ViewPowerMini

User's Manual

Management Software for Uninterruptible Power Supply Systems

Table of Contents

1. ViewPowerMini Overview

1.1. Introduction

ViewPowerMini is UPS management software which is perfect for home users and enterprises; it can monitor multiple devices via USB and Serial port and it can monitor and manage from one to multiple UPSs in a networked environment including LAN, INTERNET and RS485-based networks.at the same time. The major functions of ViewPowerMini monitoring software include data log for device, power generation statistics, alarm messages, fault messages, and parameter setting for devices; It can not only prevent data loss from power outage and safely shutdown systems, but also store programming data and scheduled shutdown UPSs

1.2. Structure

ViewPowerMini includes ViewPowerMini service,GUI (user interface) and ViewPowerMini icon.

ViewPowerMini service is the core of ViewPowerMini software. It's a system program running in the back end. It will communicate with UPS, record event, notify users with events, and execute command according to users' request.

GUI is operated in Browser and communicated with back-end program. Users can monitor UPSs for real-time status, information and modify UPS setting parameters via GUI.

ViewPowerMini icon is managing tool for ViewPowerMini software. When ViewPowerMini is activated, there is an orange plug icon located in taskbar. It also will display pop-up

dialog for current UPS status.

NOTE: Tray icon only exists under Windows OS.

1.3. Features

- Real-time dynamic graphs of UPS data (voltage, frequency, load level, battery capacity)
- Safely OS shutdown and protection from data loss during power failure
- Warning notifications via audible alarm, pop-up screen, broadcast, mobile messenger, and e-mail
- Scheduled UPS on/off, battery test, programmable outlet control, and audible alarm control
- Password security protection

2. ViewPowerMini Install and Uninstall

2.1. System Requirement

- 512 MB physical memory at least (1 GB is recommended)
- 1 GB hard disk space at least
- Administrator authority is required
- More than 16-bit colors and 800 x 600 or above resolution display is recommended
- An available communication port (RS232 serial port or USB port) is needed
- Platforms supported by software are listed below:
  - ➢ Windows 2000/XP/2003/Vista/2008/2012 (32-bit & x64-bit)
  - ➢ Windows 7 / 8 (32-bit & x64-bit)
  - ➢ Linux RedHat 8, 9
  - ➢ Linux RedHat Enterprise AS3, AS5, AS6 (32-bit)
  - ➢ Linux RedHat Enterprise AS6 (64-bit)
  - ➢ Linux SUSE 10 (32-bit & 64-bit)

- ➢ Linux Cent OS 5.4 (32-bit)

- ➢ Linux Ubuntu 8.X, 9.X, 10.X (32-bit)

- ➢ Linux Fedora 5

- ➢ Linux OpenSUSE 11.2 (32-bit & 64-bit)

- ➢ Linux Debian 5.x, 6.x (32-bit)

- ➢ Linux Debian 6.x (64-bit)

- ➢ Mac OS 10.6 / 10.7 / 10.8 (x64-bit)

2.2. Software Install

Step 1 After clicking install, it will display the installation in process. Refer to the diagram 2-3.
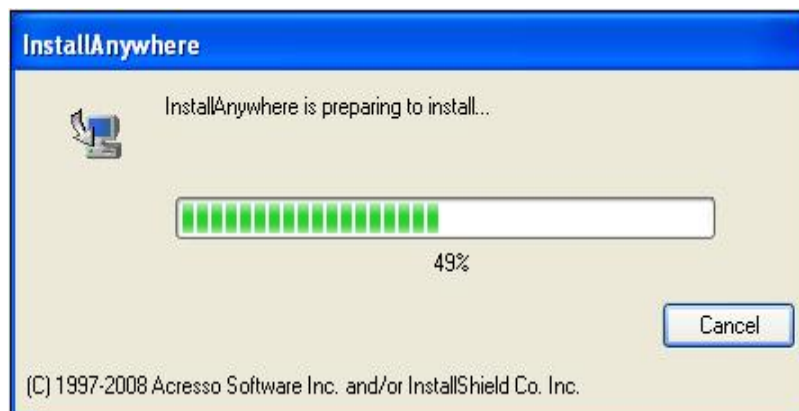

Diagram 2-3

Step 2 Choose wanted language and click "OK" as diagram 2-4.
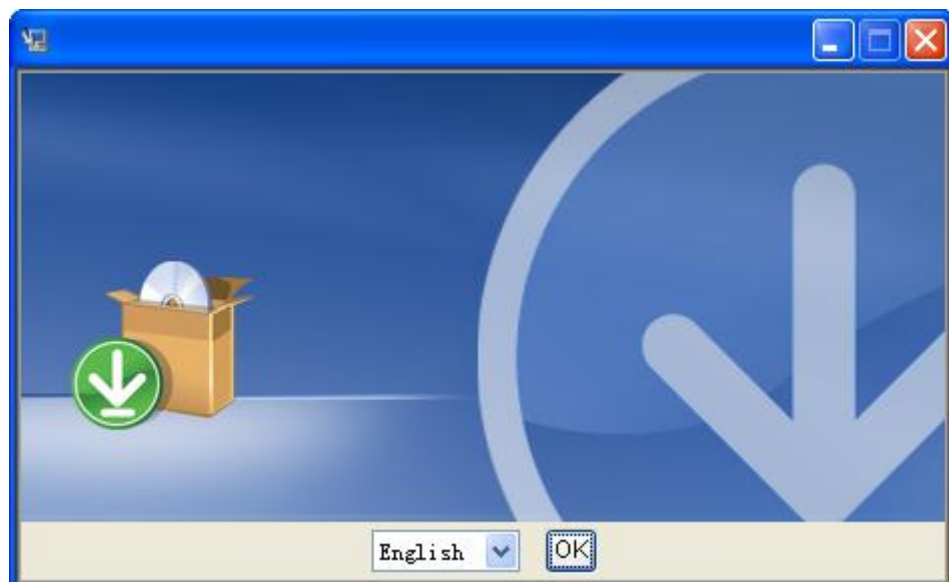
Diagram 2-4

Step 3 Click "Next" to proceed to the next screen as Diagram 2-5.
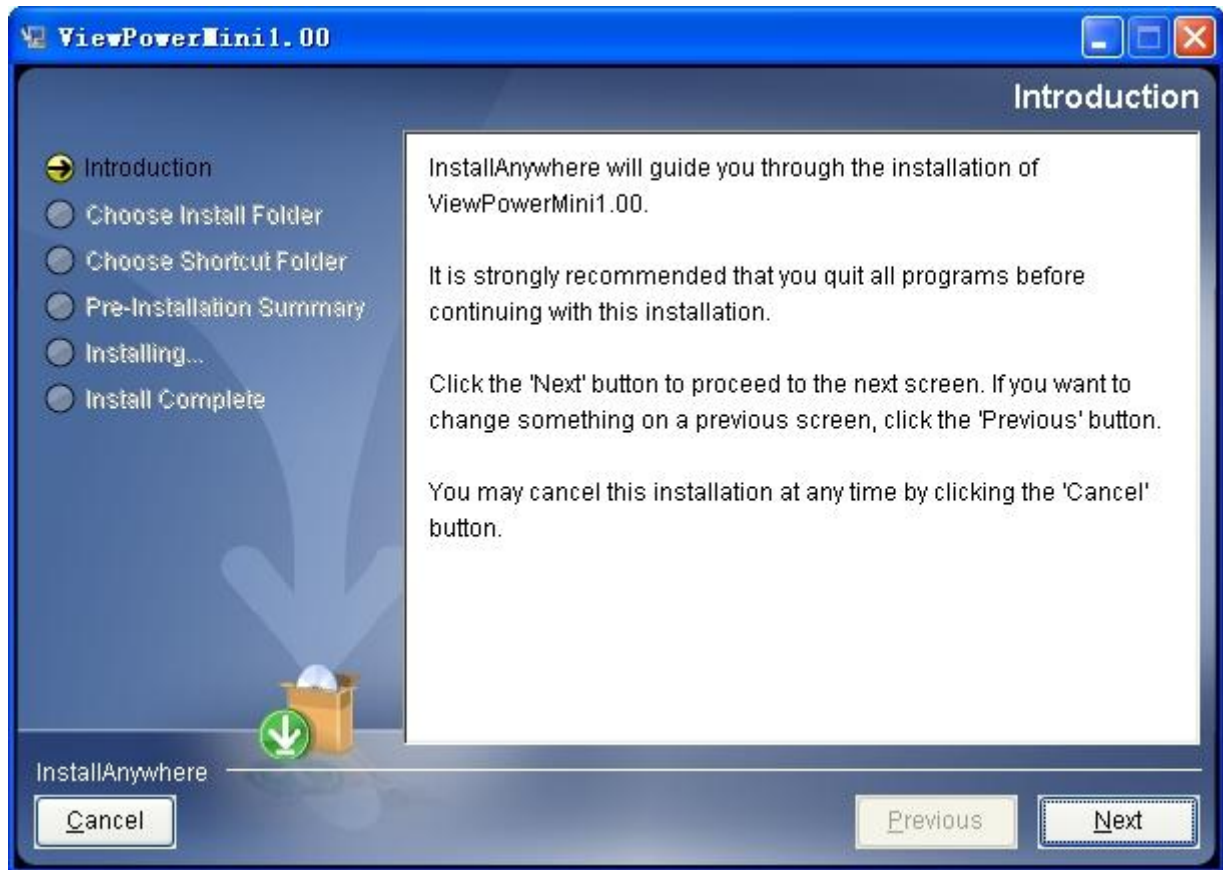
Diagram 2-5

Step 4 Click "Choose" button to change the default folder. After choosing the installed folder, click "Next" button. Refer to the following diagram 2-6.

Diagram 2-6

Step 5 Choose the shortcut folder and click "Next" button. Refer to the following diagram 2-7.

Diagram 2-7

Step 6 It will display the software summary before installation. Click "Install" button to start the installation and refer to Diagram 2-8.

Diagram 2-8

Step 7 Click "Done" button to confirm the installation completely.

Refer to Diagram 2-9.
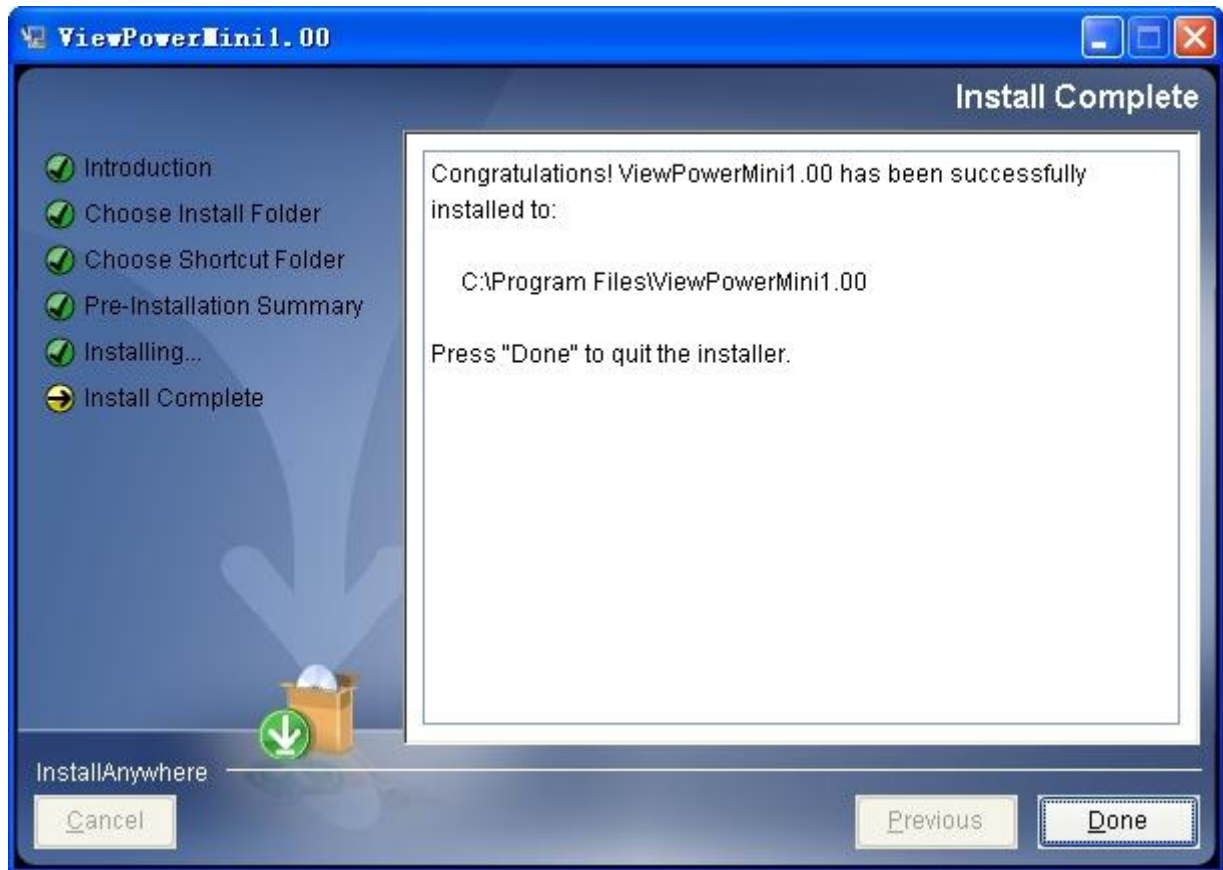
Diagram 2-9

Note: Please uninstall the previous version before install the new version software.
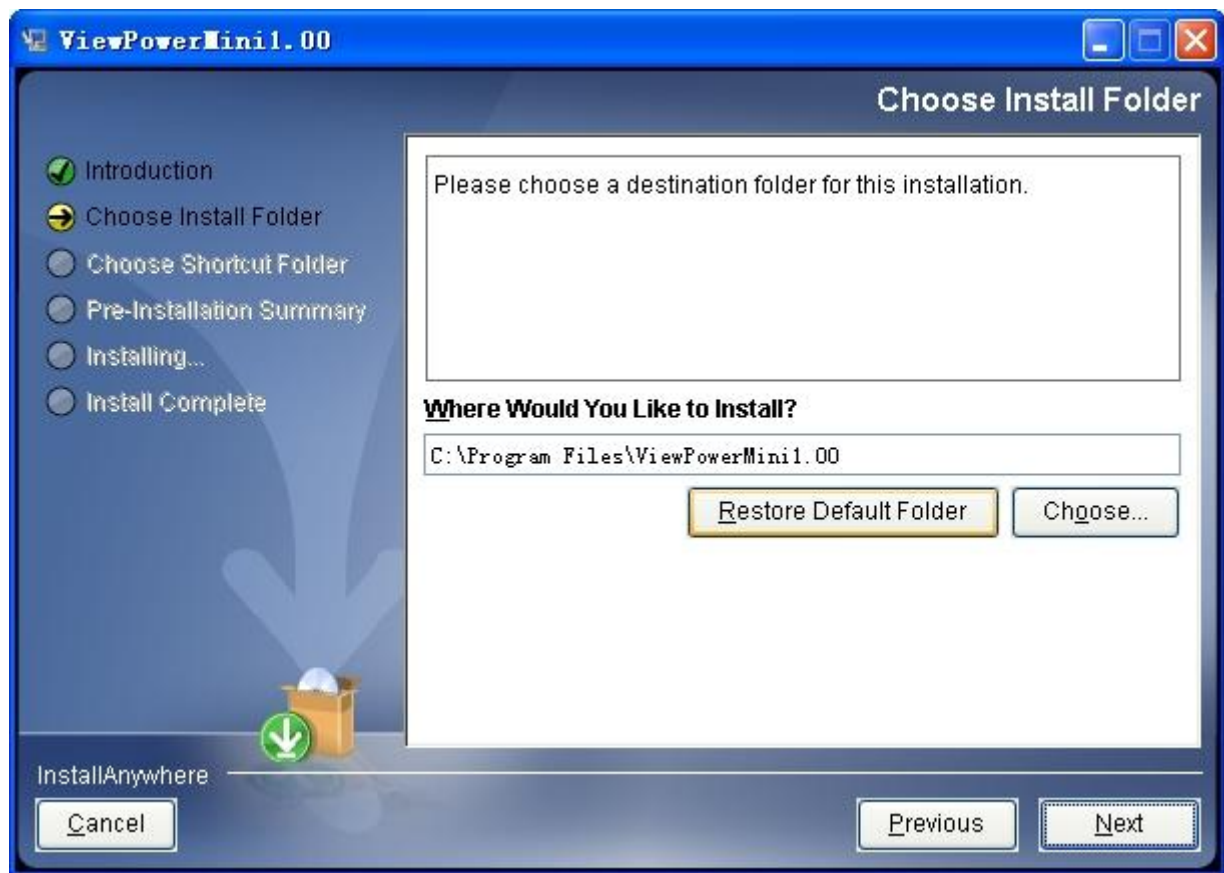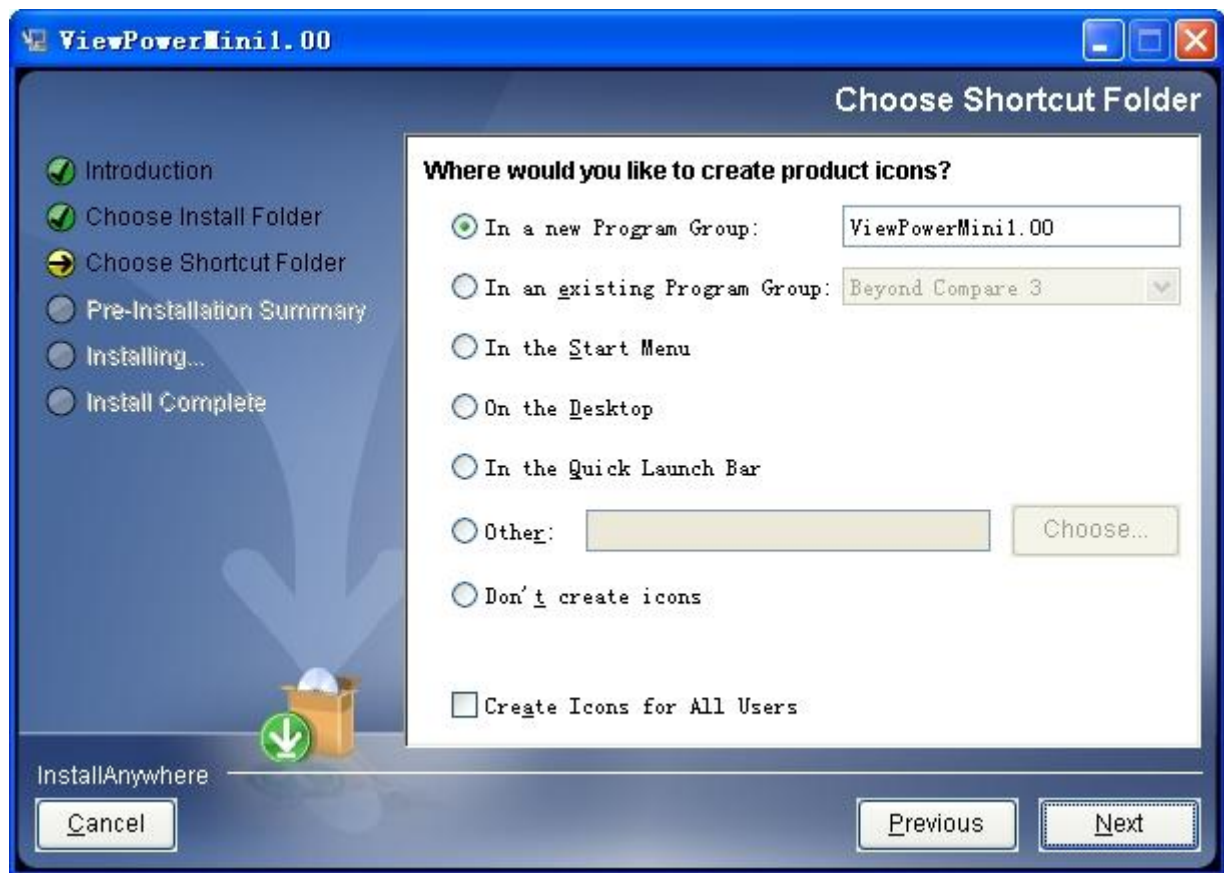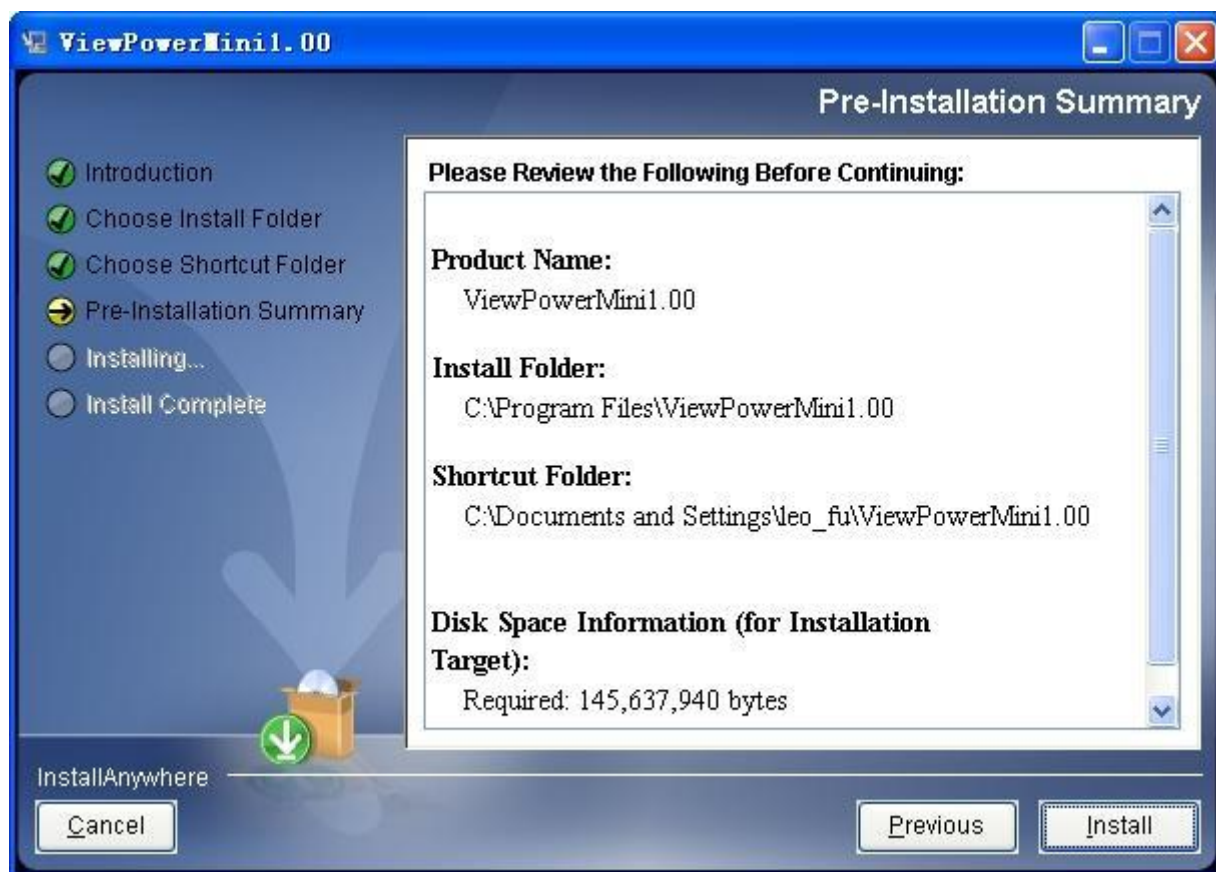
If detecting installed ViewPowerMini during installation, it will remind users to

2.3. Software Uninstall

Note: Before uninstall software, you must stop all software programs first and then log in as "Administrator"! Otherwise it can't be uninstalled completely.

Please choose Start >> All Programs >> ViewPowerMini >> Uninstall. Then follow the on-screen instruction to uninstall the software.

3. Tray Application

3.1. Start Monitor

The Installer will leave a shortcut icon on your desktop. Simply click the shortcut. Then it will start the software and display an orange plug icon located in taskbar. To launch the GUI, double click the plug icon or choose "Open Monitor" by clicking right button of the

mouse. Refer to below diagram.

Or, use the Start Menu method; Start >> All Programs >> ViewPowerMini >> ViewPowerMini

Shortcut icon   **ViewPowerMini icon**

3.2. Icon and Software status

- Monitoring application is not activated successfully:
- Monitoring application is activated as service mode:
- Monitoring application is activated as application mode:

3.3. Configuration

3.3.1. SNMP Manager

SNMP Manager is a plug-in utility for ViewPowerMini to search and operate all SNMP devices in the LAN.

Click the "SNMP Manager" to access SNMP management tool.

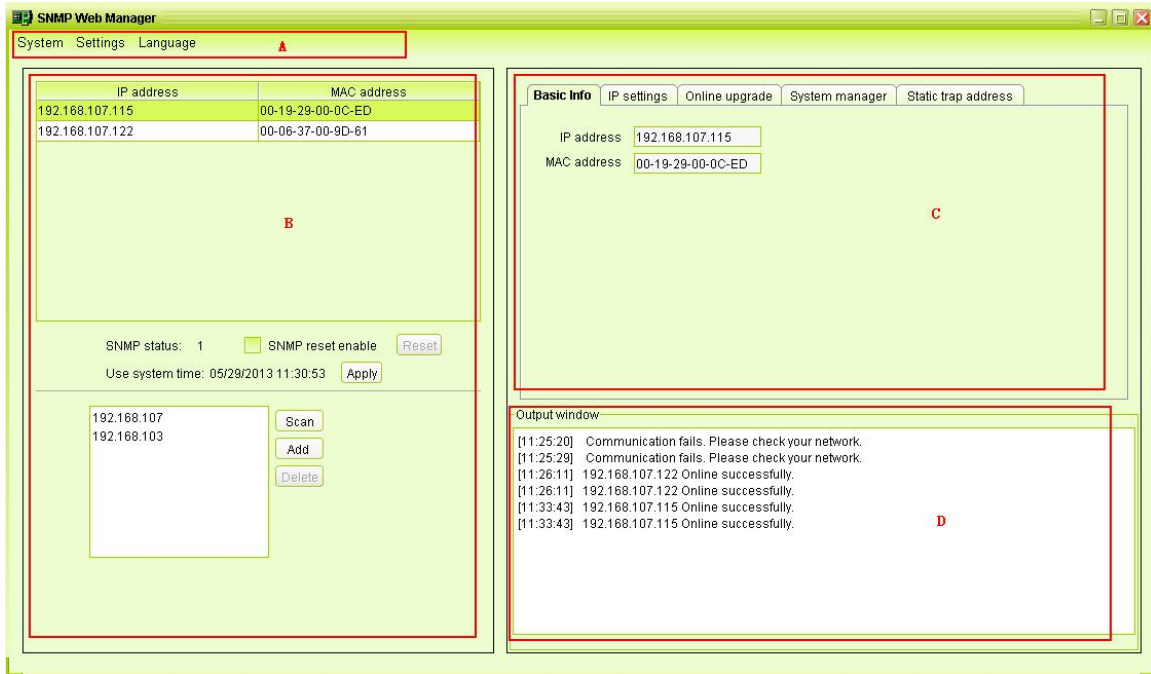It has four sections as marked in the illustration below:

Diagram 3-1

A. Function menu offers tool-set for setting SNMP devices.

B. SNMP device list can list down all SNMP devices with IP address.

C. Configuration area includes Basic info, IP settings, online upgrade, system management, and static trap address.

D. Output window displays all messages for operations

3.3.1.1. SNMP Device List

The default value in window list would be current PC IP address. For example, if IP address of current PC is "192.168.102.10", it will display "192.168.102" in list when first enabling SNMP Manager.

Scan

You may enter specific IP address and then click "Scan" button to search.

Add

Click "Add" button and it will pop up a window to ask for entering specific IP address. Then, click "Apply" button to add IP address (Subnet). Refer to Diagram 3-2.
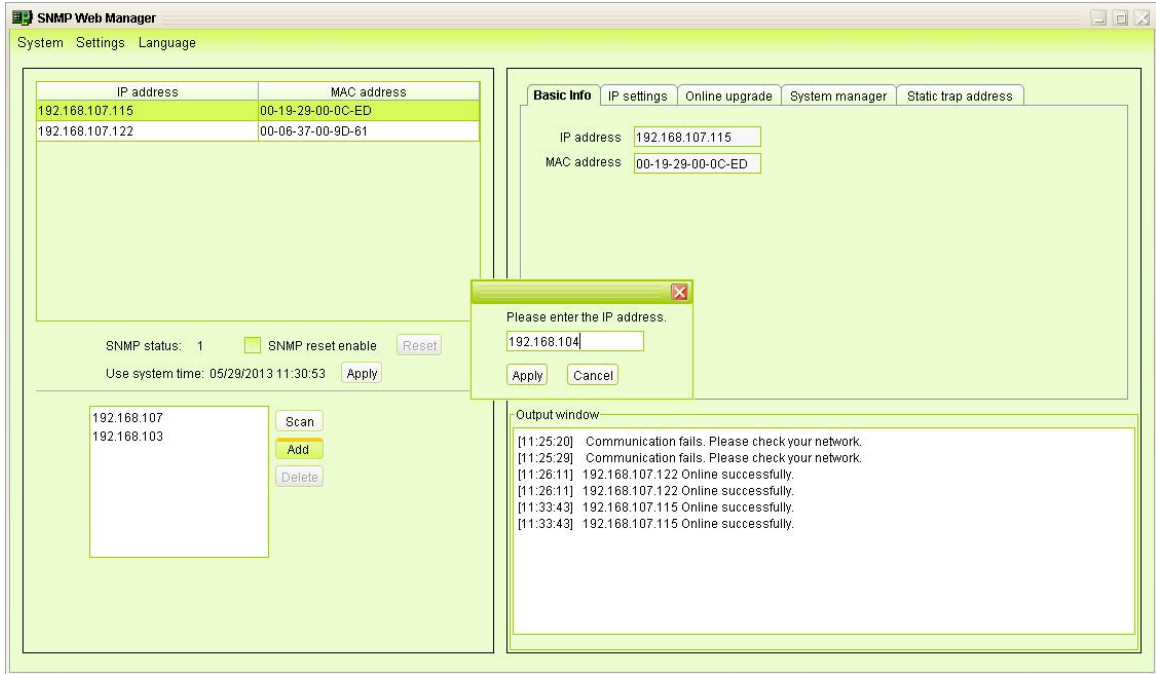
Diagram 3-2

Delete

You may select IP address from the list and remove it by clicking "Del" button.

SNMP Status

It will display SNNP status, 0 or 1, after selecting IP from the IP list. If there is program inside of selected SNMP card, the status becomes 1. If not, it will display 0. If no IP address is selected, it will display "---" as default. Refer to Diagram 3-3.

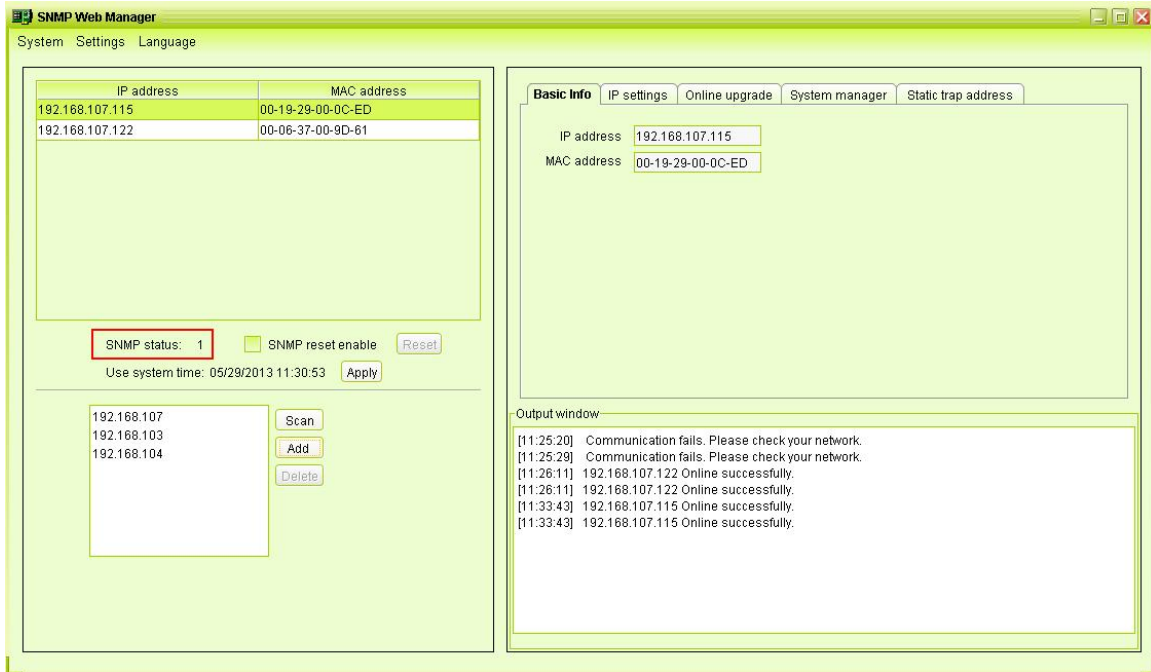**Diagram 3-3**

Reset

If it is required to restart the IP addresses of devices, please select the checkbox of "SNMP reset enable" and click "Reset" button. Then, if login is confirmed, you can restart the device. Steps are as follows:

Step1: Select IP address needed to restart IP from the list. Then, "SNMP reset enable" will become available to select. Refer to Diagram 3-4.

Diagram 3-4

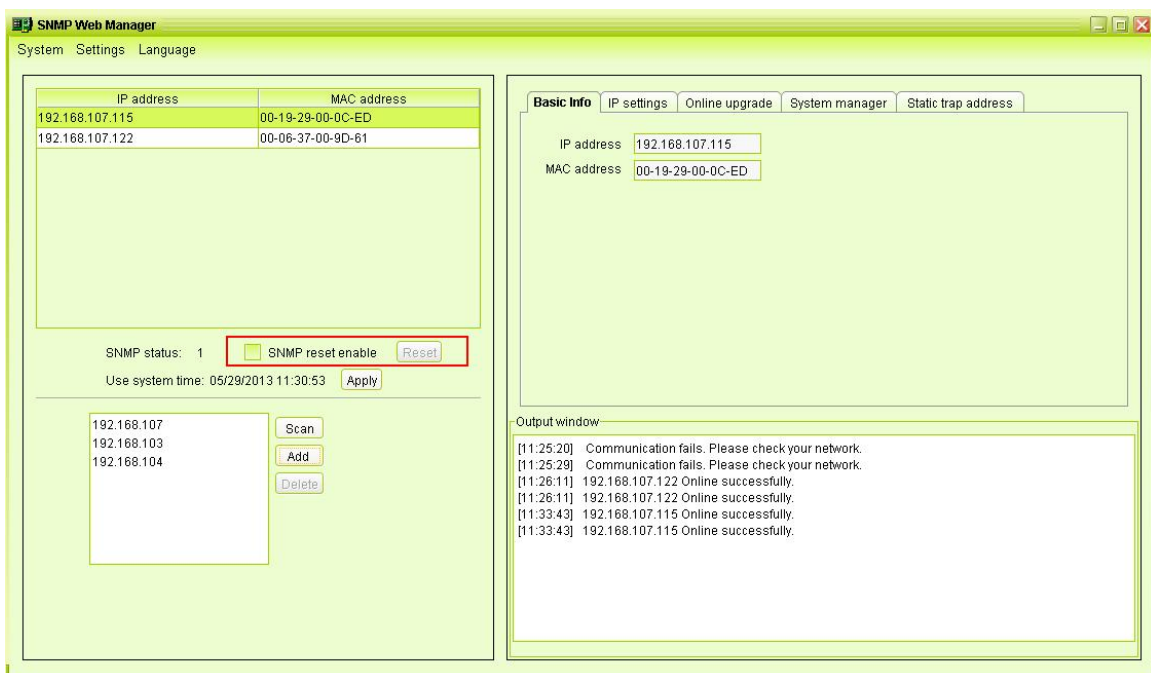Step2: Click checkbox of "SNMP reset enable". Then, "Reset" button will become available to click. Refer to Diagram 3-5.
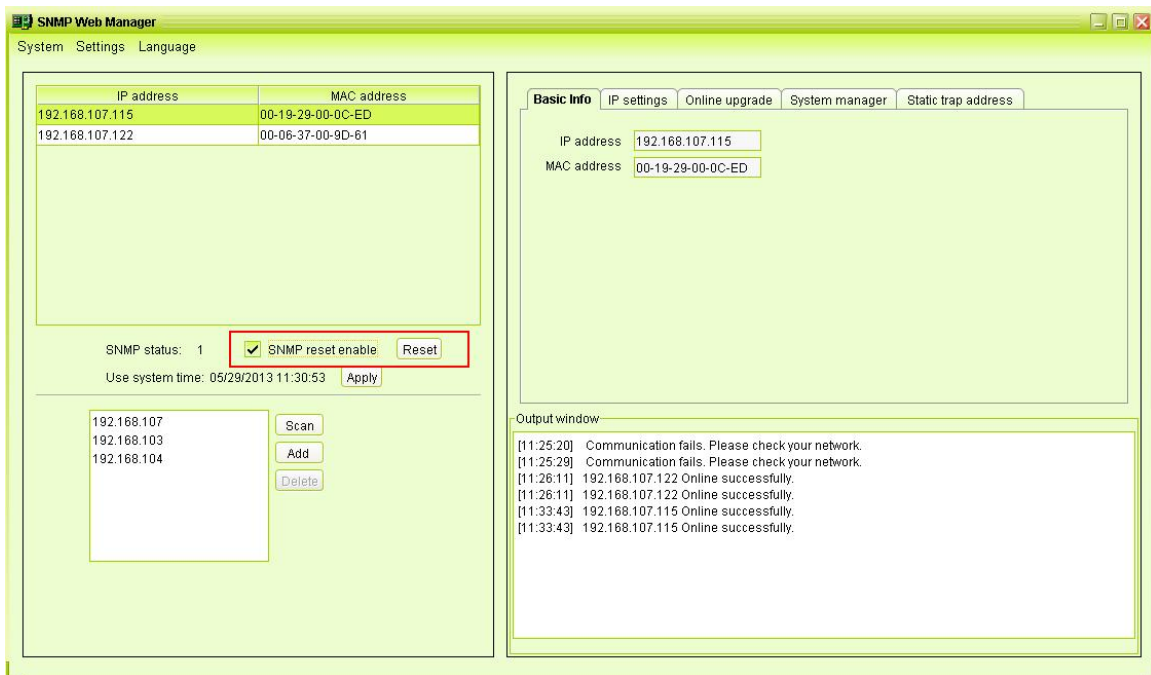
Diagram 3-5

Step3: Click "Reset" button and it will pop up a message to confirm this operation. Refer to Diagram 3-6.
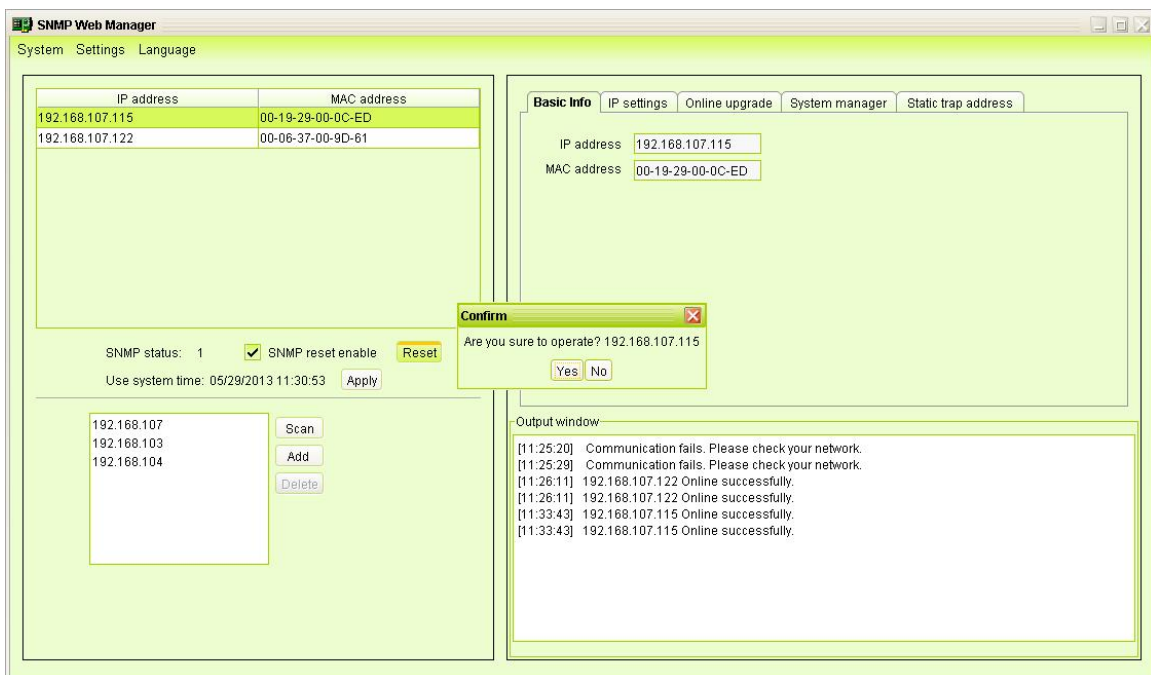
Diagram 3-6

Step4: If "Yes" is selected, it's requested to log in first. If "No" is selected, it will stop this operation. Refer to Diagram 3-7.
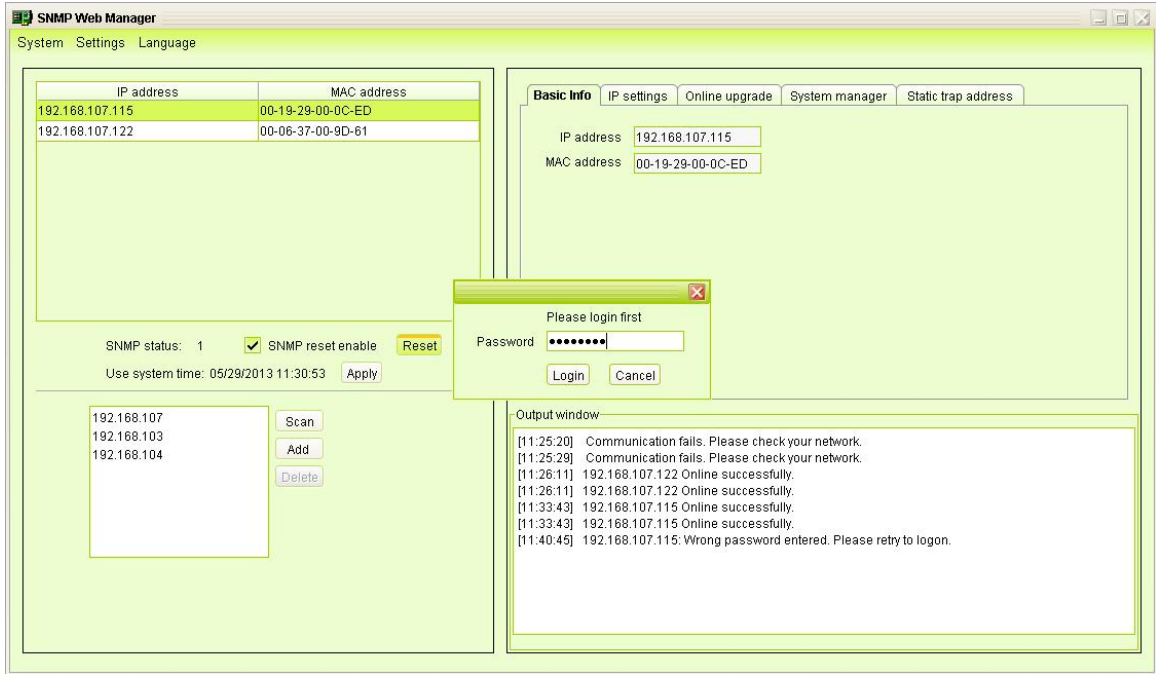
Diagram 3-7

Step5: Enter the correct password and click "Login" button. The target device will be restarted.

NOTE: If changing the MAC address of current device before reboot and the current device is applying DHCP (Automatically obtain IP address) method, you need to manually click "Scan" button to scan.

Use system time

If "Use system time" is selected, the SNMP card will apply PC system time. Refer to Diagram 3-8.
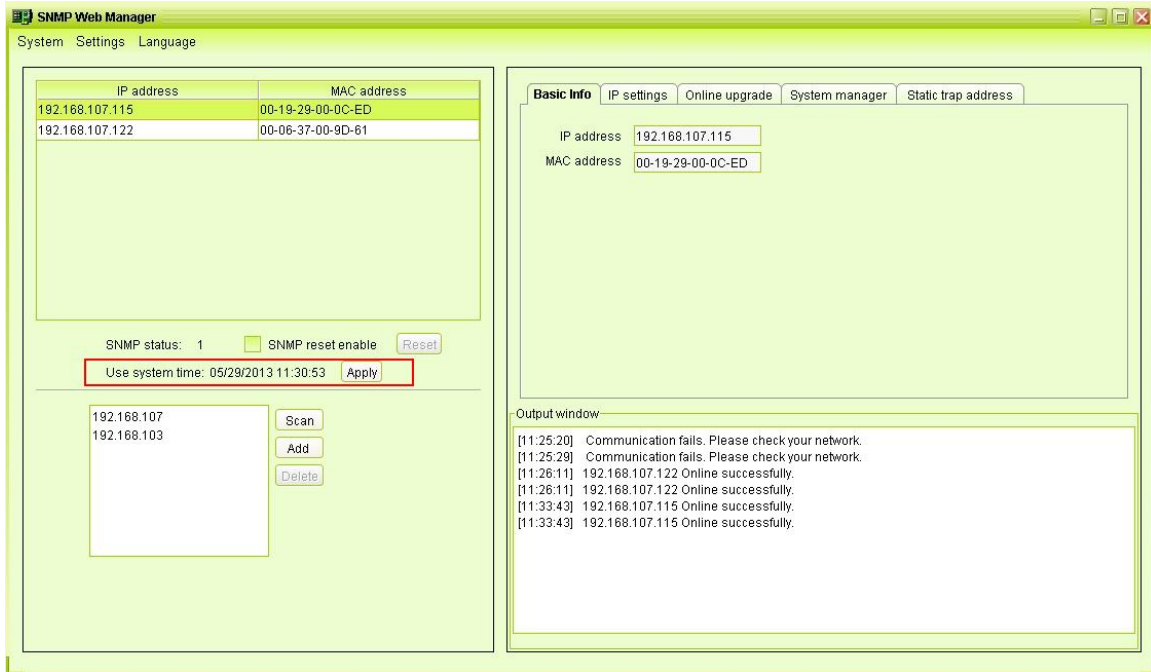
Diagram 3-8

3.3.1.2. Function Menu

3.3.1.2.1. System

3.3.1.2.1.1. Login

It's necessary to verify ID to remote access SNMP devices. The default password is "12345678".

Step 1: Select System >> Login

Step 2: Enter default password and then click "Login" button. Or click "Cancel" to cancel login. Refer to Diagram 3-9.
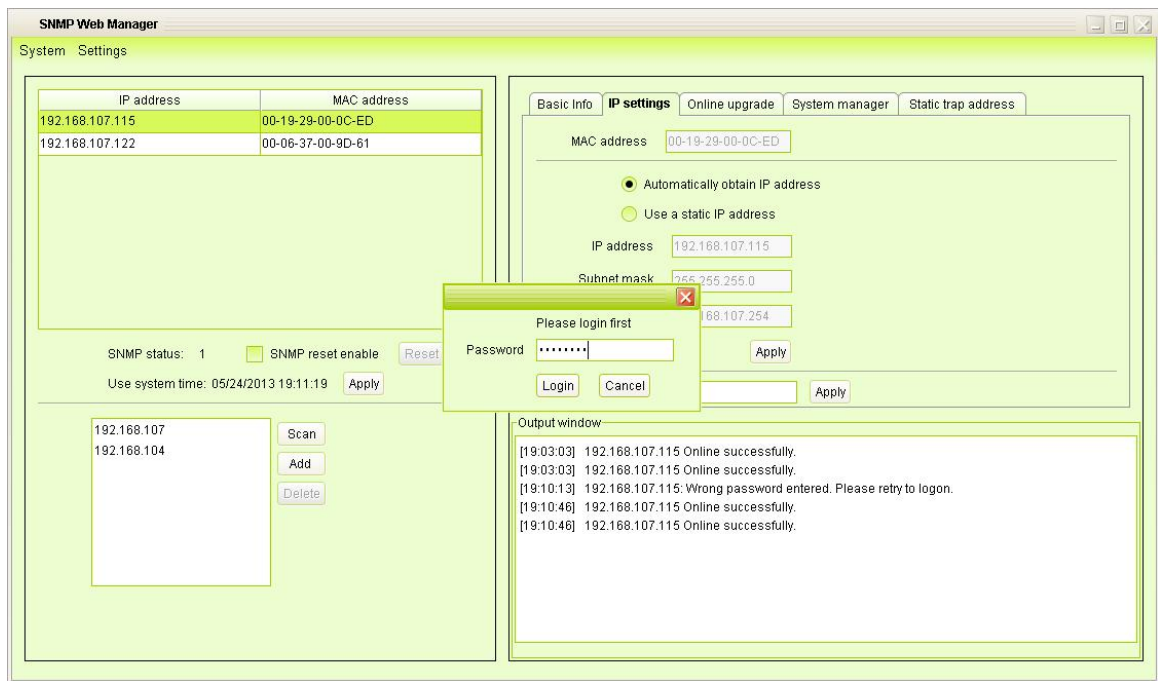
Diagram 3-9

Logout

Clear all currently saved passwords.

Quit

Select "Quick" to exit SNMP Manager.

3.3.1.2.2. Settings

Basic Info

User can manually enter basic information of SNMP cards such as UPS name, Address, and Note for verification. Refer to Diagram 3-10.
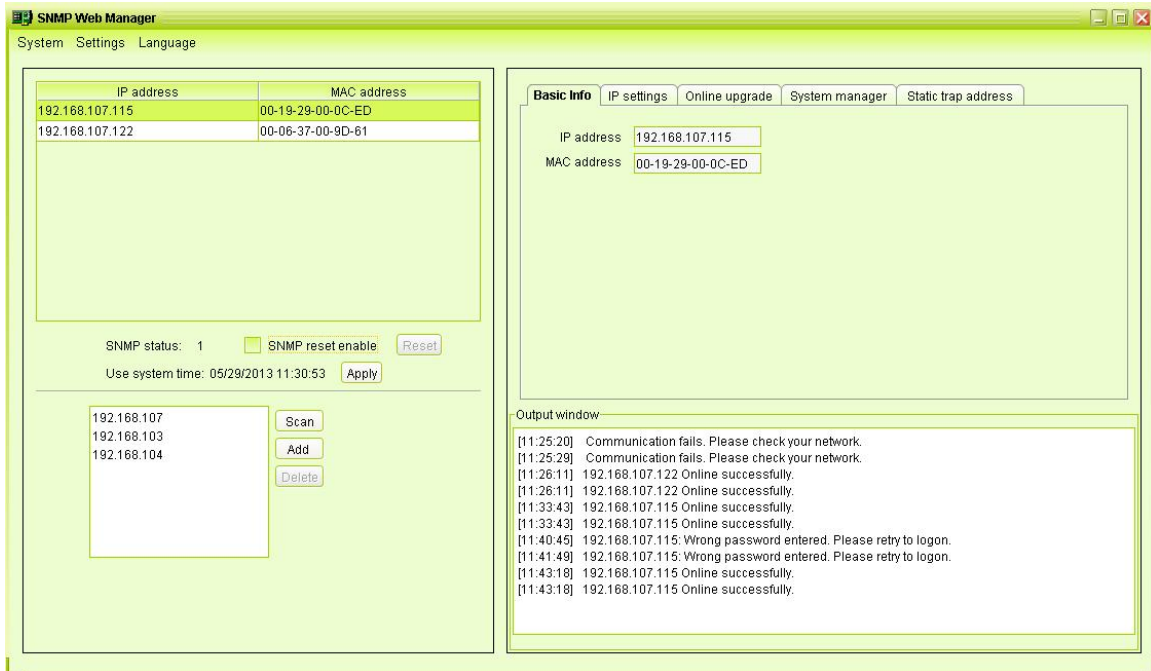
Diagram 3-10

IP Setting
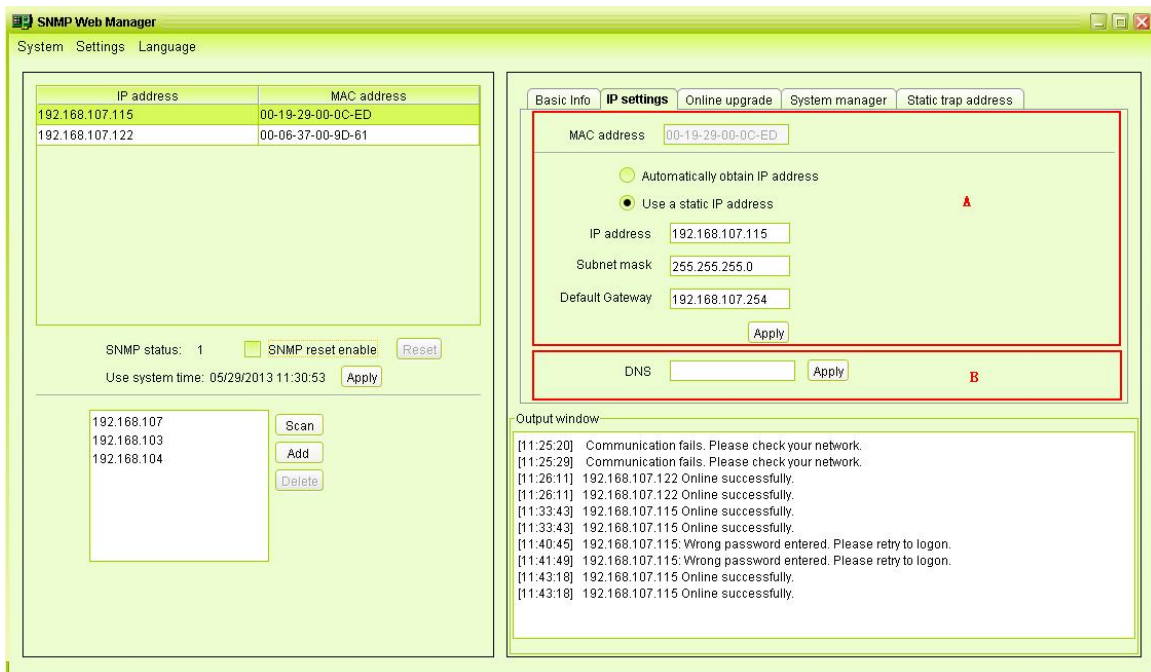
Diagram 3-11

Part A: There are two methods to obtain IP address. Select IP address from IP list. It will display MAC address of device in the output window. Refer to section A in Diagram 3-11.

● Automatically obtain IP address (DHCP)

It will allow system to automatically obtain IP addresses. If there is no this kind of

service provided in LAN, the default IP will display as "192.168.102.230", Net mask as "255.255.255.0" and default gateway as "0.0.0.0". Simply click "Apply" button to apply this change.

● Use a static IP address

It will allow users to enter static IP address for SNMP devices. When entering IP address, Subnet mask, and gateway address, simply click "Apply" button to apply this change.

Part B: Enter the DNS and click "Apply" button. Refer to section B in Diagram 3-12.

Online upgrade
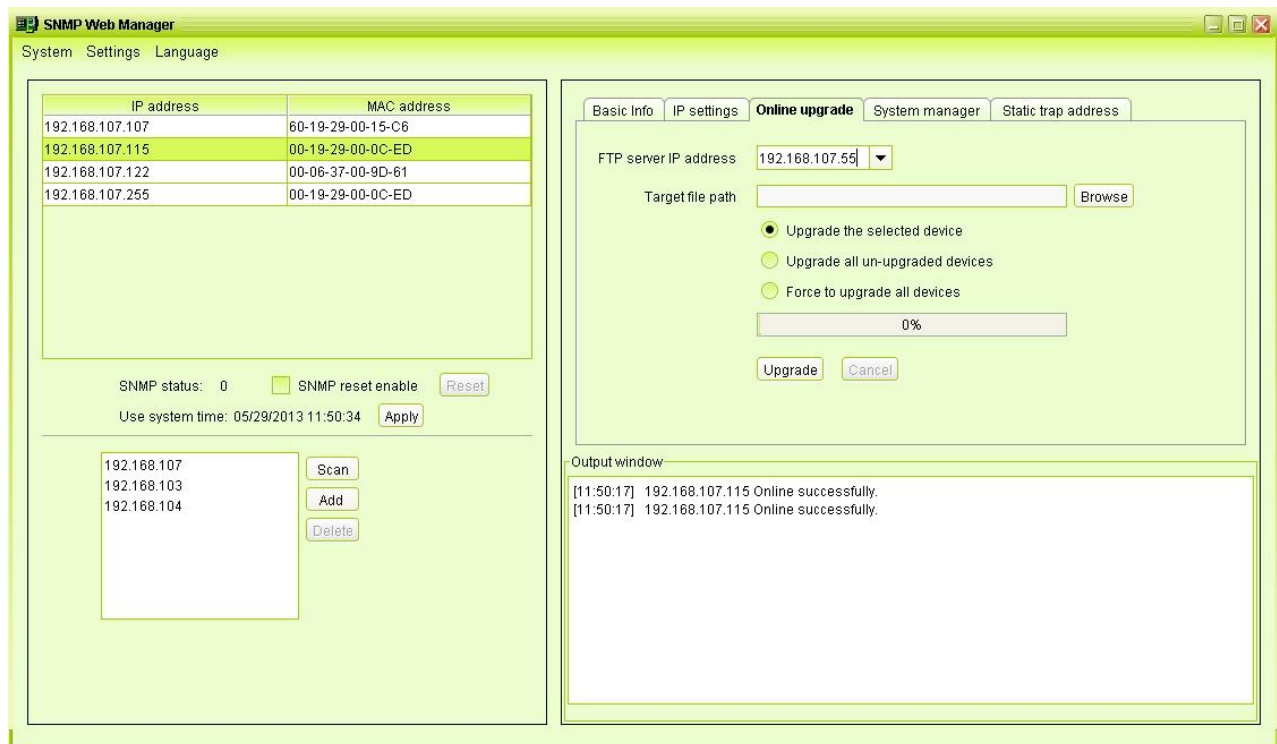
Diagram 3-12

There are three methods for online upgrade:

● Upgrade the selected devices: It will upgrade all SNMP devices listed in the IP list.

● Upgrade all un-upgraded devices: It will only upgrade SNMP devices which are not using the same version as current SNMP device is.

● Force to upgrade all devices: No matter what kinds of version are used for SNMP devices listed in the IP list, it will upgrade to the latest version for all SNMP devices. Refer to Diagram 3-12.

Step1:   select the FTP server IP address. Refer to Diagram 4-6.

NOTE: If applying upgrade for Modbus Web Server in LAN, FTP server IP address will be

IP address of current PC in LAN. If applying upgrade for Modbus Web Server in specific networking, FTP server IP address will be IP address of current PC in Internet.

Step2: Click "Browse" button to choose program file. Refer to Diagram 3-13.
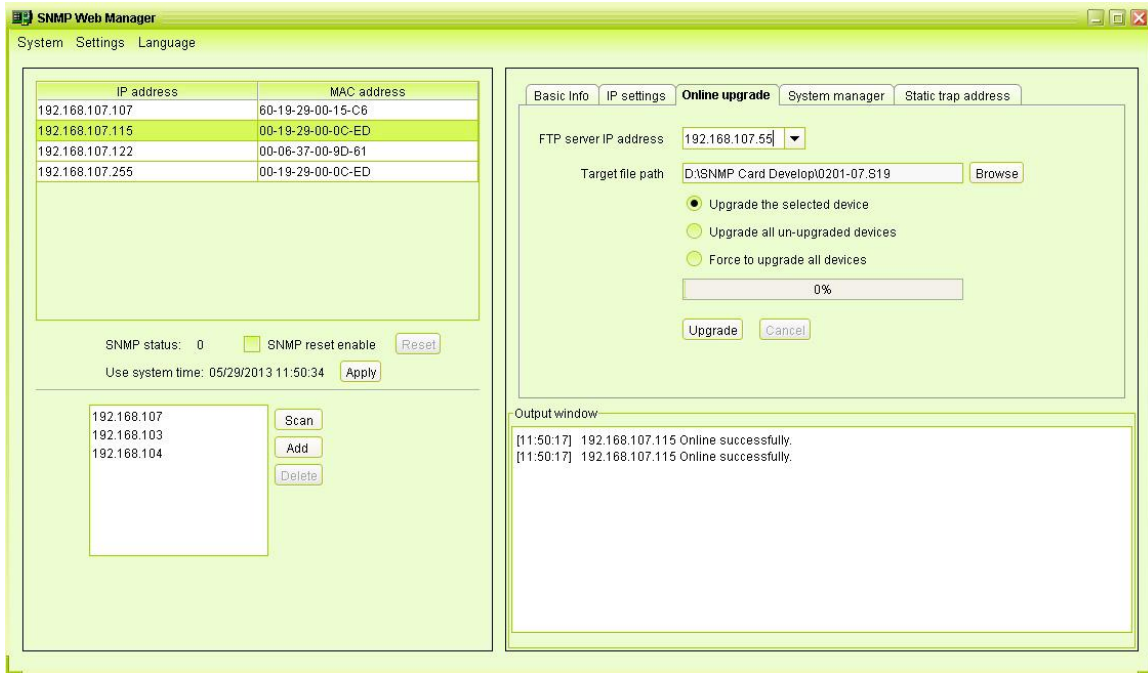
Diagram 3-13

Step3: Click "Upgrade" button to execute upgrade action. Refer to Diagram 3-14.
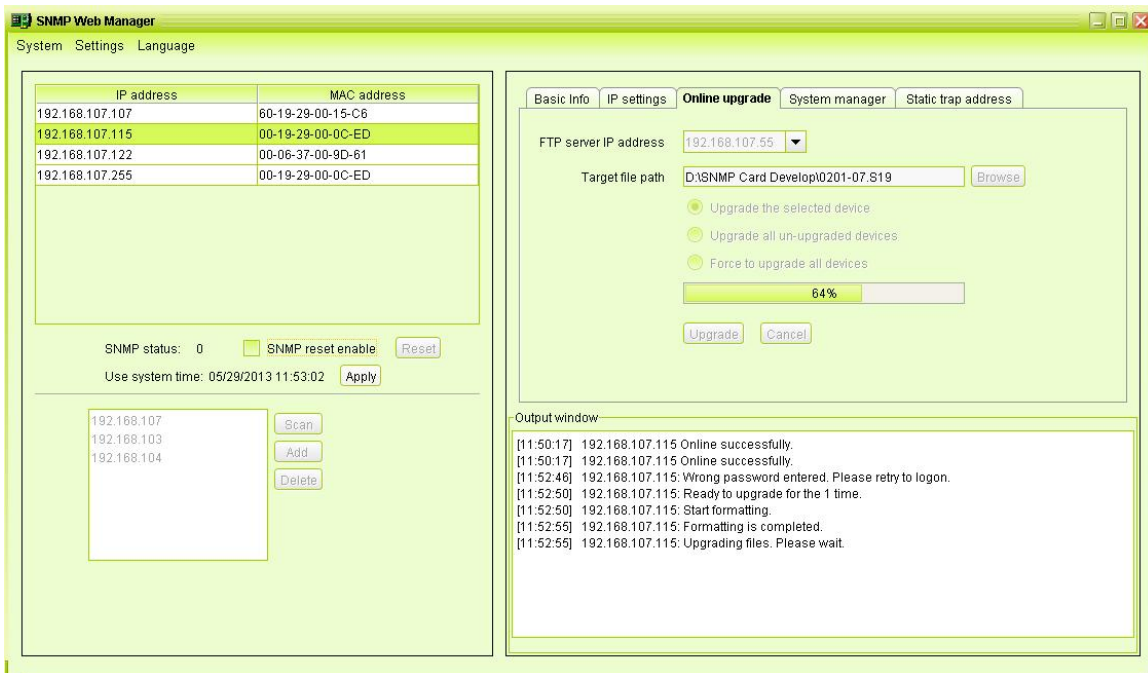
Diagram 3-14

Step4: When upgrade is complete, you may check the message in output window. Refer to Diagram 3-15.
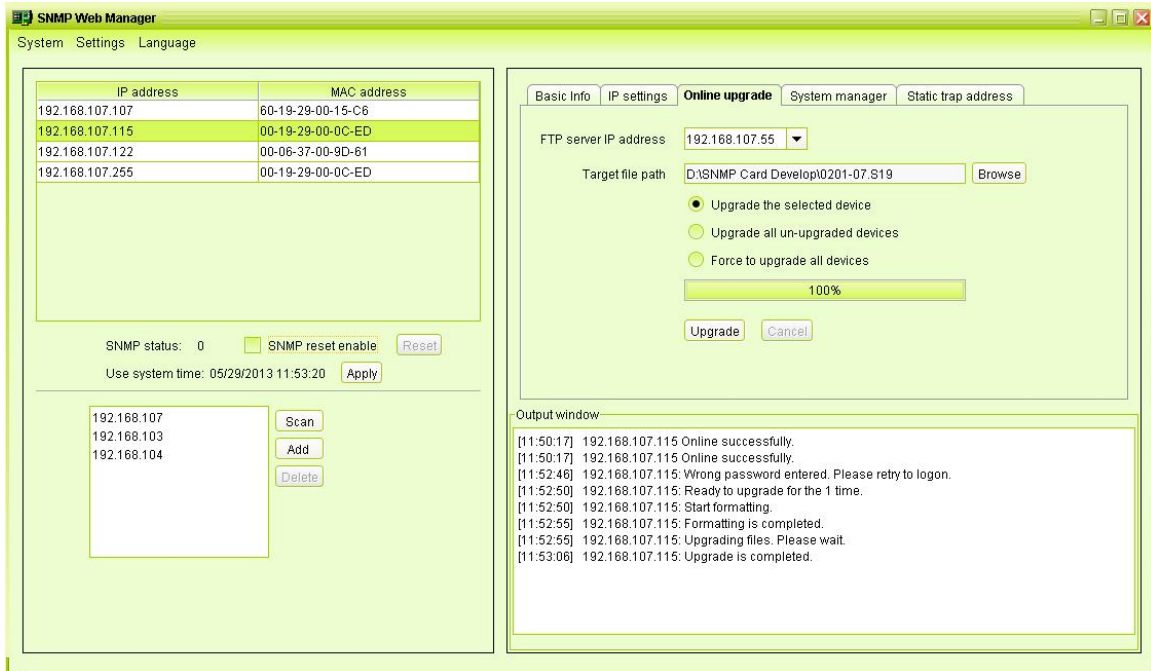
Diagram 3-15

NOTE: If abnormal situation occurs during upgrade process, the system will automatically re-start the upgrade operation. If this interruption occurs five times, then, system will automatically stop this operation. At this time, please check if LAN is working well.

System management

Diagram 3-16

Part A: You can set SNMP protocol version for selected or all devices. Simply choose

SNMP protocol version first. The default setting is V2. If choosing V3, it's also necessary to set encrypt. Select devices to apply this setting.

● Select device: Set SNMP protocol version for selected SNMP devices from device list.

● Select all: Set SNMP protocol version for all SNMP devices from device list.

Then, click "Apply" button to complete version setting.

Part B: You may modify single password for one SNMP device or all passwords for all SNMP devices. Please enter original password, new password and re-enter new password. Select devices to apply this setting.
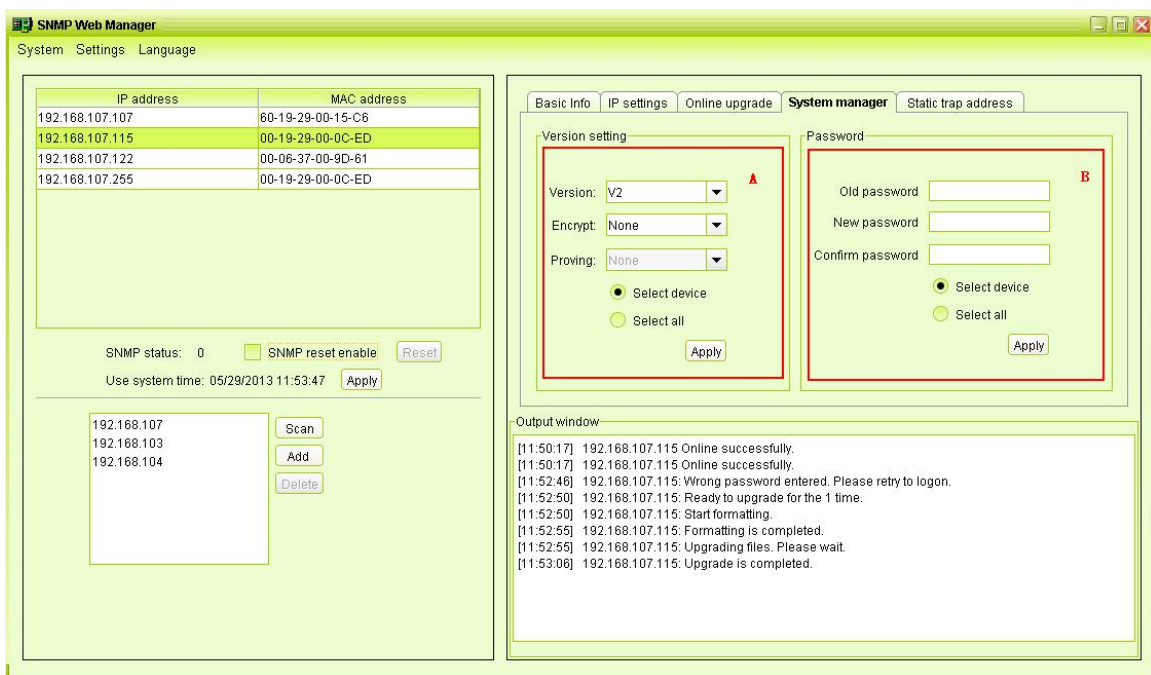
● Select device: Choose to change password for selected SNMP device from device list.

● Select all: Choose to change passwords for all SNMP devices on the window list

Then, click "Apply" button to change password.

NOTE: The length of password is 8~15 digits. If the password change is applied for all SNMP devices, it will be consistent for passwords of all SNMP devices.

Static trap address

You may configure two static trap addresses and change trap port in SNMP Manager. The default trap port is 162. Refer to Diagram 3-17.
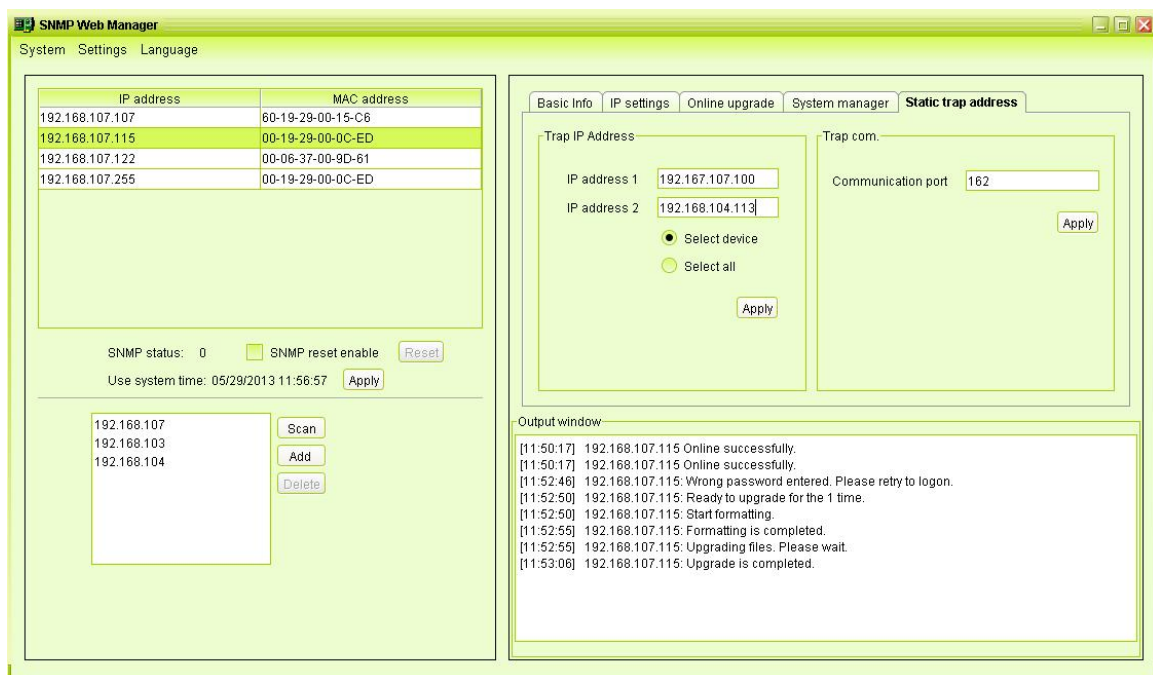

Diagram 3-17

NOTE: This software allows SNMP device to send trap messages to 2 static trap addresses and 8 dynamic trap addresses. It will default define host computer with software installed as a dynamic trap address. If communication failure occurs between SNMP card and host computer for over 10 minutes, it will stop sending trap message.

3.3.2. Software Upgrades

Refer to Diagram 3-18 for the detailed configuration for online upgrade:

- Specify the URL for update files: This is the directory to online update software. Please do not change it unless it's instructed by software vendor.
- Save files to: The directory to save files.
- Server startup type: If "Auto" is selected, the software will automatically start up when PC is turned on. If "Manually" is selected, users have to manually start the ViewPower software.
- Close the window and exit to Monitor: If selected, it will completely exit software without monitoring service when the window close. If unselected, it will continue monitoring service in the back end even though close the window from software.
- Online auto-update: If selected, it will automatically check if there is any new version launched online every 1 hour.
- If applying online upgrade, please follow below for configuration:
  1. Select "Apply the proxy configuration";
  2. Enter IP address and port of server;
  3. If ID identification is requested, select "Enable authentication" and enter User Name and Password.
- Connection test: Click this button to test if all configurations are set up well.

Diagram 3-18

3.3.3. Configuration Saved

Click "Apply" button to save all changes in Configuration page. Click "Cancel" to stop the change.

3.4. Software Update

Software update includes online update and manually update:

- Online Update:

    Click "Online Update" to search the latest software version. If there is new

version, it will automatically download and update. Refer to Diagram 3-19：
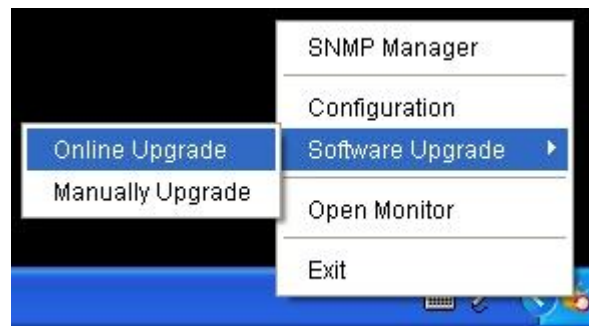
Diagram 3-19

● Manually Update:

Users can manually update the software. Follow below steps：

1. Click "Manually Update" from function menu. Refer to Diagram 3-20.
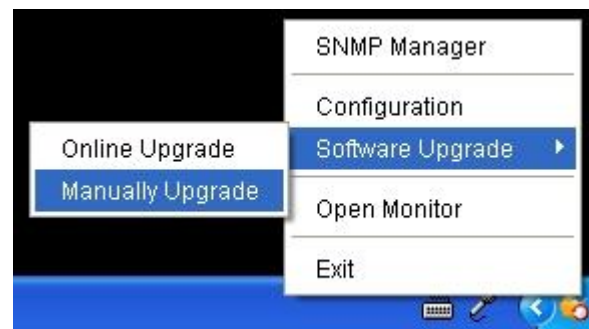
Diagram 3-20

2. Click "Browse" to choose file directory. And then click "Upgrade" to upgrade software. Refer to Diagram 3-21.
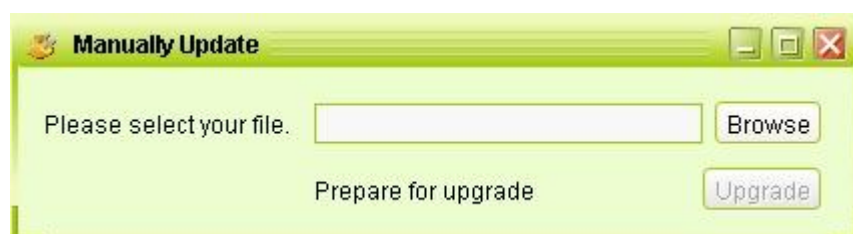
Diagram 3-21

3.5. Open Monitor

Click "Open Monitor" to open monitor page.

3.6. Message Board

Users can check message board for event list. Refer to Diagram 3-22：

Diagram 3-22

3.7. Exit

Click "Exit" to exist service application

4. ViewPowerMini GUI Interface

The GUI has five sections as marked in the illustration below:
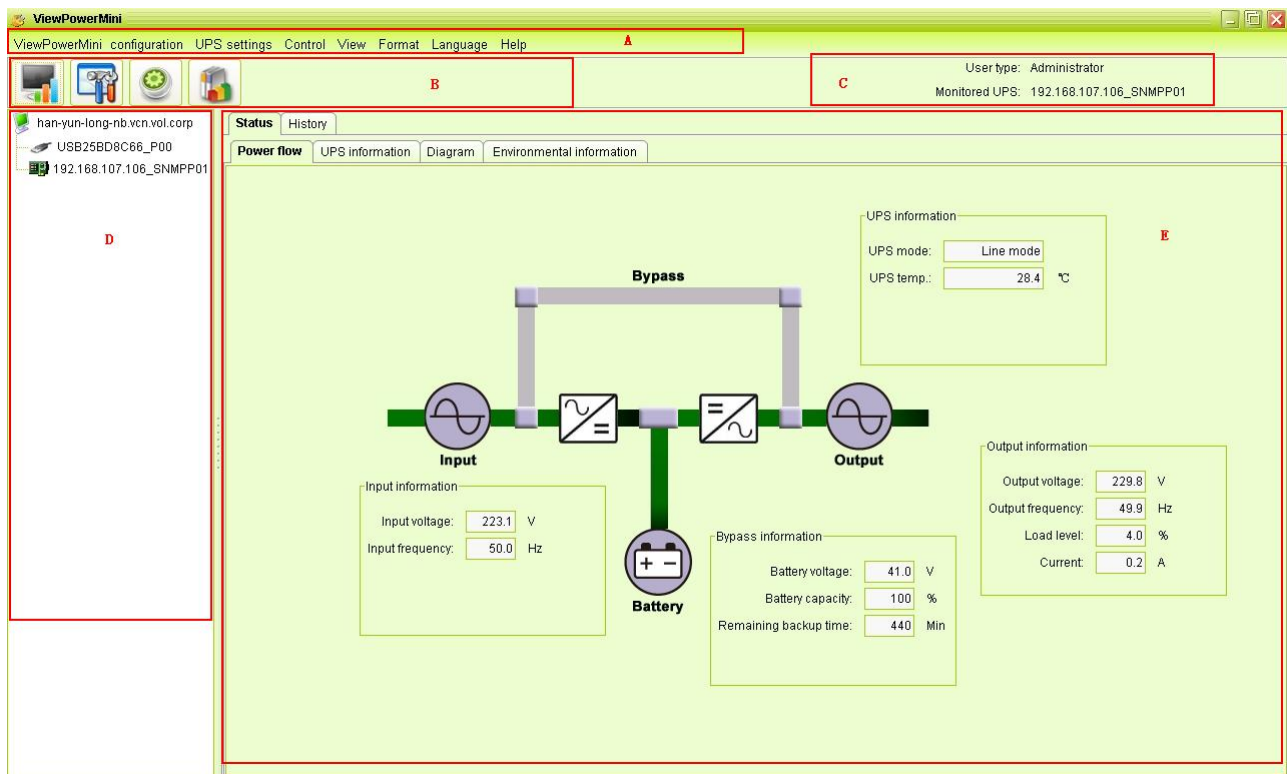
Diagram 4-1

A. Function Menu offers complete tool-set for navigating and setting the GUI.

B. Shortcut Menu provides short cuts to more commonly used functions.

C. Current Monitoring Information displays user ID and monitored UPS name.

D. UPS Navigation indicates all UPS locations in networked environment.

E. Main Window contains information and/or controls that change with each function menu or shortcut menu selected.

4.1. UPS Navigation

It displays all UPSs found through UPS searching function.

Parent node means currently connected PC and UPS device

4.1.1. Monitored UPS Information

Select one UPS from UPS navigation and it will display complete UPS information in main window. Refer to Diagram 4-2.

- UPS rated information includes rated VA, rated output voltage, rated output frequency, rated output current, and rated battery voltage.
- Battery information includes battery group numbers.

- Purchasing information means UPS purchasing date, battery purchasing date, warranty for UPS, and warranty for battery.

Diagram 4-2

NOTE: This display screen may be different for different types of UPS.

4.1.2. UPS Remote Control & Monitor

If you want to control and set up the remote UPS, you must log in as an administrator. There are two ways to remote monitor UPS:

➢ Method one: Double click any UPS from LAN or INTERNET and it will pop up a message window to confirm the monitoring action. Refer to below diagram 4-3.
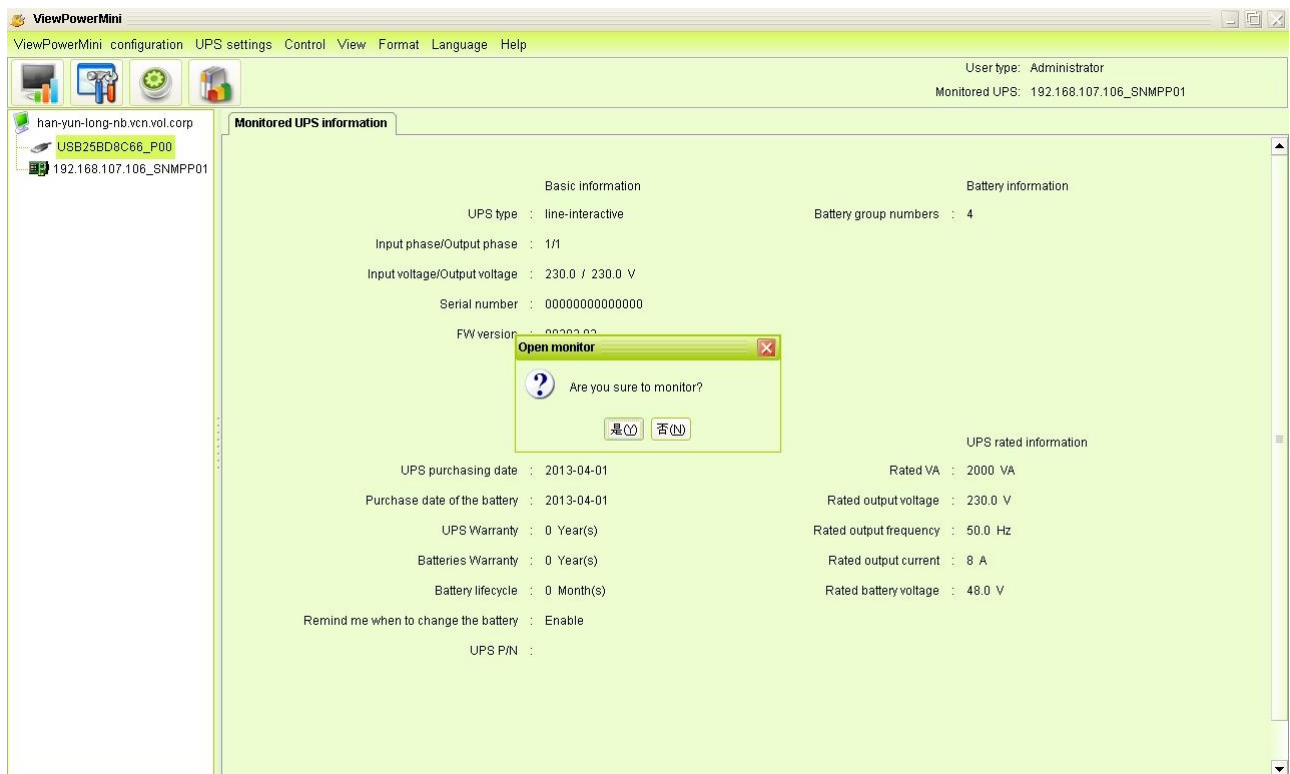
Diagram 4-3

Select "Yes" and it will open another new window to display remote UPS information. Refer to Diagram 4-4.
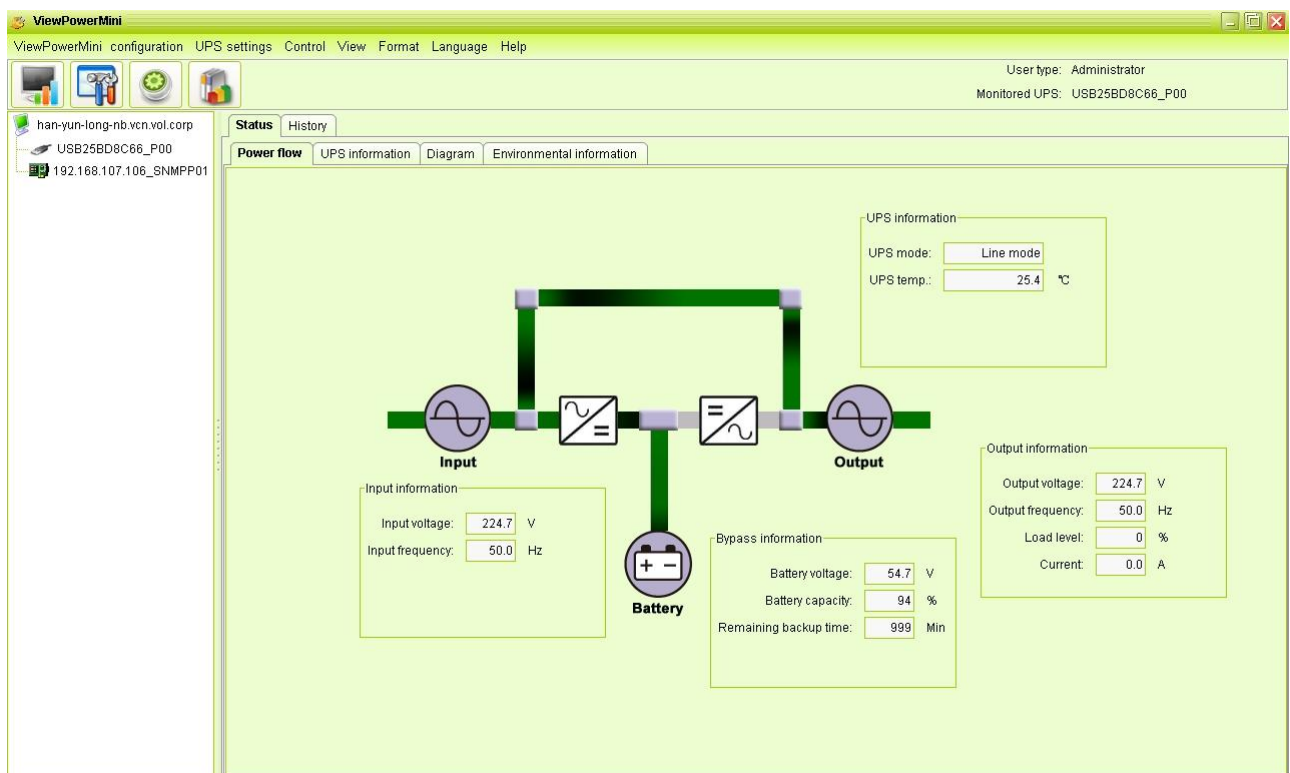
Diagram 4-4

NOTE: This display screen may be different for different types of UPS.

5. ViewPowerMini Function Menu

5.1. ViewPowerMini Configuration

5.1.1. Password Configuration

It's password configuration for administrator only. Before operating and configuring the software, please login first and modify the password. The default password is "**administrator**" at first log in.   Users can only browse UPS status and information as Guest status without login as an Administrator. Guest can NOT control or executive any setting.

Modify password

Step 1 Select ViewPowerMini Configuration>>Password. Refer to Diagram 5-1.

Diagram 5-1

Step 2 Enter old password, new password, and retype new password in confirm password column to modify password for administrator. (The password should

be at least 6 digits) Then click "Apply" button to successfully modify password for administrator.

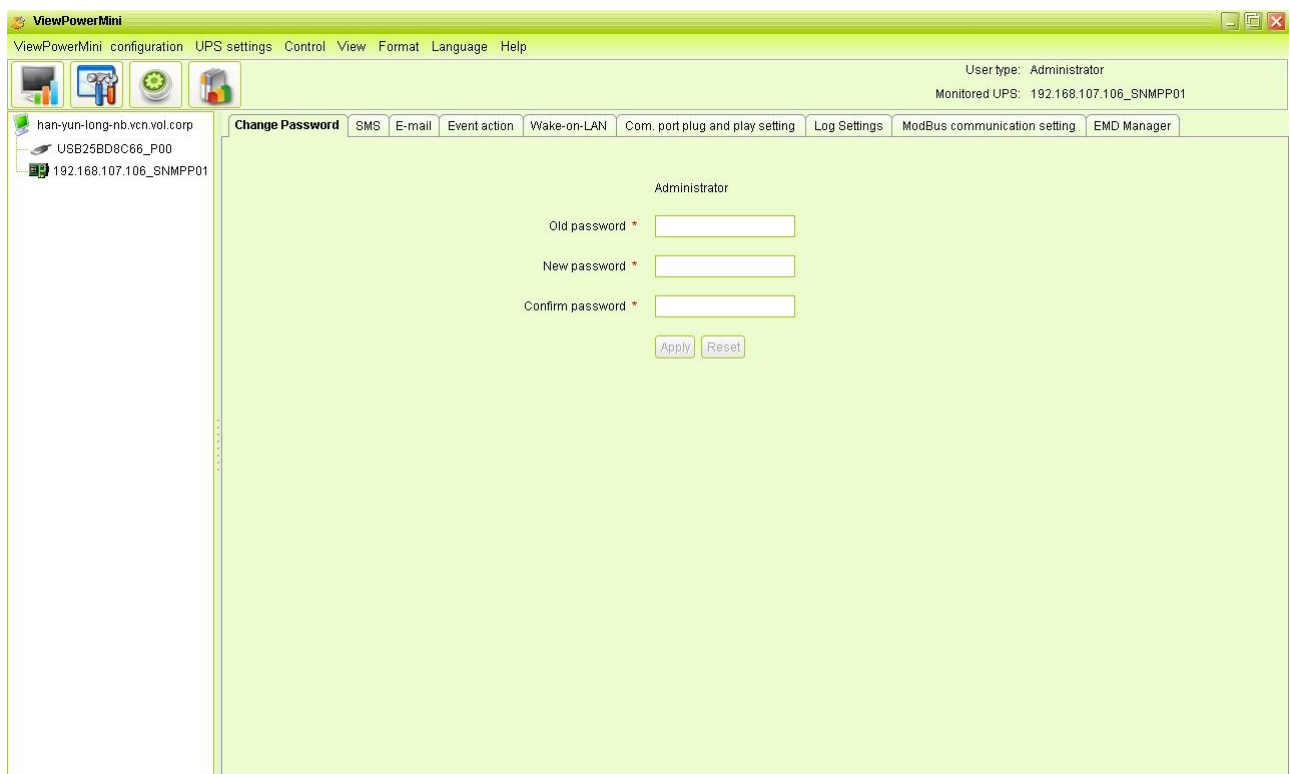**NOTE1:** Simply click "Login" button on the top right corner to log in the software.

NOTE2: If password is forgotten, it's necessary to re-install the software.

5.1.2. SMS Configuration

It's for entering SMS receiver list. In the event of an alarm condition occurring, a message about UPS status will be sent to the specified users via mobile phone. For the event receiving list, please configure in "Event Action" column (refer to section 5.1.4).

Step 1 Choose ViewPowerMini Configuration >> SMS. Refer to Diagram 5-2.
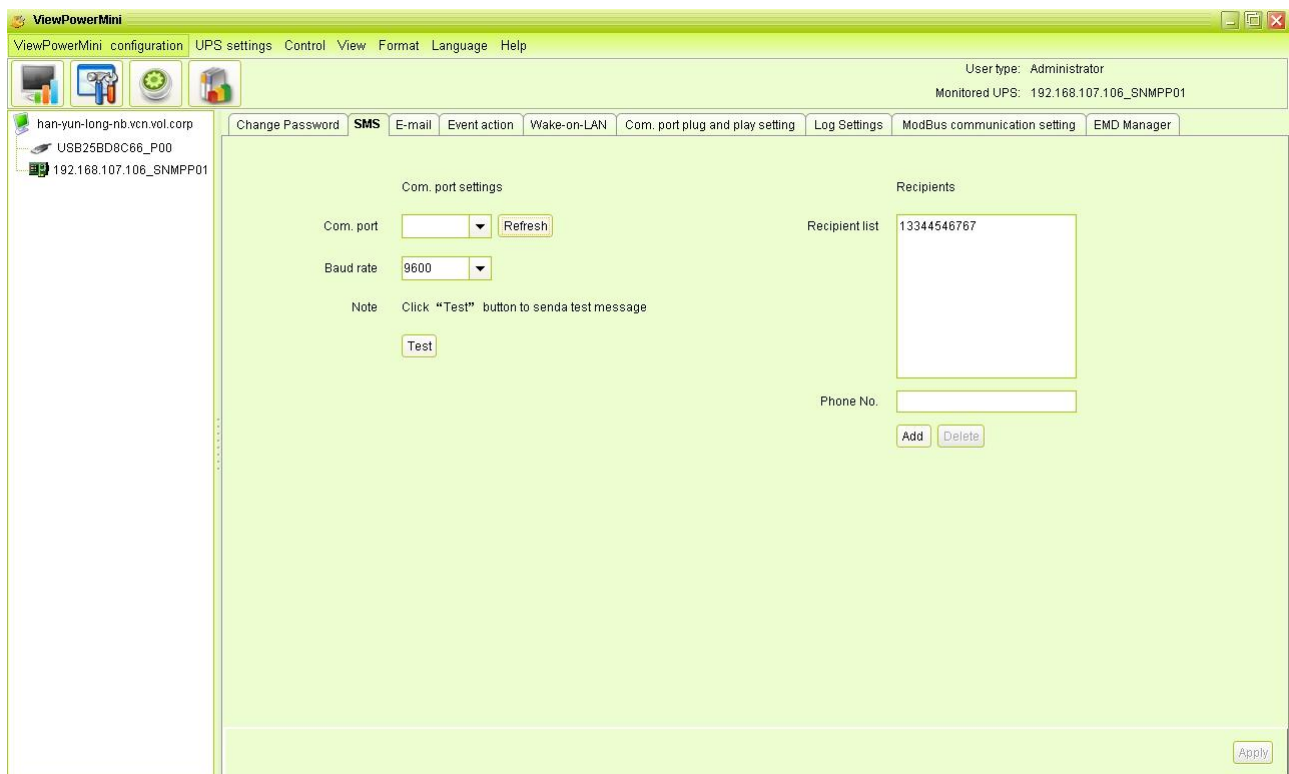
Diagram 5-2

Step 2 Select communication port and baud rate.

Step 3 Enter mobile phone numbers in "Phone no." column and click "Add" button to add phone no. in Receivers List. To delete numbers, simply select phone no. from "Receivers list" and click "Delete".

Step 4 Click "Apply" button to save all changes. The "Test" button can be used to send

test SMS to confirm the correct operation. If all parameters are set up correctly, system will send a test message to all receivers and pop up a successful message. (Refer to Diagram 5-3) Otherwise, it will pop up a failure dialog to indicate there is an error for parameter setting. (Refer to Diagram 5-4)
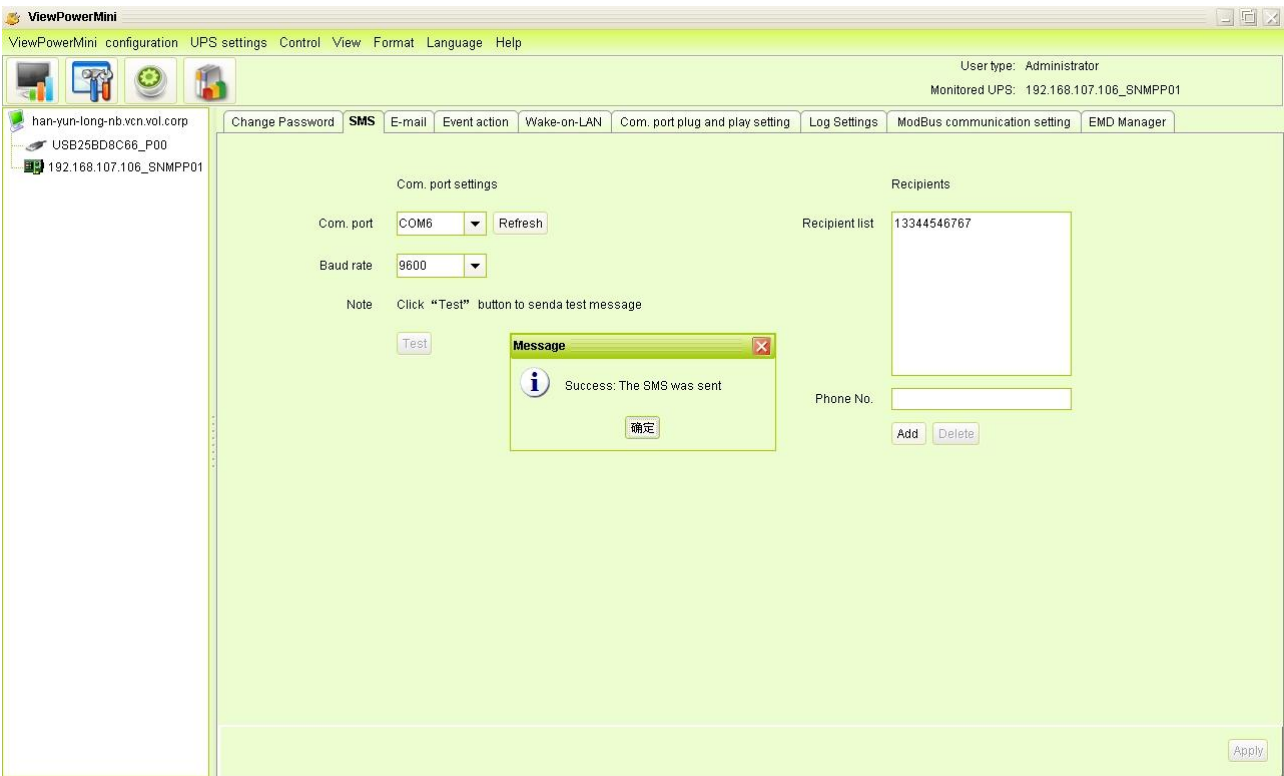
Diagram 5-3
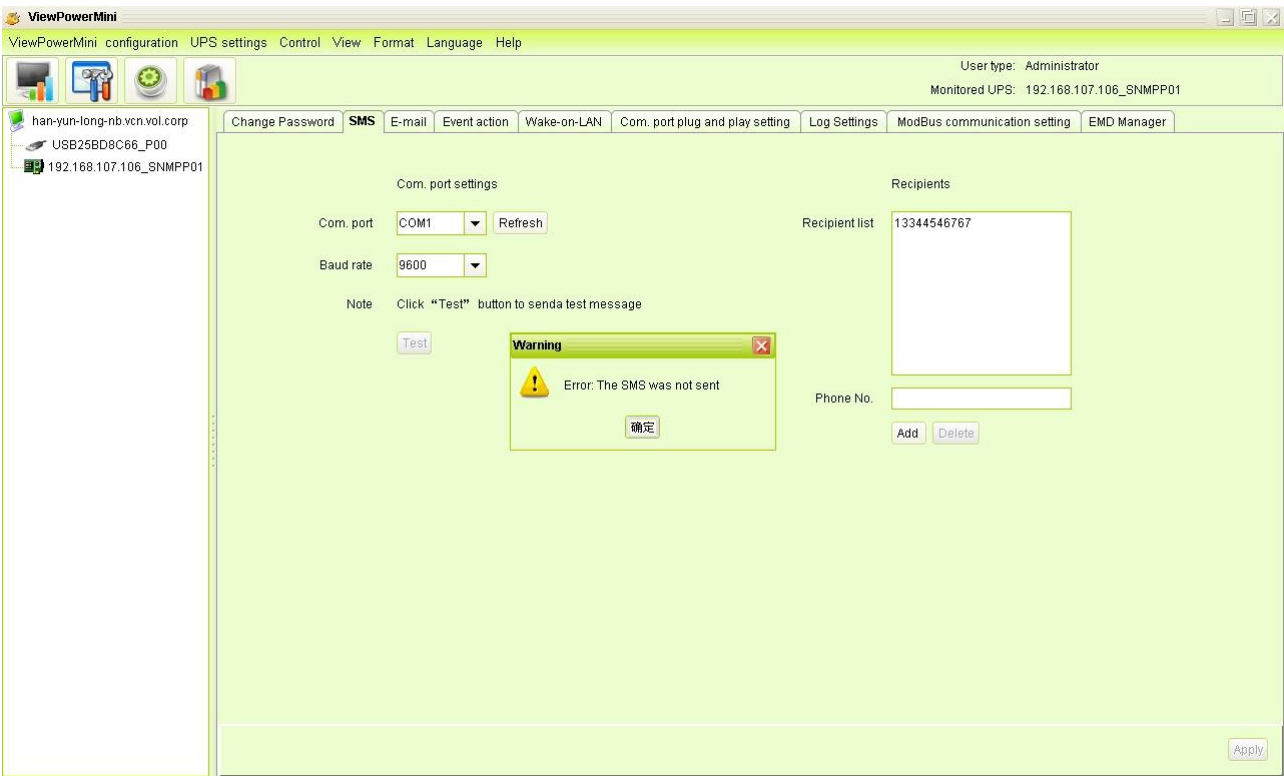
Diagram 5-4

NOTE: It's required to plug-in GSM Modem if sending SMS to mobile phone.

5.1.3. E-mail Configuration

This feature enables the configuration to send alarm mail by SMTP server. For the event receiving list, please configure in "Event Action" column (refer to section 5.1.4).

To use this function, the e-mail service must be correct configured on the computer. All values in this function page are default empty. This action can't be executed without the SMTP information, e-mail account, and password. Besides, the sender account should be allowed for SMTP/POP3 forwarding.

Step 1 Select ViewPowerMini Configuration >> E-mail. Refer to Diagram 5-5.

Diagram 5-5

Step 2 Enter SMTP server, SMTP port, Send from E-mail address, User name and password. Click checkbox of password authentication needed for password verify.

> **NOTE:** If using Exchange Server for mailbox system, it's required to configure Exchange server domain name in SMTP sever and select "Exchange

server", then click "Apply" button.

Step 3 Enter correct e-mail accounts in E-mail column. Then click "Add" to add into receivers list. To delete e-mail account, simply select accounts from Receivers list and click "Delete" button.

Step 4 Click "Apply" to save all changes. The "Test" button can be used to send a test e-mail to all receivers to confirm correct operation. When the test e-mails are successfully sent to specific recipients, it will pop up a successful message on operated PC. Otherwise, it will pop up a failure dialog to indicate there is an error for parameter setting.

5.1.4. Event Action Configuration

It's to configure response actions for UPS events. Software provides six response actions after events occur.

1. Event record: It will record event to data log in software after events occur. This function is default selected.

2. Computer alarm: Computer will beep to remind users after events occur. This function is only available for Windows OS.

3. Warning dialog (local): It will pop up a message dialog around the software orange plug icon in taskbar after events occur. This function is default selected.

4. Broadcast: It will send the event message to all PCs with software installed in LAN network.

5. SMS: It will send the event message to specific mobile phone numbers after events occur.

6. E-mail: It will send the event e-mail to assigned e-mail accounts after events occur.

Step 1 Select ViewPowerMini Configuration >> Event Action. Refer to Diagram 5-6.
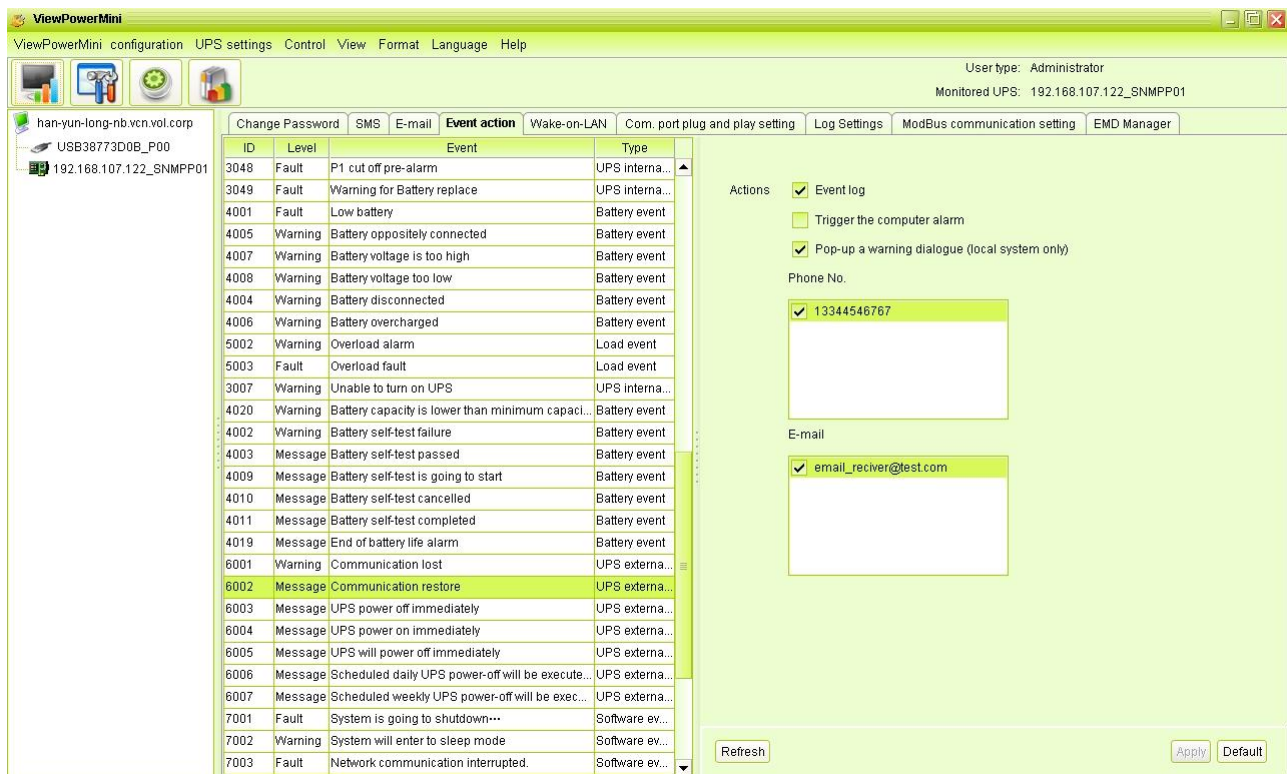
Diagram 5-6

  NOTE: The displayed event list may be different for different types of UPSs.

Step 2 Select a specific event from "Event List" and then action method page will be active on the right-hand column.

Step 3 Select desired action methods by clicking checkbox.

Step 4 Click "Apply" button to save all configurations.

  NOTE1: When editing receiver list in SMS or e-mail columns, it's necessary to refresh the event action page to reload the updated receiver list.

  NOTE2: It is requested to have following conditions for successful broadcast.

  1. All receiving PCs must have installed software.

  2. Only send the message to the PCs in LAN found in UPS Navigation.

5.1.5. Wake on LAN

It will manage the list for wake on LAN and test the function.

After adding MAC address of remote PCs into MAC list, it will allow remote control the PCs. However, it's also required to have hardware support for remote PCs to implement this function.

Step 1 Select ViewPowerMini Configuration >> Wake on LAN. Refer to Diagram 5-7.
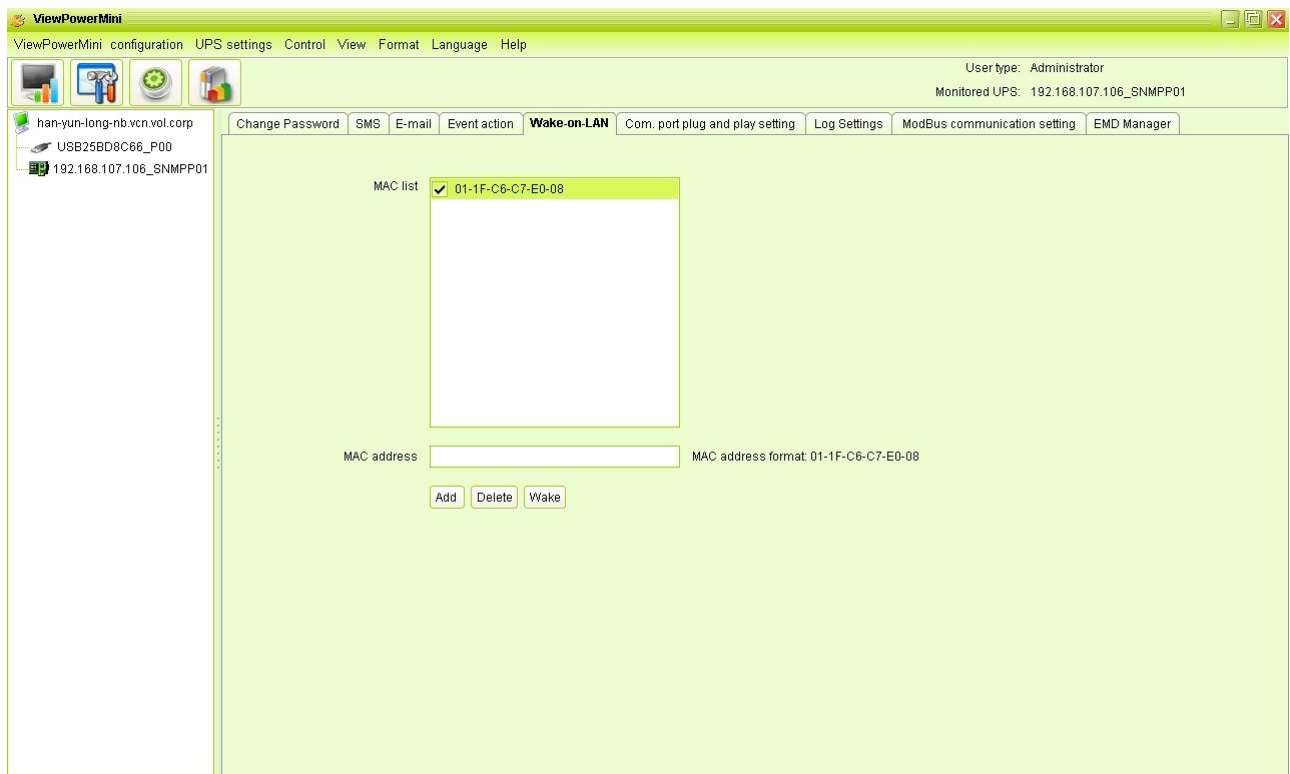
Diagram 5-7

Step 2 Add: Enter MAC address and click "Add" button to add in MAC List. Delete:

Select one from list and click "Delete" button. Test: Select one from list and

click "Test" button. Then it will execute Wake-on-LAN test.

NOTE: The MAC address format example: 01-1F-C6-C7-E0-08.

5.1.6. Com.Port Plug And Play Setting

To real-time monitor UPS device, the software will scan each com. port anytime. In this

way, it will occupy com. port. If you allow software scan com. port. It will list each com.

port. Then users can select "Allow scanned" or "forbid scanned" to re-scan or release

com. ports based on their requirements.

Step 1: Select ViewPowerMini configuration>>Com.port plug and play setting. Refer to

Diagram 5-8.
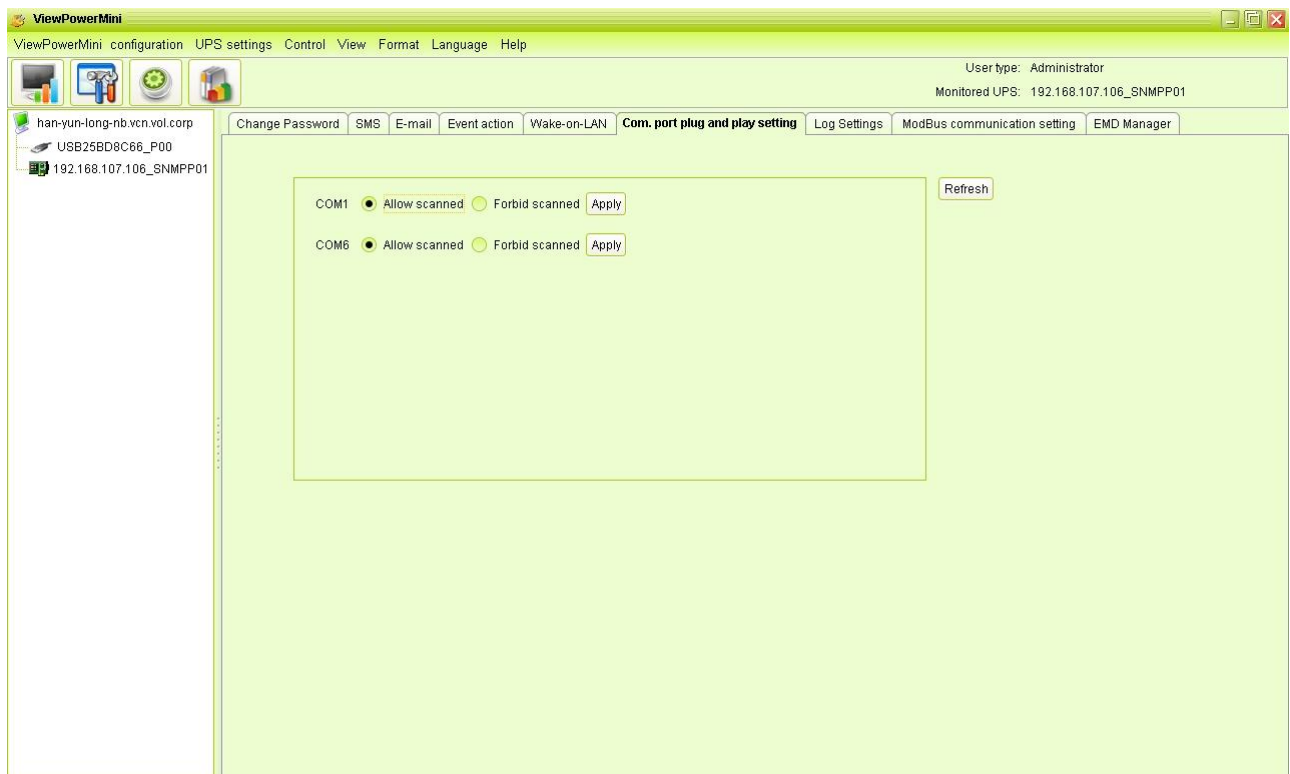
Diagram 5-8

Step 2: Click "Refresh" to reload the status of com. ports.

Step 3: Click "Forbid scanned" to stop scanning on this com. port. Click "Allow scanned" to start scanning on this com. port.

5.1.7. Log Setting

Users can set up "Record Interval", "The max. Numbers of logs for historical data", and "The max. Numbers of logs for historical events" according to real situation.

The setting range for "Record internal" is 30~600 seconds. It will effect history data displayed under View –> History.

The setting range for "The max. Numbers of logs for historical data" is 100000~100000000. It will effect displayed data under View –> History.

The setting rang for "The max. Numbers of logs for historical events" is 100000~100000000. It will effect displayed data under View -> Event log.

Step 1 Select ViewPowerMini configuration>>Log setting. Refer to Diagram 5-9.
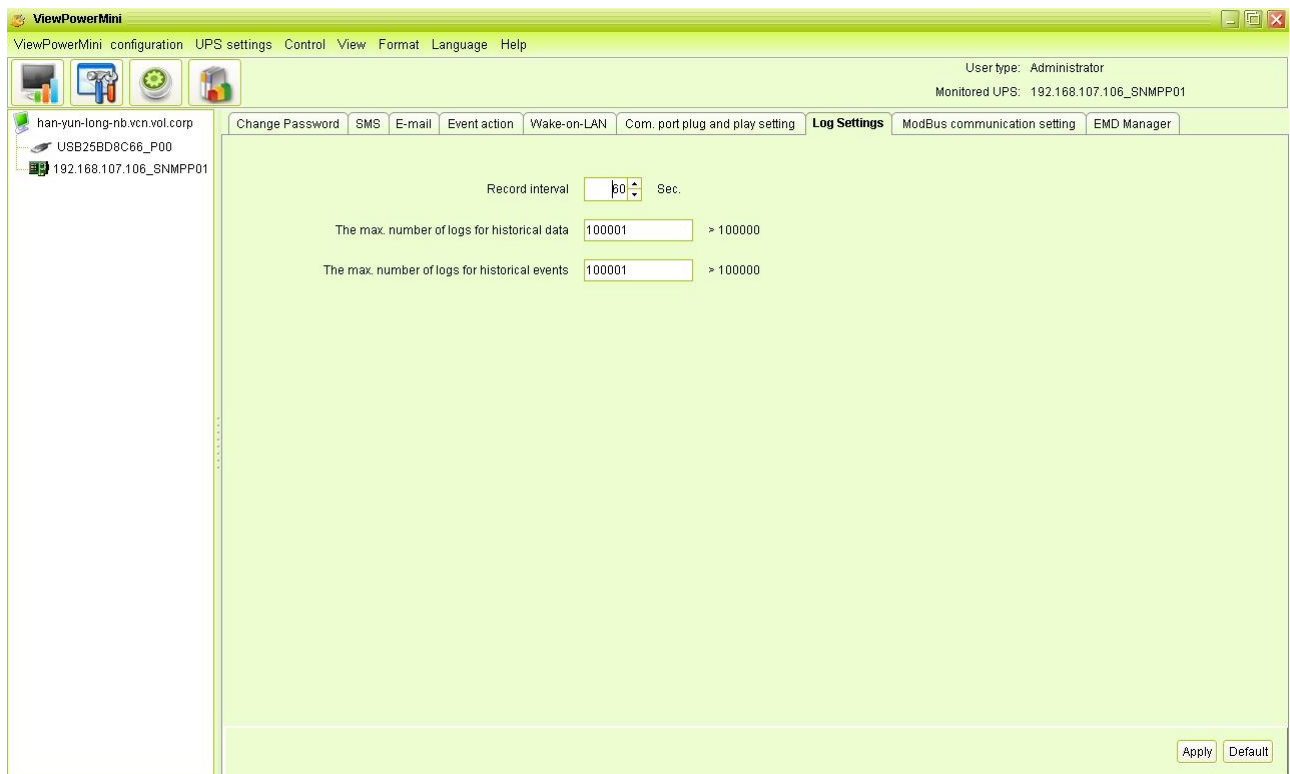
Diagram 5-9

Step 2 Enter data in the screen.

Step 3 Click "Apply" button to save all data.

Step 4 Click "Default" button to recover the default setting.

5.1.8. ModBus Communication Setting

It will display all connected PCs through ModBus.

Step 1 Select ViewPowerMini configuration>> ModBus Communication Setting

Refer to Diagram 5-10.
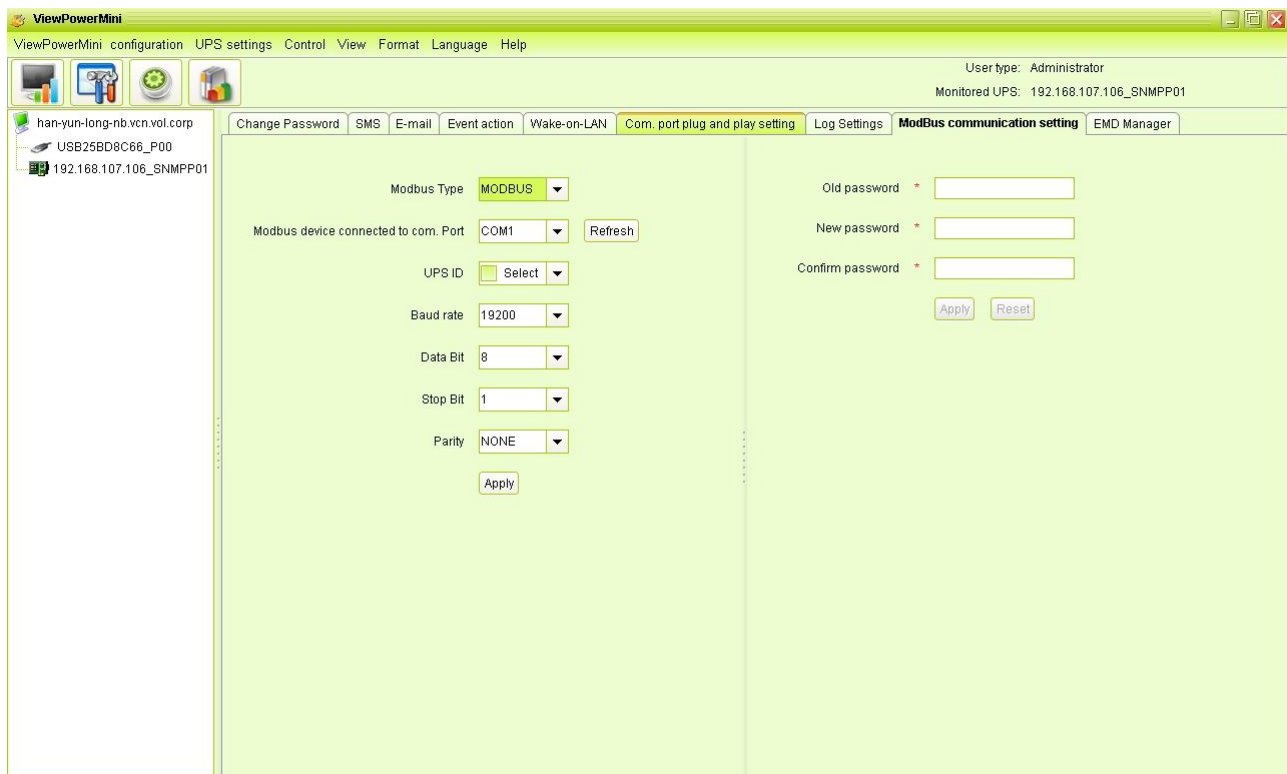
Diagram 5-10

Step 2 Password setting/change menu for ModBus. Real-time control will be available when the ModBus password is the same to the UPS password.

Step 3 Com. port setting:

Selectable baud rates are 1200, 2400, 4800, 9600, and 19200. The default setting is 19200;

Selectable data bit is 7 and 8. The default setting is 8;

Selectable stop bit is 1 and 2. The default setting is 1;

Supported parity is ODD parity, even parity and NONE. The default setting is NONE.

NOTE: This function is only available for the UPS with ModBus communication port.

5.1.9. EMD Manager

EMD Manager is used to manage Environmental Monitoring Devices. Users can define events and set message texts for each event. It also can set up warning points for temperature, humidity and smoke of devices.

- Dry contact event: Users can define events and set event level. After event is successfully added, users can configure and set alarm. Refer to Diagram 5-11.
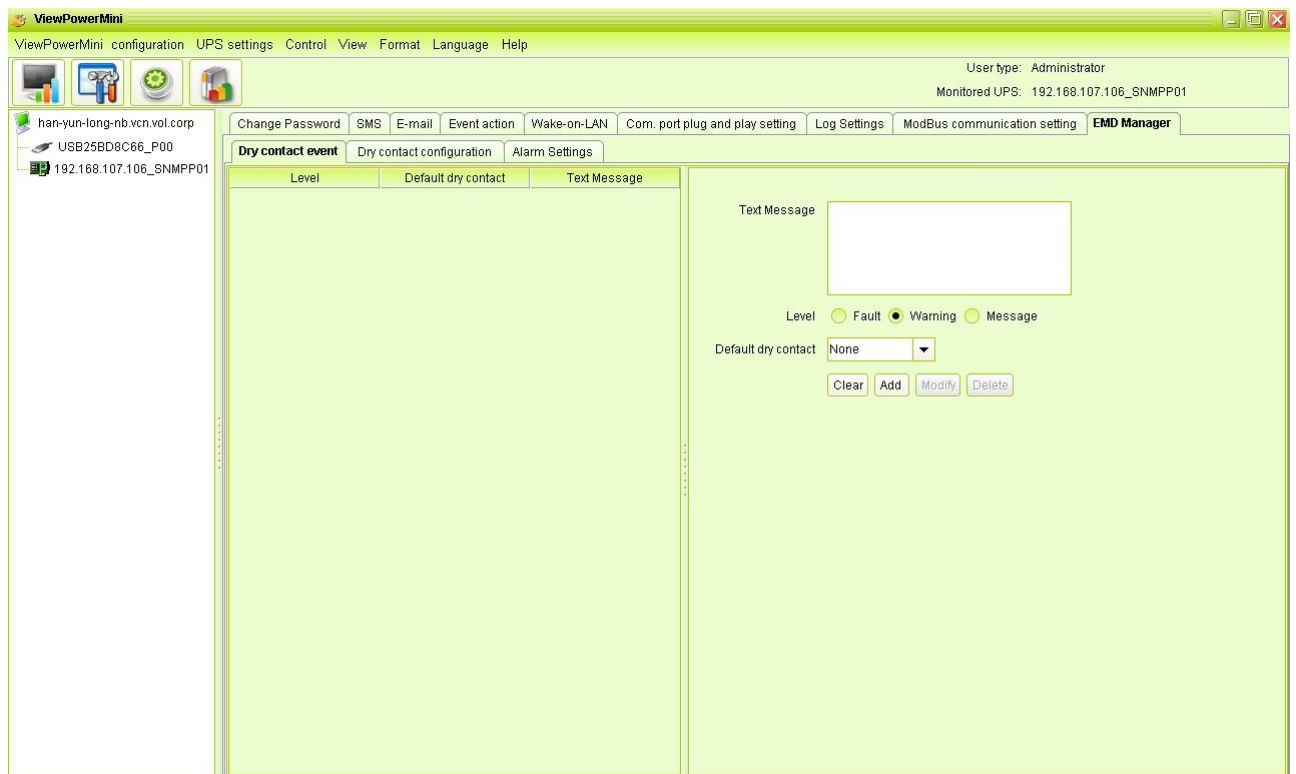
Diagram 5-11

➢ Text Message: The description of the dry contact event.

➢ Default dry Contact: Define dry contact no. to send event message. There are five selections: none, 1, 2, 3 and 4. If selecting any value from 1 to 4, any environmental monitoring device (EMD) which is detected defined event will send event message. If selecting none, it means this event is defined as special event.　Then, users can assign specific environmental monitoring device (EMD) to receive this event message. Please refer this special event setting in "Dry contact configuration" section.

● Dry contact configuration: Users can define special events with assigned dry contact no. for specific environmental monitoring device (EMD). If any defined event is detected by assigned device via assigned dry contact no., it will send alarm message via software. Refer to Diagram 5-12.
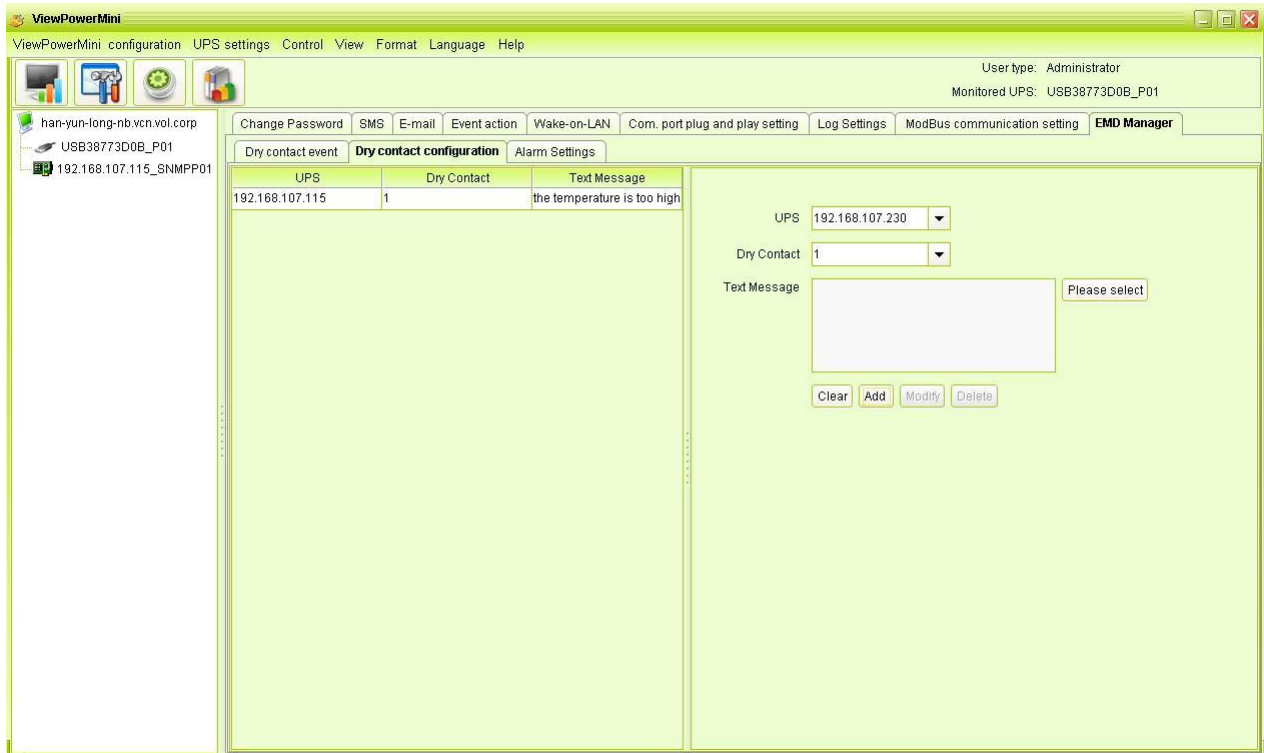
Diagram 5-12

● Alarm Settings: Set up alarm range for temperature and humidity. If detected figures are out of setting range, it will send alarm message. Refer to Diagram 5-13.
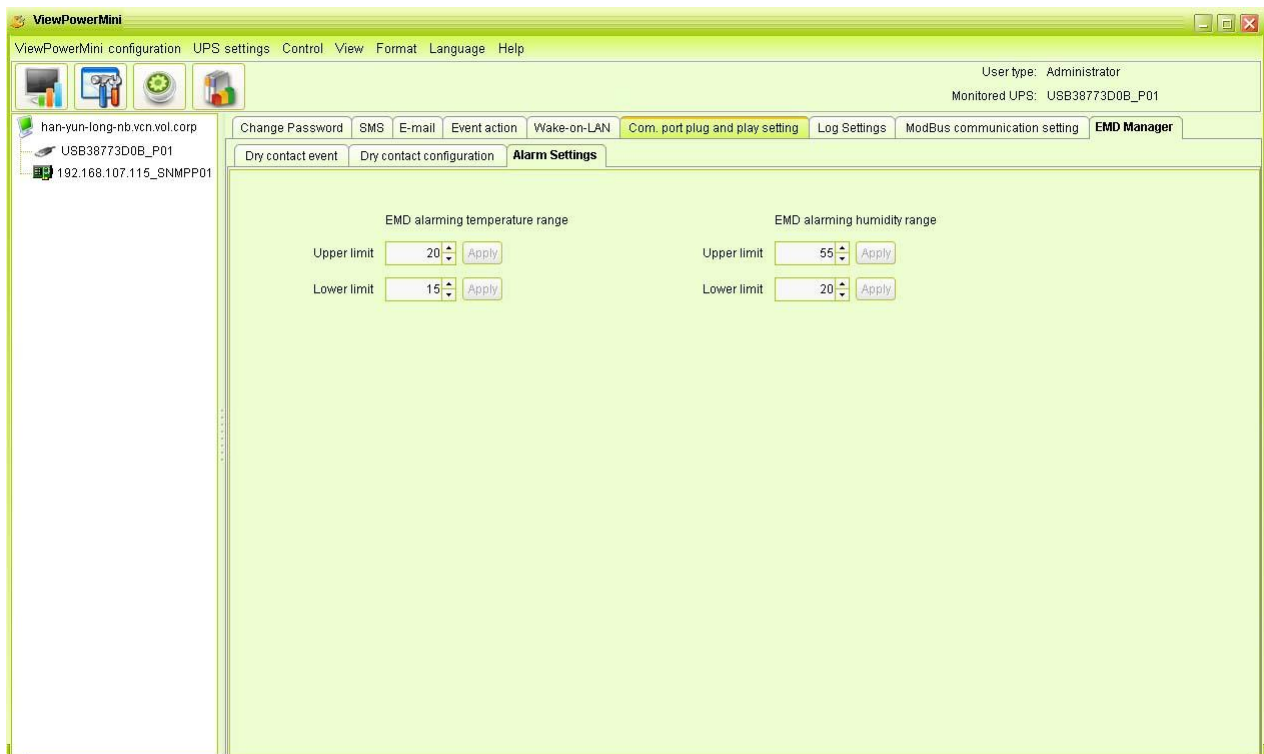
Diagram 5-13

5.2. UPS Setting

5.2.1. Local Shutdown

It's shutdown setting for local PC which is directly connected to monitored UPS with communication port. This configuration enables system shutdown of local PC or to remote shut down PCs which are powered by monitored UPS.

Step 1 Select UPS Setting >> Local Shutdown or click shortcut icon [icon]. Refer to Diagram 5-14.
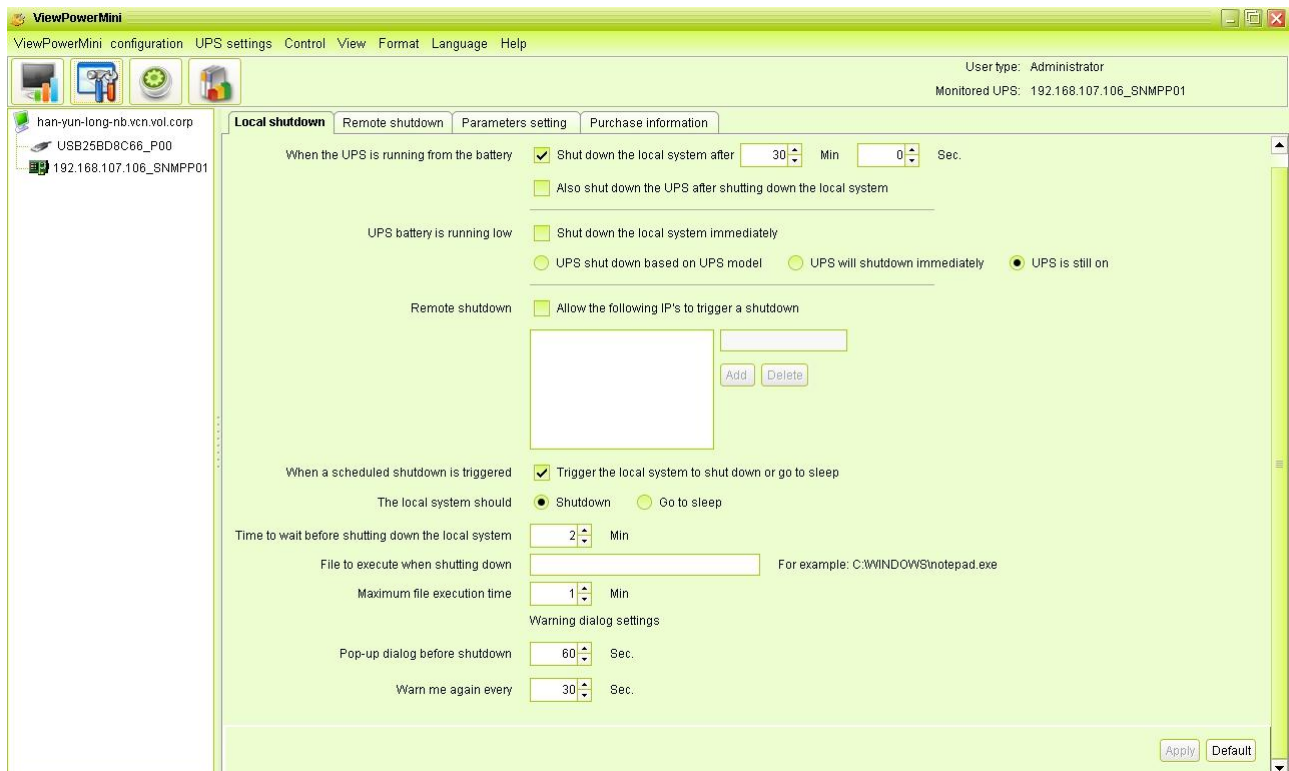
Diagram 5-14

NOTE: This screen may be different for different types of UPSs.

Step 2 Select shutdown conditions and power-off options, set delay time to shutdown system.

Step 3 Enter time for pop-up dialog before shutdown and warning interval in Warning Dialog Setting area.

Step 4 Click "Apply" button to save all data.

     NOTE: Click "Default" button to recover the default setting.

Conditions:

- When the UPS is running from battery, shut down local system after xx min xx sec: When clicking the checkbox, local PC will start to shut down after monitored UPS works on battery mode for xx min xx sec time. The maximum setting number for minutes is 999, and for seconds is 59.

- Local shutdown when the capacity of battery down to xx %: When clicking this checkbox, local UPS will still operate in battery mode until the battery capacity is down to xx%. Until then, local PC will shut down. The setting range is 0%-100%.

- Also shut down UPS after shutting down the local system: When clicking this checkbox, monitored UPS will shut down after local system shuts down. The UPS shutdown time will be later than system complete shutdown time. The default setting is clicked. But users can choose to shut down the system without shutting down the monitored UPS by unclicking this checkbox.

- When UPS battery is running low, shut down the local system immediately: When clicking this checkbox, local PC will shut down when monitored UPS battery is running low.

  1. UPS shut down based on UPS model: Only $\geq$3KVA standard UPS model will automatically shut down. However, long-run models and UPSs with above 5KVA will remain on.

  2. UPS will shutdown immediately: UPS will shutdown immediately no matter what kind of UPSs.

  3. UPS is still on: UPS will remain on until battery is running out.

- Accept shutdown command from remote system: When clicking the checkbox, it accepts shutdown command from specific remote PCs. Please enter IP address of remote systems in blank column and click "Add" button to add into list.

- Allows local system shutdown when UPS is scheduled off: When clicking this checkbox, the local system will shut down before monitored UPS is scheduled to

power off. The default setting is clicked.

Power-off option: Selecting power-off method for above shutdown system.

- Shutdown: When clicking the checkbox, the selected system will shut down. The default setting is clicked.

- Sleep mode: When clicking the checkbox, selected system will suspend the system instead of a normal shutdown. But this function is only supported by Windows 2000 or higher on supported hardware.

Delay time to shutdown system: Enter the delay time to shut down the operating system. The value range is from 1 to 99 minutes.

On shutdown execute file: Enter the path of execute file.

Warning Dialog Setting:

- Pop-up dialog before shutdown: Timer setting for pop-up warning dialog displayed in local PC. Local PC will pop up a warning dialog before system starts to shut down. The range is from 1 to 999 seconds.

- Warning dialog interval: Reminding dialog interval setting. This setting also applies for UPS shutdown because of power failure. The range is from 1 to 999 seconds.

5.2.2. Remote Shutdown

This configuration is to remote shut down specific PCs which are powered by monitored UPS.

Step 1 Select UPS Setting >> Remote Shutdown. Refer to Diagram 5-15.
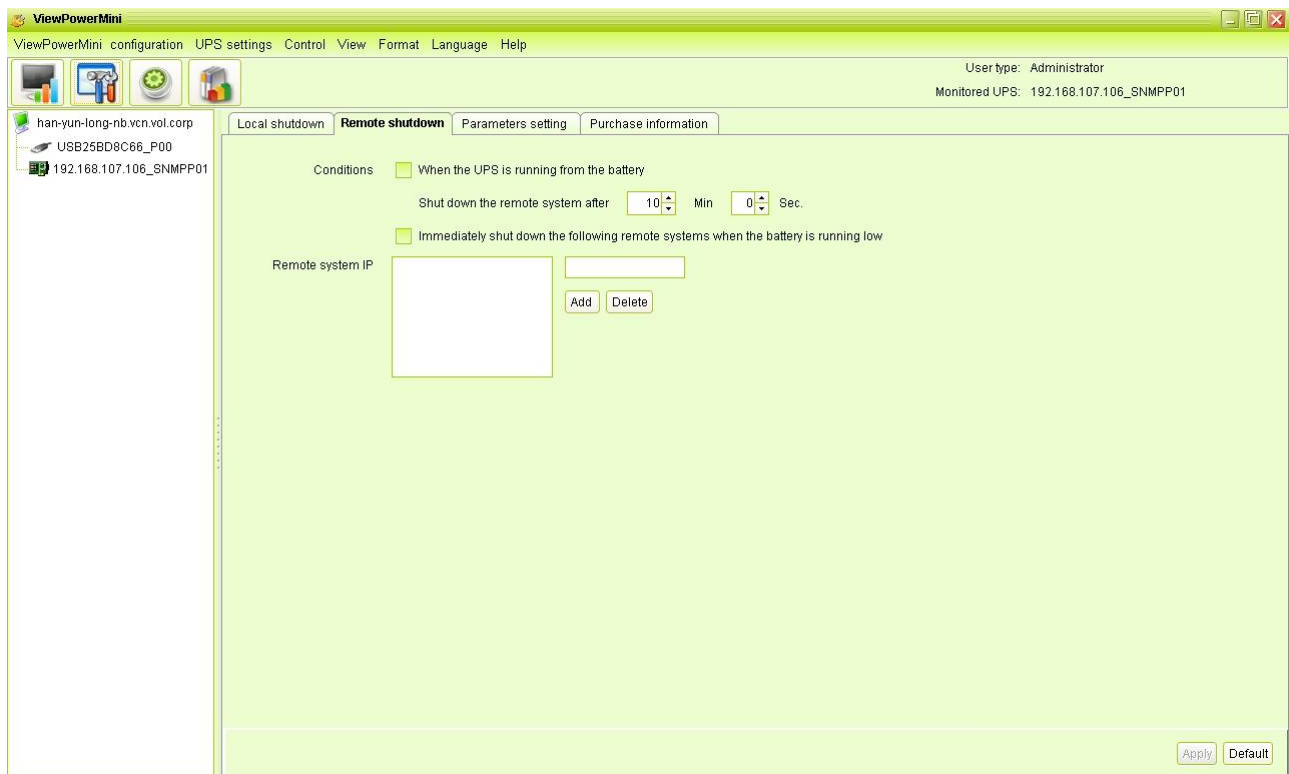
Diagram 5-15

Step 2 Select remote shutdown conditions.

Step 3 Add/Delete remote system IP address.

Step 4 Click "Apply" button to save all data.

 NOTE: Click "Default" button to recover the default setting.

 Conditions:

- When the UPS is running from battery, shut down the remote systems after xx min xx sec: When clicking the checkbox, remote systems which are powered by monitored UPS will shut down after monitored UPS running on battery mode for xx min xx sec. The maximum setting number for minutes is 999, and for seconds is 59.

- Remote shutdown when the capacity of battery down to xx % (Battery mode): When clicking this checkbox, local UPS will still operate until the battery capacity is down to xx%. Until then, it will remotely shut down PCs.

- Immediately shut down the following remote systems when the battery is running low: When clicking the checkbox, remote systems which are powered by monitored UPS will shut down when monitored UPS is at low battery level.

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5.2.3. Parameter Setting

Some UPS functions can be set and changed via software. Parameter setting includes backup time setting for P1, battery number setting, voltage and frequency range setting for bypass mode, and voltage range setting for ECO mode.

Step 1 Select UPS Setting >> Parameter Setting. Refer to Diagram 5-16.

Diagram 5-16

NOTE: This screen may be different for different types of UPSs.

Step 2 Select the functions by clicking "Enable" or "Disable" button. Or change the numbers by clicking up-down arrows or modify the numbers directly in the number column.

Step 3 Click "Apply" button to save the settings. Each function setting is saved by clicking each "Apply" button.

NOTE1: Any functions which are not supported by UPS will not be able to access.

NOTE2: Click "Default" button to recover the default setting.

- Alarm Control: If enabled, UPS alarm will be activated. Vice versa.
- Alarm at bypass mode: If enabled, UPS alarms when it's working at bypass mode. Vice versa.

- Alarm at battery mode: If disabled, UPS will not alarm when it's working at battery mode. Vice versa.

- Auto reboot: If enabled, UPS will auto recover when AC is recovering. Vice versa.

- Bypass when UPS is off: If enabled, AC will directly provide power to connected devices when UPS is off. Vice versa.

- Converter mode: If enabled, the UPS will operate in converter mode. Vice versa.

- ECO mode: If enabled, the UPS will operate in ECO mode when input voltage is within acceptable range. Vice versa.

- Battery open status check: If enabled, the monitored UPS will check if the battery connection ok or not when UPS is turned on.

- Cold start: If disabled, the UPS can be turned on only when AC is normally connected to UPS. Vice versa.

- Bypass not allowed: If enabled, the UPS will not transfer to bypass mode under any conditions.　If disabled, the UPS will be allowed to transfer to bypass mode according to UPS internal setting.

- Battery deep-discharge protection: If enabled, the monitored UPS shutdown in accordance with the condition of battery and load on battery mode to protect battery. Vice versa.

- Site fault detection: If enabled, the monitored UPS will beep when the input neutral and hot wires are reversed. Vice versa.

- P1 Programmable outlet control (battery mode): If enabled, when UPS is running at battery mode, it will cut off P1 outlets after backup setting time arrive. If disabled, UPS will provide continuous power to P1 outlets until the battery is running out.

- Outlet setting: Users can set limited backup time for P1 outlets when UPS is on battery mode.

- Battery numbers setting:
  - ➢ Numbers in parallel: set battery numbers in parallel.

- Voltage and frequency range for bypass mode: Set acceptable voltage and

frequency range in bypass mode.

> Maximum and minimum voltage: When UPS is on bypass mode and input voltage is out of setting range, UPS will enter battery mode.

> Maximum and minimum frequency: When UPS is on bypass mode and input frequency is out of setting range, UPS will enter battery mode.

● Voltage range for ECO mode: Set acceptable voltage range for ECO mode.

5.2.4. Purchasing Information

Users can enter UPS purchasing date, battery purchasing date, UPS warranty time, battery warranty time, battery lifecycle, battery replacement reminder.

Step 1 Select UPS Setting >> Purchasing Information. Refer to Diagram 5-17.

Diagram 5-17

Step 2 Please fill out purchasing information.

Step 3 Click "Apply" button to save all data.

5.3. Control

5.3.1. Real-time Control

Step 1 Select Control >> Real-time Control or click shortcut icon ⊚. Refer to
Diagram 5-18.
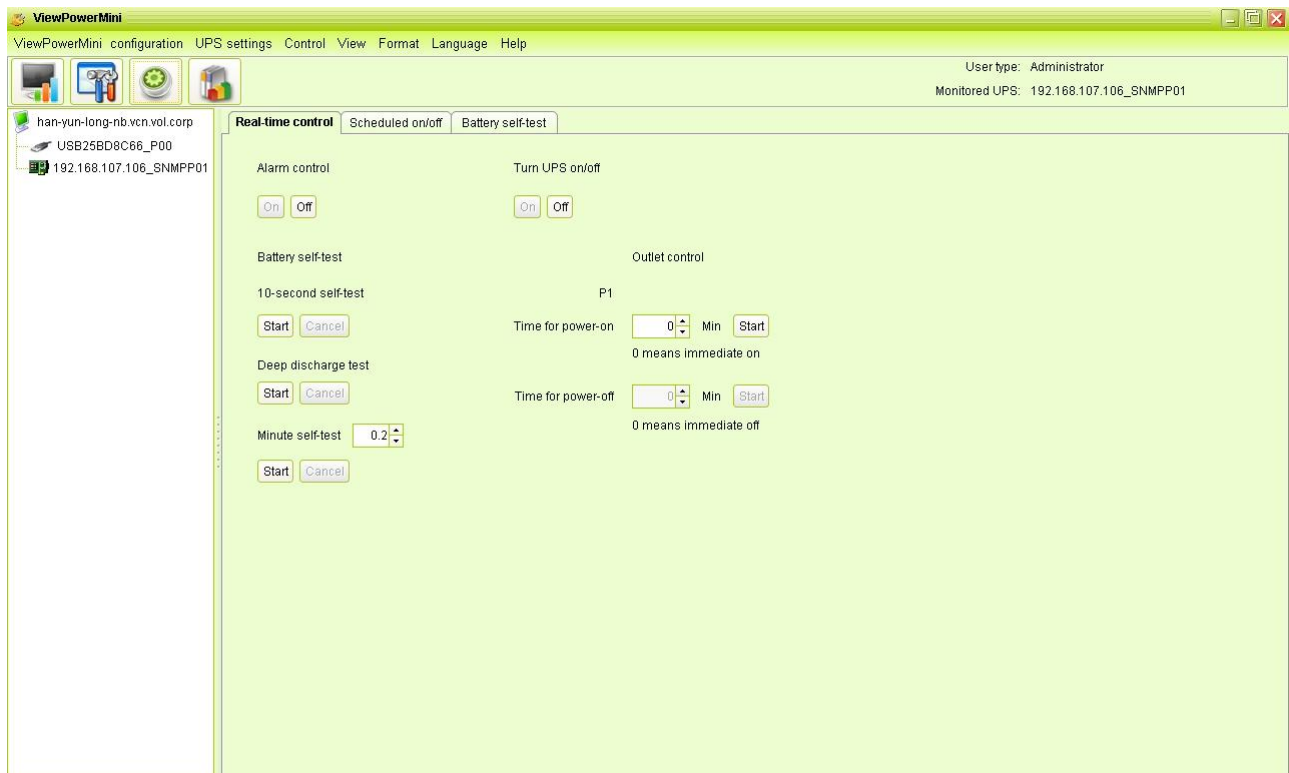
Diagram 5-18

NOTE: This screen may be different for different types of UPSs.

Step 2 Choose real-time control function by clicking "Start" button on each function
section.

You can real-time control the UPS by executing following operation:

● UPS turn On/Off: Click "On" to turn on the UPS and "Off" to turn off the UPS
immediately.

● Battery Self-Test: Software offers three types of battery self-test: 10-second
self-test, deep discharge test, and self-defined self-test. Simply clicking "Start"
button from each type. It will execute the self-test immediately.

● Outlet Control: It will cut off P1 outlets when setting time arrives. When
entering 0 in timer column and click "Start" button, it will cut off outlets
immediately when UPS works in battery mode.

5.3.2. Scheduled On/Off

Scheduled UPS on/off can be executed once, daily, weekly. In the window "Scheduled On/Off Setting", users can choose time parameters. It is recommended to set only one action in the same time.   If multiple actions have been specified at the same time, some of these actions may be ignored. Any actions which are not supported by the UPS will be ignored.

Step 1 Select "Control" >> Scheduled On/Off. Refer to Diagram 5-19.
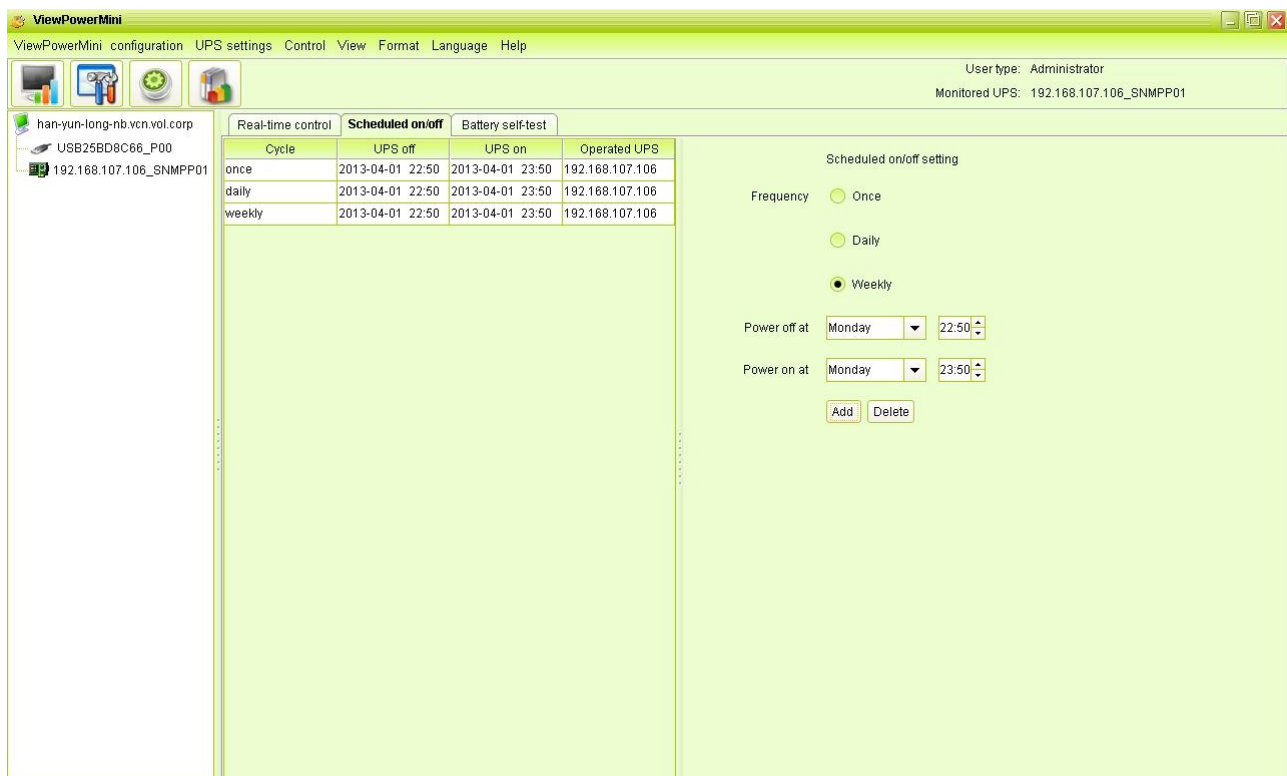
Diagram 5-19

Step 2 Set frequency and setting time on the right column.

> **NOTE: Rules for setting time.**
>
> **Daily schedule –** Power-off time should be earlier than power-on time. It only applies to set power-on time and power-off time within the same day.
>
> **Weekly schedule –**Power-off time should be earlier than power-on time. It only applies to set power-on time and power-off time within the same week.
>
> **Step 3:** Click "Add" to add task. If task is successfully set, it will display on the task table on the left-hand side. Select specific task and click "Delete" button to delete the task.

5.3.3. Scheduled Battery Self-Test

Scheduled battery self-test can be executed once, daily, weekly, or monthly. In the window of "Scheduled Battery Self-Test Setting", users can choose time parameters. It is recommended to set only one action in the same time.   If multiple actions have been specified at the same time, some of these actions may be ignored. Any actions which are not supported by the UPS will be ignored.

**Step 1** Select Control >> Battery Self-Test. Refer to Diagram 5-20.
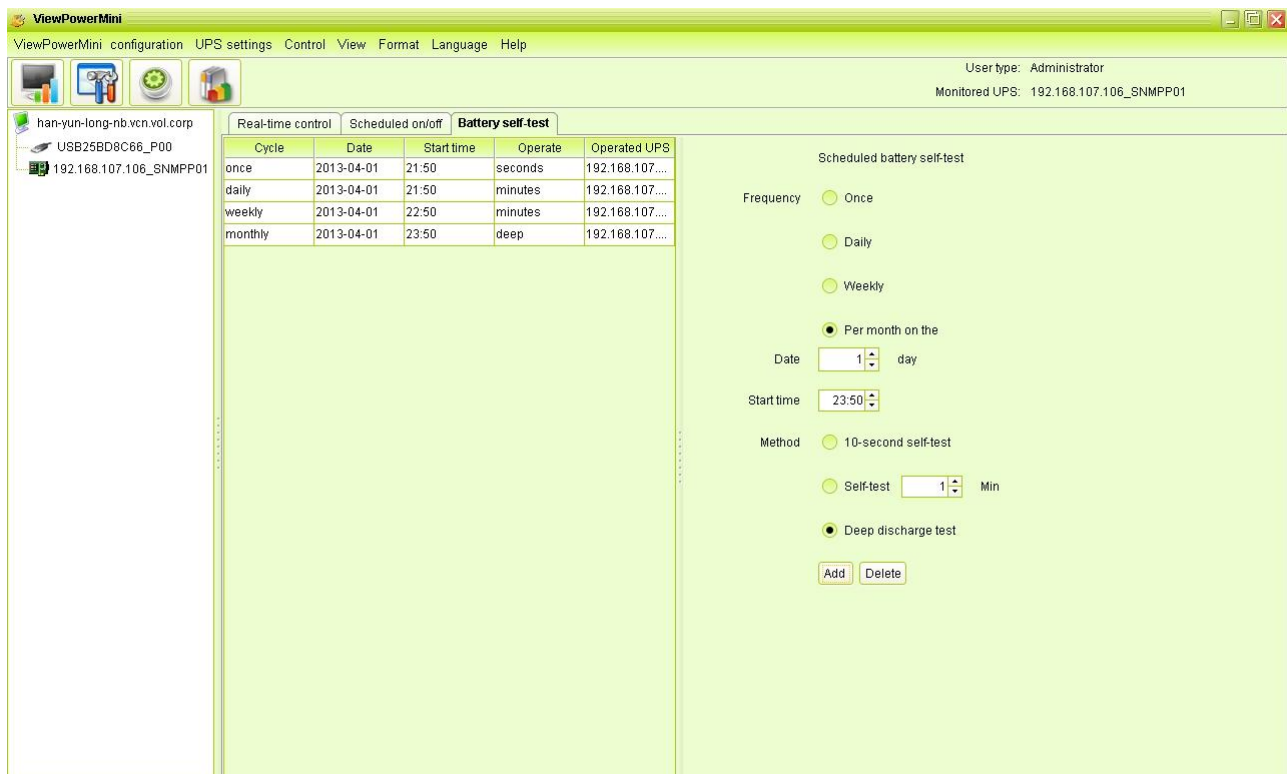
Diagram 5-20

Step 2 Select method and time parameters.

There are three self-test methods:

- 10-second self-test: Battery will discharge for 10 seconds.
- Self-test: Users can set battery discharge time for self-test.
- Deep test: This test will let battery discharge until it's in low battery level.

Step 3 Click "Add" to add task. If task is successfully set, it will display on the task table on the left-hand side. Select specific task and click "Delete" button to delete the task.

5.4. View

5.4.1. Status

5.4.1.1. Power Flow

In the Power Flow window, it's shown the internal dynamic working scheme of the UPS. Green/black flow means OK and working. Grey bar means that the object is present but not in use at the moment. There are four information blocks to display details for input, output, UPS and battery information.

- Input information includes input voltage and input frequency.
- Output information includes output voltage, output frequency, load level, and output current.
- UPS information includes UPS mode, UPS temperature.
- Battery information includes battery voltage and battery capacity.

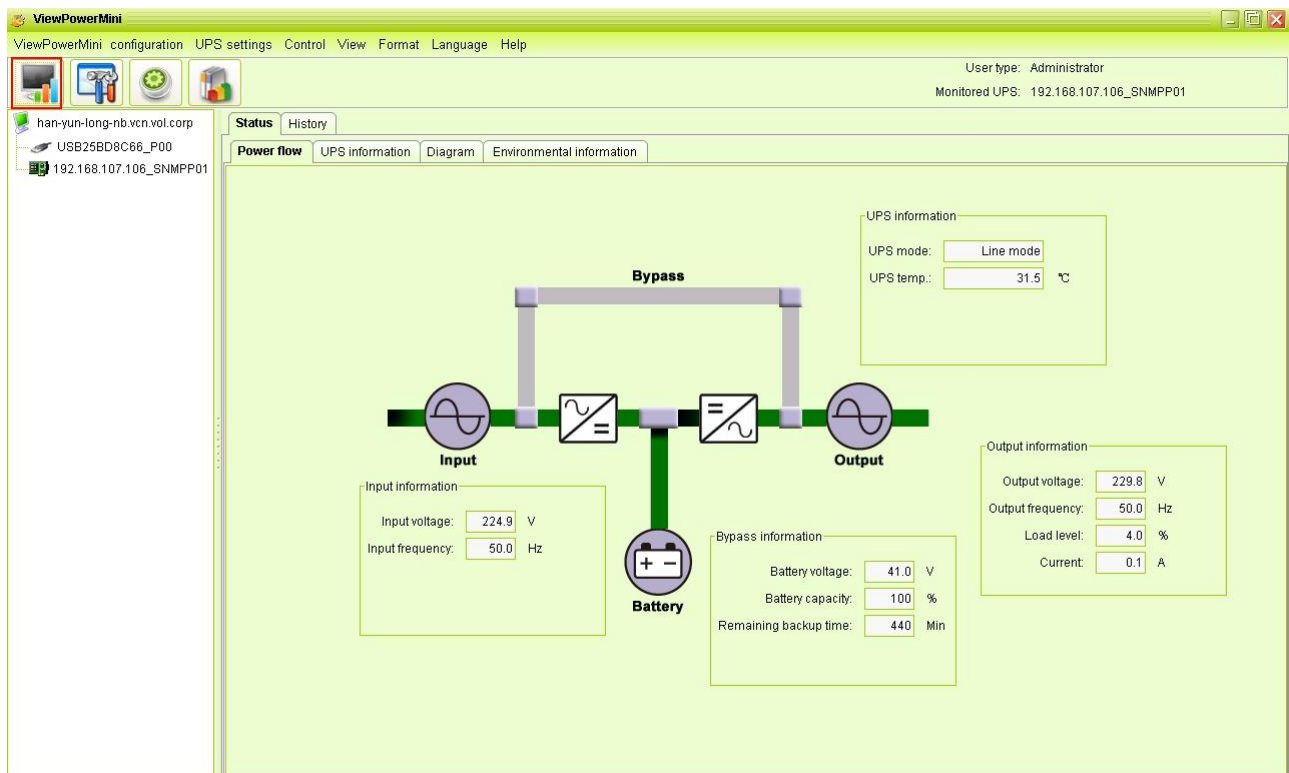Select View >> Status >> Power Flow or click shortcut icon. Refer to Diagram 5-21.

Diagram5-21

NOTE: This screen may be different for different types of UPSs.

5.4.1.2. UPS Info

Select View >> Status >> UPS Info. Refer to Diagram 5-22.
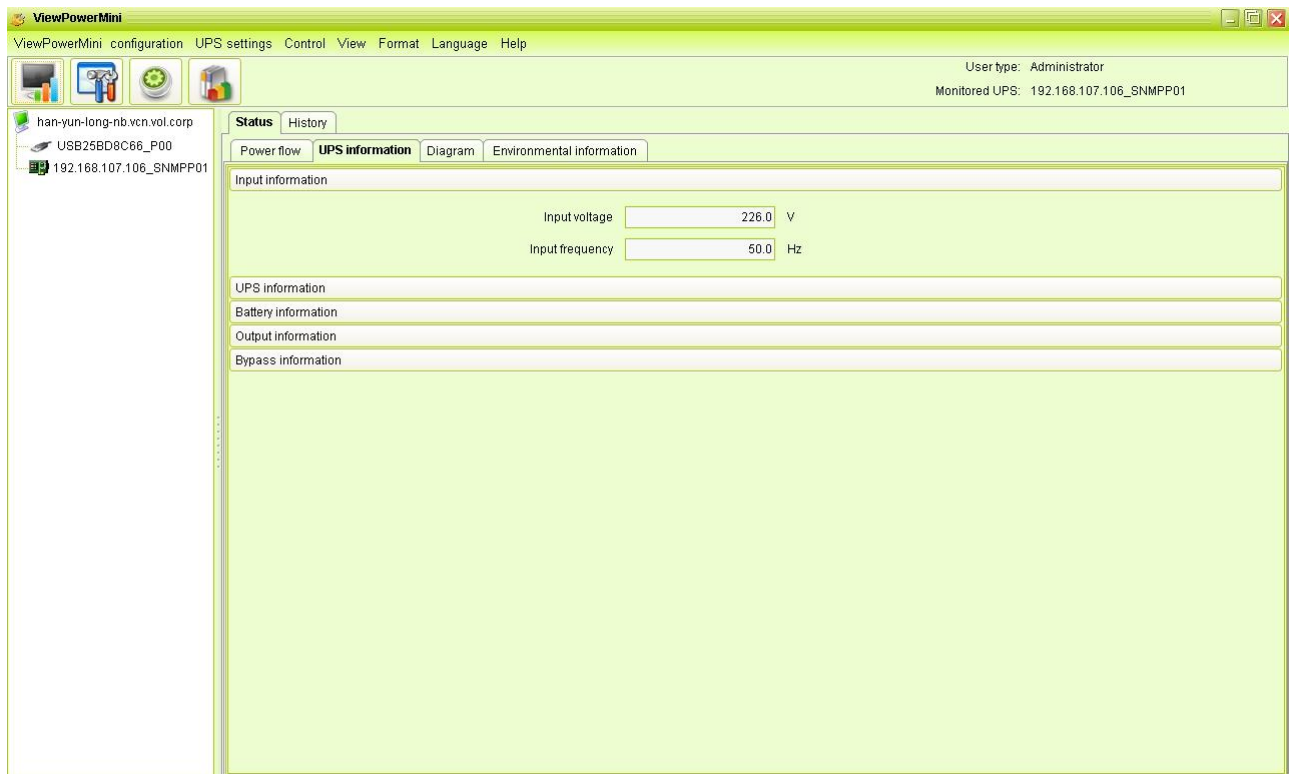

Diagram 5-22

NOTE: This screen may be different for different types of UPSs.

In the UPS Info window, it's shown detailed UPS real-time information.

5.4.1.3. Diagram

In the Diagram window, it's shown real-time monitored UPS data including voltage, frequency, load, battery, temperature information in diagram.

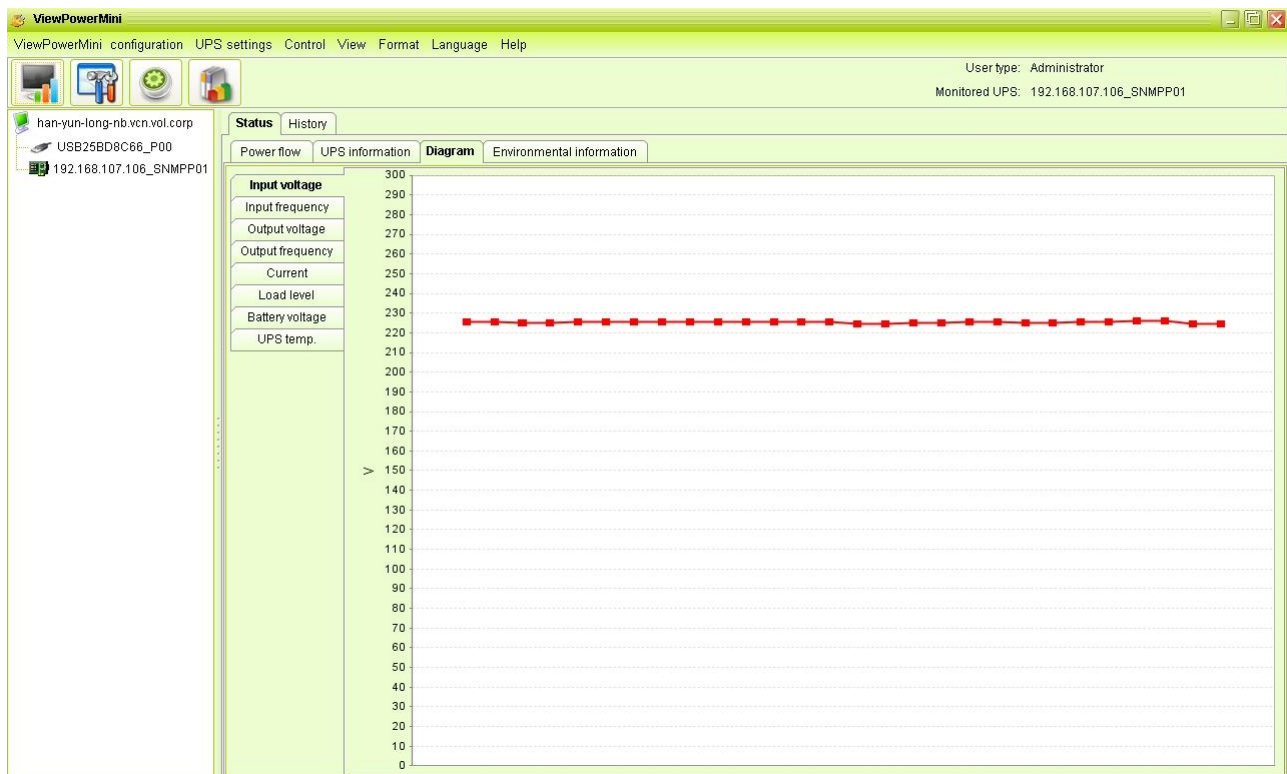**Step 1** Select View >> Status >> Diagram. Refer to Diagram 5-23.

Diagram 5-23

NOTE: This screen may be different for different types of UPSs.

Step 2 Select monitoring parameters on left-hand tab to switch diagram.

- Input voltage monitoring shows any change for input voltage.

- Output voltage monitoring shows any change for output voltage.

- Input frequency monitoring shows any change for input frequency

- Output frequency monitoring shows any change for output frequency.

- Load level monitoring shows any change for connected load level

- Battery capacity monitoring shows any change for connected battery capacity.

- UPS temp. Monitoring shows any temperature change for monitored UPS.

5.4.1.4. Environmental information

In the Environmental information window, it shows the current temperature and humidity.

Select Status >> Environmental information. Refer to Diagram 5-24

Diagram 5-24

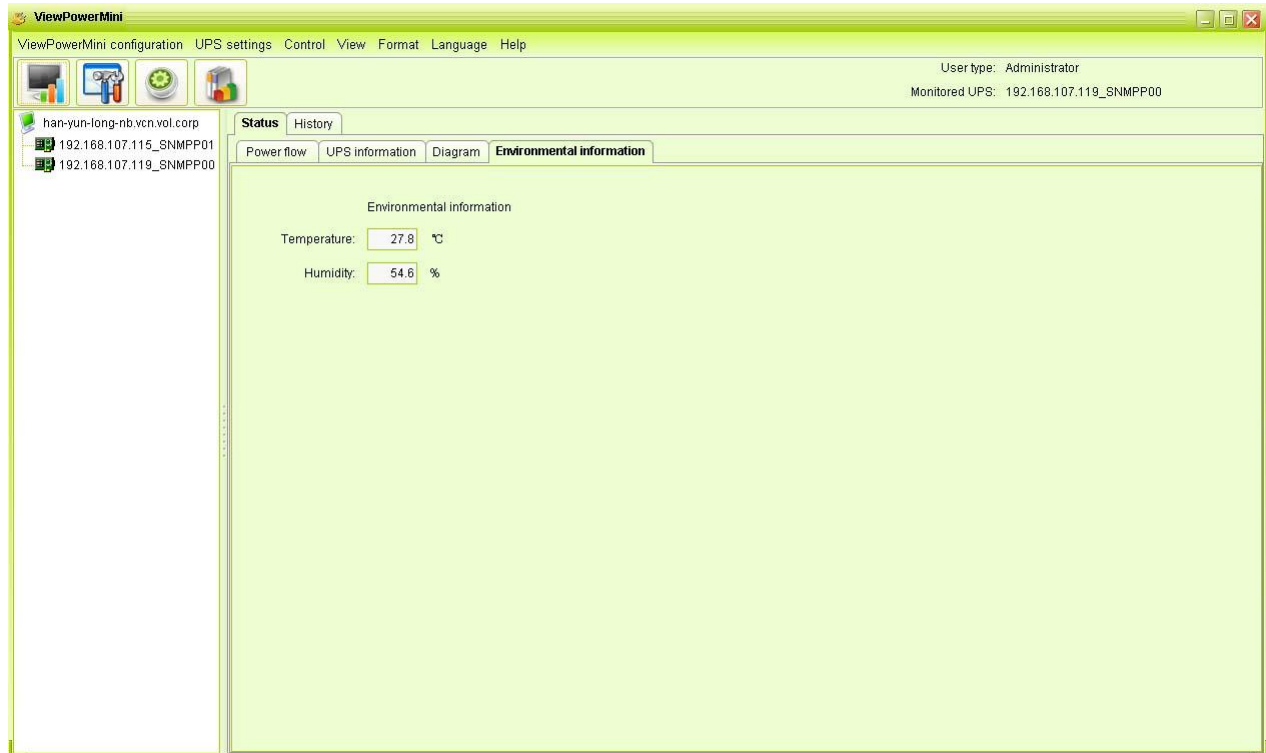**Note:** This information is only available when SNMP card is connected with Environmental monitoring device (EMD).

5.4.2. History

5.4.2.1. Event Log

In the Event Log window, it's shown all history events. Users can analyze the history data and improve the current electricity environment according to history data.

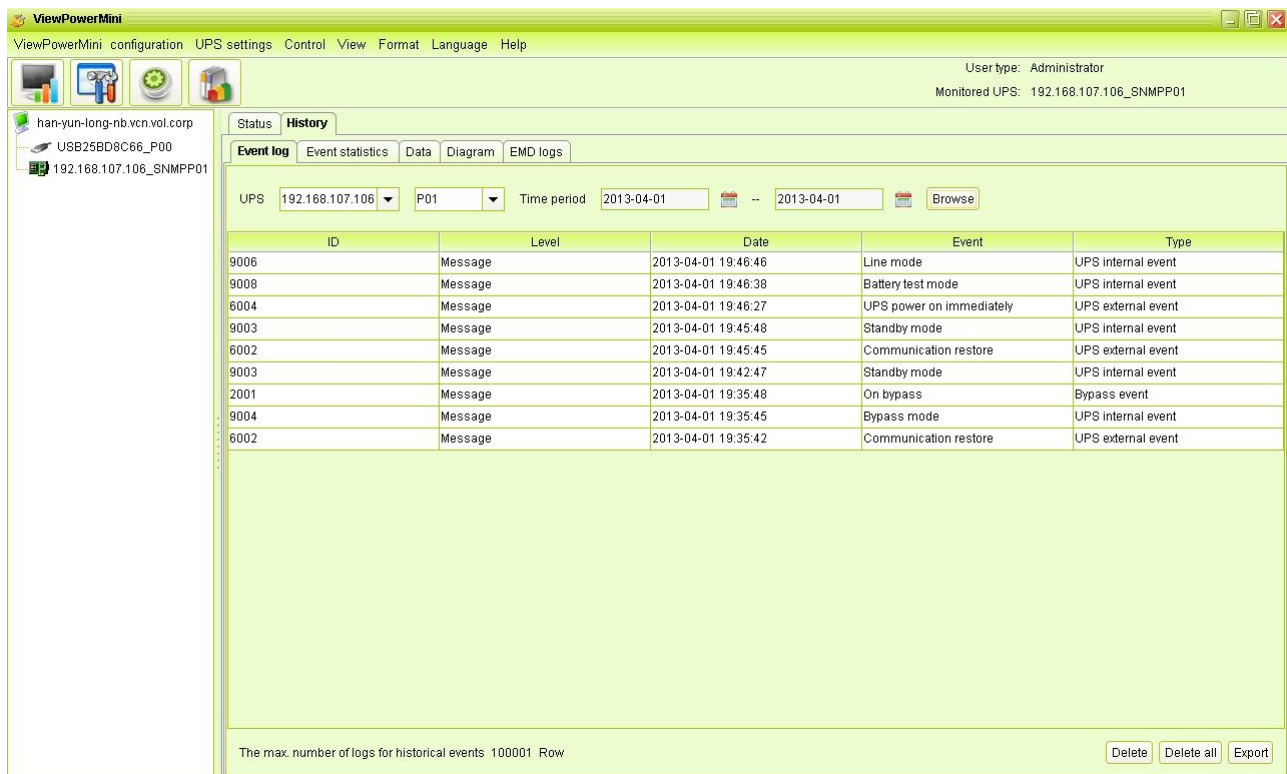**Step 1** Select View >> History >> Event Log. Refer to Diagram 5-25.

Diagram 5-25

Step 2 Select UPS from com. port list. Users still can retrieve old data saved in the software even though the UPS is no longer connected to local system.

Step 3 Select time period by clicking calendar icon. Then click "Browse" button to get list of all history events during selected period time.

Step 4 Print/Delete/Export function keys

➢ **"Delete/Delete All"**: To delete specific event, simply select that event and then click "Delete" button. Or click "Delete All" button to delete all history events on the listed table.

➢ **"Export":** Click "Export" button to save listed table to local PC in .PDF file.

5.4.2.2. Event Statistics

It will list down and provide all event statistics for UPSs with software installed based on time period A and time period B, and the change percentage [= $100*(B/A - 1)\%$].

NOTE: Event types include UPS internal event, bypass event, battery event, software event, load event, input event, parallel system event and communication event.

Step 1 Select View >> History >> Event Statistics. Or click shortcut icon . Refer to
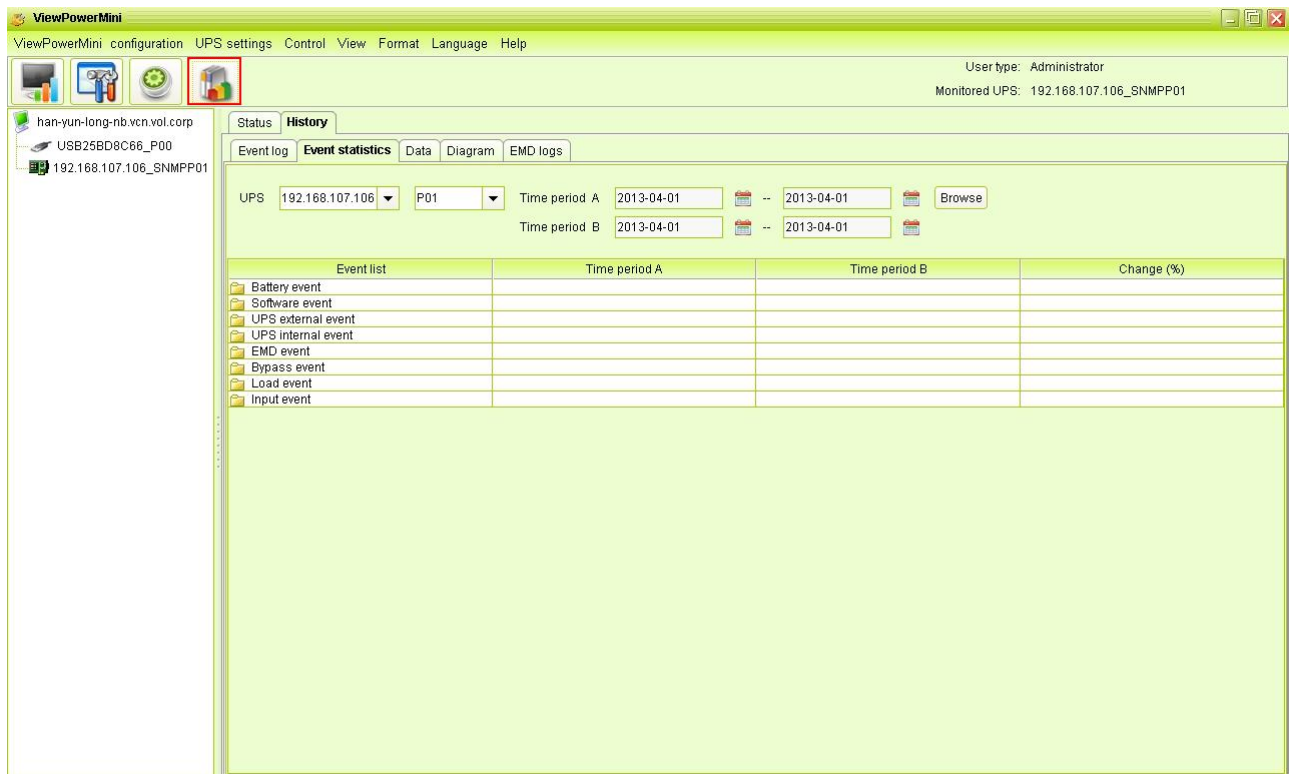
Diagram 5-26.

Diagram 5-26

Step 2 Select UPS from com. port list. Users still can retrieve old data saved in the software even though the UPS is no longer connected to local system.

Step 3 Select two periods from clicking "calendar" icon.   Then click "Browse" button. The result statistics will be listed in below table according to event types. Refer to Diagram 5-27.
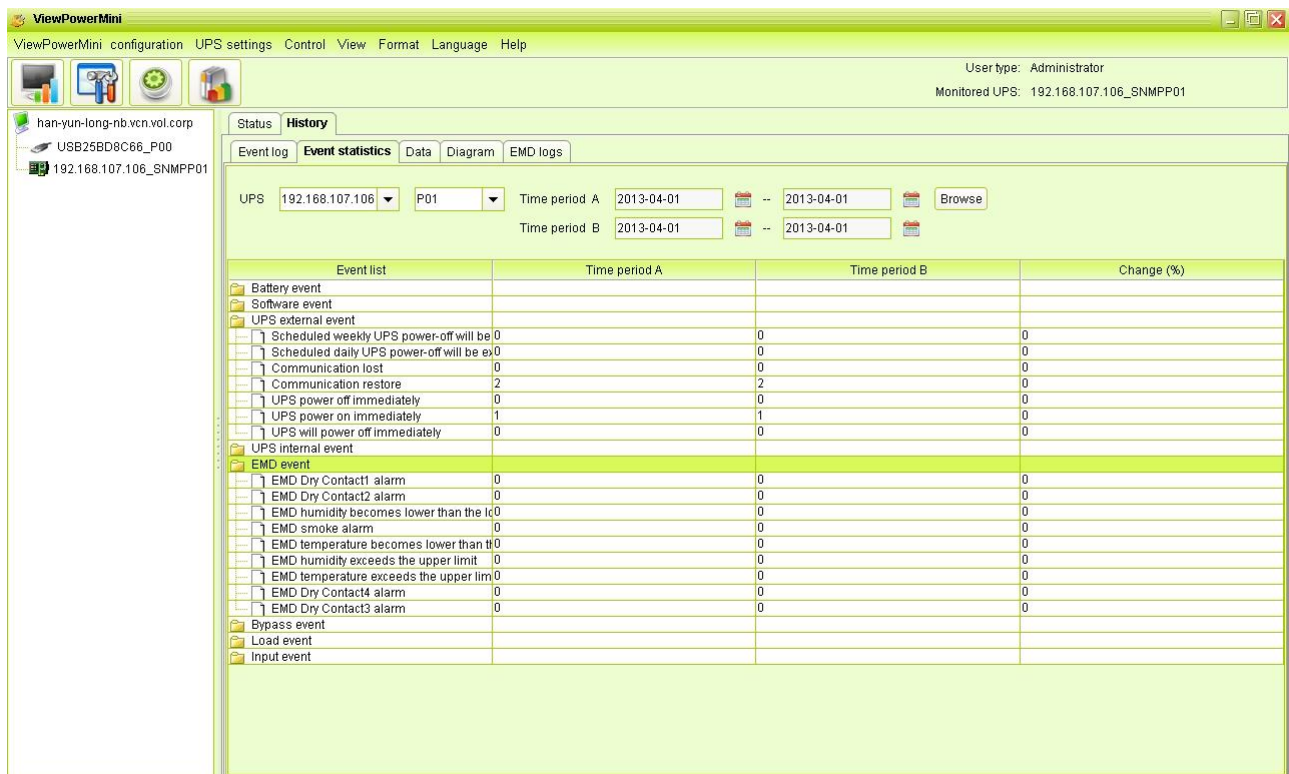
Diagram 5-27

Step 4 Click "Print" button to print event statistics.

5.4.2.3. Data

In the window of Data, it shows UPS power data in figures during selected period time. Software also offers print, save as, and delete functions.

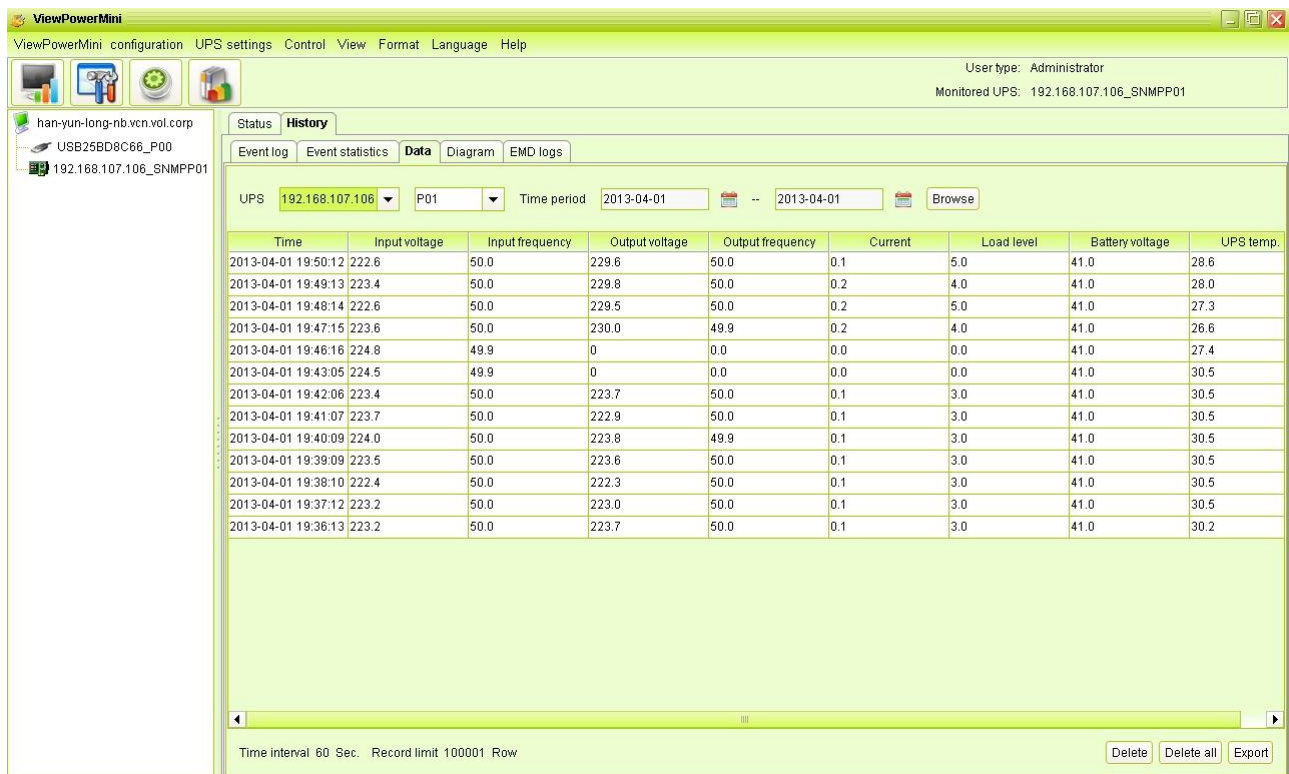**Step 1** Select View >> History >> Data. Refer to Diagram 5-28.

Diagram 5-28

NOTE: This screen may be different for different types of UPSs.

Step 2 Select UPS from com. port list. Users still can retrieve old data saved in the software even though the UPS is no longer connected to local system.

Step 3 Select the starting time and ending time by clicking calendar icon. Then click "Browse" button to get the data table.

➢ **"Delete":** Select specific data and click "Delete" button to delete the record.

➢ **"Delete All":** Click "Delete All" button to delete all records on the listed table.

➢ **"Export":** Click "Export" button to save listed table to local PC in .PDF file.

5.4.2.4. Diagram

In the Diagram window, it shows UPS power data in diagram during selected period time. UPS power data includes input voltage, output voltage, input frequency, output frequency, load level, battery capacity, and UPS temperature.

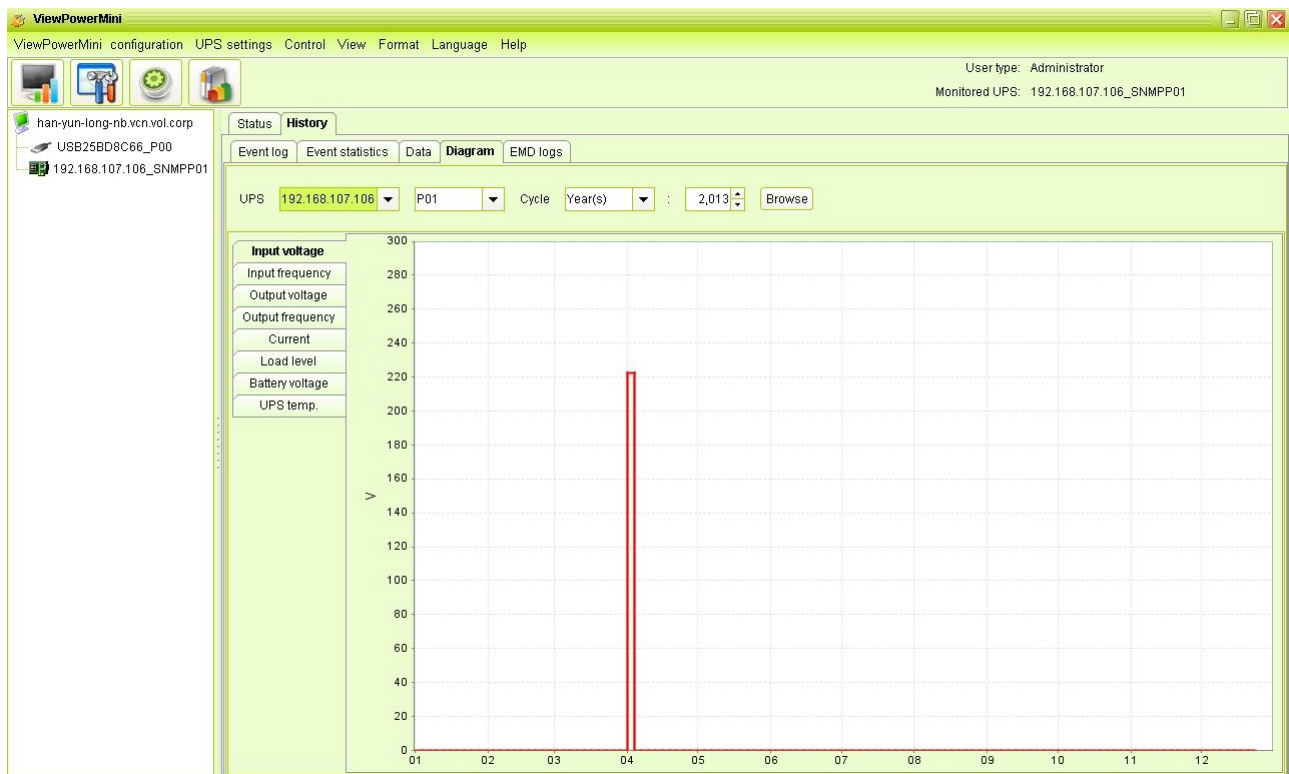**Step 1** Select View >> History >> Diagram. Refer to Diagram 5-29.

Diagram 5-29

 NOTE: This screen may be different for different types of UPSs.

Step 2 Select UPS from com. port list. Users still can retrieve old data saved in the software even though the UPS is no longer connected to local system.

Step 3 Select cycle and period time. Then click "Browse" button to get the diagram.

Step 4 Select monitoring parameters on left-hand tab to switch diagram.

5.4.2.5.   EMD Logs

In the EMD logs window, it shows the environment data in figures detected by environmental monitoring device (EMD) during selected period time.

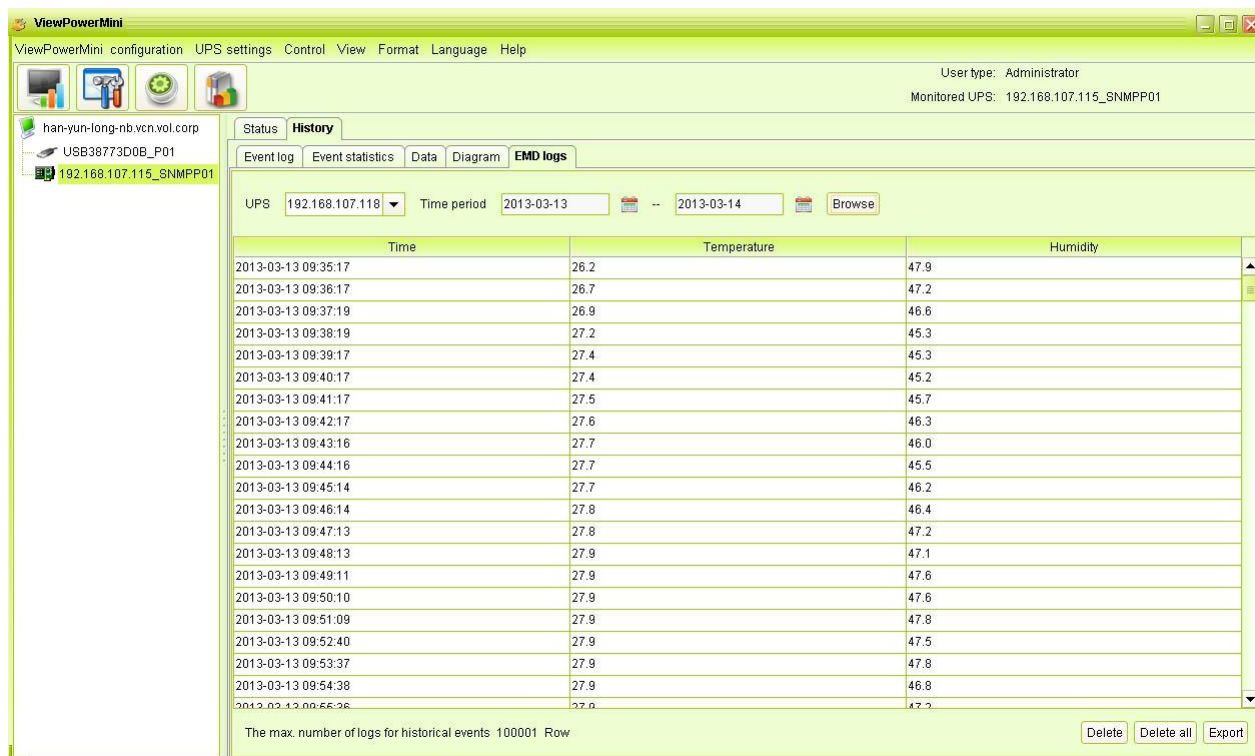**Step 1** Select View >> History >> EMD logs. Refer to Diagram 5-30.

Diagram 5-30

Step 2 Select UPS and select the starting time and ending time by clicking calendar icon.

Then click "Browse" button to get the data table. Delete/Delete all

➢ **"Delete":** Select specific data and click "Delete" button to delete the record.

➢ **"Delete all":** Click "Delete all" button to delete all records on the listed table.

➢ **"Export":** Click "Export" button to save listed table to local PC in .PDF file.

5.5. Format

Temperature Unit: There are two temperature units for selecting: Centigrade and Fahrenheit. Default setting is centigrade.

Date Format: There are nine formats for date display:

YYYY-MM-DD,YYYY/MM/DD,YYYY:MM:DD,MM-DD-YYYY,MM/DD/YYYY,MM:DD:YYYY,

DD-MM-YYYY,DD/MM/YYYY,DD:MM:YYYY. Default setting is YYYY-MM-DD.

5.6. Language

Currently, software offers thirteen languages for selection:

√ Chinese(Simplified)

√ Chinese(Traditional)

√ English

√ German

√ Italian

√ Polish

√ Portuguese

√ Russian

√ Spanish

√ Ukrainian

√ French

√ Turkish

√ Czech

5.7. Help

6. **About**: Click "Help" menu and select "About" item. It represents the copyright information about software

7. **Help**: Click "Help" menu and select "Online help" item. It will open the help manual. Before operating software, please read manual carefully.

Appendix A: Glossary

- **Local PC (system):** The local PC (system) is physically connected to UPS with communication port.

- **Remote PCs (systems):** The remote PCs (systems) are physically powered by UPS without communication port connection.