 for U		
Monitor	Device	System		System Time : Mon 03/05/2012 All	108:03:
Information	Histo	ory Environment	About		
Information	0	Monitor » Environment » Configu	ration		
Configuration	0	Configuration			
		Sensor	Warning Threshold	Alarm Threshold	
		Temperature	35 °C	40 °C	
		Humidity	80 %	90 %	
	- 1	Power Configuration			
		Input	Title	Туре	
	_	Contact 1	Smoke	Normal Open	
	- 1	Contact2	Fire	Normal Open	
	- 1	Contact3	Leak	Normal Open	
	- 1	Contact4	Door	Normal Open	
	- 1		Submit)	



5-1-4 About

Under About category, there is only one item called Information. You can obtain your SNMP IPv6's other information via this channel.

Information

Go to **Monitor** \rightarrow **About** \rightarrow **Information** to see the version of your Insight-Power SNMP IPv6 for UPS and other information about OpenSSL toolkit and licenses.



5-2 Device

5-2-1 Management

Since different UPSs have different functions, your UPS may not support the same configurations or control items stated below.

Configure

Go to **Device** \rightarrow **Management** \rightarrow **Configure** to configure the UPS. The configuration values are saved in the UPS or in the SNMP IPv6 and these values change UPS operation. The configuration items include the following. Please note that different UPSs may support different configuration options.

• > C 🕁 htt	p://192.1	68.1.100/	
A NEL	TA The	power behind competitiveness	ver SNMP IPv6 for UPS Web System Time : Mon 03/05/2012 AM 08:03:49
Monitor	Device	System	
Management			
Configure	0	Device » Management » Configure	
Control	0		
Weekly Schedule	0	Configure Select UPS Configuration: Auto-Restart	
Specific Schedule	0	UPS Buzzer	Auto Restart
Event Level	0	Transfer Voltage Low Battery UPS Shutdown Action Smart Shutdown Battery Replacement Date	Rebot Affer Power Restore: 2 Enable Boot Delay Affer Power Restore: 30 Sec Submit
		Refresh	Description: Send the command to the UPS to configure the auto restart function.

Auto Restart

After you click **Submit** to confirm your auto restart setup, the SNMP IPv6 will send the command to the UPS to enable auto restart.

UPS Buzzer

After you click **Submit** to confirm your buzzer setup, the SNMP IPv6 will send the command to the UPS to enable buzzer.

Voltage Sensitivity

After you set up your voltage sensitivity (there are Normal, Reduced, and Low selections) and click **Submit**, the SNMP IPv6 will send the command to the UPS to enable the UPS's voltage sensitivity function.

• Transfer Voltage

After you click **Submit** to confirm your transfer voltage setup, the SNMP IPv6 will send the command to the UPS to enable the relevant functions.

• Low Battery

This configuration saves the setup values in the SNMP IPv6 and compares with the values received from the UPS. If the received battery level is lower than the assigned one, the SNMP IPv6 will trigger a low-battery alarm.

• UPS Shutdown Action

This configuration saves your setup values in the SNMP IPv6 and compares with the values received from the UPS. If an event like power failure or low battery occurs, the SNMP IPv6 will send the assigned shutdown delay command to the UPS.



Smart Shutdown

The Smart Shutdown configuration is used to safely shutdown all of the connected computers and the UPS. First of all, you should estimate the longest OS Shutdown Delay time for your operating systems that have been installed shutdown software and connected to the SNMP IPv6. The SNMP IPv6 will delay the assigned OS Shutdown Delay time and wait for all operating systems' shutdown. After that, the SNMP IPv6 will send the assigned UPS shutdown-delay command to the UPS and turn off the UPS.

• Battery Replacement Date

After you set up battery replacement dates, the SNMP IPv6 will send the command to the UPS and save the information in the UPS.

• External Battery Pack

After you click **Submit** to confirm your external battery pack setup, the SNMP IPv6 will send the command to the UPS and save the external battery pack quantity in the UPS.

• Bypass Transfer Frequency

After you set a tolerance of bypass transfer frequency and confirm your setup, the SNMP IPv6 will send the command to the UPS. If the UPS transfers to bypass mode and the bypass frequency is out of the tolerance, output will be turned off and critical loads will be protected.

• Bypass Transfer Voltage

After you set a tolerance of bypass transfer voltage and confirm your setup, the SNMP IPv6 will send the command to the UPS. If the UPS transfers to bypass mode and the bypass voltage is out of the tolerance, output will be turned off and critical loads will be protected.

Periodic Auto Test

This configuration is used to set up battery test time. After you confirm your setup, the SNMP IPv6 will send the command to the UPS and save the setup in the UPS. When the test time is due, the UPS will automatically perform the battery test.

Output Dry Contacts

After you click **Submit** to confirm your setup of output dry contacts, the SNMP IPv6 will send the command to the UPS, save the values in the UPS, and report the current UPS's status.

Control

Go to **Device** \rightarrow **Management** \rightarrow **Control** to configure relevant control commands. After you click **Submit**, the SNMP IPv6 will send the according commands to the UPS to enable relevant functions. The control items include the following.

-→ C ☆ htt	p://192.1	68.1.100/
A NEL	TA The	power behind competitiveness InsightPower SNMP IPv6 for UPS Web
Monitor	Device	System
Management		
Configure	0	Device » Management » Control
Control	0	
Weekly Schedule	0	Control Select UPS Control:
Specific Schedule	0	Battery Test Shutdown & Restart UPS Only
Event Level	0	Smart Shutdown Battery Test Type: 10-seconds Test ★ Outlet Control Simulation Submit.
		Description: Send the command to the UPS to perform the battery test.

Battery Test

After you select the battery test type and click **Submit**, the SNMP IPv6 will send the command to the UPS to enable the battery test accordingly.

• Shutdown & Restart UPS Only

After you confirm your setup, the SNMP IPv6 will send the command to the UPS to shut down or/ and restart the UPS.

If you want to shutdown the UPS, please check the UPS Shutdown Delay box and key in delay time.

If you want to restart the UPS, please check the UPS Restart Delay box and key in delay time.

If you want to shutdown and restart the UPS, please check both of the boxes and key in according delay time.

Smart Shutdown

The Smart Shutdown configuration is used to safely shutdown all of the connected computers and the UPS. First of all, you should estimate the longest OS Shutdown Delay time for your operating systems that have been installed shutdown software and connected to the SNMP IPv6. The SNMP IPv6



will delay the assigned OS Shutdown Delay time and wait for all operating systems' shutdown. After that, the SNMP IPv6 will send the assigned UPS shutdown-delay command to the UPS and turn off the UPS.

Outlet Control

Press the Switch Bank button to control the UPS output relay (on or off).

• Power Fail/ Restore Simulation

Click **Power Fail Test** or **Power Restore Test** button to let the SNMP IPv6 simulate UPS power failure or power restore event. This function allows you to test all of the connected software and verify whether they work properly or not. Please note that the simulation won't influence UPS operation, the UPS remains in its original operation mode and won't transfer to battery mode.

Weekly Schedule

Go to **Device** \rightarrow **Management** \rightarrow **Weekly Schedule** to arrange a weekly schedule for the UPS. You can select **No Action, Shutdown, Restart, 10-Second Test**, and set up what day and what time you want the action to be executed.

	TA The	power behir	II nd competitiveness	nsightPo	wer S	NMP I	Pv6 fo	r UPS	Web		me Dogout	English ×
Monitor	Device	S	/stem									
Management												
Configure	0	Device »	Management » Week	y Schedule								
Control	0											
Weekly Schedule	0	► W	eekly Schedule Action	SUN	MON	TUE	WED	THR	FRI	SAT	Time	
Specific Schedule	0	1	No Action								00:00	
Event Level	0	2	No Action								00:00	
		3	No Action								00:00	
	- 1	4	No Action								00:00	
	- 1	5	No Action								00:00	
	- 1	6	No Action								00:00	
	- 1					Submit						

Specific Schedule

Go to **Device** \rightarrow **Management** \rightarrow **Specific Schedule** to arrange a specific schedule for the UPS. You can set up a specific date (MM/ DD/ YYYY) and time (hh:mm) for a specific action (Stop Action, Shutdown, Restart, 10-Second Test and Deep Battery Test).

Monitor	The p	power behind con System	npetitiveness	ower SNMP IPv6 fo	r UPS Web System Time : Mon 03/0	
Management	Device	System				
Configure	0	Device » Mana	gement » Specific Schedule			
Control	0	(
Weekly Schedule	0	Specifi	c Schedule Date(MM/DD/YYYY)	Time(hh:mm)	Action	
Specific Schedule	0	1	01/01/2000	00:00	Stop Action	-
Event Level	0	2	01/01/2000	00:00	Stop Action	
		3	01/01/2000	00:00	Stop Action 👻	
	-	4	01/01/2000	00:00	Stop Action	
	-	5	01/01/2000	00:00	Stop Action	
	- 1	6	01/01/2000	00:00	Stop Action	
	-	7	01/01/2000	00:00	Stop Action	
	-	8	01/01/2000	00:00	Stop Action	
	- 1	9	01/01/2000	00:00	Stop Action	
	-	10	01/01/2000	00:00	Stop Action	
				Submit		

Event Level

Go to **Device** \rightarrow **Management** \rightarrow **Event Level** to set up a level for an event. If you want to receive an event notification, please refer to *5-3-2 Notification* - *SNMP Trap* and *5-3-2 Notification - Mail Server*.

-> C 🕁 ht	tp://192.16	8.1.100/		
	TA The p	ower behind competitiveness InsightPower SNMP IPv6 for UPS Web	Home Dogout	
Monitor	Device	System	system time : Mon 03/05	2012 All 08:04:49
Management				
Configure	0	Device » Management » Event Level		
Control	0			_
Weekly Schedule	0	Event Level		
weekly Schedule		Event: Over temperature		
Specific Schedule	0	Level: Alarm 🕑 Update		
Event Level	0			
		Over temperature Recover from over temperature Recover from over temperature Power restore Output abnormal Recover from overload Recover from temperature Recover from temperature Recover from temperature Recover from temperature Recover from overload Recover from temperature Recover from temperature	Alarm Alarm Warning Warning Alarm Alarm Alarm Alarm Alarm Alarm Alarm Marm	



5-3 System

Only Administrator can see the System page. Under the System category, there are Administration and Notification these two items. You can use them to change or look up the system's relevant settings or records. Please see below for more descriptions.

5-3-1 Administration

The Administration page includes User Manager, TCP/ IP, Web, Console, FTP, Time Server, Syslog, Batch Configuration, and Upgrade these nine selections.

User Manager

The SNMP IPv6 supports RADIUS. Check the **Use RADIUS** box, key in required information including Server, Secret and Port (default: 1812) and click **Submit** to enable RADIUS. You can define service types for Administrator, Device Manager and Read Only User. If RADIUS is disabled, you can still manage the Account Name, Password and Login Limitation for Local Authentication.

	TA Th	e power behind competitiven	Insi	ghtPower S	NMP IPv6 f	or UPS Web		
Monitor	Device						System Time : Mon 0	3/05/2012 AM 08:44
Administratio	n 📄	Notification						
Jser Manager	0	System » Administratio	n » User Ma	anager				
CP/IP	0	User Manager						
Veb	0							
Console	0	Use RADIUS Serv (51 chars			Secret (32 chars max.)		Port	
TP	0		illian.j		(52 chars max.)		1812	_
ime Server	0			RFC	2865 Service Ty	/pe:		
yslog	0	Adminis	trator		Device Manager	r I	Read Only User	
atch Configuration	0	Login User Framed User Callback Login		□ Login Us I Framed I □ Callback	Jser Login	🗆 Fra	gin User Imed User Ilback Login	
lpgrade	0	Callback Framed Outbound Administrative		Callback Outboun Administr NAS Pro	d ative	Our Adr	liback Framed tbound ministrative S Prompt	
		Callback NAS Prompt		Authentio		Aut	henticate Only Iback NAS Prompt	
		Call Check		Call Che		🗆 Cal	II Check	
		Callback Administr	luve				Ilback Administrative	
				Lo Account Name	cal Authenticatio	on Password		
		Privilege		16 chars max.)		chars max.)	Only in This LAN	ion
		Administrator	admin		•••••		 Only in This LAN Allow Any 	
		Device Manager	device		••••••		 Only in This LAN Allow Any 	
		Read Only User	user				 Only in This LAN Allow Any 	
					Submit			

TCP/IP

This allows Administrator to configure local network parameters for the SNMP IPv6.

Monitor	Devic	e power behind competitiveness	System Time : Mon 03/05/2012 AM 08:45:
Administration		Notification	
User Manager	0	System » Administration » TCP/IP	
TCP/IP	0	► TCP/IP	► System
Web	0	TCP/IP Settings for IPv4	System
Console	0	DHCP Client: O Enable O Disable IP Address: 172.16.187.223	Host Name: AIC-UPS System Contactor:
FTP	0	Subnet Mask: 255.255.254.0	System Location:
Time Server	0	Gateway IP: 172.16.186.254	
Syslog	0	DNS IP: 172.16.1.86	Link
Batch Configuration	0	Search Domain: deltaww.com	Auto-Negotiation: I Enable Speed: ⊗ 100M © 10M Duplex: ⊗ Full © Half
Upgrade	0	TCP/IP Settings for IPv6	Change the parameters in the Link group will cause the SNMP card to restart
		DHCP Client: Enable Disable IP Address: fe80::230:abff:fe26:6	Caro to restant.
		Prefix Length: 64	Submit
		Gateway V6IP: ::	
		DNS V6IP:	

- TCP/ IP Settings for IPv4
 - DHCP Client: Enable/ Disable DHCP. If enabled, DHCP server automatically assigns an IP address to the SNMP IPv6.
 - 2) IP Address: The IP address in dotted format.
 - 3) **Subnet Mask:** The Subnet Mask for your network.
 - 4) Gateway IP: The IP address for network gateway in dotted format.
 - 5) **DNS IP:** The IP address Domain Name Server in dotted format.
 - 6) **Search Domain:** If the Host Name you provided cannot be found, the system appends the search domain to your Host Name.
- TCP/ IP Settings for IPv6
 - 1) **DHCP Client:** Enable/ Disable DHCP. If enabled, DHCP server automatically assigns an IP address to the SNMP IPv6.
 - 2) IP Address: The IPv6 address.
 - 3) **Prefix Length:** The prefix length for the IPv6 address.



- 4) Gateway V6IP: The IP address for the IPv6 network gateway.
- 5) **DNS V6IP:** The IP address for the IPv6 domain name server.
- System
 - 1) **Host Name:** The SNMP IPv6 Host Name on the network.
 - 2) System Contact: System contact information.
 - 3) System Location: System location information.
- Link
 - 1) **Auto-Negotiation:** Enable/ Disable automatic transfer rate (10/ 100M bps) negotiation.
 - 2) **Speed:** If the Auto-Negotiation is disabled, you can specify the transfer rate.
 - 3) **Duplex:** If the Auto-Negotiation is disabled, you can specify the duplex mode.

Web

This allows Administrator to enable/ disable HTTP/ HTTPS communication protocols.

← → C ☆ հայ	o://192.16	8.1.100/	
A NELT	The p	InsightPower SNMF	PIPv6 for UPS Web System Time : Mon 03/05/2012 AM 08:45:28
Monitor	Device	System	
Administration	N	lotification	
User Manager	0	System » Administration » Web	
TCP/IP	0	► Web	► SSL Certificate
Web	0	HTTP: © Enable O Disable HTTPS: © Enable O Disable	Certificate File (PEM format):
Console	0	HTTP Port: 80	Update the certificated file which is generated by opensil for new SSI connections
FTP	0	HTTPS Port: 443	New SSL connections.
Time Server	0	Web Refresh Period: 10 Seconds	
Syslog	0		Submit
Batch Configuration	0	Canudaki © 2014 Dalla	Electronico, Inc. All Dialste Deserved
Upgrade	0	Copyright @ 2011 Deita	Electronics, Inc. All Rights Reserved.

- Web
 - 1) **HTTP:** Enable/ disable HTTP connection.
 - 2) **HTTPS:** Enable/ disable HTTPS connection.

- 3) **HTTP Port:** Assign an HTTP port number (default: 80).
- 4) **HTTPS Port:** Assign an HTTPS port number (default: 443).
- 5) Web Refresh Period: Web refresh interval.

SSL Certificate

- To ensure connection security between the SNMP IPv6 and the connecting workstation, SSL certificate can be used to encrypt and secure the integrity of transmitting data.
- Certificate File: This allows you to replace your own SSL certificate file. The SNMP IPv6 supports PEM format which is generated by OpenSSL. Click Choose File to upload a certificate file.

For more information about generating a private SSL certificate file, please refer to *Chapter 7: Troubleshooting Q12*, or visit http://www. openssl.org/.

Console

This item allows the Administrator to enable or disable Telnet/ SSH communication protocols.

-> C 🔂 http	92.168.1.100/
A NELT	The power behind compatiblyeness InsightPower SNMP IPv6 for UPS Web System Time : Mon 63/05/2012 AM 68-46
Monitor	vice System
Administration	Notification
User Manager	System » Administration » Console
TCP/IP	► Console ► Host Key
Web	Telnet: © Enable O Disable DSA Key:
Console	Telnet Port: 23 RSA Key;
FTP	SSH Port: 22
Time Server	Update the certificated files which are generated by opensish for new SSH connections.
Syslog	
Batch Configuration	Authentication Public Key
Upgrade	Public Key:
	Provide the public key for authentication. The public key can be generated by opensish or publy.
	Submit



- **Telnet:** Enable/ disable Telnet connection.
- **SSH/ SFTP:** Enable/ disable SSH/ SFTP connection.
- Telnet Port: Assign a Telnet port number (default: 23).
- SSH Port: Assign an SSH protocol port number (default: 22).
- Host Key/ Authentication Public Key:

This allows you to replace your own SSH keys. The SNMP IPv6 supports key files generated by OpenSSH, including DSA, RSA, and Authentication Public Keys. How to generate DSA, RSA, and Authentication Public keys for SSH, please refer to **Chapter 7 : Troubleshooting Q13**. You can use this page or SFTP protocol to upload key files. For detailed information, please refer to **Chapter 7 : Troubleshooting Q14**.

FTP

This allows Administrator to enable/ disable FTP communication protocol.

F → C ☆ հեղ	p://192.	168.1.100/		
A NELT	Π 77	e power behind competitiveness	Home Logout System Time : Mon 03/05/3	English M
Monitor	Devic	e System		
Administration		Notification		
User Manager	0	System » Administration » FTP		
TCP/IP	0	► FTP		
Web	0	FTP: O Enable O Disable		
Console	0	FTP Port: 21		
FTP	0	Submit		
Time Server	0			
Syslog	0	Copyright @ 2011 Delta Electronics, Inc. All Rights Rese	rved.	

- FTP: Enable/ disable FTP connection.
- FTP Port: Assign an FTP port number (default: 21).

Time Server

You can manually set the time and date, or allow automatic time synchronization with SNTP servers. Please note that if the SNTP server is not responsive, the event and data log will not register even when SNTP is enabled.

• → C 🛧 htt	//192.168.1.100/	
A NEL	The power behind competitiveness	Logout English
Monitor	Device System	
Administration	Notification	
User Manager	System » Administration » Time Server	
TCP/IP	System Time: © SNTP O Manual	
Web	Simple Network Time Server Manual	
Console	Time Zone: Set Current Time: GMT Dublin,Lisbon,London GMT Dublin,Lisbon,London	
FTP	Primary Time Server: Date 01/01/2000 (MM/DD/YYYY)	
Time Server	POOL.NTP.ORG Time 00:00:00 (hh:mm:ss)	
Syslog	Secondary Time Server: JESSE-ZHUO-NB1	
Batch Configuration	Enable Daylight Saving (MM/DD):	
Upgrade	From 04/01 to 11/01	

• Simple Network Time Server

- 1) **Time Zone:** From the dropdown menu, select the time zone for the location where the SNMP IPv6 is located.
- Primary/ Secondary Time Server: Two time servers can be added. Every 60 minutes, the SNMP IPv6 synchronizes with the first responding server.
- 3) **Enable Daylight Saving:** Check to enable daylight saving time. During this period, the SNMP IPv6 adjusts time forward one hour.
- Manual

If a time server is not accessible, you can still manually set time and date. Please note that every time you restart the SNMP IPv6's network module, time and date is reinstated to previous assigned settings.

Syslog

Syslog is used to store the event log on remote Syslog servers. This will not affect the local event log. After enabling the Syslog, please set up a server IP address. You can set up at maximum four Syslog servers at a time.



• → C ☆ htt	p://192.16	8.1.100/	
	TA The	InsightPower SNMP IPv6 for UPS Web	Home Logout English v System Time : Mon 03/05/2012 AM 08:46:15
Monitor	Device	System	
Administration	1	lotification	
User Manager	0	System » Administration » Syslog	
TCP/IP	0	► Syslog	
Web	0	Syslog: O Enable O Disable	
Console	0	Syslog Server 1: Syslog Server 2:	
FTP	0	Systog Server 3:	
Time Server	0	Syslog Server 4:	
Syslog	0	Submit	
Batch Configuration	0		

Batch Configuration

The SNMP IPv6 provides batch configuration to allow quick and effortless setup on multiple SNMP devices. You can duplicate settings by exporting configuration files from the SNMP IPv6 that you have successfully configured, and import the configuration files on other devices.

• > C 🕁 http:	//192.16	68.1.100/
	The	power behind competitiveness InsightPower SNMP IPv6 for UPS Web
Monitor	Device	System
Administration		Notification
User Manager	0	System » Administration » Batch Configuration
TCP/IP	0	System Configuration SNMP Configuration
Web	0	System Configuration: Download SNMP Configuration: Download
Console	0	Browse Upload Upload
FTP	0	Description The batch configuration is used to configure all of the
Time Server	0	system parameters at one time. Please following steps to complete the process:
Syslog	0	Step 1 Press the Download button to download the configure ini Step 1 Press the Download button to download the configure ini Step 1 Press the Download the
Batch Configuration	0	Step 2 Please follow the file format, There must has a [Section] before them, nameser would be file format, There must has a [Section] before them, nameser must have a [Section]
Upgrade	0	[End] section. Step 3 Edit the configure ini file by the text edit software. Remove the terms which you don't want to be changed just leave the
		the lens which you cont wat to be changed, just eave the terms which you want to configure
		button to upload the file. Step 5 Wait for about 10 seconds for the system to update the changes. Changes.

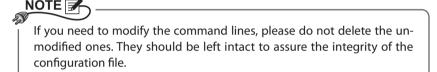
• System Configuration

The **System Configuration** includes settings saved in the **Device** and **System** tabs. To download a configuration file, simply click **Download**. To upload a configuration file, click **Choose File**, select the file you wish to upload, and click **Upload**.

If the IP address is static and you wish to copy settings to other devices on the same LAN, you must manually remove the following line **IP=xxx**. **xxx.xxx.xxx** under the [System] section from the exported configuration file. You can open the configuration file with text editors such as Notepad and WordPad. To modify/ assign IP address for the SNMP IPv6, please see **Chapter 4: System Configurations**.

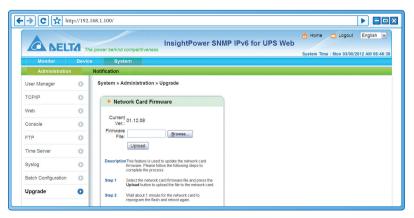
SNMP Configuration

The **SNMP Configuration** includes settings saved in the **Notification** tab. To download a configuration file, simply click **Download**. To upload a configuration file, click **Choose File**, select the file you wish to upload, and click **Upload**.



Upgrade

The Upgrade page shows the SNMP IPv6's current firmware version. The Administrator can use this page to update the SNMP IPv6's firmware. Click **Choose File**, select the file you wish to upload, and click **Upload**. The upgrade process should take about one minute.





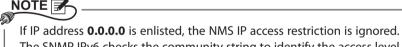
5-3-2 Notification

The Notification page includes SNMP Access, SNMPv3 USM, SNMP Trap, Mail Server, Wake On LAN these five items.

SNMP Access

	A The	power behind competitiveness InsightPower SNMP IPv6 for UPS Web System Time : Mon 03/05/2012 A System Time : Mon 03/05/2012 A	glish 💌 M 08:46:					
Monitor	Device	System						
Administration		Notification						
SNMP Access	0	System » Notification » SNMP Access						
SNMPv3 USM	0	SNMP Access						
SNMP Trap	0	Port Configuration MIB	1					
Mail Server	0	SNMP Server Port: 161 Submit Download MIB: UPSv4 UPSv5 Sensor RFC1628						
Wake On LAN	0	NMS List						
		Allowed NMS IP: 0.0.0 Pradees 0.0.0 repeaters a data to be consuminity String: [public Access Level: Read Only] [Ad] Lpdate						
	- 1	NMS IP Community Access Level						
	- 1	1 0.0.0.0 public Read Only						

The SNMP IPv6 supports SNMP protocol and SNMP NMS (Network Management System), which are commonly used to monitor network devices for conditions that call for administrative attention. To prevent unauthorized access, you can specify the NMS IP addresses that are allowed to access, their community strings and access levels. The maximum number of IP entries is 256.



The SNMP IPv6 checks the community string to identify the access level and permission according to your setting.

SNMPv3 USM

SNMPv3 offers features such as the encryption of packets and authentication to improve security. The SNMPv3 USM (User Session Management) allows you to assign eight User Names whose access is granted via SNMPv3 protocol. You can also define their respective Security Levels, Auth Passwords, Priv Passwords and Access Levels.

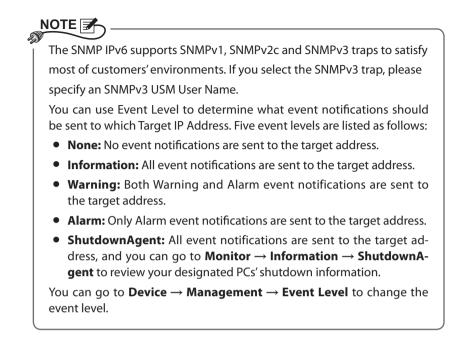
→ C ☆ http	p://192.1	168.1.100/		•
A NELT	Аты	e power behind competitiveness	InsightPower SNMP IPv6 for UPS Web	on 03/05/2012 AM 08:43
Monitor	Device	e System		
Administration		Notification		
SNMP Access	0	System » Notification » SN	Pv3 USM	
SNMPv3 USM	0	SNMPv3 USM		
SNMP Trap	0	Auth Protocol: MD5	Context Name: cn1027	
Mail Server	0	Priv Protocol: CBC-I	ËS	
Wake On LAN	0	User Name (16 bytes max.)	Security Level Auth Password Priv Password Act (>= 8 bytes) (>= 8 bytes)	cess Level
		1	noAuth, noPriv 🖌	ad Only 💌
	- 1	2	noAuth, noPriv 🖌	ad Only
	_	3	noAuth, noPriv 🖌	ad Only 💌
	_	4	noAuth, noPriv 🛩	ad Only
		5	noAuth, noPriv	ad Only 💌
		6	noAuth, noPriv	ad Only 💌
		7	noAuth, noPriv	ad Only 🖌
	- 1	8	noAuth, noPriv 🛩	ad Only
	_		Submit	

SNMP Trap

SNMP Trap alerts users to event occurrences in your monitored environment. To enable SNMP Trap, you must add Target IP addresses to the Target IP list. Specify the Community String, Trap Type, MIB, SNMPv3 User Name, Trap port, Event Level, SNMP Port for ShutdownAgent and click **Add**. If you wish to update or delete a Target IP address, specify the IP address in the Target IP list, and click **Update** or **Delete**.

e System
Notification
System » Notification » SNMP Trap
SNMP Trap Target List
Target IP: 172.16.186.78 Community String: public Trep Type: SNMPV1 MIB: UPSv4 MIB:
SNMPv3 User Name: Trap Port: 162
The User Name must match with the same field in the Event Level: ShutdownAgent 2012 •
SNMP Port for ShutdownAgent: 161 Add Update Delete
Target IP Community Port MIB Type Event Level SNMPv3 User
1 172.16.186.78 public 162 UPSv4 v1 ShutdownAgent 2012
2 172.16.186.10 public 162 UPSv4 v1 ShutdownAgent 2012
3 172.16.186.132 public 162 UPSv4 v1 ShutdownAgent 2012





Mail Server

	p://192.10	S8.1.00/
Monitor	Device	System
Administration		Notification
SNMP Access	0	System » Notification » Mail Server
SNMPv3 USM	0	Mail Server Configuration
SNMP Trap	0	
Mail Server	0	SMTP Server Name or IP: (51 bytes max.)
Wake On LAN	0	Account (32 bytes max.) Password: (16 bytes max.) Submit
	- 1	Mail List
		Receiver: Iname@company.com Event Levet: None Add Add Add Add Add
	- 1	Receiver Event Level
	- 1	1 name@company.com None

You can set up an SMTP Server and specify a list of E-mail recipients who will receive notifications when events occur. The maximum number of recipients is 256.

If a DNS server is not available in the network, you need to manually assign an SMTP server address to enable the E-mail notification system.

• SMTP Server Name or IP

If a Host Name is entered, a **DNS IP** should be added in **TCP/ IP**. Please see *5-3-1 Administration – TCP/ IP*.

Account

NOTE 📝

The mail server login account.

Password

The mail server login password.

• Receiver

The recipients' E-mail addresses.

• Event Level

Select the Event Level that when triggered, an E-mail notification is sent to the corresponding recipient.

- 1) Information: All event notifications are sent to the target address.
- 2) **Warning:** Warning and Alarm event notifications are sent to the target address.
- 3) Alarm: Only Alarm event notifications are to the target address.



Wake On LAN

Wake On LAN function can start up clients' PCs from network with MAC address, and you can set up at maximum 256 MAC addresses. The configuration can wake up clients' PCs after power restores or the SNMP IPv6 starts up.

A NELT	A The	power behind	competit	iveness	InsightI	Power SNN	IP IPv6	for UP	S We				inglish 💌
Monitor	Device									System	Time : I	Ion 03/05/2012	AM 08:47:
Administration		Notification											
SNMP Access	0	System » N	otificatio	on » Wake	On LAN								
SNMPv3 USM	0	No	Host	ist									
SNMP Trap	0				Title:	None							
Mail Server	0			IAC (xx-xx-	xx-xx-xx):	00-00-00-00-00-	00						
Wake On LAN	0			Wake Up	Delay: Condition:	0 minute(Power Restore Add		i Startup					
	- 1		Title			MAC		Delay		Restore		Startup	
	- 1	1	None		00-00-	00-00-00-00		0		No		No	

Chapter 6 : SNMP Device Firmware Upgrade

With the provided program EzSetting, you can effortlessly perform a firmware upgrade on your SNMP devices via LAN. Please refer to the following instructions.

Press "Discover" button to search all of the SNWP devices in the LAN. Discover Then select one of device in the "Device List" which you would like to configure or upgradie it. But before to do that please provide the account name and password by pressing the "Modify" button. "Configuration" is used to setup the IP address, netmask, enable or disable configuration "Upgrade" button is used to load the device firmware file then transmit it to the single selected device. (Ignore the checkbox)	LAN 172.16.186.104 Subnet: 172.16.186.0 IPv4 Mask / IPv6 Prefix length: 255.255.254.0
Select <u>A</u> II Deselect AII	Add dd an new item of SNMP device the Device List manually. Modify at the account and password r the selected device. Remove move the selected device om the Device List. Batch Upgrade

Step 1 The subnet mask allows you to define the device discovery range in the specified subnets. Make sure the SNMP device you wish to upgrade is in the subnet that is specified. If it is not, please modify the subnet and subnet mask.



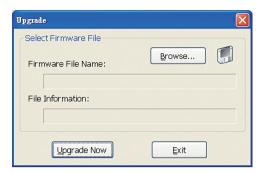
Step 2 Click **Discover**. A list of SNMP devices is shown.

R InsightPower EzSetting v2.0.6	
Press 'Discover' button to search all of the SNMP devices in the LAN. Discover Then select one of device in the 'Device List' which you would like to configure or upgrade it. But before to do that please provide the account name and password by pressing the 'Modify' button. 'Configuration' is used to setup the IP address, network, enable or disable retworking services 'Upgrade' button is used to load the device firmware file then transmit it to upgrade	LAN 172.16.186.104 Subret: 172.16.186.0 IPv4 Mask / IPv6 Prefix length: 255.255.254.0
172.016.186.053 POUL 172.016.186.053 POUL 172.016.186.053 POUL 172.016.186.133 INSIGHTPOW 172.016.186.132 INSIGHTPOW 172.016.186.133 INSIGHTPOW 172.016.186.134 INSIGHTPOW 172.016.144 INSIGHTPOW	Add dd an new item of SNMP device the Device List manually. Modify et the account and password or the selected device. Remove emove the selected device on the Device List.
Select All Deselect All Please mark the checkbox of the devices which are listed in the Device List then press the "Batch Upgrade" button to upgrade all of the marked devices sequentially. (Batch Upgrade

Step 3 Select a device from the Device List, click **Modify**, and enter Administrator account and password.

IP & Account		×						
SNMP Device Ad	dress							
IP Address:	172 . 16 . 186 . 234							
	Administrator Account							
Account:	Account: admin Default: admin							
Password: ******* Default: password								
ОК								

Step 4 Click Upgrade. The upgrade dialog box pops up. Click Browse to select a valid firmware binary file. Verify the firmware version shown under File Information, and then click Upgrade Now to continue.



Step 5 The upgrade process should take about 20 seconds.

Upgrading Now	

Step 6 When the upgrade is completed, the following dialog box appears. It takes about 1 minute for the device to reboot.





Q1. How to set up an SNTP server on my workstation for the SNMP IPv6 to synchronize?

To enable SNTP services in Windows XP, go to **Start** \rightarrow **Control Panel** \rightarrow **Add**/ **Remove Programs** \rightarrow **Add**/ **Remove Windows Components** \rightarrow **Networking Services** \rightarrow check **Simple TCP**/ **IP Services** \rightarrow **OK**. To enable time synchronization, you need to set SNTP time server addresses in **Time Server**. Please refer to **Chapter 4: System Configurations**.

Q2. How to make sure the linking between the SNMP IPv6's and the UPS is established?

If the linking between the SNMP IPv6 and the UPS is correctly established, the yellow LED indicator should flash rapidly. If not, confirm that the device ID setting on the SNMP IPv6 and the UPS is consistent.

C:\>ping 172.16.186.230
Pinging 172.16.186.230 with 32 bytes of data:
Reply from 172.16.186.230: bytes=32 time=2ms TTL=64
Reply from 172.16.186.230: bytes=32 time=2ms TTL=64
Reply from 172.16.186.230: bytes=32 time=4ms TTL=64
Ping statistics for 172.16.186.230:
 Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
Approximate round trip times in milli-seconds:
 Minimum = 2ms, Maximum = 4ms, Average = 2ms
C:\>

Q3. I can access the InsightPower SNMP IPv6 for UPS Web, but I cannot login in.

Please check the IP addresses of the SNMP IPv6 and the workstation on which you are trying to log in. By default, they must be within the same LAN so you can connect via the web interface. You can enable external connections to solve this issue. To do this, launch EzSetting and change User Limitation to Allow Any, as shown below.

Configuration	
System Identification	IPv4
*Host Name(NetBIOS): INSIGHTPOWER	BOOTP/DHCP Client: Enable *Disable
System Contactor:	*IP Address: 172 . 16 . 186 . 241
System Location:	*Subnet Mask: 255 . 255 . 254 . 0
Date/Time	Gateway IP: 172 . 16 . 186 . 254
⊙ *SNTP OManual	DNS IP: 172 . 16 . 1 . 86
Time Zone: GMT Dublin,Lisbon,London	IPv6
*1st Time Server Name or IP: POOL.NTP.ORG	DHCPv6 Client: Enable *Disable
2nd Time Server Name or IP:	*IP Address: FE80::230:ABFF:FE25:E8ED
Set Current Time: Date 01/01/2000 (MM/DD/YYYY)	*Prefix Length: 64
Time 00:00:00 (hh:mm:ss)	Gateway IP: ::
	DNS IP: ::
User Limitation Administrator: In The LAN	System Configuration
Device Manager: O In The LAN O Allow Any	HTTP Server: Enable Disable
Read Only User: O In The LAN O Allow Any	Telnet Server: Enable Oisable
	HTTP Server Port: 80
Reset to Default OK Cancel	Telnet Server Port: 23
It is recommended to provide a static "IP Address" and disable the "BOOTP/DHCP Client" option.	
If it is the first time to configure your InsightPower device, pl given a "Time Server" for the device throught "SNTP" protoc	

Q4. Unable to connect to the SNMP IPv6 via its Host Name?

If you just assign a new static IP address to the SNMP IPv6, you may need to refresh the NetBIOS table so that it corresponds with the new setting. Although Windows updates its NetBIOS table periodically, you can still manually force it to refresh by entering the following command **nbtstat** –**R** in DOS prompt mode. After that, you can now connect to the SNMP IPv6 by its Host Name. Please also ensure that the Host Name assigned to the SNMP IPv6 does not exceed 16 bytes.

Q5. How to check my workstation's IP address?

For Windows, please enter **ipconfig /all** in DOS prompt mode. For UNIX, please enter **ifconfig** in shell. You should be able to check your IP and MAC (Physical Address) now.

```
Physical Address. . . . . . . : 00-23-4D-A2-3A-2C

DHCP Enabled. . . . . . . . : Yes

Autoconfiguration Enabled . . . : Yes

Link-local IPv6 Address . . . . : fe80::ad55:5b9b:74c6:e5fc%12(Preferred)

IPv4 Address. . . . . . . : 172.16.186.97(Preferred)

Subnet Mask . . . . . . . : 255.255.254.0

C:\>
```



Q6. Unable to ping the SNMP IPv6 from my workstation?

If the SNMP IPv6 is non-responsive, check the following:

- 1) If the green LED indicator on the SNMP IPv6 is OFF, check if the network cable is correctly connected from the SNMP IPv6 to the router or hub.
- 2) If the green LED indicator is ON, the current IP address could be unreachable. Manually assign a valid IP address to the SNMP IPv6.
- 3) If the green LED indicator flashes and (1) your network configuration includes a DHCP server, make sure the DHCP service is working properly; (2) Otherwise, make sure the assigned IP is not already taken on the network. Please note that if the current configuration is not useable, the SNMP IPv6 will reset to default IP settings (IPv4 address: 192.168.1.100/ net mask: 255.255.255.0/ gateway: 192.168.1.254).
- 4) If the problem persists, use a network cable to cross link your SNMP IPv6 and the workstation. Ping the SNMP IPv6's default or static IP address, according to your configurations. If a ping response is successfully received, indicating that the SNMP IPv6 is working properly, check your network equipment. If not, contact your local dealer or service personnel for assistance.

Q7. Unable to perform an SNMP Get command?

Refer to **5-3-2 Notification** to check SNMP settings. Make sure that the workstation's IP address is added to the NMS IP list with Read or Read/ Write access. The community string on the workstation and the SNMP IPv6 must match.

Q8. Unable to perform an SNMP Set command?

Refer to **5-3-2 Notification** to check SNMP settings. Make sure that the workstation's IP address is added to the NMS IP list, with Read/ Write permission. The community string on the PC and the SNMP IPv6 must match.

Q9. Unable to receive SNMP trap?

Refer to **5-3-2 Notification** to check SNMP Trap settings. Make sure that the workstation's IP address is added to the Target IP list.

Q10. Forgot Administrator's account and password?

You can reset Administrator's account and password via text mode. Refer to **4-4 Configuring via COM** Port to establish a COM port connection with the SNMP IPv6. When the login information is prompted, key in **rstadmin** within 30 seconds and press **enter**. The Administrator account and password are now reset to default (admin/ password).

Q11. How to enable IPv6 in Windows XP?

If you are running Windows XP, please enable IPv6 first (click **START** \rightarrow **RUN**, and enter **ipv6 install**). The SNMP IPv6 supports IPv6 with no additional configurations required. However, please note that IPv6 is automatically disabled if an identical LLA (Local-link Address) already exists on the LAN. If the SNMP IPv6 obtains both IPv4 and IPv6 records from DNS resolution, the IPv4 is used as the primary IP address for the given Host Name.

To learn more information regarding IPv6 compatibility, please visit IETF (http:// tools.ietf.org/html), or IPv6 Ready Logo Program (http://www.ipv6ready.org).

Q12. How to generate a private SSL certificate file (in PEM format) for HTTPs connection?

To ensure connection security between the SNMP IPv6 and your workstation, you can create your own SSL certificate file. Please download and install OpenSSL Toolkit from http://www.openssl.org. Launch Shell or DOS prompt mode and enter the following command to create your own certificate file:

openssl req -x509 -nodes -days 3650 -newkey rsa:1024 -keyout cert.pem -out cert.pem

- 1) Answer the prompted questions. Proceed with the given directions. Once it is completed, a file named cert.pem is created in the current working directory.
- 2) Upload cert.pem to the InsightPower SNMP IPv6 for UPS Web. Please refer to **5-3-1 Administration Web**.

Q13. How to generate DSA, RSA and Public keys for SSH?

For Linux:

- 1) Please download and install OpenSSH from http://www.openssh.org.
- 2) Launch Shell and enter the following commands to create your own keys (please ignore it when prompted to provide passphrase):



```
DSA Key:ssh-keygen -t dsa
RSA Key:ssh-keygen -t rsa
```

3) Upload DSA and RSA keys to the InsightPower SNMP IPv6 for UPS Web. Please refer to **5-3-1 Administration – Console** for more information.

For Windows:

- 1) Please download and install PuTTY from http://www.putty.org.
- 2) Run puttygen.exe from the installed directory.
- Select SSH-2 RSA from the Parameters area and click Key → Generate key pair to generate a RSA key.
- Click Conversions → Export OpenSSH Key and assign a filename to the RSA key. Please ignore it when prompted to provide key passphrase.
- 5) Select **SSH-2 DSA** from the Parameters, clickt **Key** → **Generate key pair** to generate a DSA key.
- 6) Click **Conversions** → **Export OpenSSH Key** and assign a filename to the DSA key. Please ignore it when prompted to provide key passphrase.
- 7) Copy the generated key from the text box, paste in a text editor and save as a text file.

🌮 PuTTY Key Gene	rator							
<u>F</u> ile <u>K</u> ey Con <u>v</u> ersion	s <u>H</u> elp							
) into OpenSSH authoriz	ed_keys file:						
HZB2o3Gr6Glwyx0。 NkycVJ1G1l0sStWc	IBMUGLY90S2Q0yDM Xfwa/GPDGh22rInJ8R7	oBDwFlHHInBHMkLDgV YUSSeL3Wvlpuj4ahlgAK 'BwgBSilvbDYCKCDBJar gBR5s/gzs0oQCV/XMFl	s6E7X4F0zhWJ1					
Key fingerprint:	ssh-dss 1023 93:da:3	80:2a:bf:4e:ac:e3:d5:28:c	ca:9e:d9:52:eb:89					
Key <u>c</u> omment:	dsa-key-20110707							
Key p <u>a</u> ssphrase:								
Confirm passphrase:								
Actions								
Generate a public/pr	ivate key pair		<u>G</u> enerate					
Load an existing priv	ate key file		Load					
Save the generated	key	Save public key	Save private key					
Parameters								
Type of key to gener	ate: O SSH-2 <u>B</u> S/	4 💿 SSH	I-2 <u>D</u> SA					
Number of bits in a g	enerated kein		1024					

8) Upload the DSA/ RSA/ Public keys files to the InsightPower SNMP IPv6 for UPS Web. Refer to **5-3-1 Administration – Console** for more information.

Q14. How to upload configuration / firmware / key files via SSH/ SFTP?

To quickly configure your SNMP IPv6, you can upload the files via SSH/ SFTP. The SNMP IPv6 automatically imports your settings after the files are uploaded to the designated directories. Refer to the following table:

Directory	Files
\config_snmp	snmp.ini
\config_system	configure.ini
\ssh_dsa	DSA key
\ssh_rsa	RSA key
\ssh_pubkey	Public key
\upgrade_snmp	SNMP IPv6's firmware upgrade package (binary)
\upgrade_device*	Device's firmware upgrade package (binary)

*Appears on specific devices only.

Upload files to their respective directories. Make sure the filenames do not contain non-English characters to avoid read error. Overwrite existing files if prompted by your SFTP client.

Q15. How to test SNMPv3 in Linux?

Before you can access the SNMP OID (Object Identifier) via SNMPv3 protocol, the SNMPv3 USM table must be organized. Please refer to **5-2-2 Notification** – **SNMPv3 USM** for more information.

To test SNMPv3 in Linux, launch shell and key in the following command:

```
snmpwalk -v 3 -u <user> -l authPriv -A <pass-
word> -X <password> -n <context name> -t 3 <ip>
1.3.6.1.2.1.1.1.0
```

-v: 1 for SNMPv1, 3 for SNMPv3.

-I: Follow the security levels. They are: noAuthNoPriv, authNoPriv and authPriv.

-u: The user name which is assigned from SNMPv3 USM table.

-A: The Auth Password which is assigned from SNMPv3 USM table.



-X: The Priv Password which is assigned from SNMPv3 USM table.

-n: The Context Name which is assigned from SNMPv3 USM table.

-t: Timeout in seconds.

<ip>: The IP address of the SNMP IPv6.

<oid>: The next available SNMP OID (for example: 1.3.6.1.2.1.1.1.0). Please refer to the RFC1213 MIB.

Appendix A : Specifications

Model Name	InsightPower SNMP IPv6	
Power Input	12 Vdc	
Power Consumption	2 Watt (Max.)	
Network Connection	RJ-45 jack connector (10/ 100M)	
Physical		
Size (W x D)	130 mm x 60 mm	
Weight	75 g	
Environmental		
Operating Temperature	0 ~ 60°C	
Storage Temperature	-40 ~ 125℃	
Operating Humidity	0 ~ 90 % (Non-condensing)	

NOTE

* Refer to the rating label for the safety rating.

* All specifications are subject to change without prior notice.



Appendix B : Warranty

Seller warrants this product, if used in accordance with all applicable instructions, to be free from original defects in material and workmanship within the warranty period. If the product has any failure problem within the warranty period, Seller will repair or replace the product at its sole discretion according to the failure situation.

This warranty does not apply to normal wear or to damage resulting from improper installation, operation, usage, maintenance or irresistible force (i.e. war, fire, natural disaster, etc.), and this warranty also expressly excludes all incidental and consequential damages.

Maintenance service for a fee is provided for any damage out of the warranty period. If any maintenance is required, please directly contact the supplier or Seller.



WARNING : The individual user should take care to determine prior to use whether the environment and the load characteristic are suitable, adequate or safe for the installation and the usage of this product. The User Manual must be carefully followed. Seller makes no representation or warranty as to the suitability or fitness of this product for any specific application.

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