

ENGLISH

**MONITORING SOFTWARE FOR UPS
UPS WITH LAN INTERFACE
USER MANUAL**

NOTE:

**THIS MANUAL & SOFTWARE IS VALID ONLY FOR UPS MONITORED BY LAN CARD (SNMP).
NOT VALID FOR UPS COMMUNICATED BY USB or RS232 PORTS SINCE THE SOFTWARE TO BE USED IS DIFFERENT.**

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1. OVERVIEW.

MONITORING SOFTWARE:

Viewpower-PRO is an advanced UPS management software which is perfect for professional UPS monitoring. It can monitor and manage one to multiple UPSs in a networked environment including LAN, INTERNET and RS485 based networks. Monitoring can be performed by multiple PCs from the network. Each UPS must have its own SNMP LAN card connected to the network. Viewpower PRO software must be installed in every PC used for monitoring and control purposes.

Main software features:

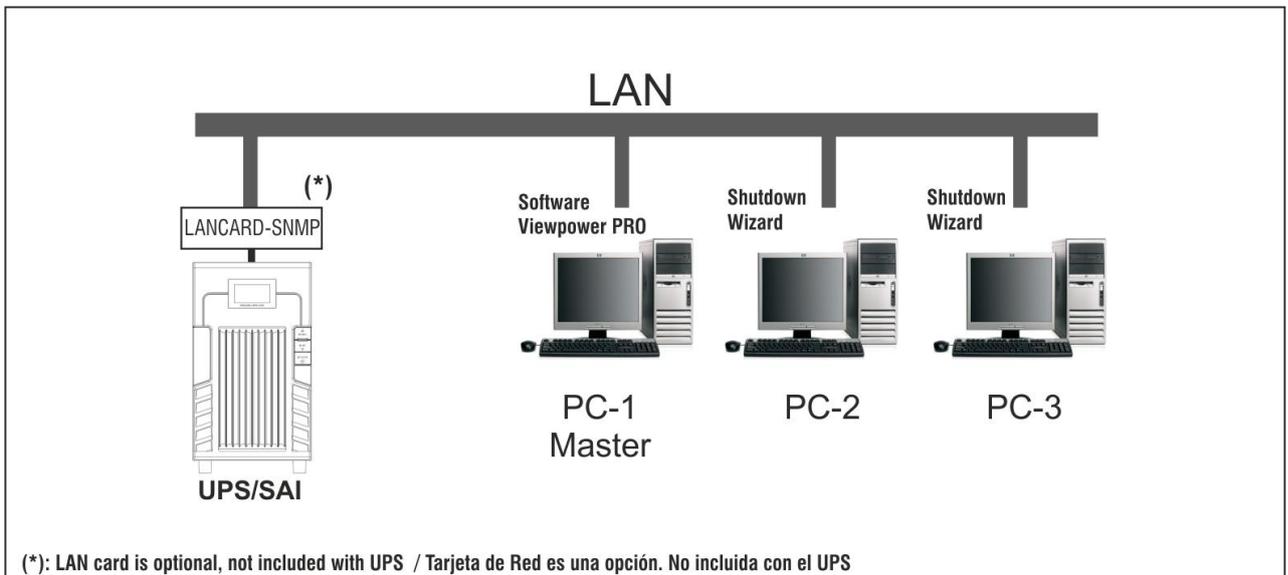
- Control and monitor up to 1000 UPS on the network
- Log events and data
- Broadcasting of alarms and messages as SMS or emails
- Scheduled actions as power-off/power-on, battery tests, wake-on LAN
- Automatic shutdown/sleep for PC on the network

SHUTDOWN SOFTWARE:

Shutdown Wizard is a separated software module that must be installed in each PC required to receive remote shutdown commands generated by UPS events. In those PC required to ONLY be shutdown remotely there is no need to install Viewpower PRO. Only Shutdown Wizard is required. Shutdown Wizard will receive remote shutdown command from other PC (named Master) with Viewpower PRO configured for sending remote commands to specific IP addresses.

NOTE:

For additional information about remote PC shutdown and UPS shutdown, we suggest to revise carefully ANNEX-1 and section LOAD CONFIGURATION and EVENT ACTION of this manual.



2. VIEWPOWER PRO INSTALL AND UNINSTALL.

2.1. SYSTEM REQUIREMENT.

- 1 GB RAM memory at least (2 GB is recommended).
- 2 GB hard disk space at least.
- Administrator authority is required.
- More than 16bit colors and 800 x 600 or above resolution display is recommended.
- TCP/IP protocol must be installed for network management .
- Platforms supported by software are listed below at the moment this manual was printed:
 - Windows 2000
 - Windows XP/2003/Vista/2008 (32bit & x64bit)
 - Windows 7 (32bit & x64bit)
 - Windows SBS 2011
 - Linux RedHat 8, 9
 - Linux RedHat Enterprise AS3, AS5, AS6 (32bit)
 - Linux RedHat Enterprise AS6 (64bit)
 - Linux RedHat Enterprise 5.2 (32bit & 64bit)
 - Linux SUSE 10 (32bit & 64bit)
 - Linux Cent OS 5.4 (32bit)
 - Linux Ubuntu 8.X, 9.X, 10.X (32bit)
 - Linux Ubuntu 10.X (64bit)
 - Linux Ubuntu 12.04 (32bit & 64bit)
 - Linux Fedora 5
 - Linux Open SUSE 11.2 (32bit & 64bit)
 - Linux Debian 5.x, 6.x (32bit)
 - Linux Debian 6.x (64bit)
 - Mac OS 10.6 (x64bit)
 - Mac OS 10.7 (x64bit)
 - Solaris 10 for x86 (32bit)

XMART keeps working to assure compatibility of all of our software with new OS released in the market. In case of doubts, please check with your XMART distributor to know the updated compatibility list.

2.2. SOFTWARE INSTALLATION

NOTE:

Before installing Viewpower-PRO in the PC, we strongly recommend to uninstall all other UPS monitoring software. Some other UPS software can affect normal operation of the Viewpower-PRO because they could be using same communication ports (for example 161 and 162). In case of ports conflict, we suggest to revise ANNEX-3 of this manual.

VIEWPOWER PRO

Insert the software CD into CD ROM. Installation menu will be automatically displayed, or you can run **Autorun.exe** to start the installation in CD directory.

It will show the Installation menu offering installation options for 2 software modules:

- **Viewpower PRO: (required for monitoring and control UPS from each PC)**
- **Shutdown Wizard (required to shutdown PC)**
- **Exit**

After clicking install, it will display the installation in process. Follow instructions during installation.

SHUTDOWN WIZARD

From CD, search for Shutdown Wizard directory for your Operating System. Find executable file and double click.

You can also download more updated software from our web: www.xmart-ups.com. Software files are in compress format (ZIP).

2.3. SOFTWARE UNINSTALL

VIEWPOWER PRO

Please choose Start> All Programs> ViewPower-Pro> Uninstall. Then follow the onscreen instruction to uninstall the software. Before uninstall software, you must stop all software programs first and then log in as "Administrator" Otherwise, it can't be uninstalled completely.

SHUTDOWN WIZARD

Find directory where Shutdown Wizard was installed and run uninstall file. By default, this software is installed in **C:\Shutdown Wizard**

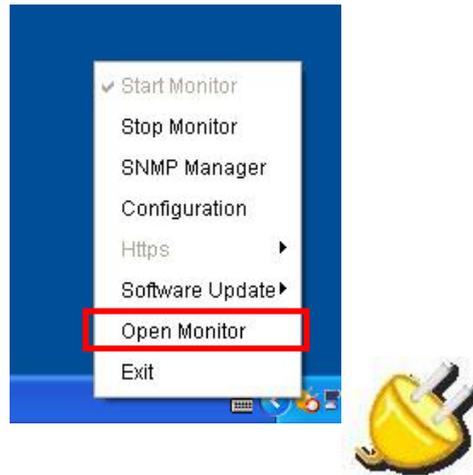
To be uninstalled Shutdown service must be stopped. From windows service can be stopped from task manager (WinShutdownService) or from system prompt **cmd.exe** (as administrator) by command:

```
C:\WINDOWS\system32>sc stop winshutdownservice
```

3. SERVICE TRAY APPLICATION.

After installation of the Viewpower PRO, 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 Graphic User Interface (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>ViewPower Pro>ViewPower Pro.



3.1. START MONITOR

This software will be automatically activated when installing it as service application. At this time, users can remote monitor UPSs through web browser even though users do not login in operation system.

If service application cannot be registered successfully, when starting up tray service, it will automatically activate monitoring application. If it's failed or stopped manually, simply click “Start Monitor” to activate it.

“Start Monitor” will check if monitoring application is registered as service application. If it's successfully, this software will be activated from service mode. If not, this software will be activated as monitoring mode. Users can identify the application mode from tray icon as below:

- Monitoring application is not activated successfully: 🚫
- Monitoring application is activated as service mode: 🔄
- Monitoring application is activated as monitoring mode: 📄

3.2. STOP MONITOR

Click “Stop Monitor” to stop monitoring application. This command ONLY can be done if software is running as administrator in your operating system. If software is running without administrator authorization, this command will not work.

If you need to stop monitor service you can go to task manager to find the service named “upsProMonitor” to stop it.

3.3. OPEN MONITOR

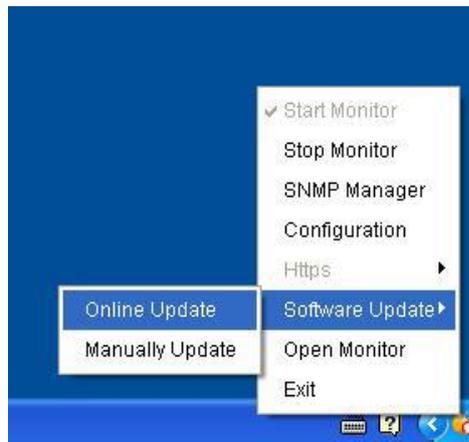
Monitor service runs in background. To open the graphic interface user must click “Open Monitor” to open monitoring GUI.

3.4. SNMP MANAGER

SNMP Manager is a plugging utility for ViewPower Pro to search and operate all SNMP devices in the LAN. This is a tool for service personnel or trained personnel. It is used for detecting UPS LAN card when Viewpower PRO cannot detect it. SNMP manager is also used for changing type of IP assigned to LAN card, for example from static to dynamic or from dynamic to static. To get more detailed information about SNMP Manager revise Annex 1 of this manual.

3.5. SOFTWARE UPDATE

Software update includes Online Update and Manually Update.

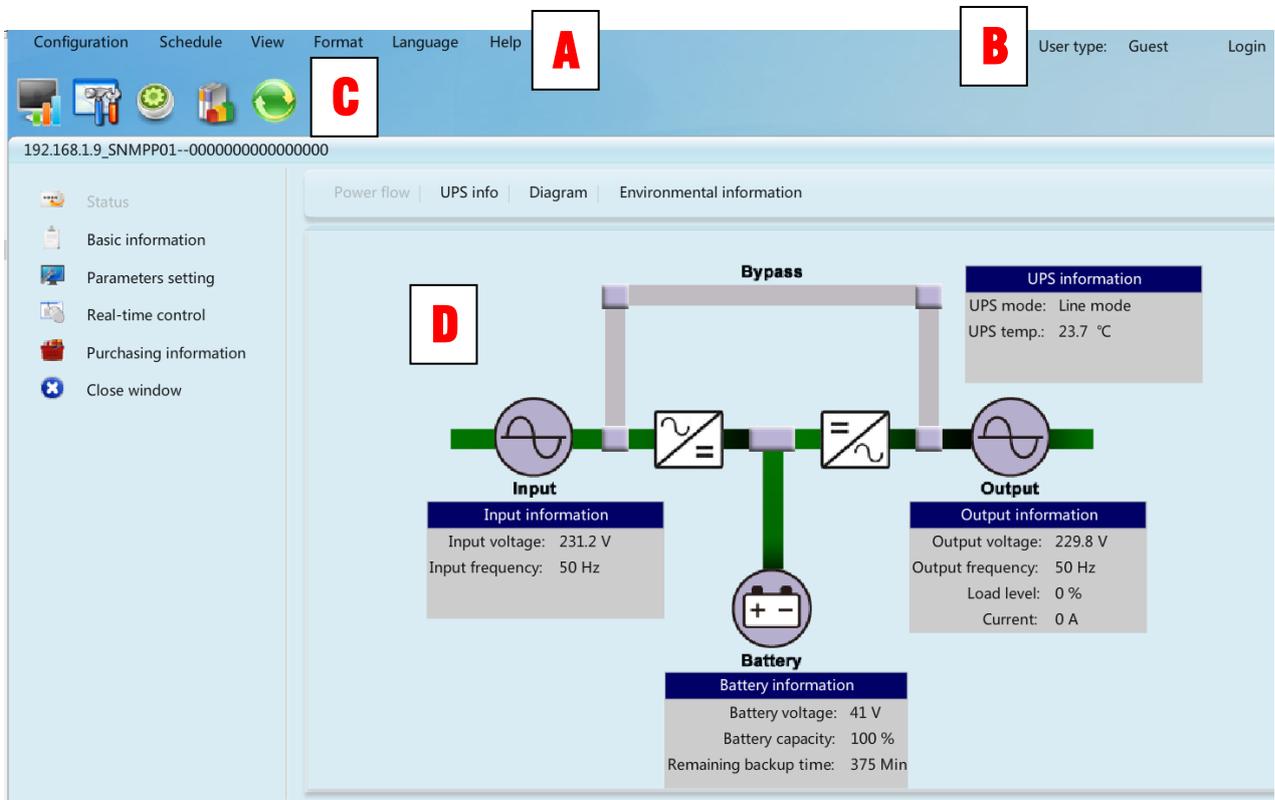


However, we strongly suggest to do all updates by checking if there is a new version in our web: www.xmart-ups.com. In that case, uninstall old version from your PC, download new version and install it.

3.6. EXIT

Click “Exit” to exit service application. Monitor service will continue working in background so any UPS event will be registered and attended according to configuration.

For selecting one of the available UPS, user just need to double click on green circle. At that moment, GUI will open a monitoring screen based on power path format:



- A. **Function Menu:** It offers complete toolset for navigation and setting the GUI.
- B. **Login section:** It shows user type for current login user. Administrator or Guest.
To login as administrator, press login key to introduce password: “**administrator**”

C. Shortcut buttons:

-  Monitoring.
-  Configuration
-  Scheduled start/stop UPS functions, Scheduled Battery tests and Wake on LAN schedule.
-  Event and data logs.
-  Refresh screen

- D. **Main Screen:** It displays information according to selected function.

4.1 STATUS

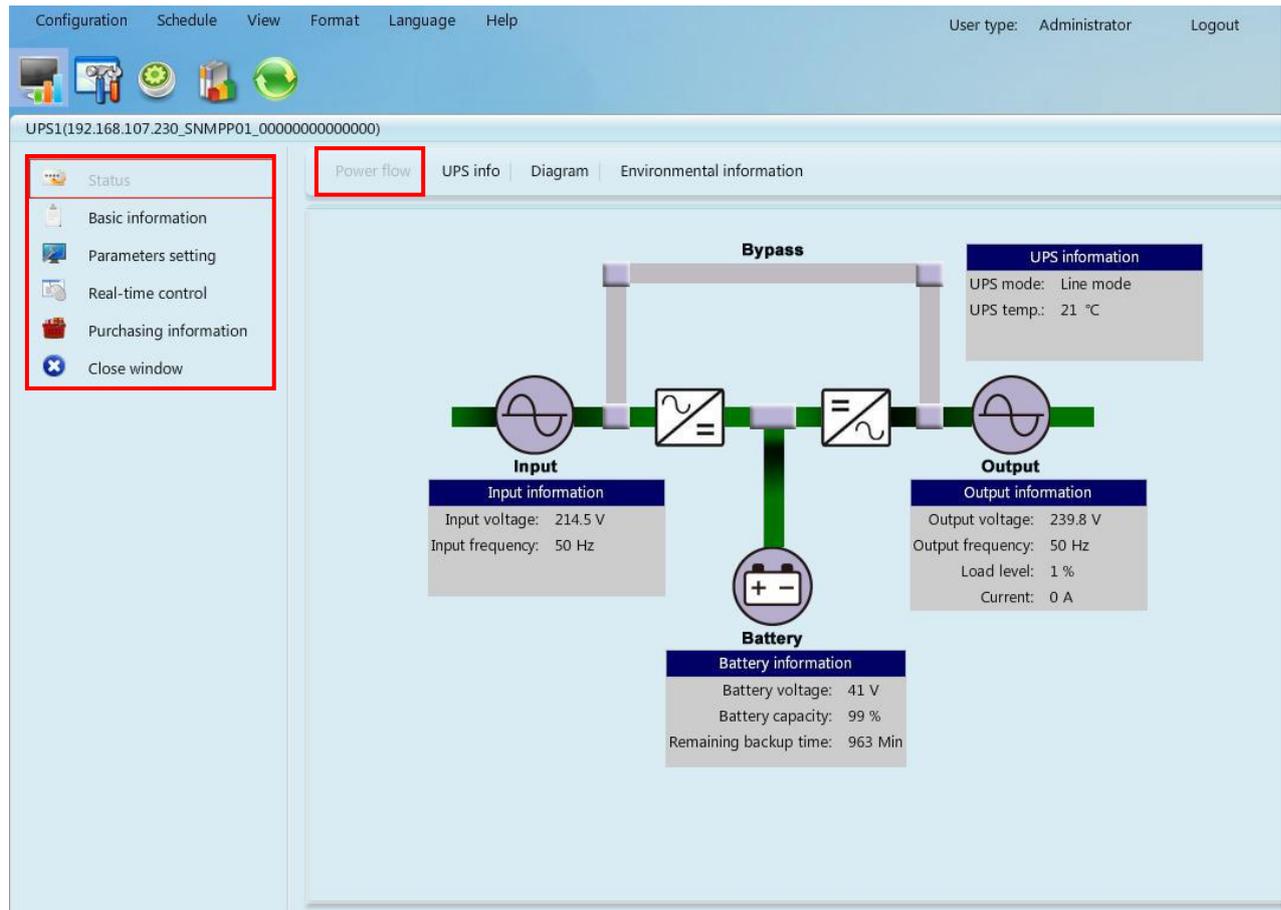
This screen allows full UPS monitoring: Input / Output and battery information.

This section can be accessed by click on the icon:



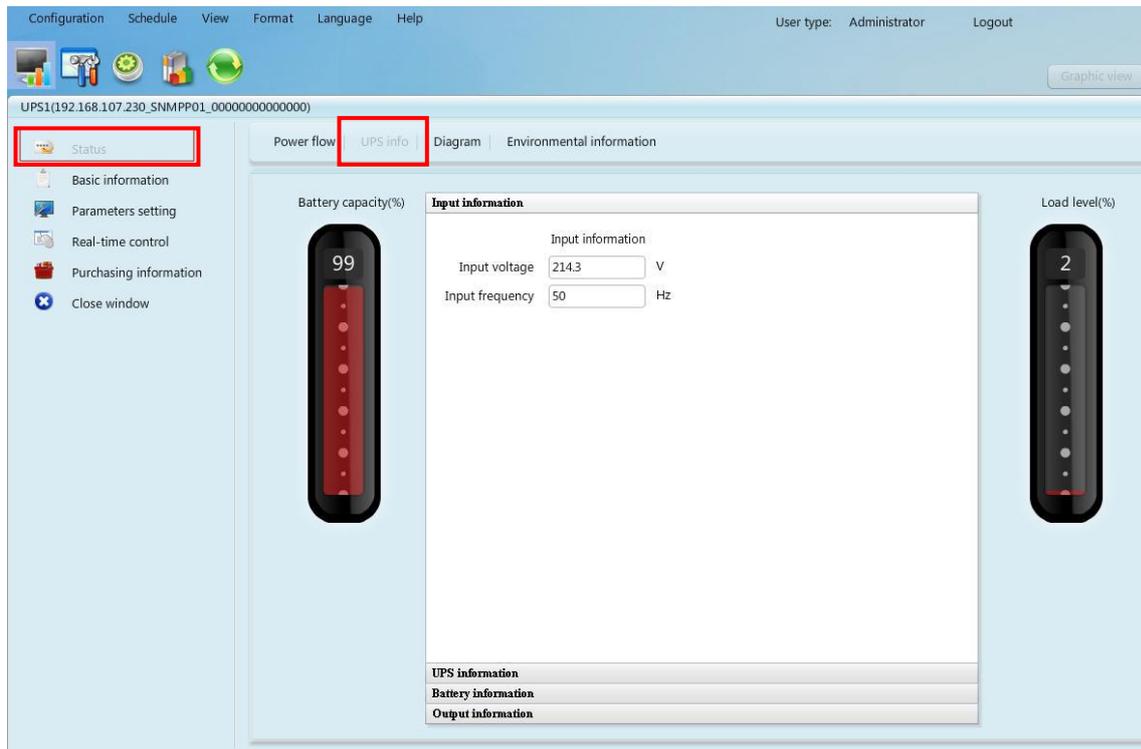
This information can be presented in different formats. Formats can be selected by clicking on vertical left menu.

STATUS – POWER FLOW CHART:

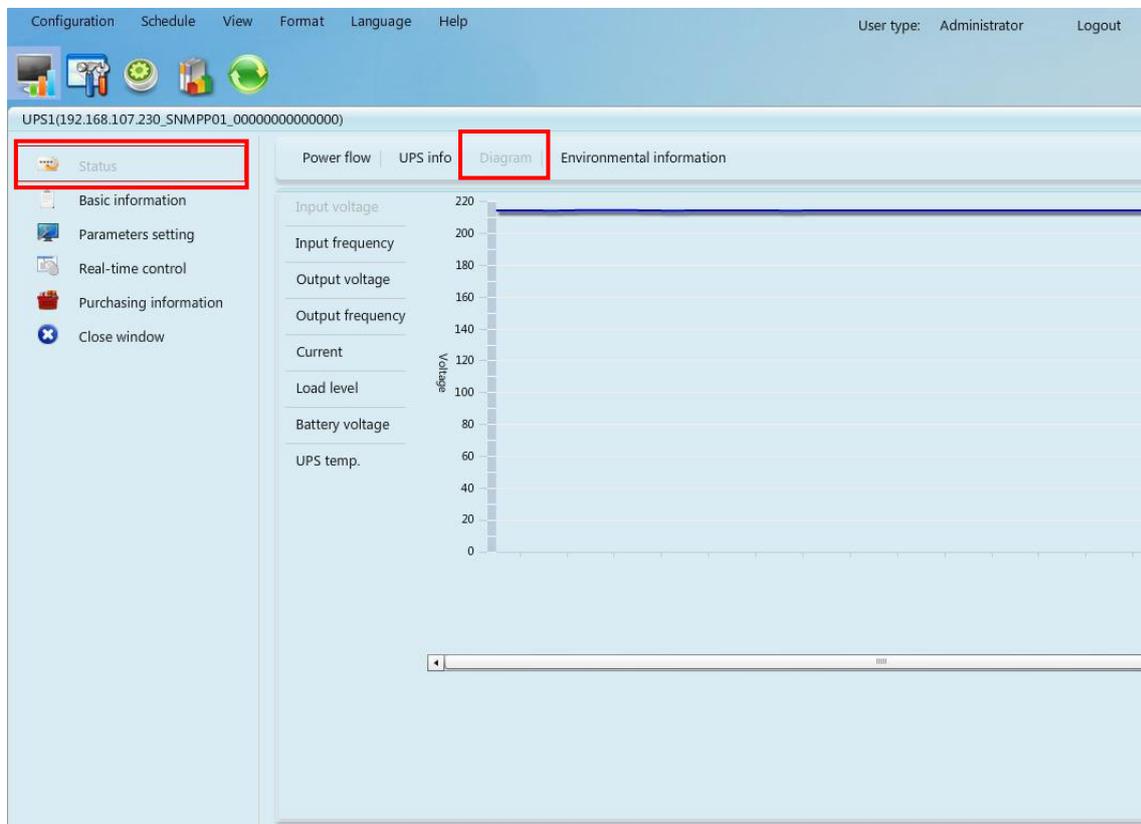


- Green flow indicates energy paths used under current mode.
- Grey bar means energy paths not used in current state.
- Input information includes input voltage and input frequency.
- Output information includes output voltage, output frequency, load level, and output current.
- UPS information includes UPS operation mode and UPS temperature.
- Battery information includes battery voltage, battery capacity and remaining backup time.

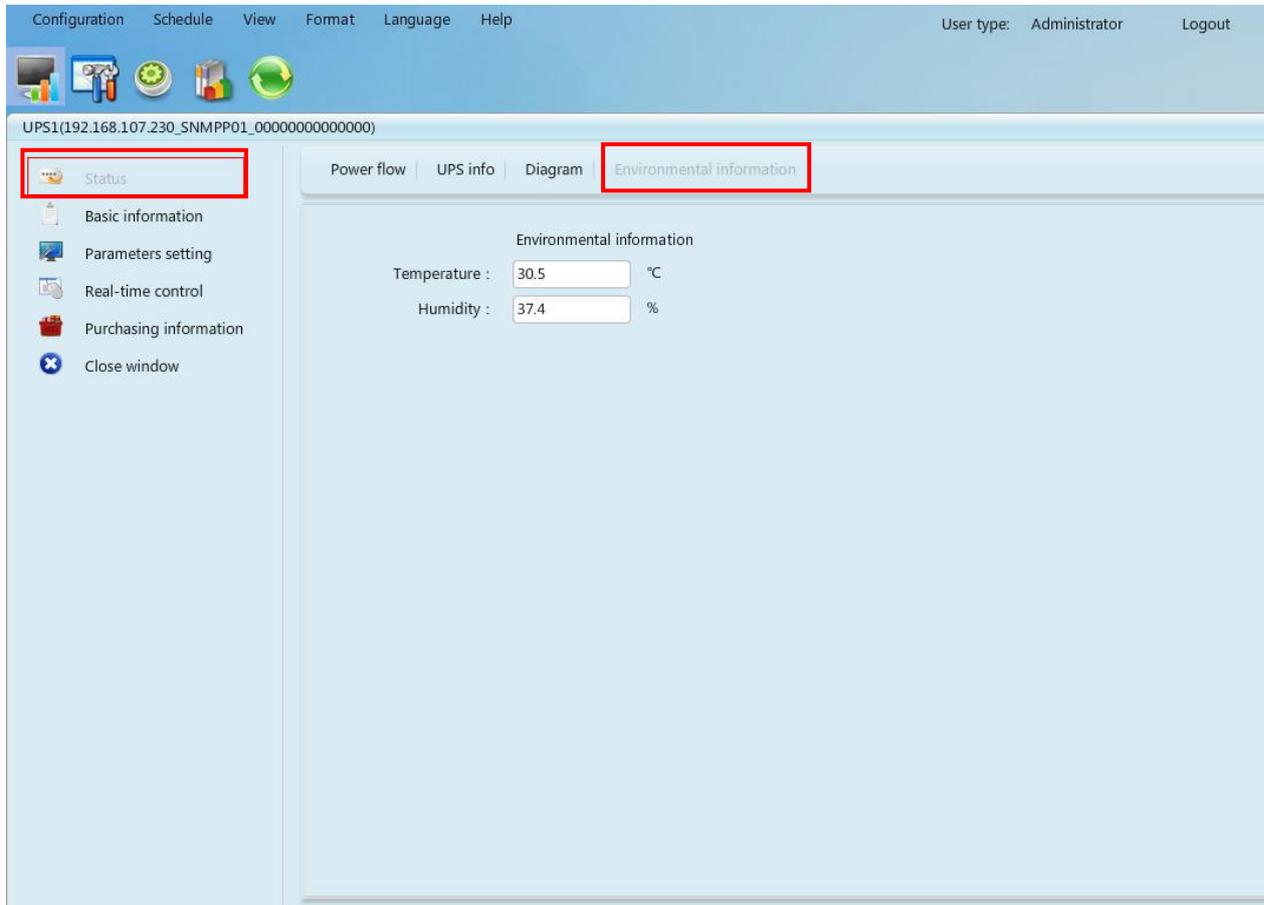
STATUS <UPS INFO>: it shows UPS information in text format.



STATUS <DIAGRAM>: It shows UPS in 2 axis chart format.

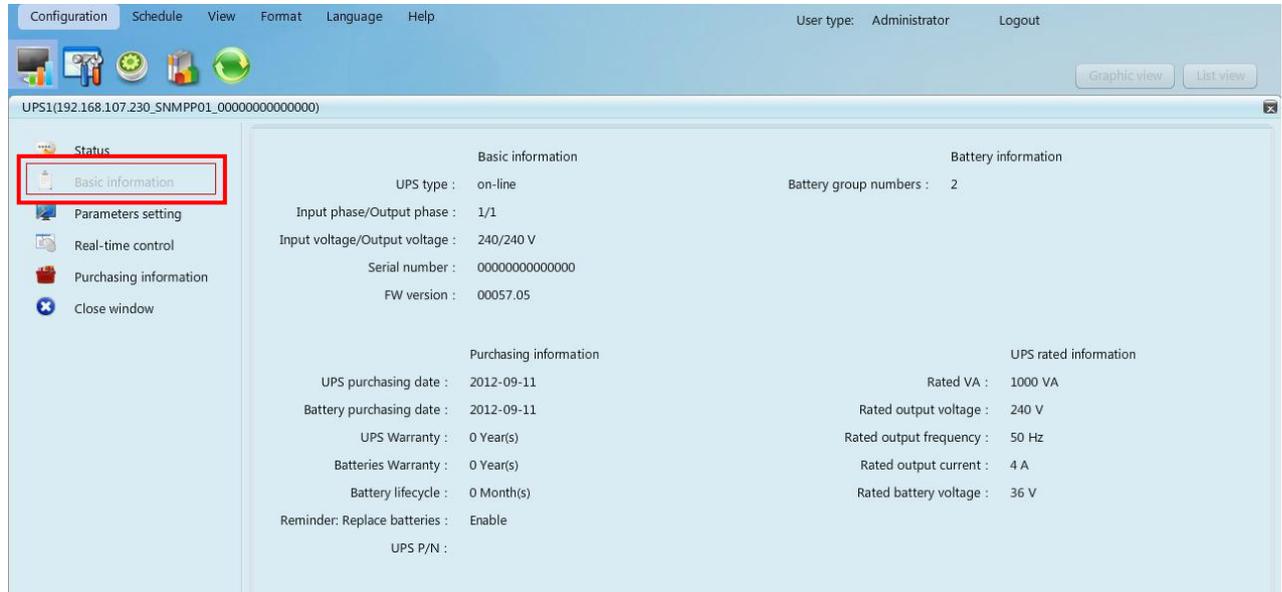


STATUS <ENVIROMENTAL INFORMATION>: If external temperature / humidity sensor is connected to SNMP LAN card, this section will show information related to the sensor. Sensor TH is an optional device not included with the UPS. It must be purchased separately. In case no sensor is connected, fields of this section will show in blank.



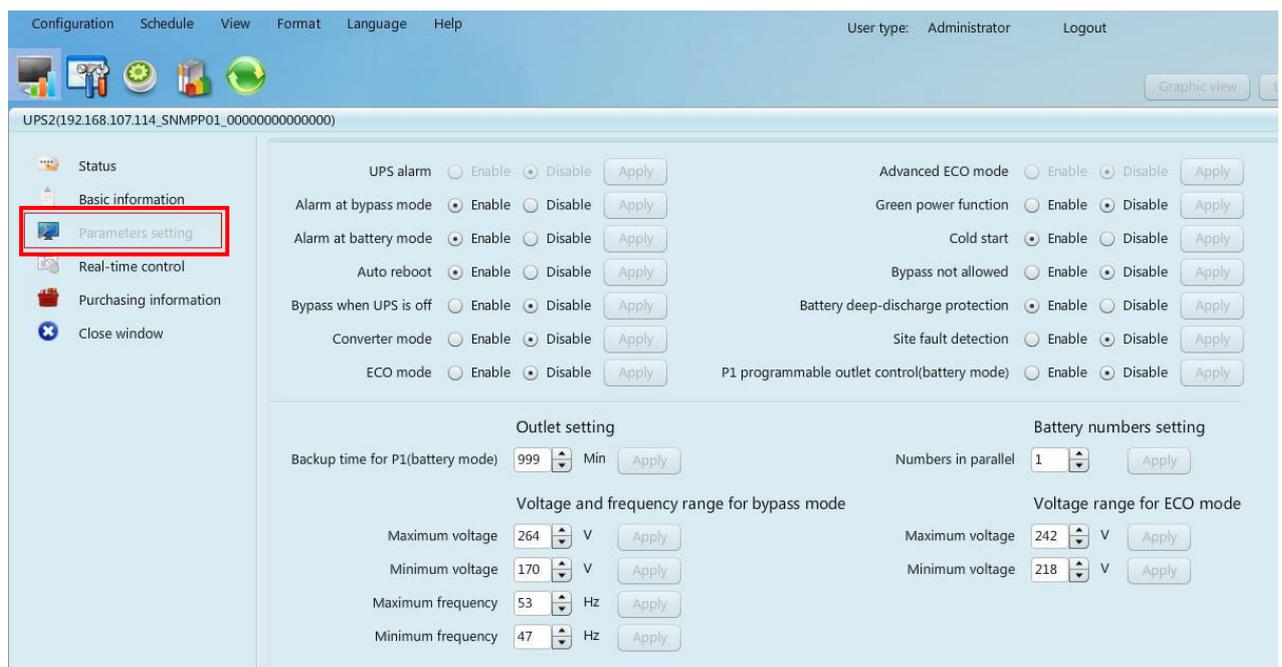
BASIC INFORMATION:

This section shows basic information about the UPS like UPS type and model, quantity of internal batteries and main model specifications.



PARAMETERS SETTING:

In this section, user can modify main UPS parameters. In this section we describe all possible UPS parameters even your system will only show available parameters for the UPS you are monitoring. Not all UPS have same parameters. For example, online UPS usually have more parameters to configure than interactive UPS.



PARAMETERS SETTING:

UPS ALARM: Enable/Disable audible alarm (beep)

ALARM AT BYPASS: Enable/Disable audible alarm (beep) for bypass mode

ALARM AT BATTERY Enable/Disable audible alarm (beep) for battery mode

AUTO REBOOT: Enable/Disable auto-reboot function when AC main service comes back from long blackout.

BYPASS WHEN UPS OFF: Enable/Disable bypass mode when UPS is OFF but connected to main AC service

COVERTER MODE: Enable/Disable frequency converter function.

ECO MODE: Enable/Disable ECO mode.

GREEN POWER: Enable/Disable green-power function that allows UPS automatic shutdown when in battery mode no load is connected to UPS outlets.

COLD-START: Enable/Disable cold-start function to allow UPS to start-up in battery mode.

BYPASS NOT ALLOWED: Enable/Disable BYPASS function. If activated (NOT ALLOWED), UPS never will switch to bypass mode. If inactive (ALLOWED) UPS will go to bypass mode depending of internal configuration.

BATTERY DEEP-DISCHARGE PROTECTION: If activated, UPS will shutdown when Deep protection Battery level is reached. This level is usually configurable and higher than standard low battery level.

SITE FAULT DETECTION: If activated, UPS will generate beep alarm if site wiring problem is detected. Usually Line and neutral swapped.

P1 PROGRAMMABLE OUTLET: If activated, UPS will turn-off programable outlets according to internal configuration. See backup for P1 parameter.

BACKUP FOR P1: Backup for programable outlets can be configured in minutes.

BATTERY NUMBER IN PARALLEL: Allows user to fix de quantity of Battery packs are connected in parallel (internal + external batteries).

VOLTAGE & FREQUENCY RANGE FOR BYPASS

MAX - MIN VOLTAGE: Configures voltage range for bypass mode. When UPS is in bypass mode and input is out of this range, UPS switch to battery mode.

MAX -MIN FREQUENCY: Configures frequency range for bypass mode. When UPS is in bypass mode and input is out of this range, UPS switch to battery mode.

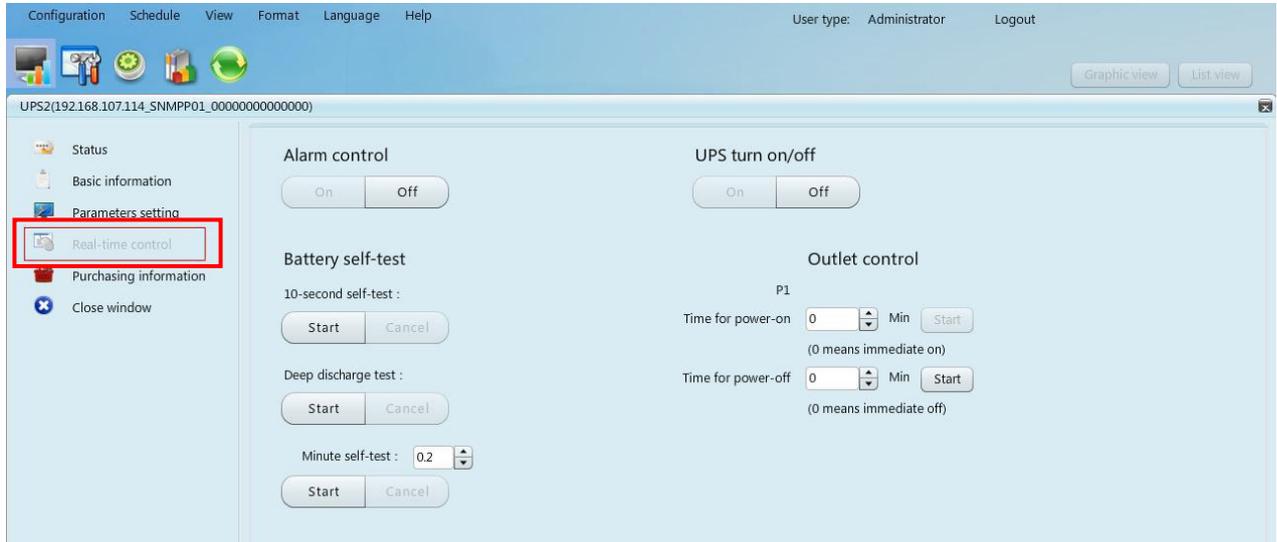
VOLTAGE RANGE ECO

MAX - MIN VOLTAGE: : Configures voltage range for ECO mode. When UPS is in ECO mode and input is out of this range, UPS switch to online mode.

IMPORTANT: For deeper information we suggest to revise user manual of your UPS.

REAL TIME CONTROL:

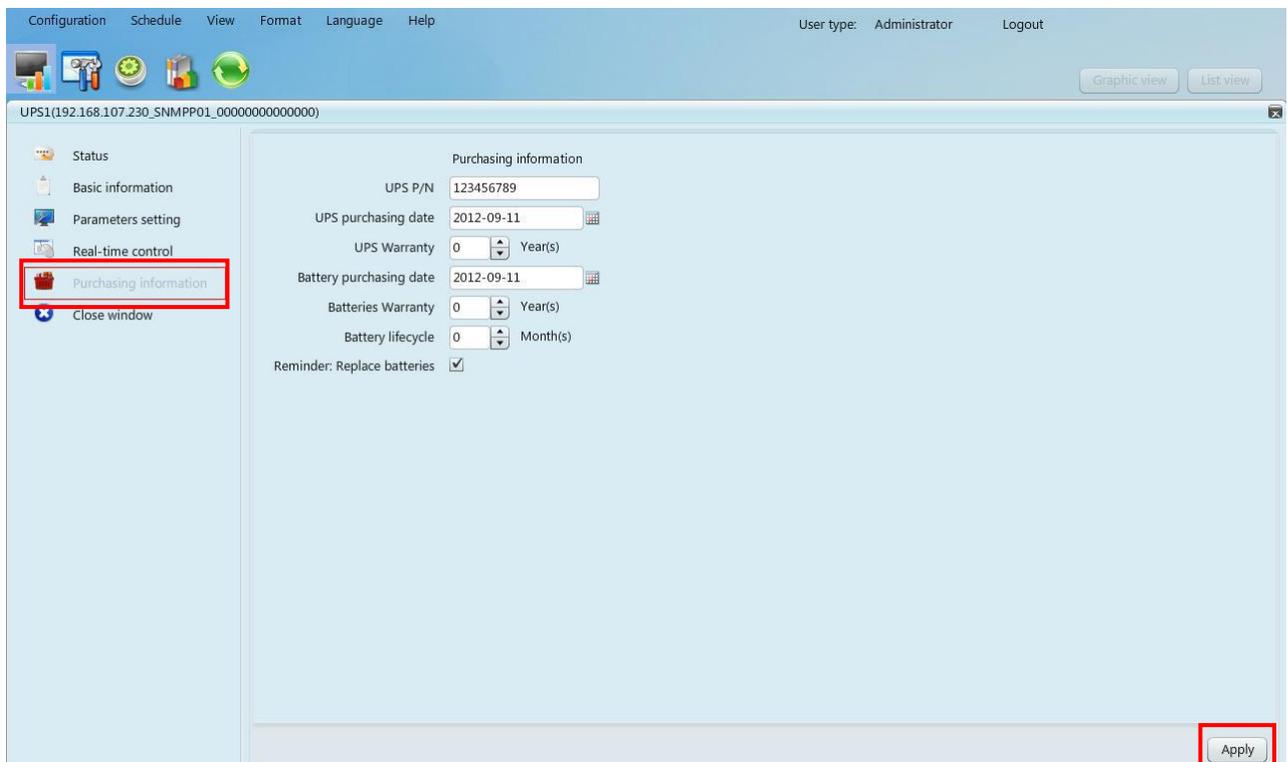
This section allows to the user to perform control commands in real time. For example: shutdown, start-up, battery tests, etc.



PURCHASING INFORMATION:

User can introduce purchasing information in this section. Software can generate alarm messages based on this information according to EVENT section configuration.

IMPORTANT: Press <APPLY> for saving changes.



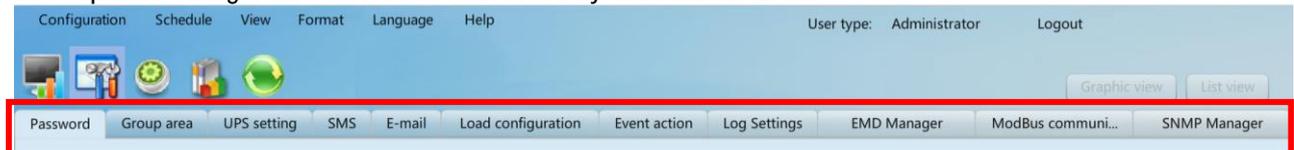
4.2. MAIN FUNCTIONS CONFIGURATION.

In this section user can configure all parameters related to UPS and the response of the software for each possible event generated by UPS or electrical service.

User can access this section by clicking on CONFIGURATION link on upper horizontal menu or by clicking on the icon:



Each specific configuration area can be accessed by each individual tab:



PASSWORD:

Allows to modify administrators password

GROUP AREA:

Allows to create groups for available UPS in the network

UPS SETTING:

Allows to group name and group UPS of the network

SMS:

Allows to configure SMS sending messages. (External GSM device is required)

EMAIL:

Allows emails sending configuration

LOAD CONFIGURATION:

Allows to configure shutdown and sleep commands to other PC son the network

EVENT ACTION:

Allows to configure how software will response to each posible event of the UPS and from AC main service.

LOG SETTING:

Allows to configure event and data logging activity

EMD MANAGER:

Allows to configure parameters related to temperature and humidity sensor.

MODBUS COMM SETTING:

Allows to configure parameters for MODBUS communication network

SNMP MANAGER:

Allows to add IP address ranges for scanning additional networks

UPS SETTING

In this section user can assign UPS to available groups. If no assignation is made, new UPS will be automatically assigned to “unassigned” group.

Device ID	Protocol	Port	Group area	device name	Address	Note
000000000000000000	SNMPP01	192.168.1.9	UNASSIGNED	OPT-1.5K	OFFICE-01	ADMIN

SMS

NOTE: For having capability to send SMS messages an external GSM device must be connected to the RS232 of the PC where Viewpower PRO is installed. This GSM device is not included neither with the UPS nor the software.

In this section user can configure list of SMS receivers Software will send SMS messages according to EVENT ACTION configuration. Each event must be configured to generate a SMS text message if required according to EVENT ACTION configuration section.

Receivers list

CHANGES MUST BE ALWAYS CONFIRMED BY PRESSING “APPLY” KEY.

EMAIL

NOTE: For sending emails it is required the PC where software is installed has access to internet. In this section user can configure information about the email outgoing server and email account to be used to send emails. Emails will be sent to list of receivers configured in this section.

NOTE: Email is sent when an event is detected by UPS if that event has been configured to send an email. Event response must be configured in section EVENT ACTION.

The screenshot shows the 'E-mail' configuration page in the Xmart software. The 'SMTP server settings' section includes fields for 'SMTP server' (mail.xmart-ups.com), 'Port' (25), and radio buttons for 'None', 'SSL', and 'TLS'. There is also a checkbox for 'Exchange server' and an 'Apply' button. The 'Send from' field is set to test@xmart-ups.com, and the 'User name' is also test@xmart-ups.com. The 'SMTP authentication required' checkbox is checked, and the 'Password' field is masked with asterisks. A note below the password field says 'Click "Test" button to check if the transmission is successfully'. The 'Receivers list' shows two entries: test@xmart-ups.com and marketing@xmart-ups.com. There is an 'E-mail' input field with 'Add' and 'Delete' buttons. A 'Test' button is highlighted with a red box. At the bottom right, an 'Apply' button is also highlighted with a red box.

CHANGES MUST BE ALWAYS CONFIRMED BY PRESSING "APPLY" KEY.

We recommend to do a TEST after configuring email section to confirm emails can be sent successfully. System will generate a successfully sent message in case configuration is OK. If any problems is detected



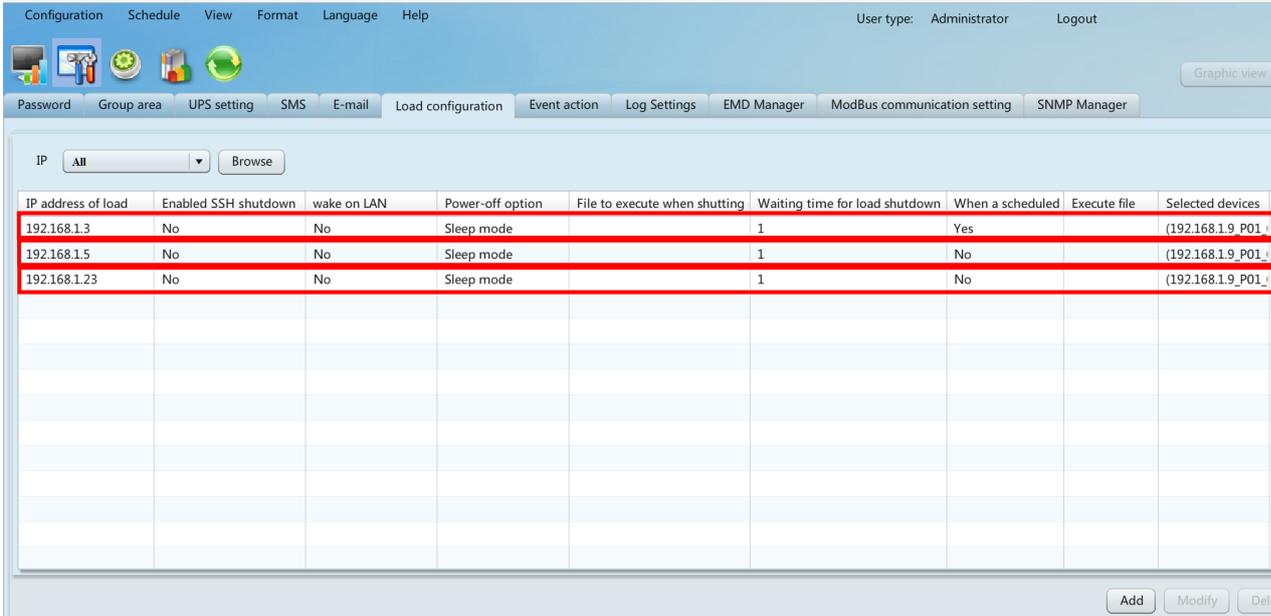
- SMTP SERVER:** It must indicate the server to be used to send emails
Examples: smtp.live.com for Hotmail / smtp.gmail.com for Gmail
- PORT:** Port number depends of kind of server to be used: **NONE: 25** / **SSL: 465** / **TLS: 587**
- NONE:** Used by non-secure server like webdomain email servers
- SSL:** It is used by email servers with SSL security like gmail
- TLS:** Used by emails servers with TLS security like hotmail.
- EXCHANGE SERVER:** For Exchange email servers
- SEND FROM:** This field must indicates the name of the email account to be used for sending emails
- USER NAME:** User name of the email account. Usually same than email account
- SMTP AUTHENTICAT.:** It depends of the email account to be used
- PASSWORD:** Password of the email account to be used

NOTE: In case of doubts check with your internet provider or responsible of this area in your company.

LOAD CONFIGURATION.

Load configuration can send remote shutdown commands to other computers via intranet or internet. PC are identified by its IP address. In case of doubts about IP address of your PC, please revise ANNEX-1 of this manual. Shutdown or sleep commands are generated by some events that can be configured in EVENT ACTION section. The purpose of a remote shutdown/sleep command is to allow PC to save files and close operating system when required, for example when a long blackout is detected. EVENT ACTION generates shutdown command according to the configured event. Then software sends shutdown command to remote PC configured in LOAD CONFIGURATION section.

For each remote PC to be turned-off, user must configure one dedicated line in this section.



IP address of load	Enabled SSH shutdown	wake on LAN	Power-off option	File to execute when shutting	Waiting time for load shutdown	When a scheduled	Execute file	Selected devices
192.168.1.3	No	No	Sleep mode		1	Yes		(192.168.1.9_P01_)
192.168.1.5	No	No	Sleep mode		1	No		(192.168.1.9_P01_)
192.168.1.23	No	No	Sleep mode		1	No		(192.168.1.9_P01_)

IP ADDRESS OF LOAD: Enter the IP address of remote computer

POWER OFF OPTION: Selecting type of power off: SHUTDOWN or SLEEP.

WAITING TIME FOR LOAD SHUTDOWN: This is the time software will wait for sending remote command to PC

SELECTED UPS: Configure IP address of the UPS that will produce shutdown event.

WAKE ON LAN: It generates a start-up command to the configured PC when AC main service comes back. It is required configured PC supports this kind of function.

WHEN SCHEDULED SHUTDOWN IS TRIGGERED: To send shutdown command as configured in scheduled actions section.

SELECTED DEVICES: Shows IP of UPS which will generate shutdown command for this PC

FILE TO EXECUTE WHEN SHUTTING DOWN: A file can be executed when shutdown command is sent.

EXECUTE FILE: A file can be executed when an event is detected

ENABLED SSH SHUTDOWN: Some EXsi y Linux OS have SSH functions that allow shutdown by SSL clients without shutdown wizard. Function SSH requires user and password information.

NOTE: ALL remote PC required to receive remote shutdown commands MUST have installed SHUTDOWN WIZARD software.

Each shutdown command line must be created by selecting ADD key. For modifying existing lines press MODIFY key in bottom right corner of the screen. These 2 commands will open an information window like described below. For saving changes press APPLY.

The screenshot shows a configuration window with the following fields and options:

- IP address of load:
- Enabled SSH shutdown
- User name:
- Password:
- MAC address:
- Accepts wake on LAN when events occur
- Power-off option: Shutdown Sleep mode
- File to execute when shutting down:
- Waiting time for load shutdown:
- Accepts scheduled device shutdown
- Execute file:
- Selected devices:

	UPS
<input type="checkbox"/>	(192.168.1.9_P01_0000000000000000)
<input type="checkbox"/>	
- Note:
-

EVENT ACTION

In this section user can configure response of the software for all possible events related to each UPS of the network. In this section is where user configures is software must send messages or shutdown commands when a specific event is detected. Events can be internal or external. Internal events are those related to the UPS like UPS alarms or abnormal states. External events are related to AC main source like AC failure. For configuring response to events, user must select EVENT ACTION tab, chose protocol P01 and select required UPS. Then relevant events must be selected and configured.

In the image of this section there is an example of configuration for AC FAILURE state.

<**WRITE TO EVENT LOG**>: In case event required to be registered in the event log.

<**LOAD SHUTDOWN**>: Shutdown is required for PC related to this UPS (according to LOAD CONFIGURATION).

<**UPS SHUTDOWN**>: To mark if UPS must be shut down when this event is detected.

<**WAITING TIME FOR LOAD SHUTDOWN**>: Indicates waiting time until shutdown command is generated. In below image waiting time is 2 min.

<**LOAD SHUTDOWN REMINDER**>: To activate periodic reminders during shutdown process.

<**POP-UP DIALOG BEFORE SHUTDOWN**>: To configure time when shutdown message will be displayed.

<**WARNING DIALOG INTERVAL**>: To configure time between messages.

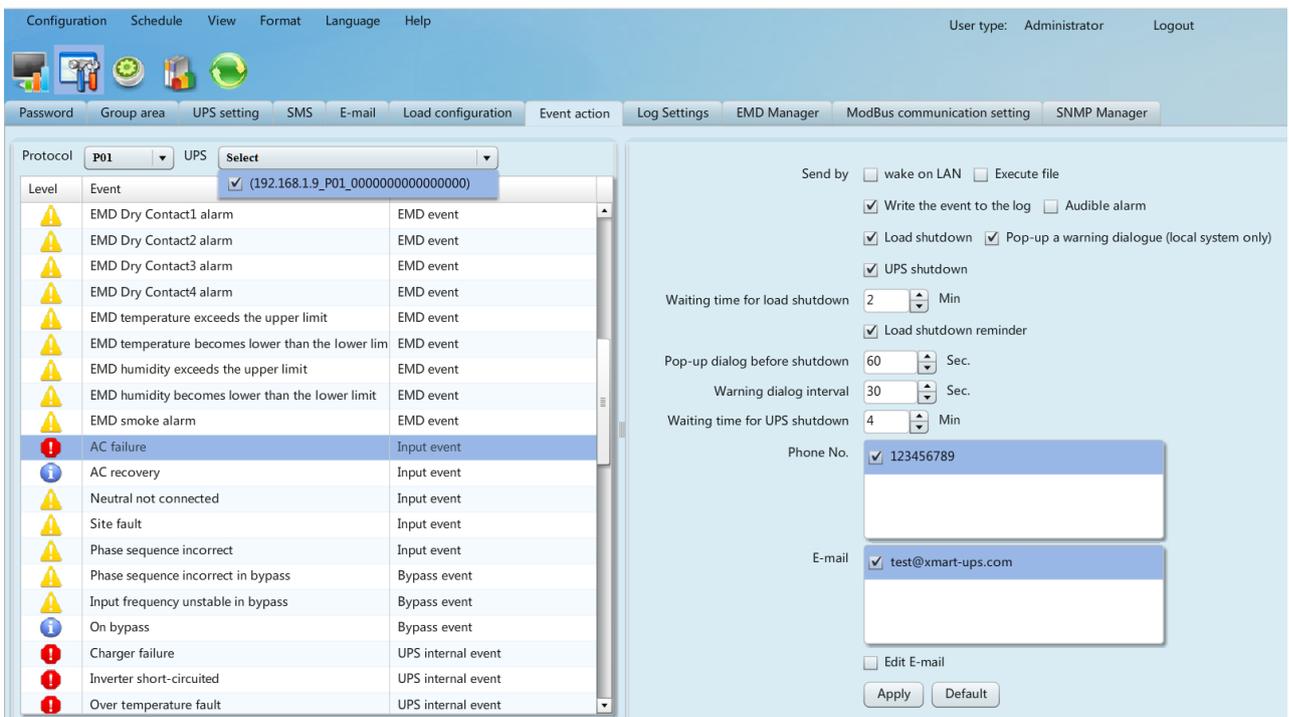
<**WAITING TIME FOR UPS SHUTDOWN**>: To configure waiting time to shutdown UPS since the momento event was detected. In below image is 4 min.

<**PHONE NUMBER**>: Allows to select phone numbers to send SMS when this event is detected.

<**EMAIL**>: Allows to select emails accounts to send messages when this event is detected.

<**EDIT EMAIL**>: Opens 2 additional fields to add extra information in emails to be sent.

If neither phone numbers nor email accounts are listed is because they have not been configured previously in SMS and E-mail sections.



The screenshot shows the 'Event action' configuration window in the Xmart Control Software. The 'Protocol' is set to 'P01' and the 'UPS' is set to '(192.168.1.9_P01_0000000000000000)'. The 'Event' list on the left includes various alarms and failures, with 'AC failure' selected. The right panel shows configuration options for the selected event:

- Send by:** wake on LAN, Execute file
- Write the event to the log, Audible alarm
- Load shutdown, Pop-up a warning dialogue (local system only)
- UPS shutdown
- Waiting time for load shutdown: 2 Min
- Load shutdown reminder
- Pop-up dialog before shutdown: 60 Sec.
- Warning dialog interval: 30 Sec.
- Waiting time for UPS shutdown: 4 Min
- Phone No.: 123456789
- E-mail: test@xmart-ups.com
- Edit E-mail

Buttons for 'Apply' and 'Default' are at the bottom right.

LOG SETTING

In section user can configure some parameters related to logging function, as refresh frequency in seconds, record interval, etc.

Configuration Schedule View Format Language Help User type: Administrator Logout

Refresh frequency Sec.

Record interval Sec.

The max. number of logs for historical data (0: unlimited)

Backup path Format example: c:\backup\
(Default backup path: \$SOFTWARE_INSTALL_DIR\$\\MySQL\\data\\backup)

Apply Default

EMD MANAGER

In case an XSMART EMD sensor is connected to the SNMP card of the UPS, parameters of temperature and humidity can be configured in this section.

Some sensor models also includes dry contact inputs for detecting opening of door and windows of the room where UPS is installed.

Revise DRY CONTACT EVENT & CONFIGURATION tab.

Configuration Schedule View Format Language Help User type: Administrator Logout

Dry contact event Dry contact configuration Alarm Settings

EMD alarming temperature range

Upper limit Apply

Lower limit Apply

EMD alarming humidity range

Upper limit Apply

Lower limit Apply

MODBUS COMMUNICATION

Even most common networks are LAN Ethernet types, it is also possible to communicate UPS in a MODBUS network. In this section related parameters can be configured.

The screenshot shows the 'Modbus Setting' configuration page. At the top, there is a navigation bar with 'Configuration', 'Schedule', 'View', 'Format', 'Language', and 'Help'. On the right, it shows 'User type: Administrator' and 'Logout'. Below the navigation bar are several icons and two buttons: 'Graphic view' and 'List view'. A secondary navigation bar contains tabs for 'Password', 'Group area', 'UPS setting', 'SMS', 'E-mail', 'Load configuration', 'Event action', 'Log Settings', 'EMD Manager', 'ModBus communi...', and 'SNMP Manager'. The main content area is titled 'Modbus Setting' and contains the following fields:

- Port: A dropdown menu with a 'Refresh' button next to it.
- Device ID: A dropdown menu with 'Select' as the current value.
- Baud rate: A dropdown menu with '4800' as the current value.
- Data Bit: A dropdown menu with '8' as the current value.
- Stop Bit: A dropdown menu with '1' as the current value.
- Parity: A dropdown menu with 'NONE' as the current value.

An 'Apply' button is located at the bottom of the configuration area.

SNMP MANAGER

This section allows to add IP ranges to be monitored from SNMP MANAGER tool. See annex 1 of this manual for additional information.

The screenshot shows the 'SNMP Manager' configuration page. It has the same top navigation bar as the previous page. The secondary navigation bar has 'SNMP Manager' selected. The main content area is titled 'IP address list' and contains a text box with '192.168.1' entered. Below this is an empty text box labeled 'IP address'. At the bottom of the configuration area are two buttons: 'Add' and 'Delete'.

4.4 HISTORY / REGISTRO HISTORICO

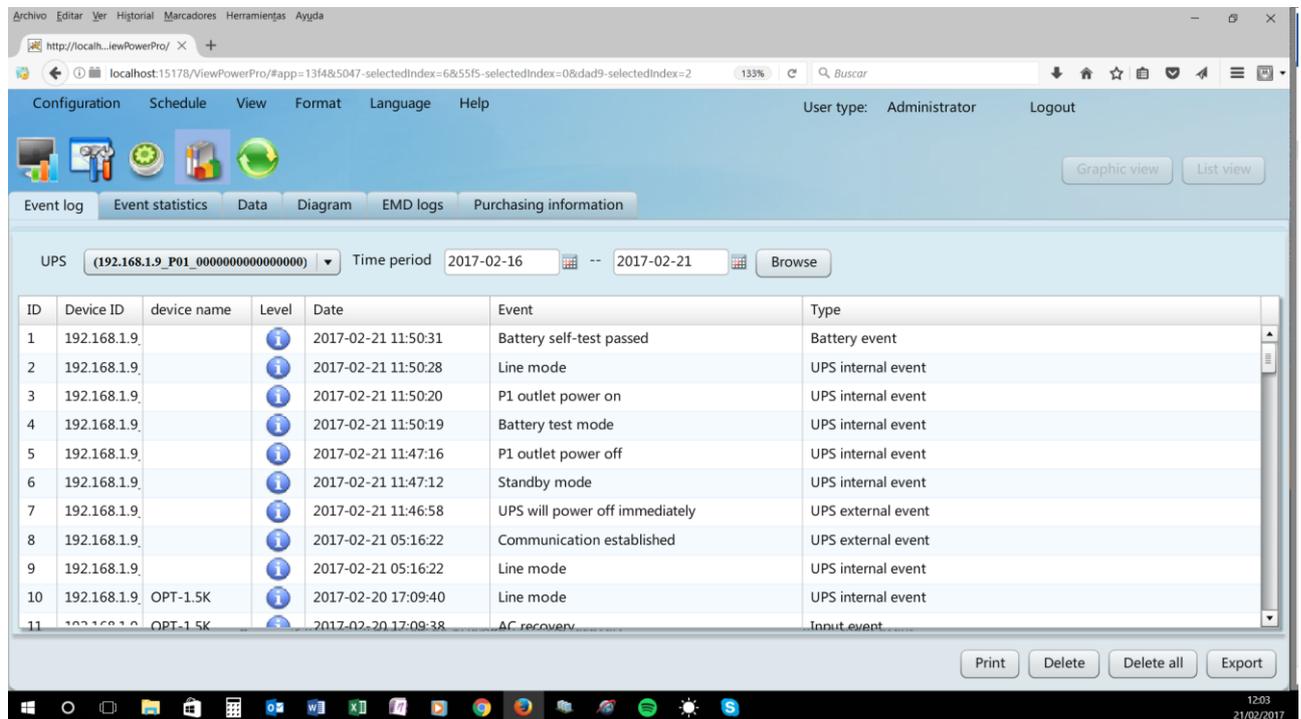
User can select this section by horizontal menú (VIEW/HISTORY) or by clicking on shortcut key:



This section shows all registered data and events in a determined data range.
Type of information listed is described below:

EVENT LOG:

List of events marked to be included in the event log.



ID	Device ID	device name	Level	Date	Event	Type
1	192.168.1.9		i	2017-02-21 11:50:31	Battery self-test passed	Battery event
2	192.168.1.9		i	2017-02-21 11:50:28	Line mode	UPS internal event
3	192.168.1.9		i	2017-02-21 11:50:20	P1 outlet power on	UPS internal event
4	192.168.1.9		i	2017-02-21 11:50:19	Battery test mode	UPS internal event
5	192.168.1.9		i	2017-02-21 11:47:16	P1 outlet power off	UPS internal event
6	192.168.1.9		i	2017-02-21 11:47:12	Standby mode	UPS internal event
7	192.168.1.9		i	2017-02-21 11:46:58	UPS will power off immediately	UPS external event
8	192.168.1.9		i	2017-02-21 05:16:22	Communication established	UPS external event
9	192.168.1.9		i	2017-02-21 05:16:22	Line mode	UPS internal event
10	192.168.1.9	OPT-1.5K	i	2017-02-20 17:09:40	Line mode	UPS internal event
11	192.168.1.9	OPT-1.5K	i	2017-02-20 17:09:38	AC recovery	Input event

EVENT STATISTICS:

Shows events grouped by quantity of appearances.

DATA LOG:

List of data and values marked to be included in the data log.

DIAGRAM:

Shows data and values in graphic mode.

EMD LOGS:

List of temperature and humidity data (ONLY if EMD sensor is connected to SNMP card).

4.5 FORMAT

User can select this section by FORMAT option in horizontal menu.
Temperature and data can be format in this section.

The screenshot shows the Xmart control software interface. At the top, there is a horizontal menu with options: Configuration, Schedule, View, Format, Language, and Help. The 'Format' menu is open, showing two options: 'Temperature unit' and 'Date format'. The 'Temperature unit' option is selected, and its sub-menu is open, showing two options: 'Centigrade' (selected) and 'Fahrenheit'. Below the menu, there are three buttons: 'UNASSIGNED', 'AREA-02', and 'AREA-03'. The main display area shows the IP address '192.168.1.9_SNMP01--0000000000000000' and the following information:

UPS information:	Line mode
Input information:	231.2V/50.0Hz
Output information:	229.8V/50.0Hz
Battery information:	41.0V/100%

The screenshot shows the Xmart control software interface. At the top, there is a horizontal menu with options: Configuration, Schedule, View, Format, Language, and Help. The 'Format' menu is open, and the 'Date format' option is selected. Its sub-menu is open, showing several date format options: 'YYYY-MM-DD' (selected), 'YYYY/MM/DD', 'YYYY:MM:DD', 'MM-DD-YYYY', 'MM/DD/YYYY', 'MM:DD:YYYY', 'DD-MM-YYYY', 'DD/MM/YYYY', and 'DD:MM:YYYY'. Below the menu, there are three buttons: 'UNASSIGNED', 'AREA-02', and 'AREA-03'. The main display area shows the IP address '192.168.1.9_SNMP01--0000000000000000' and the following information:

UPS information:	Line mode
Input information:	227.5V/50.0Hz
Output information:	229.6V/50.0Hz
Battery information:	41.0V/100%

4.6 LANGUAGE

Select LANGUAGE option in horizontal menu.

In this section, user can select language for menus and information.

The screenshot displays the Xmart control software interface. At the top, there is a horizontal menu with options: Configuration, Schedule, View, Format, Language (highlighted), and Help. Below the menu is a toolbar with icons for a monitor, tools, a gear, a server rack, and a refresh button. Underneath the toolbar are three buttons: UNASSIGNED, AREA-02, and AREA-03. A status bar shows the IP address 192.168.1.9_SNMPP01--0000000000000000. The main display area shows UPS information: UPS information: Line mode (indicated by a green circle icon), Input information: 226.7V/50.0Hz, Output information: 229.5V/50.0Hz, and Battery information: 41.0V/100%. A dropdown menu is open under the Language option, listing the following languages: English (selected with a bullet point), French, German, Italian, Polish, Portuguese, Russian, Spanish, Ukrainian, Turkish, Czech, Chinese(Simplified), and Chinese(Traditional).

ANNEX -1

PC & UPS SHUTDOWN CONFIGURATION

PC SHUTDOWN IN NETWORK:

Software can shutdown multiple PC on network by sending remote commands from Viewpower Pro. Viewpower Pro must be installed at least in one PC of the network. This PC can be named as Master.

PCs required to shutdown can be named as slaves. These PCs must have installed Shutdown Wizard software. They do not require Viewpower PRO software,

If Master PC also requires to be shutdown, it must also have Shutdown Wizard software installed in addition to Viewpower PRO software.

If a shutdown command is sent to remote PC that does not has Shutdown Wizard installed, this PC will simply not shutdown.

As mentioned, at least 1 PC in network must have Viewpower PRO installed. This software must be configured to send remote commands to the network making reference to all IP addresses of PCs to be shutdown.

Shutdown commands are sent as a consequence of an event detected by Viewpower PRO. Once event is detected, it sends commands according to parameters configuration in EVENT ACTION and LOAD CONFIGURATION sections in the Master PC:

LOAD CONFIGURATION: In this section, user can configure IP address of those PC to be shutdown. Revise section **4.2 CONFIGURACION >> LOAD CONFIGURATION**, on this manual.

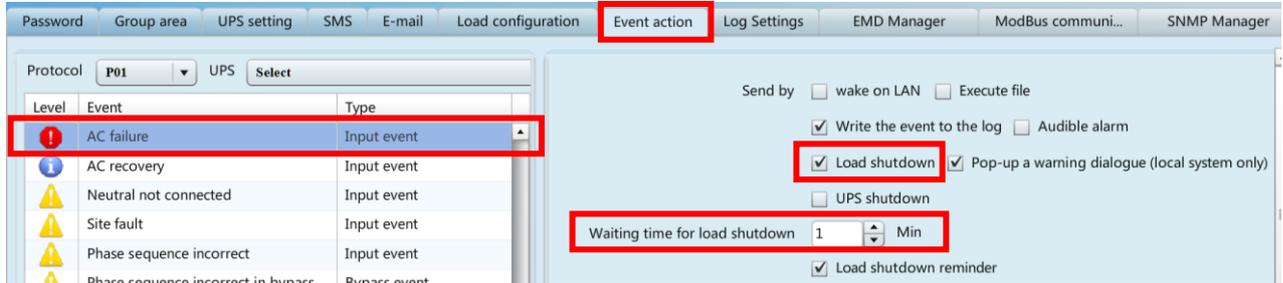
NOTE: To know the IP address of any PC, please revise information at ending of this section.

IP address of load	Enabled SSH	wake on LAN	Power-off option	File to execute when shutting down	Waiting time for load shutdown	When a scheduled	Execute file	Selected devices
192.168.1.3	No	No	Sleep mode		1	Yes		(192.168.1.9_P01_

EVENT ACTION: In this section, user can select the event that will generate shutdown command and its related parameters. For deeper information, check section **4.2 CONFIGURACION >> EVENT ACTION**, on this manual.

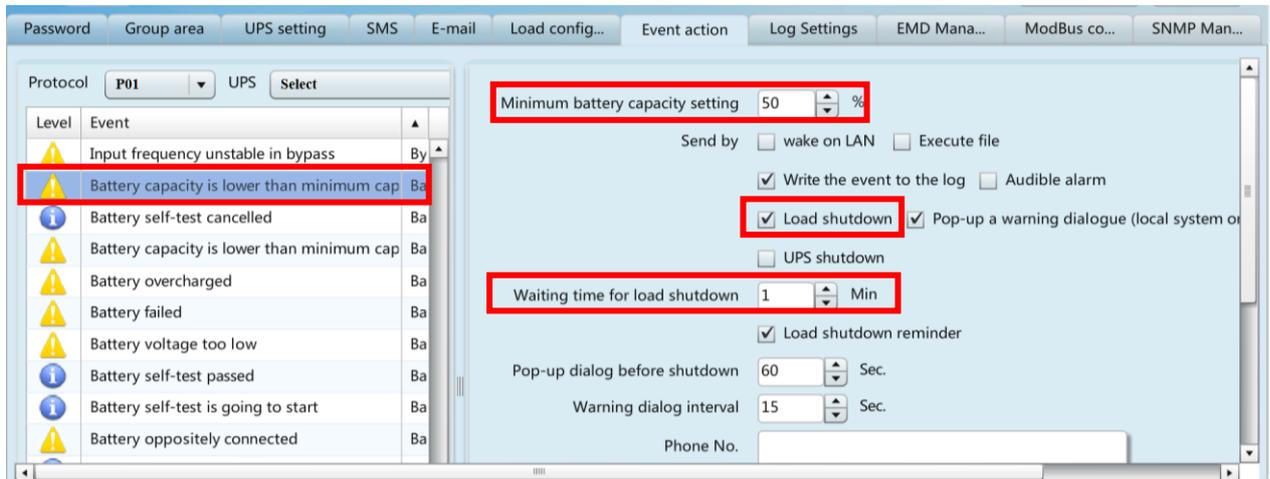
SHUTDOWN BY TIME:

Shutdown command can be sent after reaching an elapsed limit after event is detected. For example 1 minute after an AC FAILURE condition is detected:



SHUTDOWN BY BATTERY LEVEL:

Software can also send shutdown command when defined battery level is reached. For example when batteries level goes down to 50% of total maximum capacity. User just needs to select event named: "BATTERY CAPACITY IS LOWER THAN MINIMUM" and define battery level in % that will trigger shutdown command. In below image software has been configured to send command when 50% is reached. When this level is reached, software will send command to PC in case LOAD SHUTDOWN has been marked.



NOTE:
HOW TO KNOW IP OF MY PC:

In windows IP address can be consulted by Control Panel. Select Network section and double click on the network adapter in use. Press DETAILS option to list IP address related to IPv4.

IP can also be read by cmd.exe command line of the system.

Run “**cmd.exe**” and then execute command “**ipconfig**”.

This command will list information for all network adapters available. Please take note of IPv4.

```
C:\Users\JP12>ipconfig

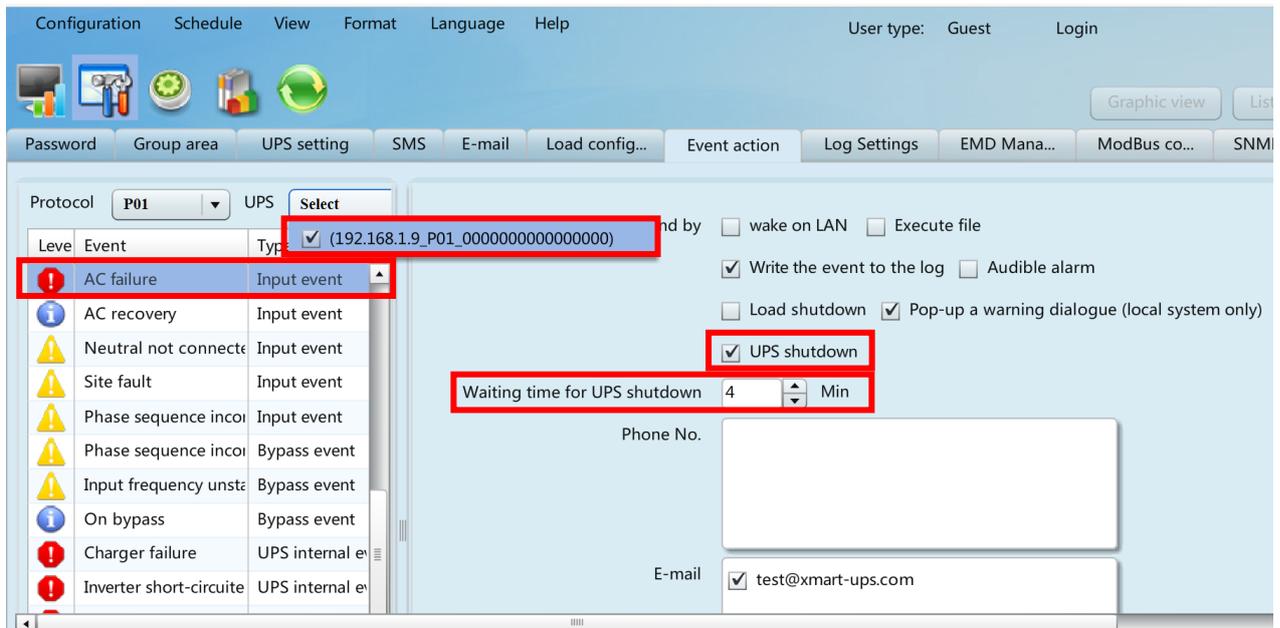
Adaptador de Ethernet Conexión de área local:

    Sufijo DNS específico para la conexión. . . :
    Vínculo: dirección IPv6 local. . . . . : fe80::8c05:ded7:d334:e351%22
    Dirección IPv4. . . . . : 192.168.1.3
    Máscara de subred . . . . . : 255.255.255.0
    Puerta de enlace predeterminada . . . . . : 192.168.1.1
```

UPS SHUTDOWN:

UPS also can receive shutdown command from software based on waiting time.

User must select event that will generate this command and then mark all UPS available. UPS shutdown option must be also marked. Then a waiting time must be configured as described in below image (5 minutes).



Shutdown command for any UPS can be related to Battery event, for example: BATTERY CAPACITY IS LOWER THAN MINIMUM, as explained in previous section of this manual. User only needs to select this kind of event and configure it accordingly.

For deeper information we suggest to revise section 4.2 of this manual.

IMPORTANT:

If selected event disappears with enough time before shutdown command has been sent, shutdown process will be cancelled. For example, if software has been configured to shutdown UPS 5 minutes after detecting AC FAILURE event but AC main service comes back 2 minutes before sending shutdown command, software will reset event to inform UPS to eliminate shutdown action. If AC service is reestablished just few seconds before shutdown is completed, probably software will not have enough time to detect new event and inform UPS to stop shutdown process.

On the other hand, if selected event was configured to shutdown PC where software is installed and event is reestablished after PC has been shut down, there will be no way to warn UPS to stop shutdown process since PC is already powered off.

ANNEX – 2

SNMP MANAGER

SNMP MANAGER is an auxiliary software that allows performing some service activities like:

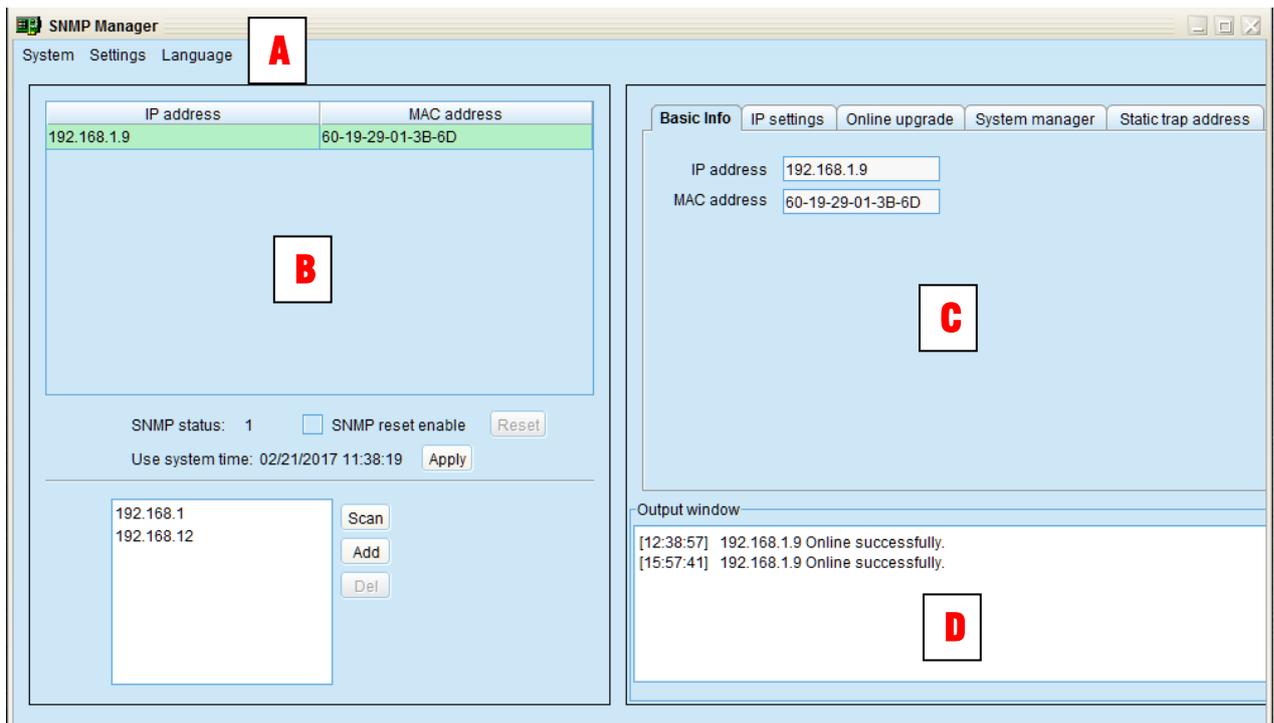
- Searching of SNMP card in the network based on its IP
- Configuring IP address and IP type for SNMP cards (DHCP or Static)
- Upgrade SNMP card firmware
- Password modification for SNMP cards
- Configuring TRAP IP and communication port

You can run SNMP Manager if you have downloaded it from XMART service center or you can simply right click on orange power plug:



SNMP MANAGER has 4 main areas:

- A. Functions Menu:** Navigation menu.
- B. SNMP Devices:** List all XMART SNMP cards in network.
- C. Configuration:** Configuration functions for SNMP cards.
- D. Results:** Shows results and options for each function.



SNMP DEVICE LIST

As soon as SNMP manager opens, it does an automatic scan to find all available SNMP cards in the network.

Scan.

You may also do a manual search of specific IP address by entering the IP range 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.

Delete.

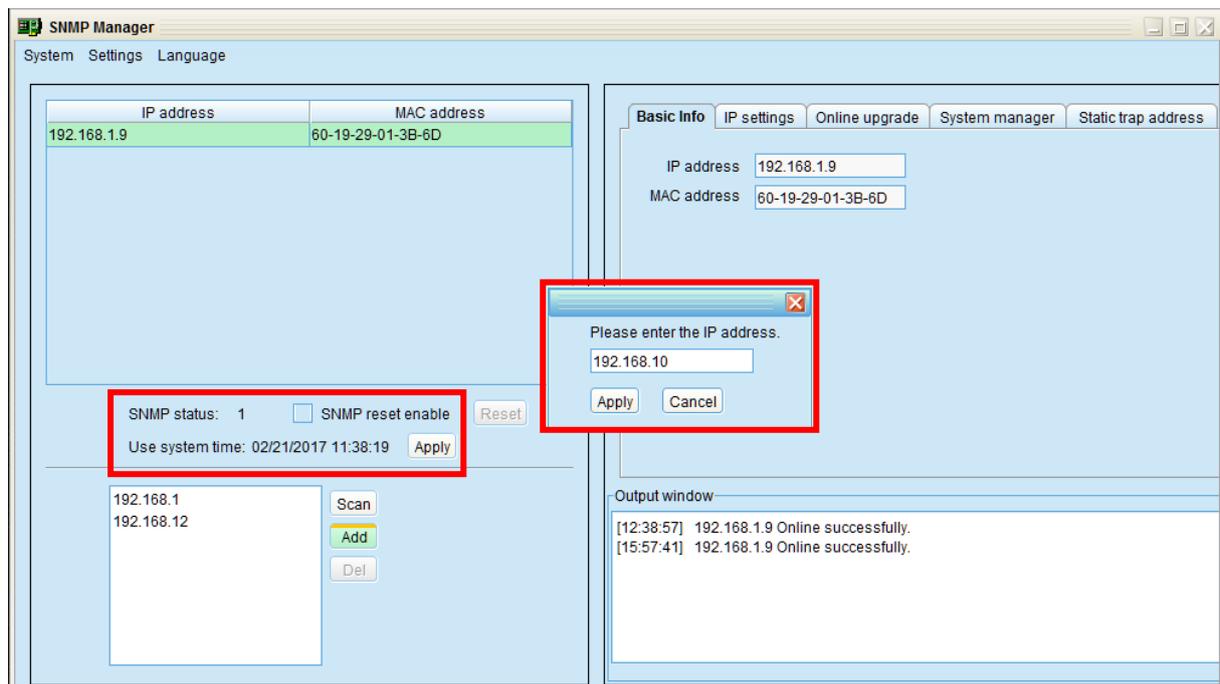
You may select IP address from the list and remove it by clicking “Del” button.

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.

Use system time.

If “Use system time” is selected, the SNMP card will apply PC system time.



SNMP MANAGER.

FUNCTIONS.

SYSTEM

Login.

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

12345678

Step 1: Select System >> Login

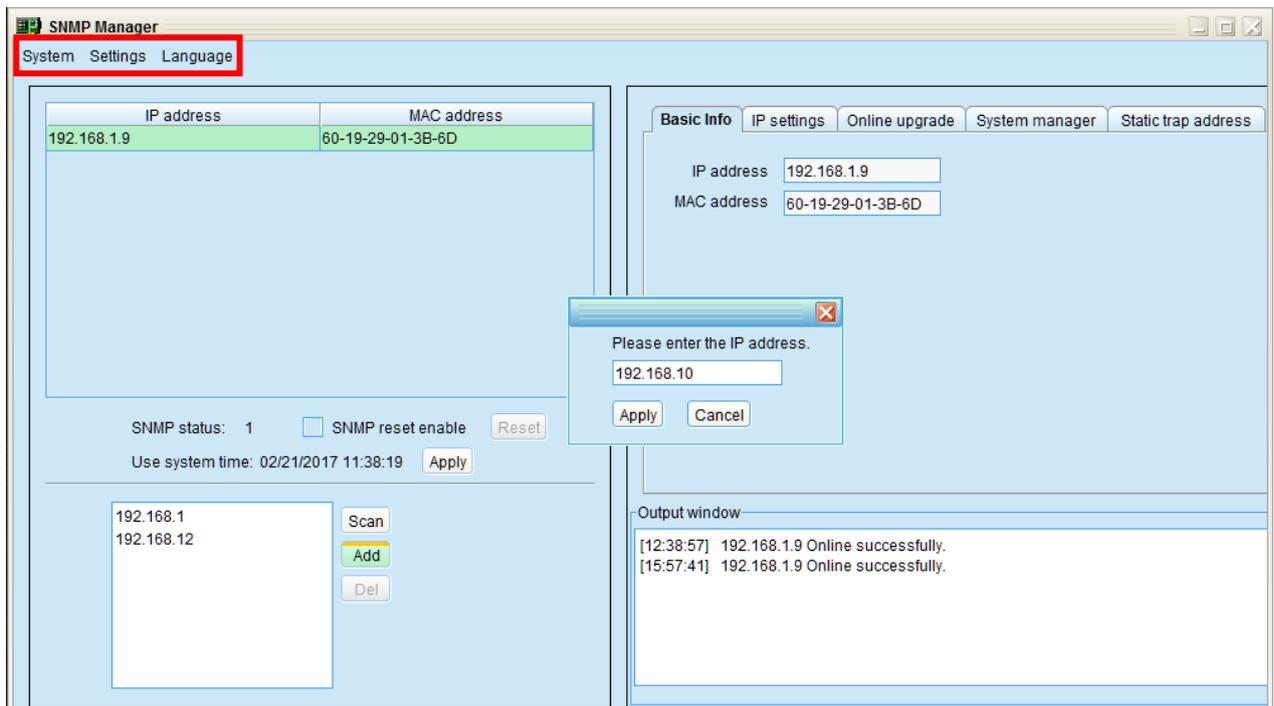
Step 2: Enter default password and then click "Login" button. Or click "Cancel" to cancel login.

Logout.

Clear all currently saved passwords.

Quit.

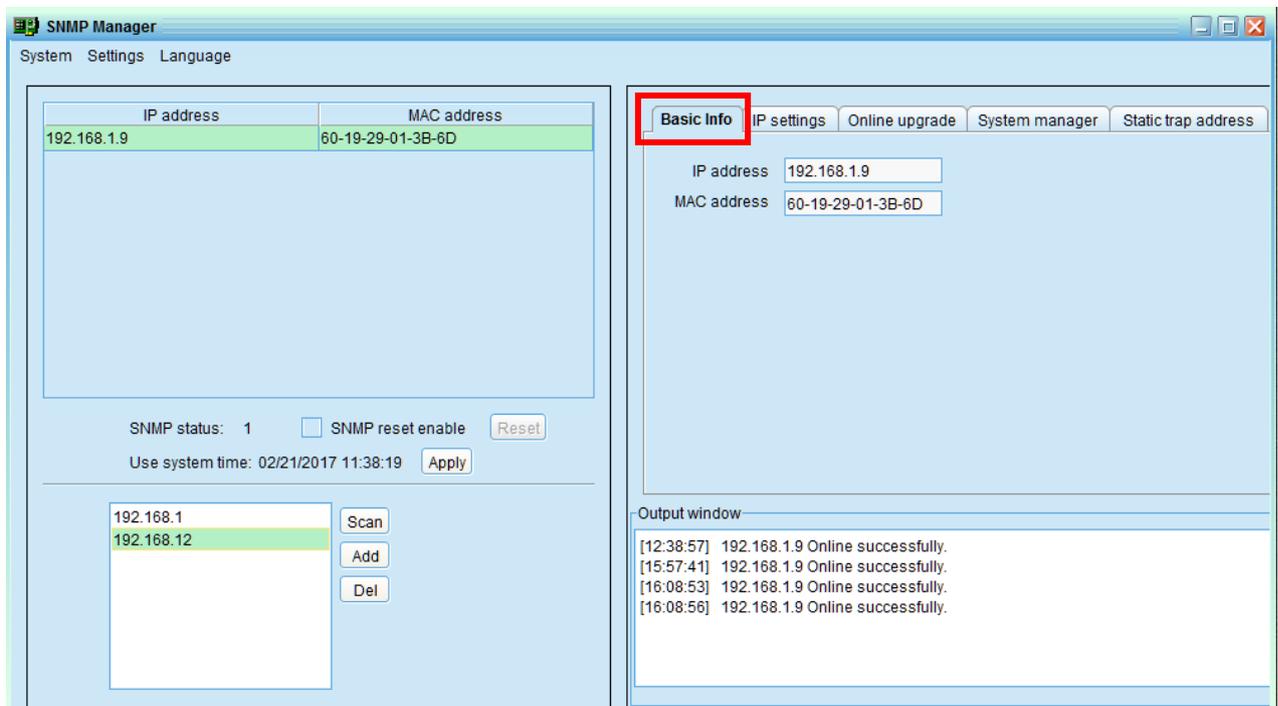
Select "Quit" to exit SNMP Manager.



SETTINGS.

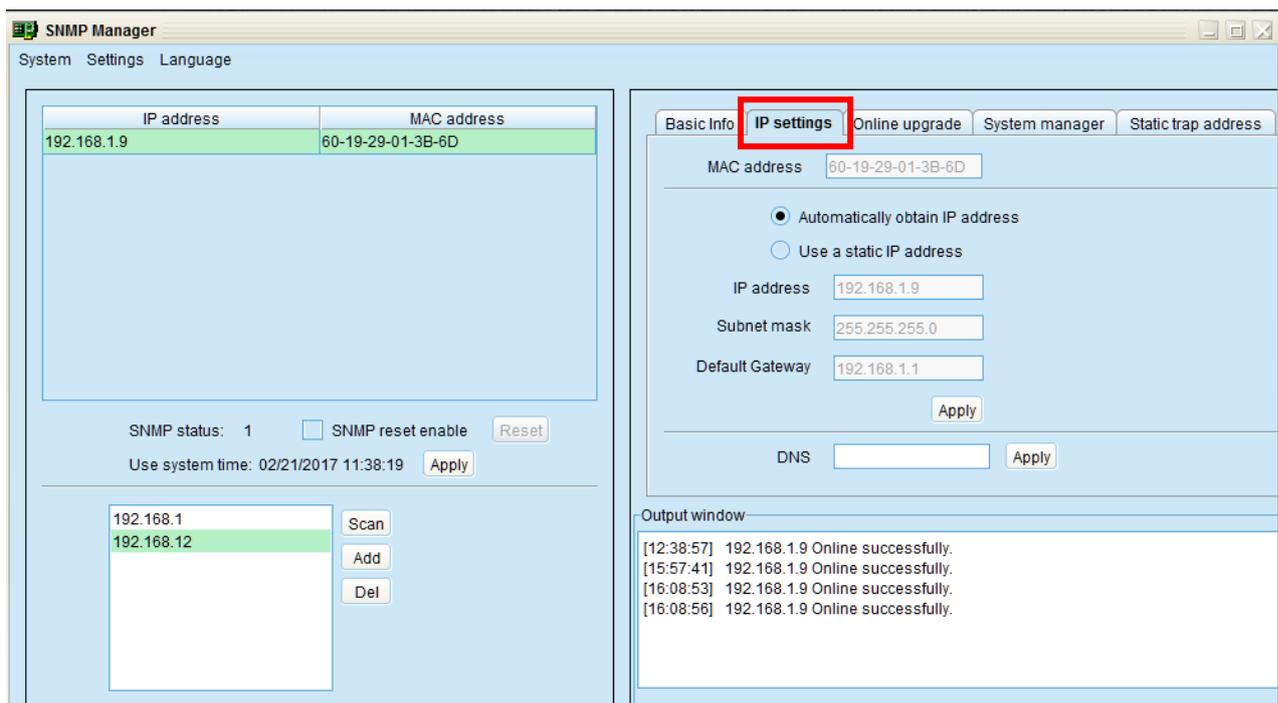
BASIC INFO.

User can manually enter basic information of SNMP cards such as UPS name, Address, and Note for verification.



IP SETTINGS.

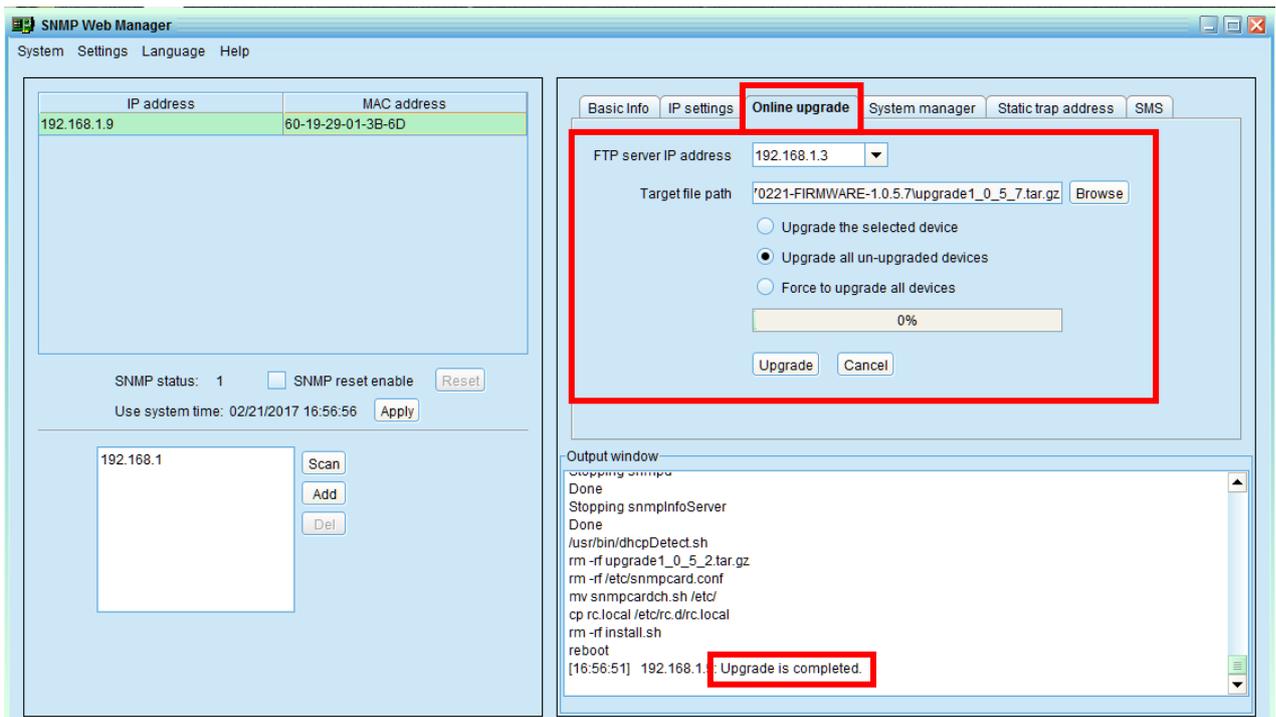
It allows IP configuration for the SNMP card. IP can be configured as DHCP (automatically obtain IP) or Static.



FIRMWARE UPGRADE.**IMPORTANTE:**

This process must be performed by service personnel only.

Before starting upgrading process is mandatory to disable all firewalls in the PC from download will be done. If firewalls are not disabled, downloading process could be interrupted. Sometimes this kind of interruptions can cause a permanent damage in the card.

**PROCEDURE:**

Make sure all firewalls are disable.

Select ONLINE UPGRADE tab.

Write IP of the PC where download will be done from

Search firmware file by BROWSE key

Select type of upgrade:

- Only in selected card:
- All cards not upgraded in the network
- All cards in the network (already upgraded or not)

Press UPGRADE key

If you have not logged in as administrator previously, you will be asked for the password. Introduce: 12345678

Confirm again.

When process ends, results window must show a message like this:

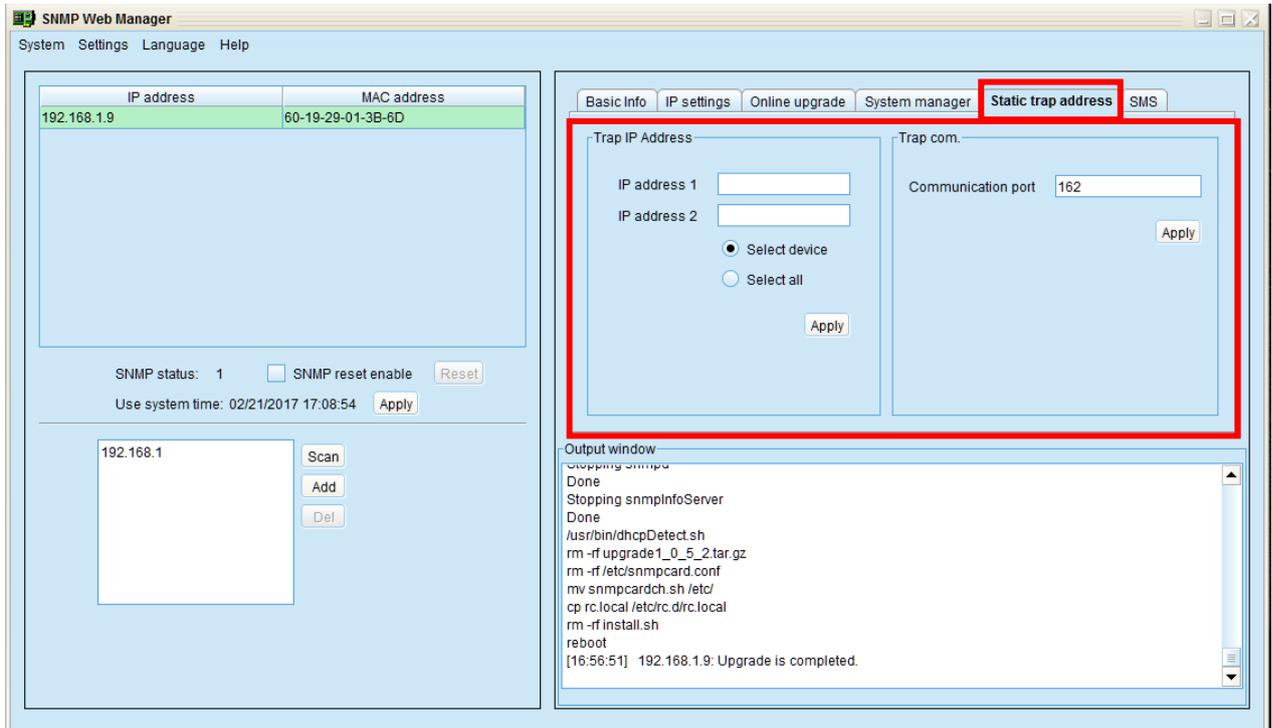
“UPGRADE IS COMPLETE”

If download cannot be done, results window will show up to 5 attempts for upgrading and a final message indicating upgrade failure. Check if all firewalls are disable. Check if network is working OK.

STATIC TRAP ADDRESS.

ONLY for service personnel.

You may configure two static trap addresses and change trap port in SNMP Manager. The default trap port is 162.



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.

ANEXO -3

COMMUNICATION PORT 162

This software uses port 162 as default to communicate with SNMP card of the UPS. Sometimes firewalls could be blocking this port. Other times, other software could be using same port 162. In any of these 2 situations, Viewpower Pro will have problems to communicate with UPS card.

To know if port 162 is being used by another software, user could revise it from the system command line of the Operating System.

Before doing this procedure make sure Viewpower PRO is stop. If not, results will not determine if port 162 is being used by other software or by Viewpower Pro.

Viewpower PRO can be stop by command "**sc stop upspromonitor**" from command line.

Run cmd.exe as administrator by right clicking: run as administrator:

Then execute command:

```
C:\WINDOWS\system32>sc stop upspromonitor
```

```
SERVICE_NAME      : upspromonitor
        TYPE        : 110  WIN32_OWN_PROCESS  (interactive)
        STATUS      : 3   STOP_PENDING
                    (NOT_STOPPABLE, NOT_PAUSABLE,
```

Then you should confirm if software is stopped or not. Line command must reply with message **STOPPED**

```
C:\WINDOWS\system32>sc query upspromonitor
```

```
SERVICE_NAME      : upspromonitor
        TYPE        : 110  WIN32_OWN_PROCESS  (interactive)
        STATUS      : 1   STOPPED
```

Now you can proceed to check if port 162 is being used with command netstat as follow. If port is not usedm system prompt will reply with blank line:

```
C:\WINDOWS\system32>netstat -an | find "162"
C:\WINDOWS\system32>
```

If port is in use, prompt will reply with message like this:

```
C:\WINDOWS\system32>netstat -an | find "162"
    UDP  0.0.0.0:162          *:*
    UDP  [::]:162                 *:*
```

In case other software is using same port 162, find it and stop it. If it cannot be stopped, you could change port number for SNMP card by using SNMP MANAGER as explained in previous ANNEX-2 of this manual.