

The power behind competitiveness

Delta InsightPower G3 Mini SNMP

User Manual

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 G3 Mini SNMP, hereafter referred to as Mini SNMP, is designed to work with a UPS and needs to be installed inside the UPS's SNMP slot. 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 55032: 2015 ISN, Class B**
- **EN 55032: 2015 Radiated Emission, Class B**
- **EN 55024: 2010 + A1: 2015**

IEC 61000-4-2: 2008

IEC 61000-4-3: 2010

IEC 61000-4-4: 2012

IEC 61000-4-6: 2013

Chapter 2 : Introduction

2-1 Product Description

The InsightPower G3 Mini SNMP, hereafter referred to as Mini SNMP, 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 Mini SNMP supports public protocols including SNMP and HTTP. You can effortlessly configure this Mini SNMP using a network system and easily obtain your UPS's status and manage your UPS via the Mini SNMP.

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
- Remote event log management through syslog
- IPv4 protocol
- IPv6 protocol

2-3 Package Contents

Please carefully verify the Mini SNMP 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.

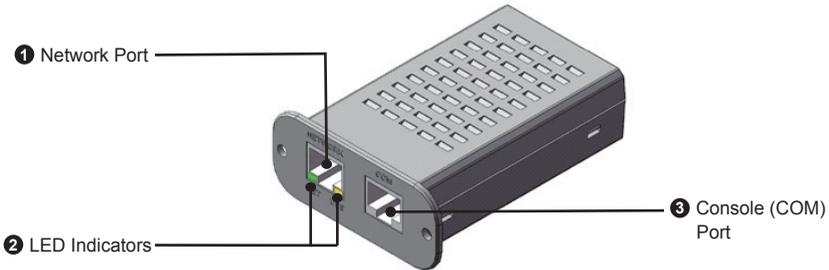


No.	Item	Quantity
①	InsightPower G3 Mini SNMP	1 PC
②	RJ45 to DB9 cable	1 PC
③	Software & User's Manual CD	1 PC
④	Screw	2 PC

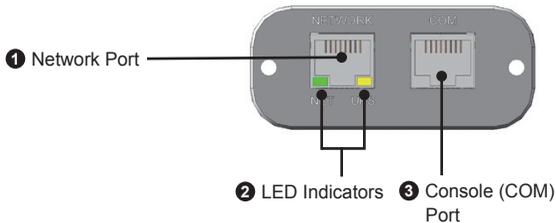
2-4 Interface

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

Top view:



Front view:



No.	Item	Description
1	Network Port	Connects to the Ethernet Network.

No. Item	Description
2 LED Indicators	<p>When the Mini SNMP is initializing or upgrading firmware, the two LED indicators flash simultaneously to show its status. Refer to the following:</p> <ul style="list-style-type: none"> • Rapid simultaneous flashing (every 50ms) : Initialization or firmware upgrade in progress. • Slow simultaneous flashing (every 500ms) : Initialization failed. <div data-bbox="325 507 1003 692" style="border: 1px solid black; padding: 10px; margin-top: 10px;">  <p>WARNING : Do NOT remove the Mini SNMP or disconnect the UPS's input power during initialization or firmware upgrade! This could result in data loss or damage to the Mini SNMP.</p> </div> <p>The green LED indicator shows the network connection status:</p> <ul style="list-style-type: none"> • ON : Network connection established and the IPv4 address is useable. • OFF : Not connected to a network. • Flashes slowly (every 500ms) : Faulty IP address. <p>The yellow LED indicator shows the linking status between the Mini SNMP and the UPS:</p> <ul style="list-style-type: none"> • Flashes rapidly (every 50ms): UPS linked. • Flashes slowly (every 500ms): UPS not linked.
3 Console (COM) Port	<ol style="list-style-type: none"> 1. Connects to a workstation with the provided RJ45 to DB9 cable to configure the system. 2. Connects to an EnviroProbe (optional) to monitor its connected environment monitoring devices.



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

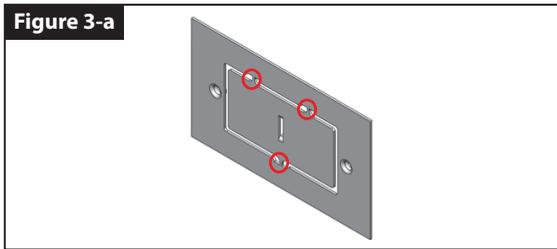
Chapter 3 : Installation



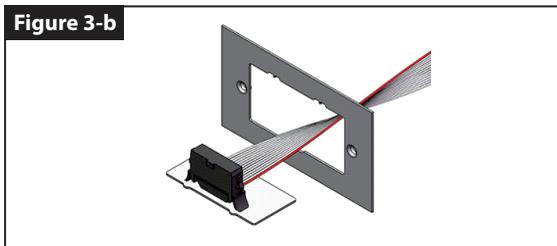
Before installation, please disconnect all power sources and critical loads connected to the UPS. Otherwise, the Mini SNMP might have shorting issues to cause UPS shutdown or damage.

- Please follow the procedures below to install the Mini SNMP into your UPS's SNMP slot.

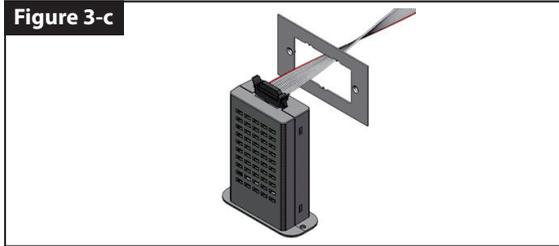
Step 1 Use tool to cut off three connections on the Mini slot (*see Figure 3-a*).



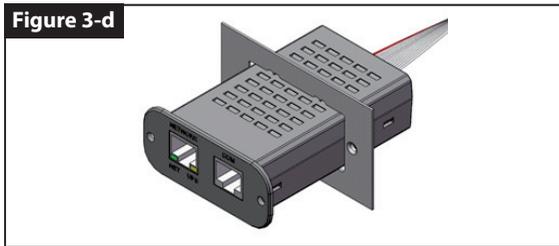
Step 2 Pull the flat wire out and use tool to cut the straps that are tied to the flat wire (*see Figure 3-b*).



Step 3 Take out the Mini SNMP and connect to the flat wire (*see Figure 3-c*).



Step 4 Install the Mini SNMP through the Mini slot to the UPS (*see Figure 3-d*).



Step 5 Use the two screws that get from Mini SNMP package to fix the Mini SNMP on the UPS (*see Figure 3-e*).



NOTE 

The backside view of the Mini SNMP is shown as follows.



① 10-pin Connector

Pin	Definition	Pin	Definition
1	GND	2	+12V
3	RS232_TXD	4	RS232_RXD
5	Reserved	6	Reserved
7	Reserved	8	Reserved
9	n/c	10	n/c

Chapter 4 : System Configurations

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

- **Web-based interface** : The InsightPower G3 Mini SNMP Web offers comprehensive system management and monitoring. Please refer to **Chapter 5: InsightPower G3 Mini SNMP Web**.
- **EzSetting** : Use the provided program EzSetting to quickly set up your Mini SNMP. Please refer to **4-2 Configuring with EzSetting**.
- **Telnet mode** : Configure your Mini SNMP 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 Mini SNMP. Please see **4-4 Configuring 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 Mini SNMP units installed in your network, we highly suggest that you change the Mini SNMP'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 Mini SNMP.

4-1 Configuring via InsightPower G3 Mini SNMP Web

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

- Step 1** Use a CAT5e network cable to connect the Mini SNMP's Network port to the network. Launch your web browser. In the address bar, enter the Mini SNMP'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**.

NOTE

If you have previously changed the Mini SNMP'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 Mini SNMP remembers your language preference. In the following instructions, English is chosen as the display language.
- Step 4** Click **System** → **User** → **Local**. Manage your login accounts and passwords under the "User" 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** → **Ethernet** to set Host Name, IP address, Subnet Mask and Gateway IP for the Mini SNMP.
- Step 6** Click **System** → **Service** → **Time** to manually set time and date for the system, or enable automatic time synchronization between the Mini SNMP and the time servers.

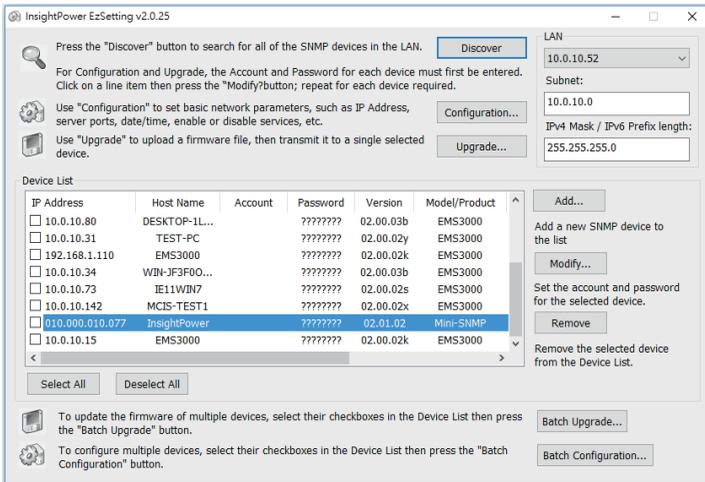
NOTE

To completely set up your Mini SNMP, please refer to **Chapter 5: InsightPower G3 Mini SNMP Web**.

4-2 Configuring with EzSetting

Included in the provided CD, the EzSetting (compatible with Windows 2000/ 2003/ 2008/ XP/ Vista/ 7/ 10) allows you to easily configure your Mini SNMP and upgrade firmware on your SNMP devices. Follow the instructions below:

- Step 1** Use the CAT5e cable to connect the Mini SNMP's Network port to the network.
- Step 2** Make sure the workstation and the Mini SNMP 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.



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 Mini SNMP can not be found, check UDP port 3456 on the workstation you are using. Make sure it is open.

Step 5 Select the Mini SNMP 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 Address

IP Address: 10 . 0 . 10 . 77

Administrator Account

Account: Default: admin

Password: Default: password

OK

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

Configuration

System Identification

*Host Name (NetBIOS): InsightPower

System Contactor:

System Location:

Date/Time

*SNMP Manual

Time Zone: GMT Dublin,Lisbon,London

*1st Time Server Name or IP: POOL.NTP.ORG

2nd Time Server Name or IP:

Set Current Time: Date 08/04/2017 (MM/DD/YYYY)

Time 13:13:07 (hh:mm:ss)

User Limitation

Administrator: In The LAN Allow Any

Device Manager: In The LAN Allow Any

Read Only User: In The LAN Allow Any

Reset to Default SNMPV3... OK Cancel

* Fields marked with an asterisk indicate recommended settings and inputs.

IPV4

BOOTP/DHCP Client: Enable *Disable

*IP Address: 192 . 168 . 1 . 100

*Subnet Mask: 255 . 255 . 255 . 0

Gateway IP: 192 . 168 . 1 . 254

DNS IP: 0 . 0 . 0 . 0

IPV6

DHCPV6 Client: Enable *Disable

*IP Address: ::

*Prefix Length: 0

Gateway IP: ::

DNS IP: ::

System Configuration

HTTP Server: Enable Disable

Telnet Server: Enable Disable

HTTP Server Port: 80

Telnet Server Port: 23



Refer to **Chapter 5 : InsightPower G3 Mini SNMP Web** for complete configurations.

4-3 Configuring via Telnet

- Step 1** Use a CAT5e network cable to connect the Mini SNMP's Network port to the network.
- Step 2** Connect the workstation (Windows or Linux) to the LAN that the Mini SNMP is connected to.
- Step 3** For Windows, launch DOS prompt mode (**Start** → **Run** → 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 Mini SNMP.
- 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.

NOTE

1. The Mini SNMP terminates idle connections after 60 seconds.
2. Refer to **Chapter 5: InsightPower G3 Mini SNMP Web** for complete configurations.

4-4 Configuring through COM Port

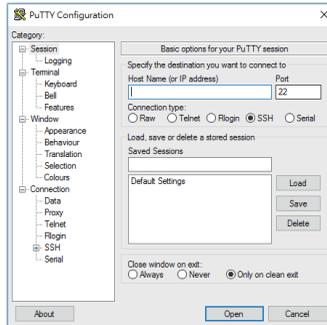
If a network connection is not available at your location, you can still set up the Mini SNMP via COM port connection. Please follow the instructions below:

NOTE

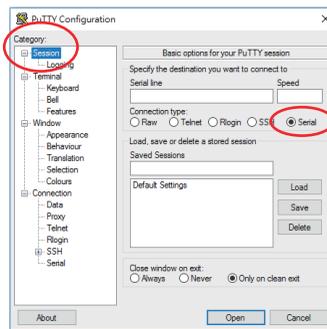
If you are running a non-Windows system, refer to your system's user manual for Telnet clients.

- Step 1** Use the provided RJ45 to DB9 cable to connect the Mini SNMP's COM port to the workstations' COM port.
- Step 2** Download the free Telnet/ SSH client program named **PuTTY** from <http://www.putty.org>.

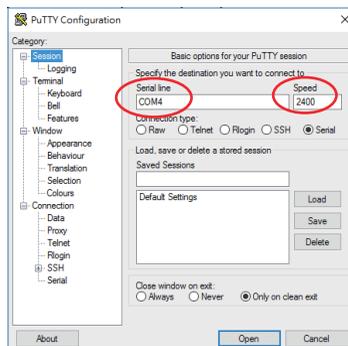
Step 3 Lunch PuTTY as shown below .



Step 4 Select **Category** → **Session** and **Connection type** → **Serial**.



Step 5 In the **Serial line** bar, enter your workstation's COM port number, which is connected to the Mini SNMP's COM port. In the **Speed** bar enter the baud rate to 2400.



- Step 6** Click **Open** to continue, and PuTTY will automatically connect to the Mini SNMP. 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 Mini SNMP 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

```
+-----+
|   Web Card Main Menu   |
+-----+
Web Card Version 02.01.02
MAC Address 00-23-45-67-89-ab
[1]. User Manager
[2]. TCP/IP Setting
[3]. Network Parameter
[4]. Time Server
[5]. Soft Restart
[6]. Reset All To Default
[z]. Exit Without Save
[0]. Save And Exit

Mini> |
```

● User Manager

```

+-----+
|   User Manager   |
+-----+
Local Auth
Administrator
[1]. Account:      admin
[2]. Password:    *****
[3]. Limitation:  LAN
Device Manager
[4]. Account:      device
[5]. Password:    *****
[6]. Limitation:  LAN
Read Only User
[7]. Account:      user
[8]. Password:    *****
[9]. Limitation:  ANY
[0]. Back To Previous Menu

Mini>

```

No.	Item	Description	Default
[1]	Administrator Account	The default account/ password for the Administrator (case sensitive).	admin
[2]	Administrator Password		password
[3]	Administrator Limitation	Restrict Administrator login area.	LAN
[4]	Device Manager Account	The default account/ password (case sensitive) for the Device Manager. This account is only permitted to change device-related settings.	device
[5]	Device Manager Password		password
[6]	Device Manager Limitation	Restrict Device Manager login area.	LAN
[7]	Read Only User Account	The default account/ password (case sensitive) for Read Only User. This account is only allowed to view settings without the permission to make changes.	user
[8]	Read Only User Password		password
[9]	Read Only User Limitation	Restrict Read Only User login area.	Any

TCP/IP Setting

```

=====+
| TCP/IP Setting |
=====+
[1]. IPv4 Address:      192.168.1.100
[2]. IPv4 Subnet Mask:  255.255.255.0
[3]. IPv4 Gateway IP:  192.168.1.254
[4]. IPv4 DNS1 IP:     0.0.0.0
[5]. IPv4 DNS2 IP:     0.0.0.0
[6]. DHCPv4 Client:    Enable
[7]. IPv6 Address:     ::
[8]. IPv6 Prefix Length: 0
[9]. IPv6 Gateway IP:  ::
[a]. IPv6 DNS1 IP:     ::
[b]. IPv6 DNS2 IP:     ::
[c]. DHCPv6:           Disable
[d]. Host Name(NetBIOS): InsightPower
[e]. System Contact:
[f]. System Location:
[g]. Ethernet PHY Mode: Auto Negotiation
[h]. Status Stable:    3
[i]. Telnet Idle Time: 60
[0]. Back To Previous Menu

Mini>

```

No.	Item	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 DNS1 IP	IPv4 Domain Name Server1 IP.	0.0.0.0
[5]	IPv4 DNS2 IP	IPv4 Domain Name Server2 IP.	0.0.0.0
[6]	DHCPv4 Client	Enable/ Disable DHCPv4 protocol.	Enable
[7]	IPv6 Address	The IPv6 address.	
[8]	IPv6 Prefix Length	The IPv6 prefix length.	
[9]	IPv6 Gateway IP	The IPv6 gateway's IP address.	
[a]	IPv6 DNS1 IP	IPv6 Domain Name Server1 IP.	
[b]	IPv6 DNS2 IP	IPv6 Domain Name Server2 IP.	
[c]	DHCPv6	Enable/ Disable DHCPv6 protocol.	Disable
[d]	Host Name (NetBIOS)	The Host Name for the Mini SNMP.	InsightPower

No.	Item	Description	Default
[e]	System Contact	The System Contact information.	
[f]	System Location	The System Location information.	
[g]	Ethernet PHY Mode	Switch the speed (10/ 100 Mbps) and duplex, or auto negotiation.	Auto Negotiation
[h]	Status Stable	Status change confirmation check time.	3
[i]	Telnet Idle Time	Telnet connection time-out setting.	60 Seconds

● Network Parameter

```

-----+-----
| Network Parameter |
-----+-----
[1]. HTTP Server:      Enable
[2]. HTTPS Server:    Enable
[3]. Telnet Server:   Enable
[4]. SSH/SFTP Server: Enable
[5]. FTP Server:      Disable
[6]. Syslog:          Disable
[7]. HTTP Server Port: 80
[8]. HTTPS Server Port: 443
[9]. Telnet Server Port: 23
[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: 161
[0]. Back To Previous Menu

Mini>

```

No.	Item	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

No.	Item	Description	Default
[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.	
[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 Mini SNMP or set up automatic time server synchronization. The Mini SNMP and Windows 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   |
+=====+
[1]. Time Selection:      Manual
[2]. Time Zone:          +0:00
[3]. 1st Time Server:    POOL.NTP.ORG
[4]. 2nd Time Server:
[5]. Period:             0:06:00
[6]. Manual Date:        2017/08/04
[7]. Manual Time:        13:18:07
[0]. Back To Previous Menu

Mini>

```

No.	Item	Description	Default
[1]	Time Selection	SNTP or manual.	SNTP
[2]	Time Zone	Adjust your time zone.	+0 hr
[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]	Period	Auto update period of time server	0:06:00
[6]	Manual Date	Set the date manually.	01/01/2000
[7]	Manual Time	Set the time manually.	00:00:00

● Soft Restart

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

● Reset All To Default

Reset to manufacture default.

● Exit Without Saving

Exit and ignore changes.

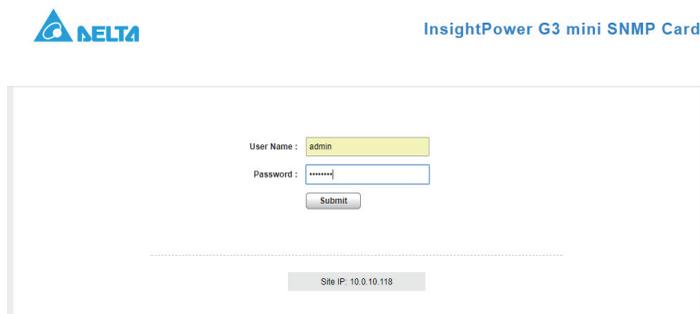
● Save and Exit

Preserve your changes and exit.

Chapter 5 : InsightPower G3 Mini SNMP Web

To configure the Mini SNMP via the InsightPower G3 Mini SNMP Web, please follow the steps below:

- Step 1** Make sure that your Mini SNMP is connected to the LAN. Use a CAT5e network cable to connect the Mini SNMP's Network port to the network.
- Step 2** Launch your web browser. In the address bar, enter the Mini SNMP's Host Name **http://InsightPower/** 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).



DELTA InsightPower G3 mini SNMP Card

User Name : admin

Password : *****

Submit

Site IP: 10.0.10.118

NOTE

1. If you have previously changed the Mini SNMP's Host Name or IP address, please connect with new settings.
2. 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 Mini SNMP's. To solve this issue, please refer to **Chapter 7: Troubleshooting Q3**.

The **InsightPower G3 Mini SNMP 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, Environment and About these four items.

5-1-1 Information

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

UPS Properties

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

The screenshot shows the web interface for the InsightPower G3 Mini SNMP Card. The top navigation bar includes the DELTA logo, language settings (Global | English), and navigation icons. The main menu has three tabs: MONITOR, DEVICE, and SYSTEM. The current page is 'Monitor » Information » UPS Properties', with a timestamp of 'Sat 01/01/2000 AM 00:11:33'.

The left sidebar lists the following menu items under 'MONITOR': Information, UPS Properties (highlighted), Battery Parameters, In/Out Parameters, Identification, Status Indication, Power Module, History, Environment, and About.

The main content area displays the following data:

- Input:**

	P-1	P-2	P-3
Volt(L-N):	116.6	116.5	116.4 V
Freq:	59.8	59.7	59.6 Hz
- UPS Status:**
 - Model: GES102R110002
 - Type: Off-line
 - Rating: 1.1 kVA
 - Comm: Normal
 - Source: Reducing
- Output:**

Volt(L-N):	110.0 V
Load:	75 %
Freq:	60.1 Hz
- Schedule:**
 - Next Power Off Time: None
 - Next Power On Time: None
 - Next Test Time: None
 - Next Deep Batt. Test Time: None
- Battery:**
 - Status: Normal
 - Capacity: 100 %
- Power Module:**
 - ID1: Off
 - ID2: Off
 - ID3: Warning
 - ID4: Warning
- Countdown:**
 - Time To Power Off: --:--
 - Estimated OS Delay: --:--

Battery Parameters

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

The screenshot shows the web interface for the InsightPower G3 mini SNMP Card. The top navigation bar includes 'Global', 'English', and icons for home and refresh. The main header displays 'InsightPower G3 mini SNMP Card' and the date 'Sat 01/01/2000 AM 00:15:09'. The left sidebar is under the 'MONITOR' tab and lists various information categories, with 'Battery Parameters' selected. The main content area shows the breadcrumb 'Monitor » Information » Battery Parameters' and three data panels:

- Battery Parameters:**
 - Battery Status: **Normal**
 - On Battery Time: **0** Seconds
- Battery Measurement:**
 - Battery Capacity: **100(+)** %
 - 46(-)
 - Voltage: **23.0(+)** V
 - 12.3(-)
 - Current: **54(+)** A
 - 23(-)
 - Temperature: **33** °C
- Replacement Date:**
 - Last Battery Replacement Date: **12/28/2012** (MM/DD/YYYY)
 - Next Battery Replacement Date: **12/28/2013** (MM/DD/YYYY)

In/ Out Parameters

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

The screenshot shows the web interface for the InsightPower G3 mini SNMP Card. The top navigation bar includes 'Global', 'English', and icons for home and refresh. The main header displays 'InsightPower G3 mini SNMP Card' and the date 'Sat 01/01/2000 AM 00:59:17'. The left sidebar is under the 'MONITOR' tab and lists various information categories, with 'In/Out Parameters' selected. The main content area shows the breadcrumb 'Monitor » Information » In/Out Parameters' and three data panels:

- Input Measurement:**

P-1	P-2	P-3
Frequency: 59.8	59.7	59.6 Hz
Voltage: 116.6	116.5	116.4 V
- Bypass Measurement:**
 - Frequency: **60.0** Hz
 - P-1 P-2 P-3
 - Voltage: **116.5** **333.3** **666.6** V
- Output Measurement:**
 - Output Source: **Reducing**
 - Frequency: **60.1** Hz
 - Voltage: **110.0** V
 - Power: **75.0** kW
 - Loading: **75** %
- Outlet Bank:**
 - 1 **110.0** V
 - 2 **110.0** V
 - 3 **110.0** V

Identification

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

MONITOR | DEVICE | SYSTEM | Sat 01/01/2000 AM 01:04:21

MONITOR

- Information
- UPS Properties
- Battery Parameters
- In/Out Parameters
- Identification**
- Status Indication
- Power Module
- History
- Environment
- About

Monitor » Information » Identification

Identification
Model: GES102R110002
Type: Off-line
UPS Firmware: 1.22
Web Firmware: 02.01.02

UPS Rating
VA: 1.1 kVA
Power: 0.8 kW
Input Voltage: 112 V
Output Voltage: 113 V
Frequency: 60.2 Hz
Battery Voltage: 24 V

Status Indication

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

MONITOR | DEVICE | SYSTEM | Tue 11/28/2017 AM 04:54:25

MONITOR

- Information
- UPS Properties
- Battery Parameters
- In/Out Parameters
- Identification
- Status Indication**
- Power Module
- History
- Environment
- About

Monitor » Information » Status Indication

Status Indication		
<input checked="" type="checkbox"/> Buzzer Enabled	<input type="checkbox"/> UPS Disconnect	<input type="checkbox"/> Output Over Voltage
<input type="checkbox"/> Buzzer Alarm	<input type="checkbox"/> Buzzer Alarm	<input type="checkbox"/> Output Under Voltage
<input type="checkbox"/> Input Out Of Range	<input type="checkbox"/> Input Out Of Range	<input type="checkbox"/> Overload
<input type="checkbox"/> Battery Low	<input type="checkbox"/> Battery Low	<input type="checkbox"/> Temperature Out Of Range
<input type="checkbox"/> Battery Depleted	<input type="checkbox"/> Battery Depleted	<input type="checkbox"/> Other Warning
<input type="checkbox"/> Battery Need Replace	<input type="checkbox"/> Battery Need Replace	<input type="checkbox"/> Fan Abnormal
<input type="checkbox"/> Battery Ground Fault	<input type="checkbox"/> Battery Ground Fault	<input type="checkbox"/> Fuse Abnormal
<input type="checkbox"/> Test In Progress	<input type="checkbox"/> Test In Progress	<input type="checkbox"/> Charger Abnormal
<input type="checkbox"/> Test Fail	<input type="checkbox"/> Test Fail	<input type="checkbox"/> Emergency Power Off
<input type="checkbox"/> Output Off	<input type="checkbox"/> Output Off	<input type="checkbox"/> Phase Asynchronous
<input type="checkbox"/> On Reserve	<input type="checkbox"/> On Reserve	<input type="checkbox"/> Rectifier Abnormal
<input type="checkbox"/> UPS Shutdown	<input type="checkbox"/> UPS Shutdown	<input type="checkbox"/> Redundancy Loss
<input type="checkbox"/> Output Breaker	<input type="checkbox"/> Output Breaker	

Power Module

Go to **Monitor** → **Information** → **Power Module** to view the information of every Power Module and the status of Power Module Bypass.



MONITOR

DEVICE

SYSTEM

Sat 01/01/2000 AM 01:13:08

MONITOR

Information

- UPS Properties
- Battery Parameters
- In/Out Parameters
- Identification
- Status Indication

Power Module

History

Environment

About

Monitor » Information » Power Module

Power Module Bypass

- Bypass Voltage/Frequency Abnormal
- Bypass Phase Sequence Abnormal
- Bypass STS Overload
- Bypass STS Over Temperature
- Bypass STS Fail

Power Module

ID1		ID2		ID3		ID4	
PFC Temp.:	11 °C	PFC Temp.:	21 °C	PFC Temp.:	31 °C	PFC Temp.:	41 °C
Inverter Temp.:	12 °C	Inverter Temp.:	22 °C	Inverter Temp.:	32 °C	Inverter Temp.:	42 °C
Inverter-R Volt:	1.1 V	Inverter-R Volt:	2.1 V	Inverter-R Volt:	3.1 V	Inverter-R Volt:	4.1 V
Inverter-S Volt:	1.2 V	Inverter-S Volt:	2.2 V	Inverter-S Volt:	3.2 V	Inverter-S Volt:	4.2 V
Inverter-T Volt:	1.3 V	Inverter-T Volt:	2.3 V	Inverter-T Volt:	3.3 V	Inverter-T Volt:	4.3 V

5-1-2 History

Event Log

Go to **Monitor** → **History** → **Event Log** → Page 1/ 2/ 3/ 4... to see events that occur. The existing ones are overwritten when the maximum number of entries (1,0000) is reached. You can also download the entire event log archive (EventLog-year-month-day.csv) recorded during an assigned period of time on your computer.



MONITOR

DEVICE

SYSTEM

Sat 01/01/2000 AM 01:21:12

MONITOR

Information

History

Event Log

Data Log

Upgrade Log

Configure

Environment

About

Monitor » History » Event Log » Page 1

Date	Time	Type	Level	Event Log
2000-01-01	00:00:36	System	Information	Admin login to the WEB from 192.168.0.52
2000-01-01	00:00:23	Device	Alarm	PM ID8: Off
2000-01-01	00:00:23	Device	Information	PM ID8: Does not exist
2000-01-01	00:00:23	Device	Alarm	PM ID7: Off
2000-01-01	00:00:23	Device	Information	PM ID7: Does not exist
2000-01-01	00:00:23	Device	Alarm	PM ID6: Off
2000-01-01	00:00:23	Device	Information	PM ID6: Does not exist
2000-01-01	00:00:23	Device	Alarm	PM ID5: Off
2000-01-01	00:00:23	Device	Information	PM ID5: Does not exist
2000-01-01	00:00:23	Device	Alarm	PM ID4: Inverter fan fail
2000-01-01	00:00:23	Device	Alarm	PM ID4: PFC base fail
2000-01-01	00:00:23	Device	Warning	PM ID4: Fan shutdown
2000-01-01	00:00:23	Device	Warning	PM ID3: PFC base warning
2000-01-01	00:00:23	Device	Alarm	PM ID3: Inverter over temperature shutdown
2000-01-01	00:00:23	Device	Warning	PM ID3: PFC over temperature warning
2000-01-01	00:00:23	Device	Warning	PM ID3: Fan shutdown
2000-01-01	00:00:23	Device	Alarm	PM ID2: Off
2000-01-01	00:00:23	Device	Warning	PM ID2: Inverter over temperature warning
2000-01-01	00:00:23	Device	Alarm	PM ID2: PFC over temperature shutdown
2000-01-01	00:00:23	Device	Alarm	PM ID2: Repair screw open

- **Date:** The date when the event occurred.
- **Time:** The time when the event occurred.



- **Type:** The type of 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 Mini SNMP will monitor the status of UPS automatically and display the event log according to its event level. All of these event logs will also be saved in the Mini SNMP. Once user click **Download**, the entire event log archive will be saved in user's computer.

● Data Log

Go to **Monitor** → **History** → **Data Log** to see all saved device data. You can also download the data archive (DataLog-year-month-day.csv) recorded during an assigned period of time on your computer.

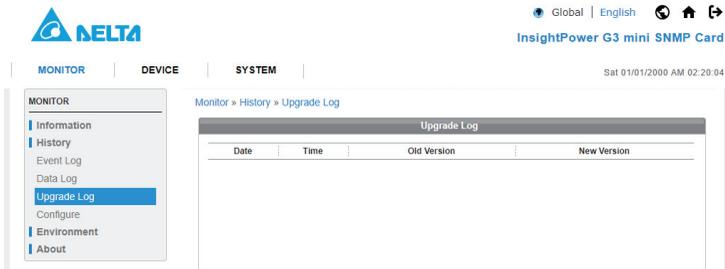
The screenshot shows the web interface for the Delta InsightPower G3 mini SNMP Card. The main content area is titled "Data Log" and includes the following elements:

- Navigation:** MONITOR, DEVICE, SYSTEM tabs. A left sidebar menu includes Information, History, Event Log, Data Log (selected), Upgrade Log, Configure, Environment, and About.
- Time Period Per Page:** Radio buttons for All, 2 Hours, 4 Hours, 6 Hours, 8 Hours, and 12 Hours.
- Time Range:** Input fields for "From" (2000-01-01 00:00) and "to" (2000-01-01 23:59), with an "Apply" button.
- Display Item:** Checkboxes for All, Input, Output, Bypass, and Battery.
- Display Property:** Checkboxes for All, Min., Avg., and Max.
- Table:** A table with columns: Time, InputFreq AVG, InputVolt AVG, InputAmp AVG, InputPower AVG, OutputFreq AVG, OutputVolt AVG, and OutputAmp AVG. The table shows data for the period 2000-01-01 02:00:00 to 2000-01-01 02:11:00.
- Actions:** Navigation arrows and a "Download" button.

Time	InputFreq AVG	InputVolt AVG	InputAmp AVG	InputPower AVG	OutputFreq AVG	OutputVolt AVG	OutputAmp AVG
2000-01-01 02:00:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:01:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:02:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:03:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:04:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:05:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:06:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:07:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:08:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:09:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:10:00	59.8	116.6	32	1000	60.1	110.0	69
2000-01-01 02:11:00	60.8	116.6	32	1000	60.1	110.0	69

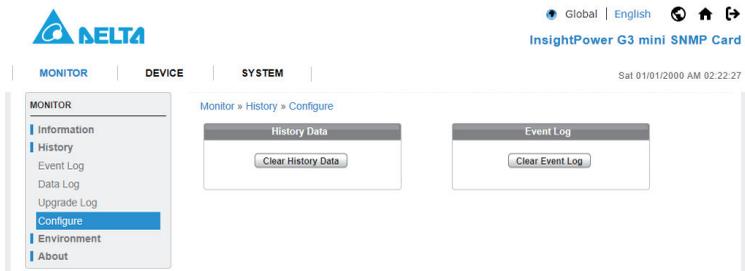
● Upgrade Log

Go to **Monitor** → **History** → **Upgrade Log** to see the installation time of the Mini SNMP's all firmware version.



Configure

Go to **Monitor** → **History** → **Configure** to clear the history data and event log.



- **Clear History Data:** Empty the history data log only.
- **Clear Event Log:** Empty the event log only.

5-1-3 Environment

Only when an EnviroProbe is used can the Environment page show up.

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** → **Environment** → **Information** to see your EnviroProbe's Sensor Information, Input Contacts and Contact Setting.

The screenshot shows the web interface for the Delta InsightPower G3 mini SNMP Card. The top navigation bar includes 'MONITOR', 'DEVICE', and 'SYSTEM'. The left sidebar has a 'MONITOR' section with sub-items: Information, History, Environment, Information (highlighted), Configuration, and About. The main content area is titled 'Monitor » Environment » Information' and displays a table with three columns: Sensor Information, Input Contacts, and Contact Setting.

Environment		
Sensor Information	Input Contacts	Contact Setting
Temperature: 27.8 °C	Smoke(R1): Normal Open	Smoke(R1): Normal
82.0 °F	Fire(R2): Normal Open	Fire(R2): Normal
Humidity: 51 %	Leak(R3): Normal Open	Leak(R3): Normal
	Door(R4): Normal Open	Door(R4): Normal

Configuration

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

The screenshot shows the web interface for the Delta InsightPower G3 mini SNMP Card. The top navigation bar includes 'MONITOR', 'DEVICE', and 'SYSTEM'. The left sidebar has a 'MONITOR' section with sub-items: Information, History, Environment, Information, Configuration (highlighted), and About. The main content area is titled 'Monitor » Environment » Configuration' and displays a form for 'Sensor Configuration'.

Sensor Configuration		
Sensor	Warning Threshold	Alarm Threshold
Temperature	<input type="text" value="35.0"/> °C	<input type="text" value="40.0"/> °C
Humidity	<input type="text" value="80"/> %	<input type="text" value="90"/> %

Input	Title	Type
Contact 1	<input type="text" value="Smoke"/>	<input type="text" value="Normal Open"/>
Contact 2	<input type="text" value="Fire"/>	<input type="text" value="Normal Open"/>
Contact 3	<input type="text" value="Leak"/>	<input type="text" value="Normal Open"/>
Contact 4	<input type="text" value="Door"/>	<input type="text" value="Normal Open"/>

5-1-4 About

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

Information

Go to **Monitor** → **About** → **Information** to see the version of your InsightPower G3 Mini SNMP and other information about OpenSSL toolkit and licenses.

The screenshot shows the 'About' page of the InsightPower G3 mini SNMP Card. The page title is 'About' and the content includes the version '02.01.02' and a description of the 'OpenSSL toolkit' functionality. The navigation menu on the left includes 'MONITOR', 'DEVICE', and 'SYSTEM'. The 'MONITOR' menu is expanded, showing 'Information', 'History', 'Environment', and 'About'.

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

The screenshot shows the 'Configure' page of the InsightPower G3 mini SNMP Card. The page title is 'Configure' and the content includes various configuration options such as 'Auto-Restart', 'UPS Buzzer', 'Voltage Sensitivity', 'Transfer Voltage', 'Low Battery', 'Battery Replacement Date', 'Bypass Transfer Frequency', 'Periodic Auto Test', 'Customized Battery Test', and 'Economic Mode'. The 'Reboot After Power Restore' option is checked and set to 'Enable'. The 'Boot Delay After Power Restore' is set to '34 Sec'. The 'Submit' button is visible at the bottom.

- **Auto Restart**

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

- **UPS Buzzer**

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

- **Low Battery**

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

- **Battery Replacement Date**

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

- **Bypass Transfer Frequency**

After you set a tolerance of bypass transfer frequency and confirm your setup, the Mini SNMP 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.

- **Periodic Auto Test**

This configuration is used to set up battery test time. After you confirm your setup, the Mini SNMP 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.

- **Customized Battery Test**

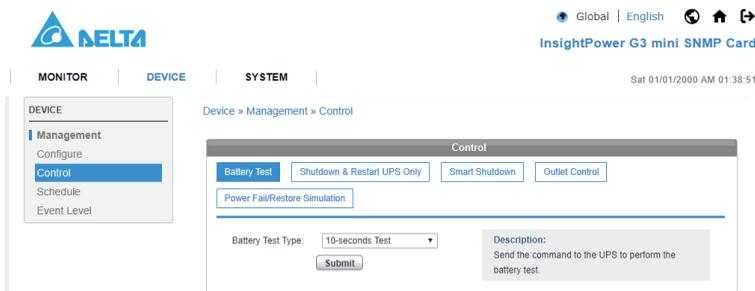
This configuration is used to set up the test parameters and store them in the UPS EEPROM, then select the **Customized Battery Test** command from the **Control** → **Battery Test** web page to perform the customized battery test.

- **Economic Mode**

After you click **Submit** to confirm your economic mode setup, the Mini SNMP will send a command to the UPS to enable/ disable the relevant functions.

- **Control**

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



- **Battery Test**

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

- **Shutdown & Restart UPS Only**

After you confirm your setup, the Mini SNMP 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 Mini SNMP. The Mini SNMP will delay the assigned OS Shutdown Delay time and wait for all operating systems' shutdown. After that, the Mini SNMP 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 Mini SNMP 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.

- **Schedule**

Go to **Device** → **Management** → **Schedule** to arrange a weekly schedule or specific schedule for the UPS.

- **Weekly**

You can select **Stop Action/ Shutdown/ Restart/ 10 seconds test/ Deep battery test**, and set up what day and what time you want the action to be executed every week.

Global | English | Home | Refresh

InsightPower G3 mini SNMP Card

Sat 01/01/2000 AM 00:25:14

MONITOR | DEVICE | SYSTEM

DEVICE

- Management
- Configure
- Control
- Schedule**
- Event Level

Device » Management » Schedule

Schedule

Schedule: Enable

Schedule Type: Weekly

Weekday: SUN MON TUE WED THR FRI SAT

Time: 13:48 (hh:mm)

Action: Restart

Enable	Schedule Type	Weekday / Date	Time	Action	
1	Yes	Specific	2017-08-04	13:48	Restart
2	Yes	Weekly	FRI	13:49	Restart
3	Yes	Specific	2017-08-04	13:45	Shutdown
4	Yes	Weekly	FRI	13:44	Shutdown

• Specific

You can select **Stop Action/ Shutdown/ Restart/ 10 seconds test/ Deep battery test**, and set up a specific date (YYYY-MM-DD) and time (hh:mm) to execute this action. Once the specific schedule has been set, the actions of weekly schedule will be ignored.

Global | English | Home | Refresh

InsightPower G3 mini SNMP Card

Sat 01/01/2000 AM 00:35:28

MONITOR | DEVICE | SYSTEM

DEVICE

- Management
- Configure
- Control
- Schedule**
- Event Level

Device » Management » Schedule

Schedule

Schedule: Enable

Schedule Type: Specific

Date: 2017-08-04 (YYYY-MM-DD)

Time: 13:48 (hh:mm)

Action: Restart

Enable	Schedule Type	Weekday / Date	Time	Action	
1	Yes	Specific	2017-08-04	13:48	Restart
2	Yes	Weekly	FRI	13:49	Restart
3	Yes	Specific	2017-08-04	13:45	Shutdown
4	Yes	Weekly	FRI	13:44	Shutdown

● Event Level

Go to **Device** → **Management** → **Event Level** to set up an event level for the UPS or Environment Sensor. If you want to receive an event notification, please refer to **5-3-3 Notification - SNMP Trap** and **5-3-3 Notification - Mail Server**.

- **UPS**

You can select an event level (**None, Information, Warning and Alarm**), and once the UPS event occurs, the event will be sent according to this level setting.

The screenshot shows the web interface for the InsightPower G3 mini SNMP Card. The top navigation bar includes 'Global', 'English', and icons for home and refresh. The main header displays 'InsightPower G3 mini SNMP Card' and the date 'Sat 01/01/2000 AM 01:43:53'. The interface is divided into three main sections: 'MONITOR', 'DEVICE', and 'SYSTEM'. The 'DEVICE' section is active, showing a sidebar with 'Management' options: 'Configure', 'Control', 'Schedule', and 'Event Level'. The main content area is titled 'Device > Management > Event Level' and contains a configuration form for the 'Environment Sensor' type. The event is 'UPS temperature out of range', and the selected level is 'Warning'. Below the form is a table listing 14 event descriptions and their corresponding levels.

	Event Description	Level
1	UPS temperature out of range	Warning
2	UPS temperature back to normal	Alarm
3	Power fail	Alarm
4	Power restore	Warning
5	Output abnormal	Alarm
6	Recover from output abnormal	Alarm
7	Overload	Alarm
8	Recover from overload	Alarm
9	Bypass abnormal	Alarm
10	Recover from bypass abnormal	Alarm
11	Turn UPS output off	Alarm
12	Turn UPS output on	Alarm
13	UPS shutdown	Warning
14	Recover from UPS shutdown	Warning

- **Environment Sensor**

You can select an event level (**None, Information, Warning and Alarm**), and once the Environment Sensor event occurs, the event will be sent according to this level setting.

The screenshot shows the web interface for the InsightPower G3 mini SNMP Card, similar to the previous one. The 'DEVICE' section is active, and the 'Event Level' configuration is now for the 'Environment Sensor' type. The event is 'Environment sensor insert', and the selected level is 'Information'. Below the form is a table listing 13 event descriptions and their corresponding levels.

	Event Description	Level
1	Environment sensor insert	Information
2	Environment sensor remove	Warning
3	Environment sensor disconnect	Warning
4	Environment sensor connect	Warning
5	Environment temperature warning (Warning threshold=%s, Detected temperature=%s)	None
6	Environment temperature recovered from warning (Warning threshold=%s, Detected temperature=%s)	Warning
7	Environment humidity warning (Warning threshold=%s%%, Detected humidity=%s%%)	Warning
8	Environment humidity recovered from warning (Warning threshold=%s%%, Detected humidity=%s%%)	Warning
9	Environment temperature alarm (Alarm threshold=%s, Detected temperature=%s)	Alarm
10	Environment temperature recovered from alarm (Alarm threshold=%s, Detected temperature=%s)	Alarm
11	Environment humidity Alarm (Alarm threshold=%s%%, Detected humidity=%s%%)	Alarm
12	Environment humidity recovered from Alarm (Alarm threshold=%s%%, Detected humidity=%s%%)	Alarm
13	Environment R1 (%) alarm	Alarm

5-3 System

Only Administrator can see the System page. Under the System category, there are Ethernet, Service, Notification, User and FW Update these five 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 Ethernet

The Ethernet page includes Host, IPv4 and IPv6 these three selections.

Host

The screenshot shows the web interface for the InsightPower G3 Mini SNMP Card. At the top, there is a navigation bar with the DELTA logo, language settings (Global | English), and a home icon. Below the navigation bar, there are tabs for MONITOR, DEVICE, and SYSTEM. The SYSTEM tab is active, and a breadcrumb trail shows 'System > Ethernet > Host'. On the left, a sidebar menu lists 'Ethernet' (selected), 'Host', 'IPv4', 'IPv6', 'Service', 'Notification', 'User', and 'FW Update'. The main content area is titled 'System Information' and contains the following fields:

- Host Name:
- System Contact:
- System Location:
- Speed & Duplex:

A 'Submit' button is located at the bottom of the form.

- **Host Name:** The Mini SNMP Host Name on the network.
- **System Contact:** System contact information.
- **System Location:** System Location information.
- **Speed & Duplex:** Select the speed and duplex mode of Mini SNMP.

IPv4

This allows Administrator to configure the IPv4 parameters for the Mini SNMP.

MONITOR | DEVICE | **SYSTEM**

Sat 01/01/2000 AM 03:33:09

SYSTEM

- Ethernet
- Host
- IPv4**
- IPv6
- Service
- Notification
- User
- FW Update

System » Ethernet » IPv4

TCP/IP	
Status	Settings
DHCP Client : Enable	DHCP Client : <input checked="" type="radio"/> Enable <input type="radio"/> Disable
IP Address : 10.0.10.45	IP Address : <input type="text" value="192.168.1.100"/>
Subnet Mask : 255.255.255.0	Subnet Mask : <input type="text" value="255.255.255.0"/>
Gateway IP : 10.0.10.252	Gateway IP : <input type="text" value="192.168.1.254"/>
DNS 1 : 172.16.176.200	DNS 1 : <input type="text" value="0.0.0.0"/>
DNS 2 : 172.16.0.1	DNS 2 : <input type="text" value="0.0.0.0"/>
Search Domain :	Search Domain : <input type="text"/>
	<input type="button" value="Submit"/>

- **DHCP Client**

Enable/ Disable DHCP. If enabled, DHCP server automatically assigns an IP address to the Mini SNMP.

- **IP Address**

The IP address for your Mini SNMP.

- **Subnet Mask**

The subnet mask for your network.

- **Gateway IP**

The IP address for network gateway.

- **DNS 1**

The IP address for Domain Name Server 1.

- **DNS 2**

The IP address for Domain Name Server 2.

- **Search Domain**

If the Host Name you provided cannot be found, the system appends the search domain to your Host Name.

IPv6

This allows Administrator to configure the IPv6 parameters for the Mini SNMP.

- **DHCPv6**

Enable/ Disable DHCPv6 client. If enabled, DHCPv6 server automatically assigns an IPv6 address to the Mini SNMP.

- **IP Address**

The IPv6 address for your Mini SNMP.

- **Prefix**

The prefix length for the IPv6 address.

- **Gateway IP**

The IPv6 address for network gateway.

- **DNS 1**

The IPv6 address for Domain Name Server 1.

- **DNS 2**

The IPv6 address for Domain Name Server 2.

- **Search Domain**

If the Host Name you provided cannot be found, the system appends the search domain to your Host Name.

5-3-2 Service

The Service page includes Web, Console, FTP, Time, SNMP and SNMPv3 USM these six selections.

Web

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



- **HTTP**
Enable/ Disable HTTP connection.
- **HTTPS**
Enable/ Disable HTTPS connection.
- **HTTP Port**
Assign a HTTP port number (default: 80).
- **HTTPS Port**
Assign a HTTPS port number (default: 443).
- **Web Refresh Period**
Web refresh interval.

Console

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



- **Telnet**
Enable/ Disable Telnet connection.
- **Telnet Port**
Assign a Telnet port number (default: 23).
- **Telnet Timeout**
The timeout of Telnet connection.
- **SSH**
Enable/ Disable SSH connection.
- **SSH Port**
Assign a SSH port number (default: 22).

● FTP

This allows Administrator to enable/ disable FTP communication protocol.



- **FTP**
Enable/ Disable FTP connection.
- **FTP Port**
Assign a FTP port number (default: 21).
- **SFTP**
Enable/ Disable SFTP connection.
- **SFTP Port**
Assign a SFTP port number (default: 22).

Time

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.

The screenshot shows the web interface for the InsightPower G3 mini SNMP Card. The top navigation bar includes 'Global', 'English', and a home icon. The main menu on the left lists 'MONITOR', 'DEVICE', and 'SYSTEM'. Under 'SYSTEM', there are sub-menus for Ethernet, Service, Web, Console, FTP, Time (highlighted), SNMP, SNMPv3 USM, Notification, User, and FW Update. The 'Time' configuration page is displayed, with a breadcrumb trail 'System > Service > Time'. The 'System Time' section has radio buttons for 'SNTP' and 'Manual'. The 'Simple Network Time Server' section contains:

- Time Zone: A dropdown menu showing 'GMT Dublin, Lisbon, London'.
- Primary Time Server: A text input field containing 'POOLNTP.ORG'.
- Secondary Time Server: An empty text input field.
- Period Time: A dropdown menu showing '6 Hours'.
- Checkboxes for 'Update time to UPS' and 'Enable Daylight Saving (MMDD)'. Below the second checkbox are 'From' and 'to' fields, each with a time selection dropdown (01:01 and 00:00).

 The 'Manual' section contains:

- A 'Set Current Time' checkbox.
- A 'Refer to Local PC Time' checkbox.
- Date: Input field with '08/04/2017' and a format '(MM/DD/YYYY)'.
- Time: Input field with '12:13:07' and a format '(hh:mm:ss)'.
- A 'Submit' button at the bottom.

Simple Network Time Server

- 1) **Time Zone:** From the dropdown menu, select the time zone for the location where the Mini SNMP is located.
- 2) **Primary/ Secondary Time Server:** Two time servers can be added. Every **Period Time**, the Mini SNMP synchronizes with the first responding server.
- 3) **Period Time:** The time interval that the Mini SNMP synchronizes with the SNTP server.

- 4) **Update time to UPS:** Determine whether the time also synchronizes with the UPS.
- 5) **Enable Daylight Saving:** Check to enable daylight saving time. During this period, the Mini SNMP 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 Mini SNMP's network module, time and date is reinstated to previous assigned settings.

● **SNMP**

The Mini SNMP supports SNMP protocol, which is 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 16.



If IP address * is enlisted, the NMS IP access restriction is ignored. The Mini SNMP checks the community string to identify the access level and permission according to your setting.

System » Service » SNMP

Port Configuration

SNMP Server Port: 161 (Default: 161)

Download MIB: UPSV3 UPSV4 REC1928

NMS List

Allowed NMS IP: * IP address * represents it allows to receive the SNMP packets from any host.

IP Prefix: 0

Community String: public

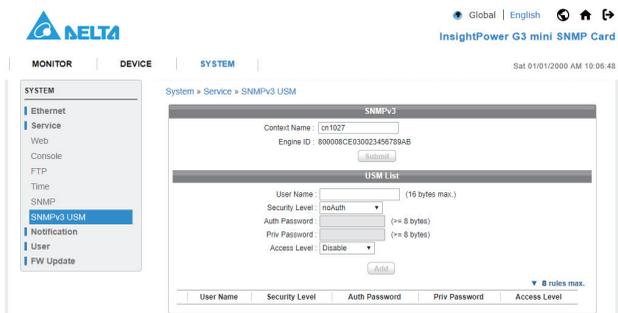
Access Level: Read Only

▼ 16 rules max.

	NMS IP	IP Prefix	Community	Access Level
1	*	0	public	Read Only
2	10.0.100.1	0	public	Read Only
3	10.0.100.2	0	public	Read Only
4	10.0.100.3	0	public	Read Only
5	10.0.100.4	0	public	Read Only
6	10.0.100.5	0	public	Read Only
7	10.0.100.6	0	public	Read Only

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 sixteen User Names whose access is granted via SNMPv3 protocol. You can also define their respective Security Levels, Auth Passwords, Priv Passwords and Access Levels.

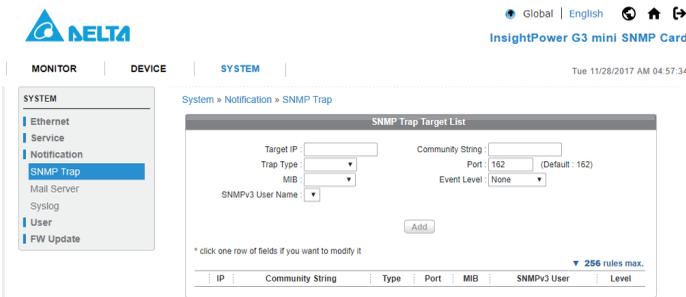


5-3-3 Notification

The Notification page includes SNMP Trap, Mail Server and Syslog these three selections.

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, Port, Event Level, 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**. The maximum number of Target IP addresses is 256.





The Mini SNMP supports SNMPv1, SNMPv2c and SNMPv3 traps to satisfy most of customer's environments. If you select the SNMPv3 trap, please specify an SNMPv3 USM User Name.

You can use Event Level to determine what event notifications should be sent to which Target IP Address. Three event levels are listed as follows:

- **None:** No event notifications are sent to the target address.
- **Information:** All event notifications are sent to the target address.
- **Warning:** Both Warning and Alarm event notifications are sent to the target address.
- **Alarm:** Only Alarm event notifications are sent to the target address.

You can go to **Device** → **Management** → **Event Level** to change the event level.

Mail Server

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 8.



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.

The screenshot shows the web interface for the InsightPower G3 Mini SNMP Card. The top navigation bar includes 'Global', 'English', and icons for home and refresh. The main header identifies the device as 'InsightPower G3 mini SNMP Card' and shows the date and time: 'Sat 01/01/2000 AM 00:02:22'. The left sidebar contains a menu with 'SYSTEM' selected, and sub-items: Ethernet, Service, Notification, SNMP Trap, Mail Server (highlighted), Syslog, User, and FW Update. The main content area is titled 'System > Notification > Mail Server' and contains two sections:

Mail Server Configuration

SMTP Server Name or IP: [text box] (51 bytes max.)
 SMTP Server Port: 25
 Mail Title: Mini-SNMP (64 bytes max.)
 Sender E-mail: [text box] (64 bytes max.)
 Account: admin (32 bytes max.)
 Password: [password box] (16 bytes max.)
 Enable TLS/SSL

Mail List

Receiver: name@company.com
 Event Level: None
 Daily Event Log
 Daily Data Log

	Receiver	Event Level	Daily Event Log	Daily Data Log
1	name@company.com	None	No	No

▼ 8 rules max.

- **SMTP Server Name or IP**

If a Host Name is entered, a **DNS IP** should be added. Please see **5-3-1 Ethernet**.

- **SMTP Server Port**

The mail server's port number.

- **Mail Title**

The subject of the notification E-mail.

- **Sender E-mail**

The sender's E-mail address.

- **Account**

The mail server login account.

- **Password**

The mail server login password.

- **Receiver**

The recipient's E-mail addresses.

- **Event Level**

Select the Event Level 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 sent to the target address.

- **Daily Event Log**

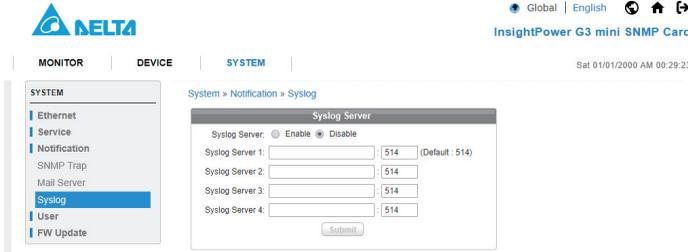
If this is selected, all event logs in the same day will be packaged as an attachment and sent to the specified receiver at 0:00 AM next morning.

- **Daily Data Log**

If this is selected, all data logs in the same day will be packaged as an attachment and sent to the specified receiver at 0:00 AM next morning.

Syslog

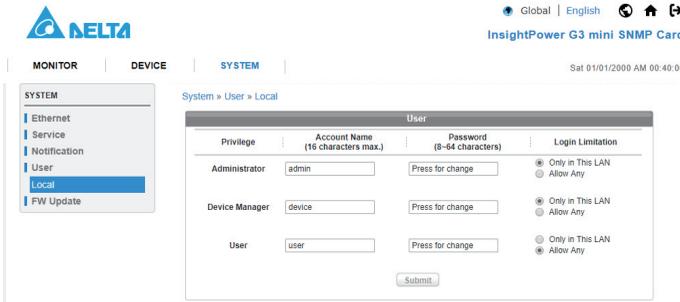
Syslog is used to store the event log on remote Syslog servers. This will not affect the local event log. After enabling the Syslog, please set up a server IP address. You can set up at maximum four Syslog servers at a time.



5-3-4 User

Local

This page allows user to manage the Account Name, Password and Login Limitation for local authentication.



- **Administrator**

Allowed to modify all settings.

- **Device Manager**

Allowed to modify device related settings.

- **Read Only User**

Only allowed to view settings without the permission to make changes.

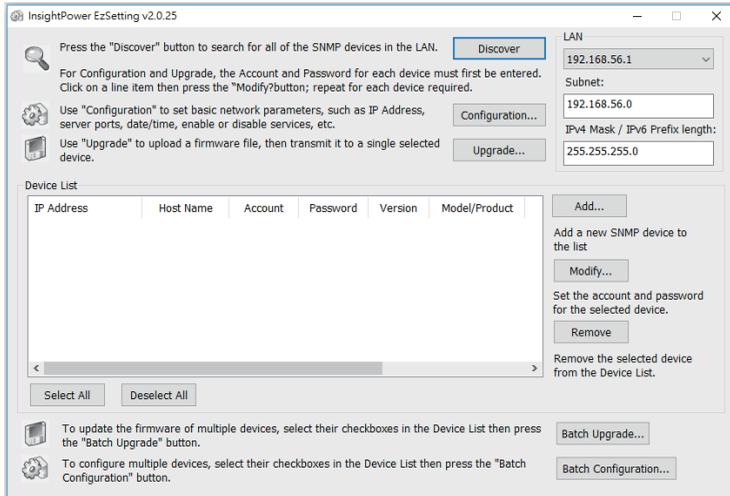
5-3-5 FW Upgrade

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



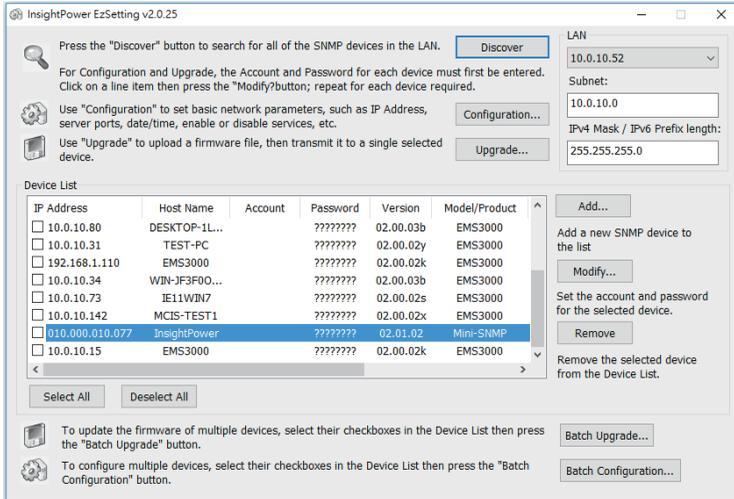
Chapter 6 : SNMP Device Firmware Upgrade

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

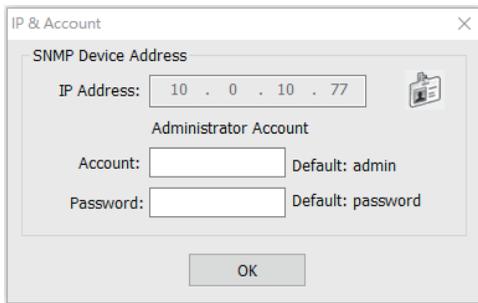


Step 1 The subnet mask allows you to define the device discovery range in the specified subnets. Make sure the SNMP device you wish to upgrade is in the subnet that is specified. If it is not, please modify the subnet and subnet mask.

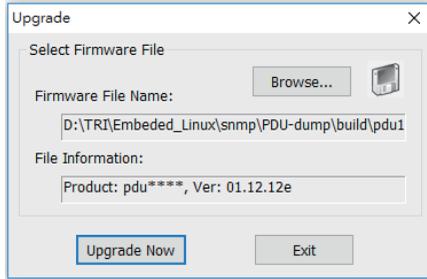
Step 2 Click **Discover**. A list of SNMP devices is shown.



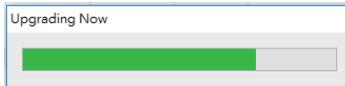
Step 3 Select a device from the Device List, click **Modify**, and enter Administrator account and password.



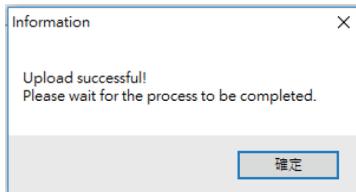
Step 4 Click **Upgrade**. The upgrade dialog box pops up. Click **Browse** to select a valid firmware binary file. Verify the firmware version shown under File Information, and then click **Upgrade Now** to continue.



Step 5 The upgrade process should take about 20 seconds.



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



Chapter 7 : Troubleshooting

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

To enable SNTP services in Windows, go to **Start** → **Control Panel** → **Add/ Remove Programs** → **Add/ Remove Windows Components** → **Networking Services** → check **Simple TCP/ IP Services** → **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 Mini SNMP and the UPS is established?

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

```
C:\>ping 172.16.186.230

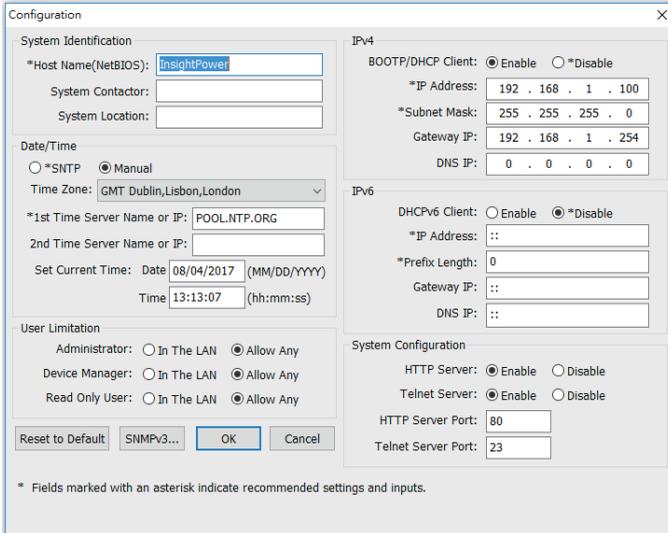
Pinging 172.16.186.230 with 32 bytes of data:
Reply from 172.16.186.230: bytes=32 time=2ms TTL=64
Reply from 172.16.186.230: bytes=32 time=2ms TTL=64
Reply from 172.16.186.230: bytes=32 time=2ms TTL=64
Reply from 172.16.186.230: bytes=32 time=4ms TTL=64

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 G3 SNMP Web, but I cannot log in.

Please check the IP addresses of the Mini SNMP 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.



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

If you just assign a new static IP address to the Mini SNMP, 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 **nbstat -R** in DOS prompt mode. After that, you can now connect to the Mini SNMP by its Host Name. Please also ensure that the Host Name assigned to the Mini SNMP 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 Mini SNMP from my workstation?

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

- 1) If the green LED indicator on the Mini SNMP is OFF, check if the network cable is correctly connected from the Mini SNMP 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 Mini SNMP.
- 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 Mini SNMP 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 Mini SNMP and the workstation. Ping the Mini SNMP's default or static IP address, according to your configurations. If a ping response is successfully received, indicating that the Mini SNMP is working properly, check your network equipment. If not, contact your local dealer or service personnel for assistance.

Q7. Unable to perform a SNMP Get command?

Refer to **5-3-2 Service** 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 Mini SNMP must match.

Q8. Unable to perform a SNMP Set command?

Refer to **5-3-2 Service** 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 Mini SNMP must match.

Q9. Unable to receive SNMP trap?

Refer to **5-3-3 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 through COM Port** to establish a COM port connection with the Mini SNMP. When the login information is prompted, key in **rstadmin** within 60 seconds and press **enter**. The Administrator account and password are now reset to default (admin/ password).

Q11. 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 <password> -X <password> -n <context name> -t 3 <ip> 1.3.6.1.2.1.1.1.0
```

-v: 1 for SNMPv1, 3 for SNMPv3.

-l: 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 Mini SNMP.

<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 G3 Mini SNMP
Power Input	12 Vdc
Power Consumption	2 Watt (Max.)
Network Connection	RJ-45 jack connector (10/ 100M)
Physical	
Size (W x D X H)	87 mm x 70 mm x 30 mm
Weight	75 g
Environmental	
Operating Temperature	0 ~ 60°C
Storage Temperature	-40 ~ 125°C
Operating Humidity	0 ~ 90 % (Non-condensing)



- * 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.

No. 353413900910
Version : V 9.10
UM Date : 2017_12_01



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.

