

UPSCAPO Monitoring Software

User's Manual

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1. Installation & Settings

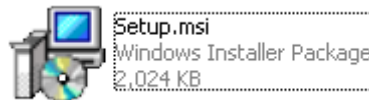
1.1. Note

- Operating OS: Windows 7 / Server 2012 / 10 / Server 2016.
- Other Software Conditions:
 - Windows Installer 3.0 and above.
 - .NET Framework 3.5 and above.
- Peripherals: Use either a serial port or USB.

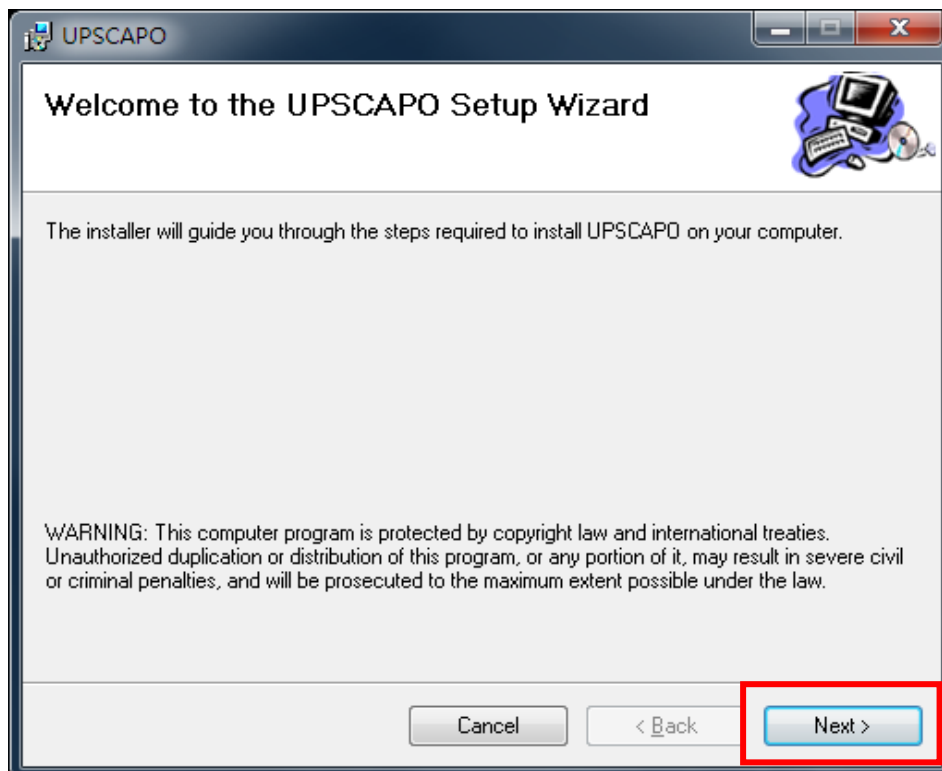
1.2. Installation Instructions

Step 1 Please login as an Administrator.

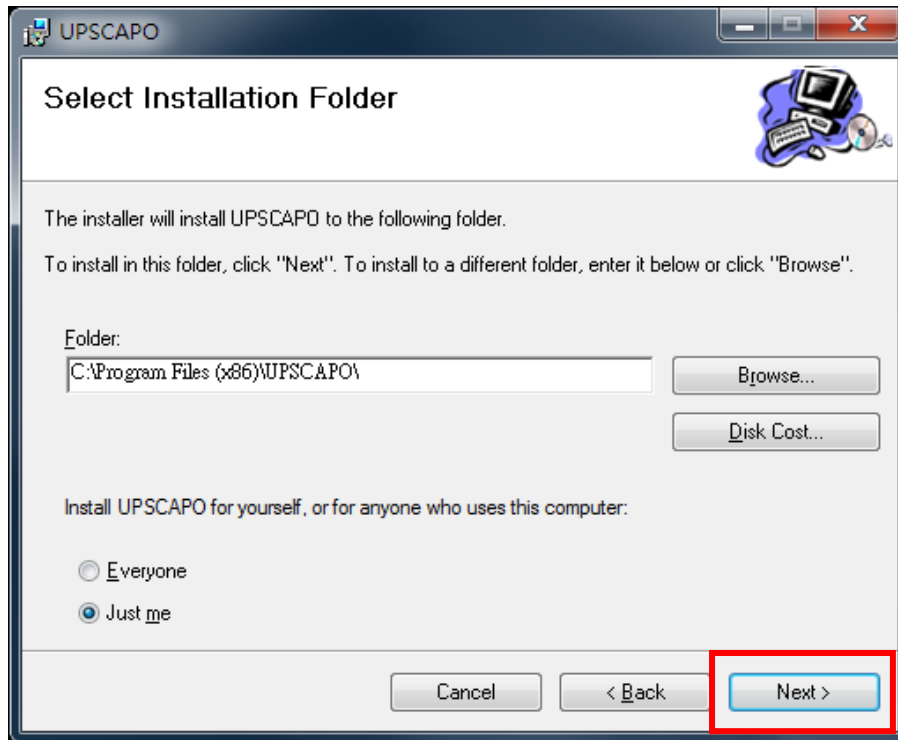
Step 2 Double click to execute "Setup".



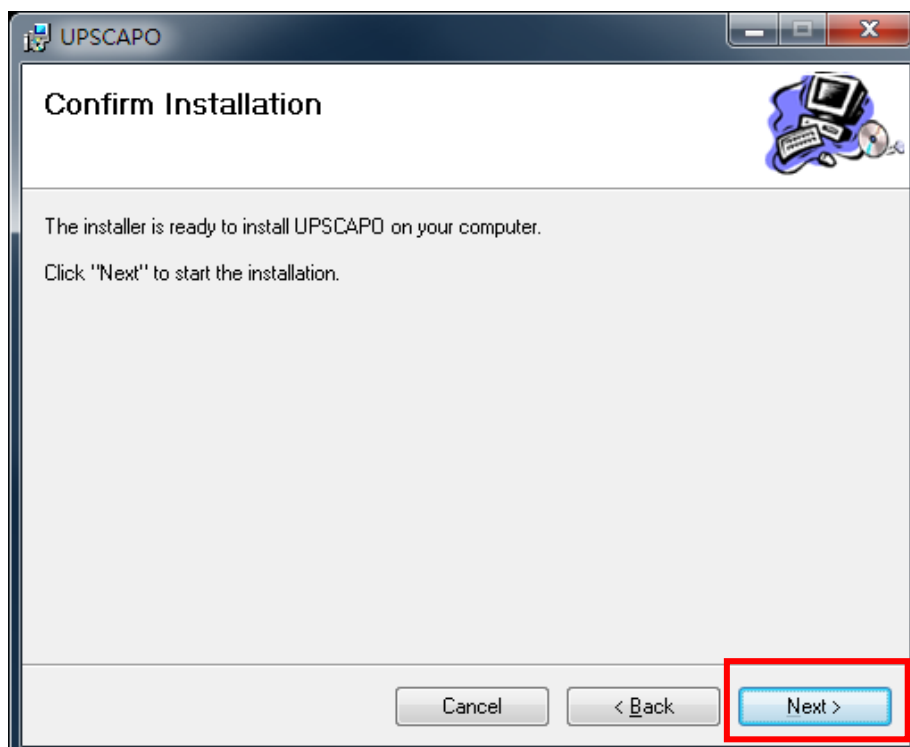
Step 3 Click "Next" to next step.



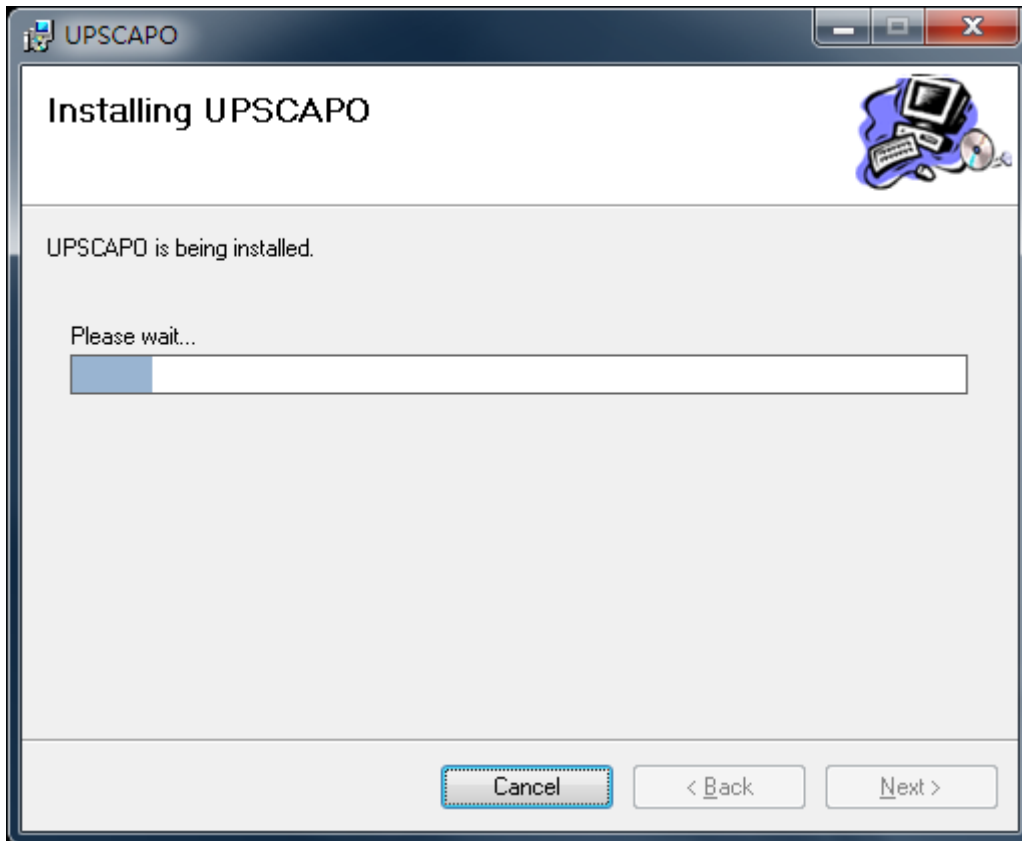
Step 4 Enter "Select Installation Folder" to select the desire location for UPSCAPO program. (Default: C:\Program Files(x86)\ UPSCAPO.) Choose the user (yourself or anyone) who uses this software. Click "Next" to next step.



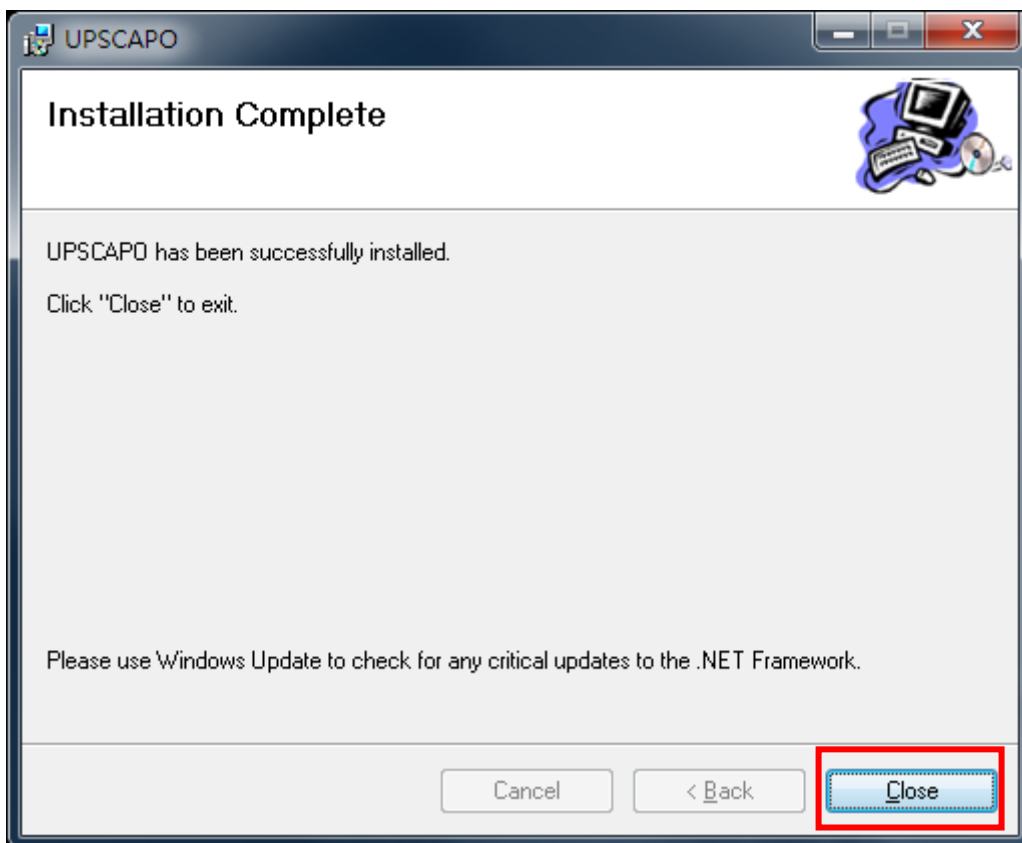
Step 5 Enter "Confirm Installation" to ensure the completed installation of UPSCAPO. Click "Next" to next step.



Step 6 Installing UPSCAPO program.



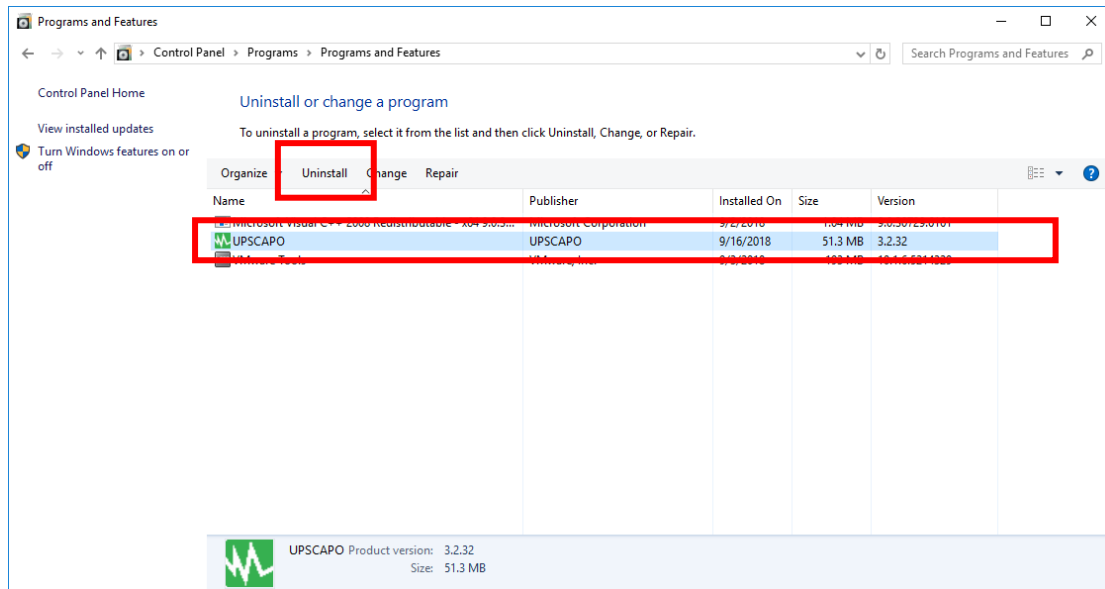
Step 7 Click "Close" to end the installation.



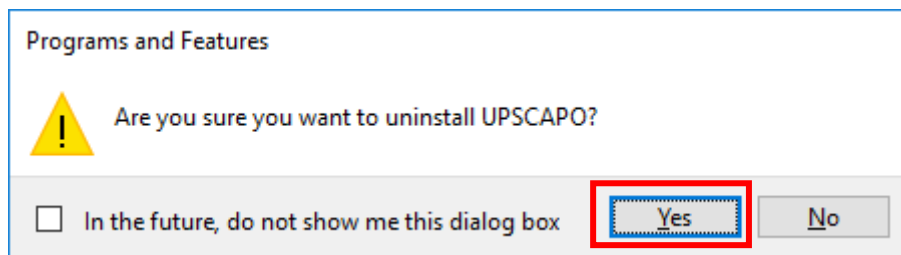
1.3. Instructions on Removing UPSCAPO Program

Step 1 Go to Windows Control Panel and select "Add or Remove Programs".

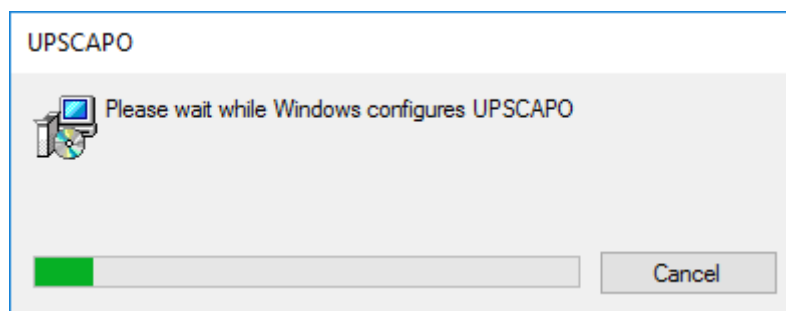
Step 2 Select "UPSCAPO" and click "Uninstall".



Step 3 In the page shown below, click "Yes" to confirm removal of the UPSCAPO or click "No" to cancel the removal.



Step 4 When the progress bar ends, the uninstallation is completed. UPSCAPO Icon will disappear from "Add or Remove Programs".



2. Function Descriptions

UPSCAPO program is user-friendly UPS monitoring software which reveals the status of the UPS via USB or RS232. It provided easy to read real time UPS parameters such as input/output voltage, frequency, UPS temperature, load percentage & battery capacity. These UPS parameters & status information are recorded and presented both graphically and numerically. The "Schedules" function of UPSCAPO allows user to preset various UPS commands to perform repetition of tasks automatically. In event of Power outage or abnormality, UPSCAPO Software is capable of automatically alerting user via Email. The following sections will provide detailed descriptions of these superior features of UPSCAPO Software.

2.1. Real-Time Information Monitoring Display

The screenshot displays the UPSCAPO software interface. At the top, a menu bar includes 'Control', 'UPS Settings', 'Logging', 'Schedules', 'Oscillograph', and 'About'. A red box labeled 'A. Tools Field' highlights the menu bar. Below the menu is a table with the following data:

UPS name	Input Voltage	Output Voltage	Input Frequency	Battery Capacity
UPS 1	231.8 (V)	231.8 (V)	50 (Hz)	100 (%)

The main interface area is titled 'UPS 1' and features a 'Power Flow' section with a 'Meter' tab. A blue box labeled 'B. Real Time Information' encompasses the central part of the interface. It includes a power flow diagram showing 'LINE' connected to 'UPS' and 'UPS' connected to 'LOAD'. The diagram also shows a battery icon. Key parameters are displayed as follows:

- Input Frequency: 50 Hz
- Input Voltage: 231.8 V
- Output Voltage: 231.8 V
- UPS Load: 0 %
- Battery Capacity: 100 %
- Temperature: 30.0 °C / 86.0 °F

Two information panels are visible on the right side:

- B1. Rating Information** (orange border):
 - Rated Voltage: 230 V
 - Rated Current: 3 A
 - Battery Voltage: 24 V
 - Frequency: 50 Hz
- B2. UPS Information** (green border):
 - Manufacturer: S.E.
 - UPS Model: 750VA
 - Firmware Version: GS1018AN

A. Tools Field

Function	Descriptions	Remarks
Control	This function include: Start Self-Test, Battery Discharge Test, Cancel Test, Start Shutdown, and Cancel Shutdown.	
UPS Settings	There are 4 parts in this item: "Import Setting", "Export Setting", "General Settings", And "E-Mail Configuration". 1. "Import Setting": Import the Settings file. 2. "Export Setting": Export the Settings file. 3. "General Settings": setting of Communications, Multi language, Setting of Shutdown. 4. "E-Mail Configuration": E-mail alert function set up.	
Logging	There are 2 parts in this item: "Event Log" And "Data Log". 1. "Event Log": Provides a list of records of events, command entries, alarms, etc. 2. "Data Log": Stores the UPS operating parameters monitored & recorded by the UPSCAPO.	
Schedules	Provides scheduling of to-do events and commands.	
Oscilloscope	Graphical representation of recorded UPS parameters.	
About	Record the version number and proprietor name of the UPSCAPO.	

B. Real Time Information

The details of UPS parameters will be shown in this area. (as shown in below picture)

This area includes: "Icon page", "Value page", "Rating Information", and "UPS Information".

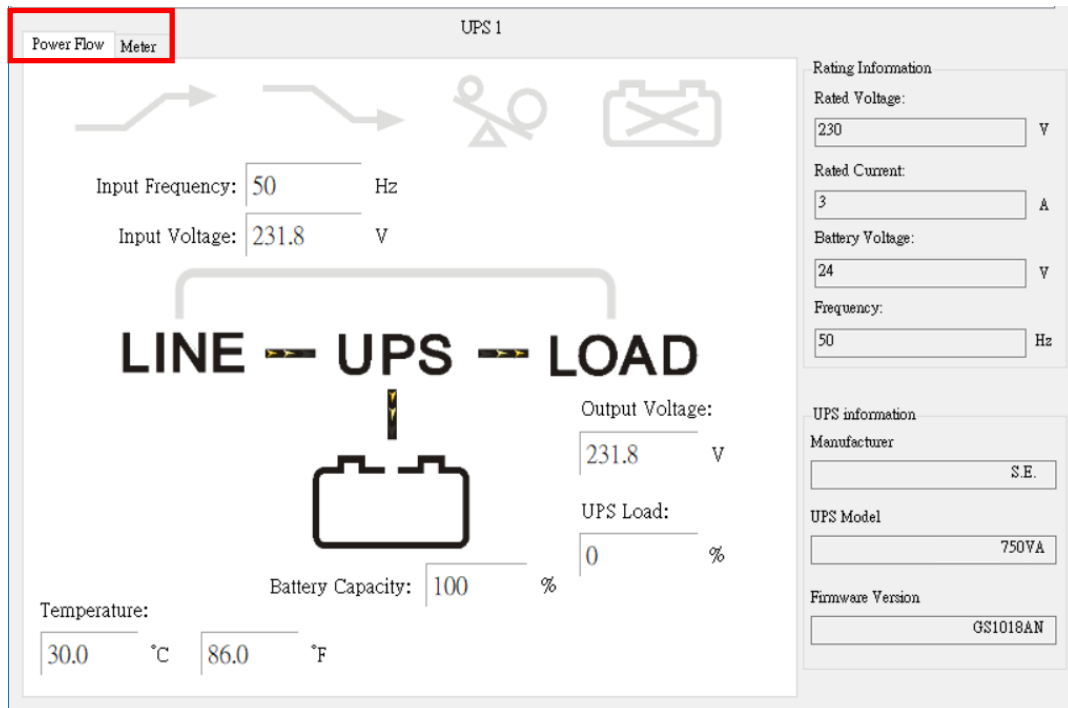
B1. Rating Information

Provides Power ratings of the connected UPS such as Voltage, Current, Battery Voltage and Frequency.

B2. UPS Information

Provides UPS information of the connected UPS such as Manufacturer, UPS Model, and Firmware Version.

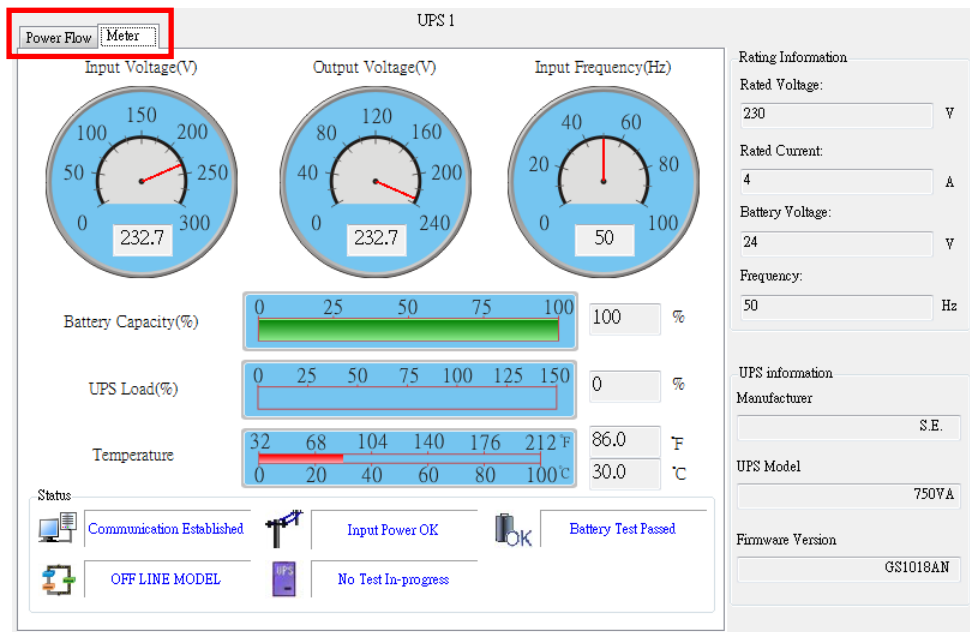
Power Flow page :



※ Symbols Description

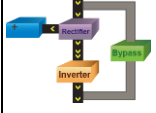
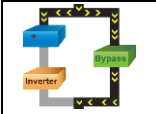




State	Symbols	Description	Remarks
Boost		Boost OFF	
		Boost ON	
Trim		Trim OFF	
		Trim	
Over Load		No Overload	
		Over Load	
Battery State		Battery Connected	
		Battery Error	
Battery State		Battery OK	
		Low Battery	
By Pass		Bypass OFF	Only for Online Model
		Bypass ON	

Meter Page:

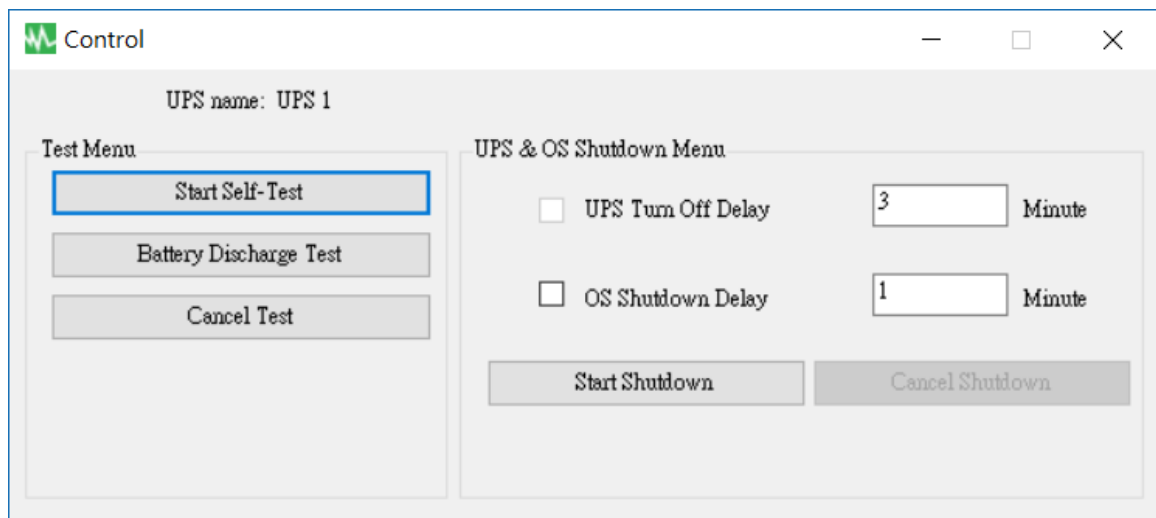


※ Symbols Description

State	Symbols	Description	Remarks
Connection State		Communication Established. This symbol represents the UPS is successfully connected to the Computer.	
		Communication Lost. Communication is lost between the UPS and the Computer.	
Power State		Power Supply OK.	
		Power Failure. The utility supply is absent or abnormal conditions.	
UPS Battery State		Battery Level OK.	
		Low Battery. UPS battery is discharged to Low Battery condition.	
		Battery Error.	

UPS Models		ON LINE Model.	
		OFF LINE Model.	
Test State		UPS No Test In-progress.	
		UPS Test In-progress.	
By Pass		By Pass mode. (2 Icon swap)	Only for Online Model
			

2.2. Control



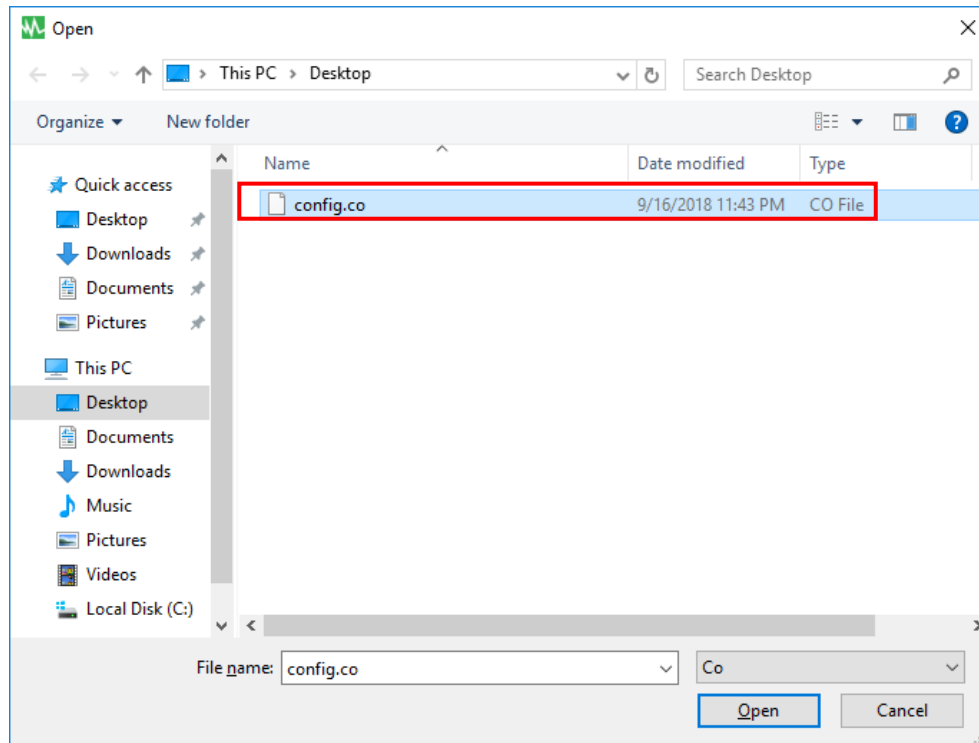
Provides commands for UPS to perform: Start Self-Test, Battery Discharge Test, Cancel Test, Start Shutdown, and Cancel Shutdown.

2.3. Import/Export Setting

2.3.1. Import Setting

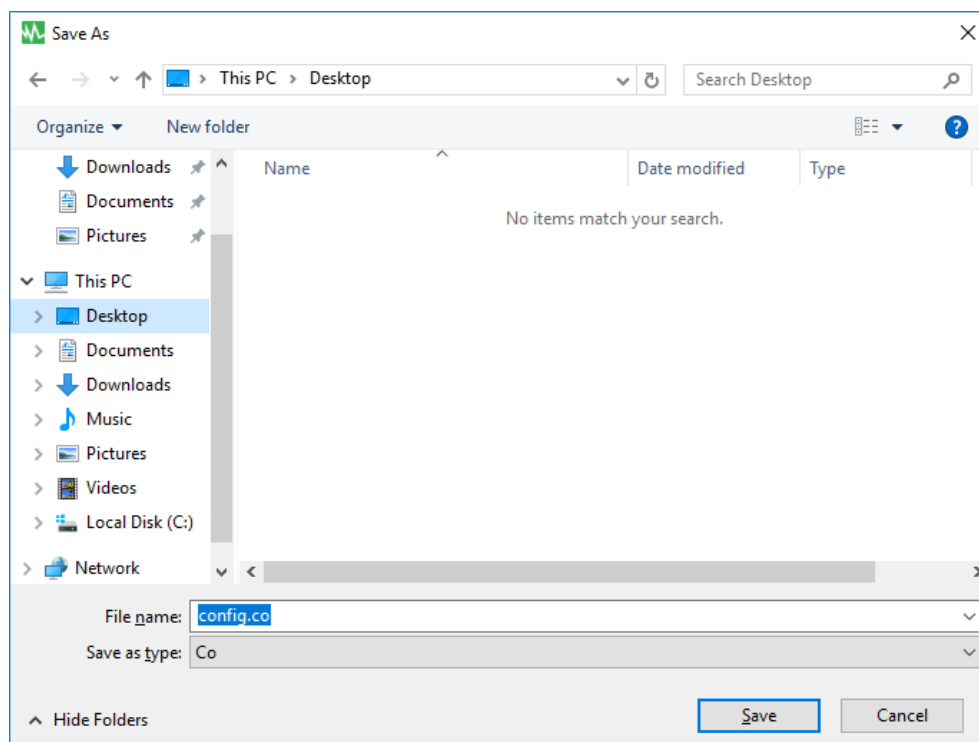
Select the Config file which you want to Import.

Click "Open" to Import the Setting.



2.3.2. Export Setting

Select Export Folder and click "Save" to save this Setting.



2.4. General Settings

Allows user to select & set the connecting Com port or Remote, UPS or OS shutdown, etc.

General Settings

Local Setting

Name: Protocol:

Communication Interface: Data Log Record:

Baud Rate: Maximum Record:

Com Port:

Remote Setting

Connect Local Machine
 Connect Remote Machine

IP:

Normal Setting

Language:

Days of data retention: (0: Never Delete)

Shutdown Setting

Enable ACPI Shutdown

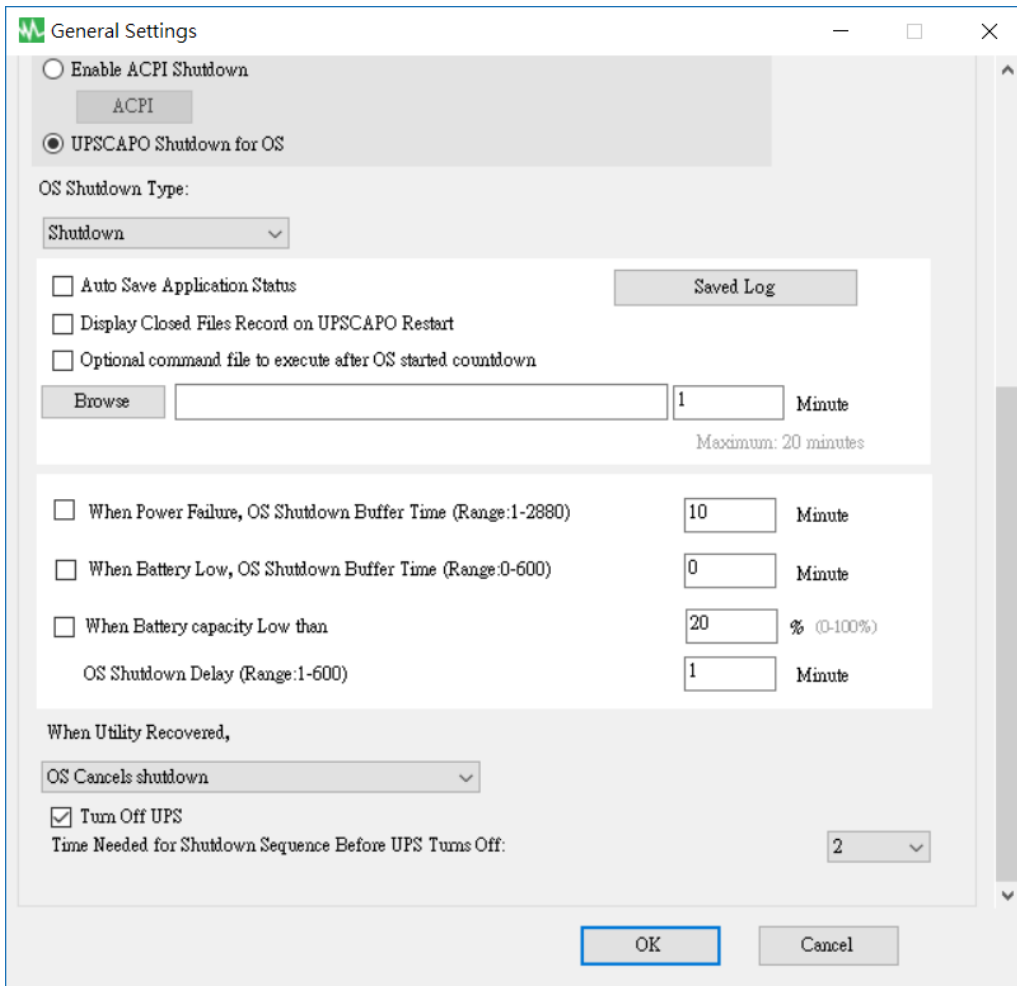
UPSCAPO Shutdown for OS

OS Shutdown Type:

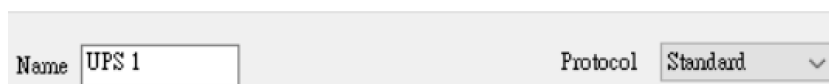
Auto Save Application Status

Display Closed Files Record on UPSCAPO Restart

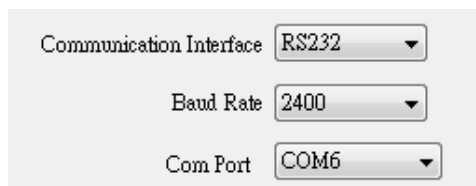
Optional command file to execute after OS started countdown



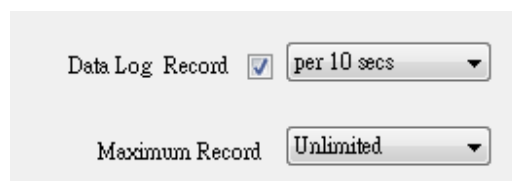
2.4.1. Enter the name of the unit which is shown on the Real Time Information Monitoring Display form, and to choose the Protocol type.



2.4.2. Setting Interface and Com Port of connection.



2.4.3. Data log record setting



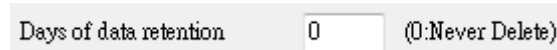
Select the item to enable the data log record, to set record interval time and to set data storage limit.

2.4.4. Language Selections



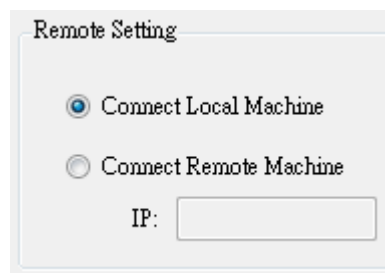
The UPSCAPO program provides various major languages for user selection. The initial startup language will be English.

2.4.5. Data log record setting



The period of time user intends to save the data in database. If the value is "0", means data in database never deletes.

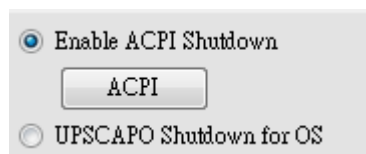
2.4.6. Remote Setting



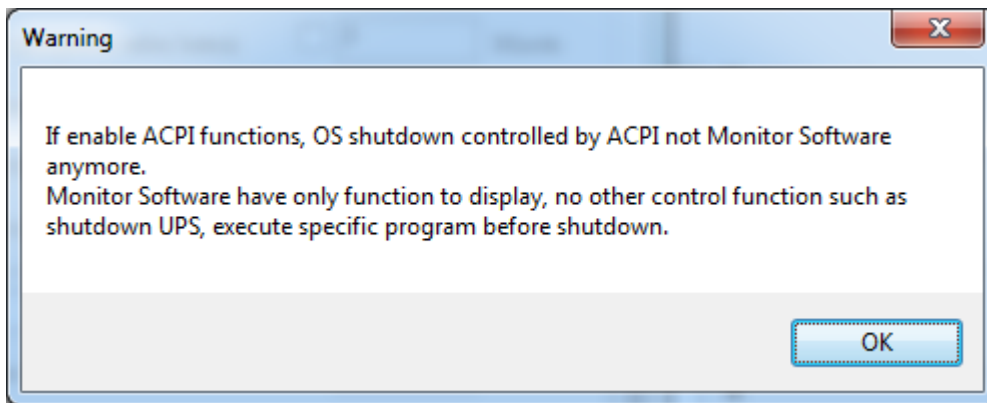
You can remotely connect to UPSCAPO installation from another computer. Please choose "Connect Remote Machine" and insert IP address. With "Connect Remote Machine" you cannot send commands like Scheduling or UPS turn off. But, you can shutdown the computer.

2.4.7. Enable ACPI Shutdown

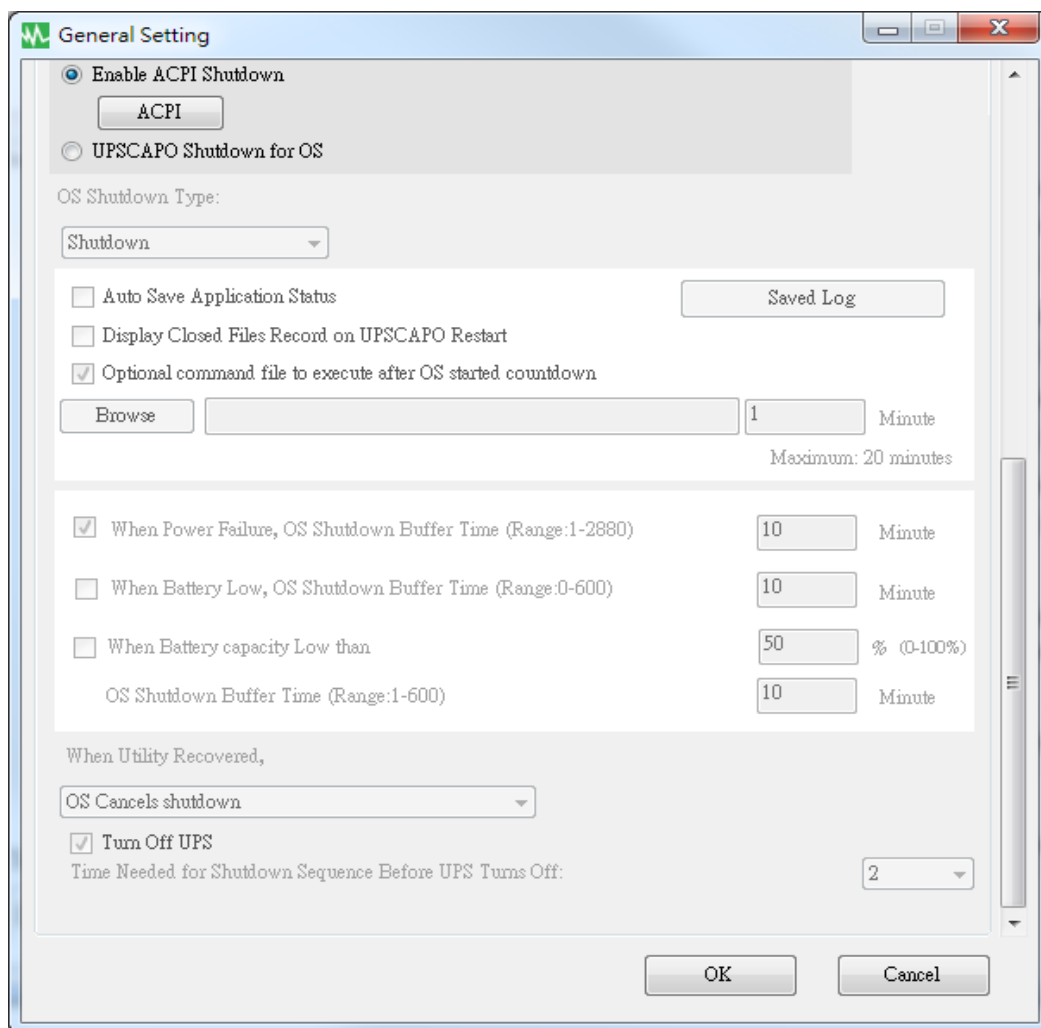
When Enable ACPI Shutdown is selected, it means all of the Shutdown functions will be controlled by ACPI feature.



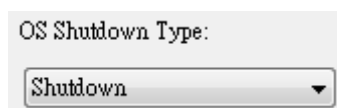
Pop up Warning Message.



All setting is depending on the ACPI setting value on the computer.



2.4.8. Shutdown Type



If the "Hibernate" is already activated on your computer OS, the user can choose "Hibernate" as one of shutdown type selections.

2.4.9. Auto save Application

Provides a function to save program when OS shutdown.

Auto Save Application Status Saved Log
 Display Closed Files Record on UPSCAPO Restart

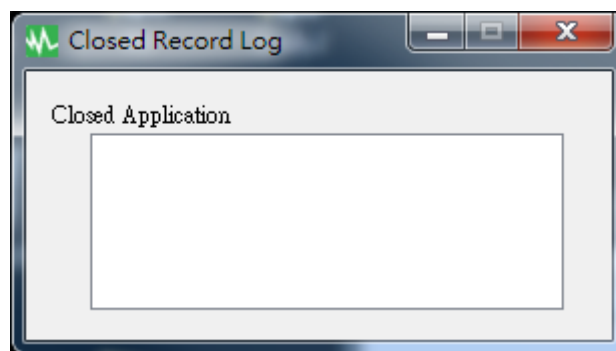
Auto close and save Application Files before OS shutdown.

AutoSave Application Status

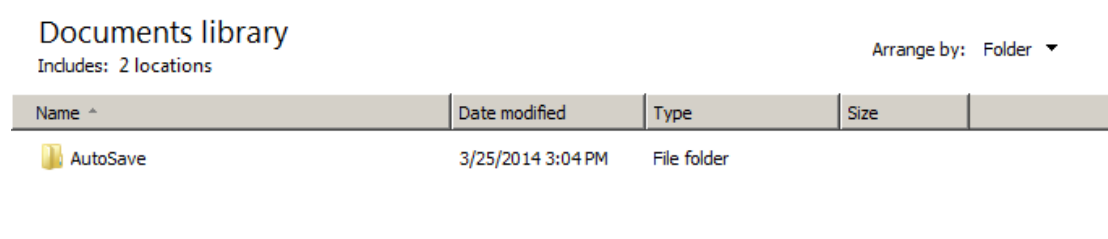
When restart UPSCAPO, Pop up the list of Closed Files.

Display Closed Files Record on UPSCAPO Restart

“Record Log”



Save AutoSave Directory under My Document.



2.4.10. Optional command file to execute after OS started countdown

Select a desire time to execute specific file automatically after OS started Shutdown. (20 min at Max.)

1 Minute
Maximum: 20 minutes

2.4.11. When Power Failure, OS Shutdown Buffer Time

When Power Failure, OS Shutdown Buffer Time (Range:1-2880) 10 Minute

Select a sufficient time for the computer OS to automatically shutdown when a power outage occurred. The selectable time is from 1 min. to 2880 min.

2.4.12. When Battery low, OS Shutdown Buffer Time

When Battery Low, OS Shutdown Buffer Time (Range:0-600) Minute

Select a desire time to automatically shutdown the computer OS before the UPS battery power is depleted. The selectable time is from 0 min. to 600 min.

2.4.13. When Battery capacity Low than, OS Shutdown Buffer Time

When Battery capacity Low than % (0-100%)
OS Shutdown Buffer Time (Range:1-600) Minute

Select a desire time to automatically shutdown the computer OS before the battery capacity is lower than xx %.The selectable time is from 1 min. to 600 min.

2.4.14. Action When Utility Recovery

When Utility Recovered,

When utility recovers, continue or cancel the countdown of OS shutdown.

2.4.15. Turn off UPS

Turn Off UPS
Time Needed for Shutdown Sequence Before UPS Turns Off:

Time needed for shutdown sequence before UPS turn off

2.5.E-Mail Configuration

The screenshot shows the 'E-Mail Configuration' dialog box. It is divided into several sections:

- A:** A red box highlights the 'Email Test' button.
- B:** A blue box highlights the account settings fields: User Name (UPSCAPO), User Email Address (XX@XXX.XXX), Password (*****), SMTP Server (XXX.XXX.XXX), SMTP Server Port (25), Receiver Name (User), Mail To (XX@XXX.XXX.XXX), and Subject (Hello).
- C:** An orange box highlights the 'Send Setting' section, which lists various events with checkboxes and corresponding message templates:

Event	Message Template
<input type="checkbox"/> Communication Established	Mail message UPS connect
<input type="checkbox"/> Communication Lost	Mail message UPS disconnect
<input type="checkbox"/> OS Shutdown Started	Mail message System shutdown
<input type="checkbox"/> Power Failed	Mail message Power failure
<input type="checkbox"/> Low Battery	Mail message Battery low
<input type="checkbox"/> Power Restored	Mail message Power restored
<input type="checkbox"/> UPS Shutdown Started	Mail message UPS shutdown
<input type="checkbox"/> Over Load	Mail message Over load
<input type="checkbox"/> Replace Battery	Mail message Battery weak
<input type="checkbox"/> UPS Self Testing	Mail message UPS test
- D:** A green box highlights the 'OK' and 'Cancel' buttons.

A. Sent Test :

Click to send a test message to confirm the settings are correct.

B. Account Settings :

Insert the User Name (Sender, e.g. UPSCAPO), User Email Address (select a sender email address specifically for this function), Password (the pass word of your email server), SMTP Server (insert SMTP server or IP address), SMTP Server port (port of SMTP Server), Receiver Name (Insert a user name who will be receiving the event message), Mail To (Mail address of receiver), and Subject (select a subject name to acknowledge the receiver).

Note : If you want to send email to more than 1 email address, you must use " ; " to separate email addresses.

C. Send Setting :

Click to select the desired Events to be broadcasted and their respective message contents (You may want to change and retype the Message contents to meet your requirement in English).

D. Save Setting :

Click "OK" to save & apply settings.

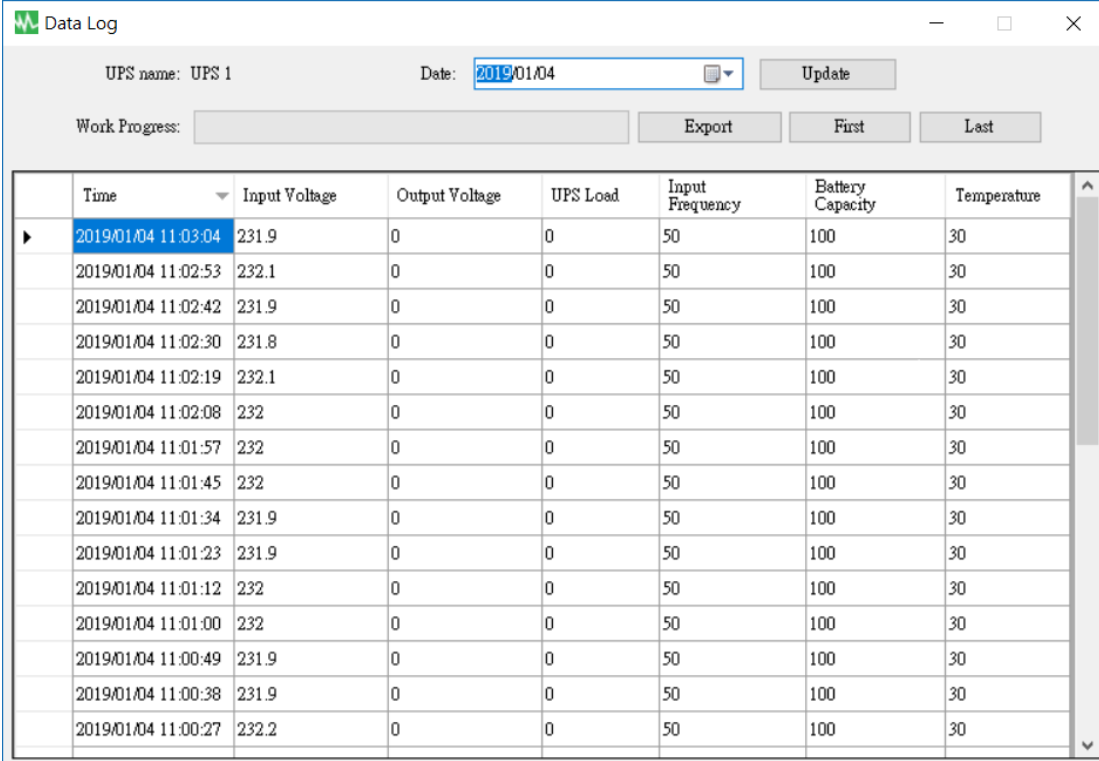
Note : Internet Firewall may not allow this E-Mailing function. If you have installed Firewall please allow this function.

2.6. Data Log

The “Logging” stores all UPS operating parameters monitored & recorded by the UPSCAPO program.

It facilitates the recorded data (includes Input Voltage, Output Voltage, Input Frequency, Battery Capacity, Temperature, UPS Load) for a more effective study of desired information.

The information in the Data Log can be exported to Excel File (.xls) or Text File (.txt).



The screenshot shows the 'Data Log' application window. At the top, it displays 'UPS name: UPS 1' and 'Date: 2019/01/04'. There are 'Update', 'Export', 'First', and 'Last' buttons. Below the controls is a table with the following data:

Time	Input Voltage	Output Voltage	UPS Load	Input Frequency	Battery Capacity	Temperature
2019/01/04 11:03:04	231.9	0	0	50	100	30
2019/01/04 11:02:53	232.1	0	0	50	100	30
2019/01/04 11:02:42	231.9	0	0	50	100	30
2019/01/04 11:02:30	231.8	0	0	50	100	30
2019/01/04 11:02:19	232.1	0	0	50	100	30
2019/01/04 11:02:08	232	0	0	50	100	30
2019/01/04 11:01:57	232	0	0	50	100	30
2019/01/04 11:01:45	232	0	0	50	100	30
2019/01/04 11:01:34	231.9	0	0	50	100	30
2019/01/04 11:01:23	231.9	0	0	50	100	30
2019/01/04 11:01:12	232	0	0	50	100	30
2019/01/04 11:01:00	232	0	0	50	100	30
2019/01/04 11:00:49	231.9	0	0	50	100	30
2019/01/04 11:00:38	231.9	0	0	50	100	30
2019/01/04 11:00:27	232.2	0	0	50	100	30

2.6.1. Setting UPS Name and date of data

Choose the “UPS Name” and “Date”, click “Update” to have the recorded information with respect to the selected date.



This image shows a close-up of the control panel from the Data Log application. It includes the text 'UPS name: UPS 1', a date input field containing '2019/01/04', and an 'Update' button.

2.6.2. Tools

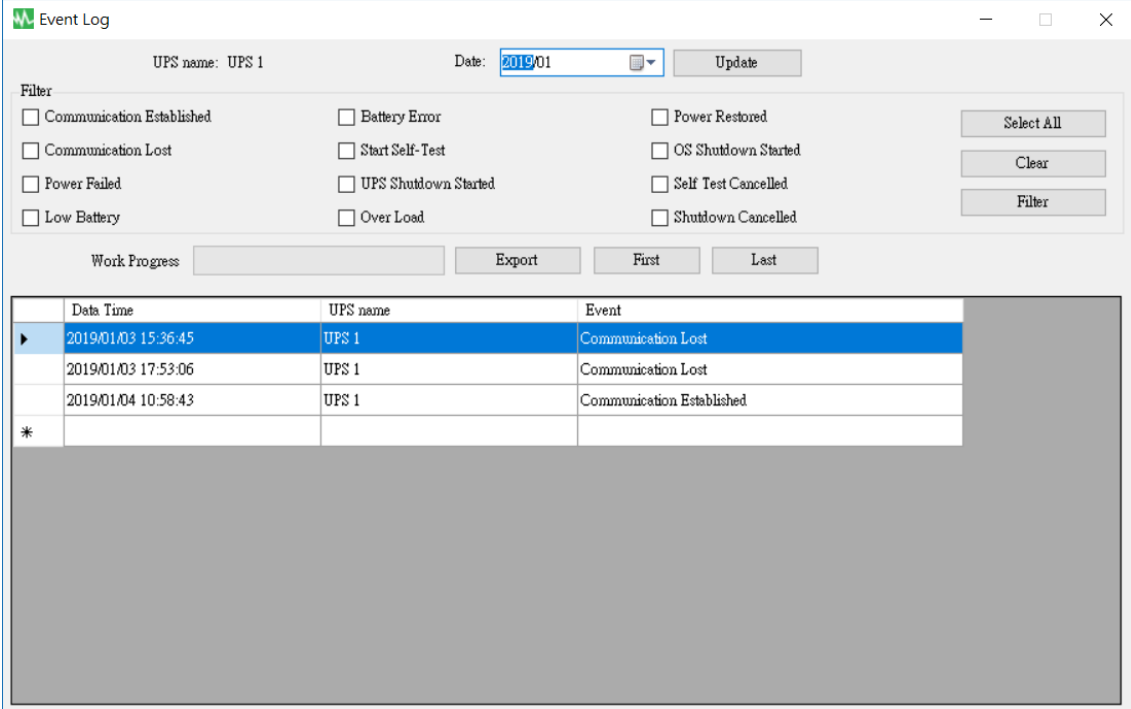
Work Progress:

	Time	Input Voltage	Output Voltage	UPS Load	Input Frequency	Battery Capacity	Temperature
▶	2019/01/04 11:03:04	231.9	0	0	50	100	30
	2019/01/04 11:02:53	232.1	0	0	50	100	30
	2019/01/04 11:02:42	231.9	0	0	50	100	30
	2019/01/04 11:02:30	231.8	0	0	50	100	30
	2019/01/04 11:02:19	232.1	0	0	50	100	30
	2019/01/04 11:02:08	232	0	0	50	100	30
	2019/01/04 11:01:57	232	0	0	50	100	30
	2019/01/04 11:01:45	232	0	0	50	100	30
	2019/01/04 11:01:34	231.9	0	0	50	100	30
	2019/01/04 11:01:23	231.9	0	0	50	100	30
	2019/01/04 11:01:12	232	0	0	50	100	30
	2019/01/04 11:01:00	232	0	0	50	100	30
	2019/01/04 11:00:49	231.9	0	0	50	100	30
	2019/01/04 11:00:38	231.9	0	0	50	100	30
	2019/01/04 11:00:27	232.2	0	0	50	100	30

- **Export** : Click to export the current data into "xls" or "txt" format.
- **First** : Click to go to the first recorded entry.
- **Last** : Click to go to the last recorded entry.

2.7. Event log

The “Event Log” provides a list of records of all the events & tasks to be performed by the program and those that had occurred on each day of the particular month. It provides a summary of the Utilities conditions and UPS testing results.



The screenshot shows the 'Event Log' application window. At the top, it displays 'UPS name: UPS 1' and 'Date: 2019/01' with an 'Update' button. Below this is a 'Filter' section with checkboxes for various events: Communication Established, Communication Lost, Power Failed, Low Battery, Battery Error, Start Self-Test, UPS Shutdown Started, Over Load, Power Restored, OS Shutdown Started, Self Test Cancelled, and Shutdown Cancelled. There are 'Select All', 'Clear', and 'Filter' buttons. Below the filter is a 'Work Progress' section with an 'Export' button and 'First' and 'Last' buttons. The main area contains a table with the following data:

	Data Time	UPS name	Event
▶	2019/01/03 15:36:45	UPS 1	Communication Lost
	2019/01/03 17:53:06	UPS 1	Communication Lost
	2019/01/04 10:58:43	UPS 1	Communication Established
*			

2.7.1. Setting UPS Name and date of data



This close-up shows the 'UPS name: UPS 1' and 'Date: 2019/01' fields, along with a calendar icon and an 'Update' button.

Choose the “UPS Name” and “Date”, click “Update” to have the recorded information with respect to the selected date.

2.7.2. Filter

Filter

<input type="checkbox"/> Communication Established	<input type="checkbox"/> Replace Battery	<input type="checkbox"/> Power Restored	<input type="button" value="Select All"/>
<input type="checkbox"/> Communication Lost	<input type="checkbox"/> Start Self-Test	<input type="checkbox"/> OS Shutdown Started	<input type="button" value="Clear"/>
<input type="checkbox"/> Power Failed	<input type="checkbox"/> UPS Shutdown Started	<input type="checkbox"/> Self Test Cancelled	<input type="button" value="Filter"/>
<input type="checkbox"/> Low Battery	<input type="checkbox"/> Over Load	<input type="checkbox"/> Shutdown Cancelled	

Please select or unselect the desired parameters by clicking on the parameters check box. Click "Filter" to have relevant information.

- **Select All** : Field box of all events will be ""
- **Clear** : Field box of all events will be ""
- **Filter** : Click "Filter" the data will show respectively.

2.7.3. Tools

Work Progress

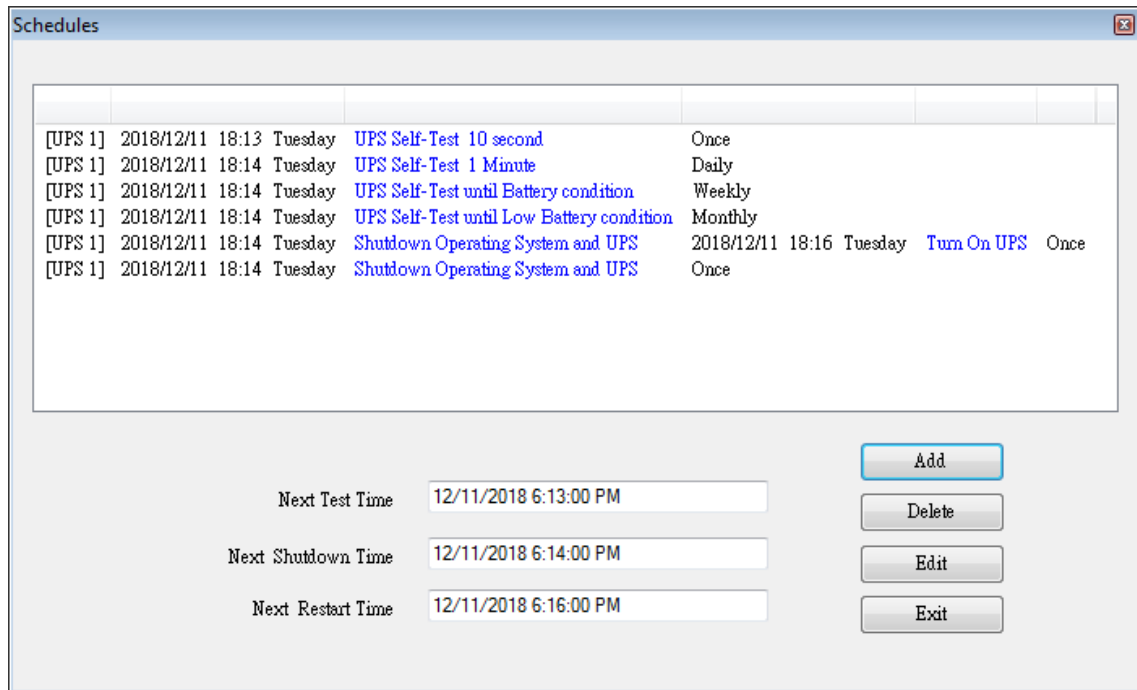
	Data Time	UPS name	Event
▶	2019/01/03 15:36:45	UPS 1	Communication Lost
	2019/01/03 17:53:06	UPS 1	Communication Lost
	2019/01/04 10:58:43	UPS 1	Communication Established
*			

- **Export** : Click to export the current data into "xls" or "txt" format.
- **First** : Click to go to the first recorded entry.
- **Last** : Click to go to the last recorded entry.

2.8. Schedules

“Schedules” allows user to create a desired routine to notify UPS to perform specific or repeatable tasks automatically at predetermined dates & times.

Please refer to the following instructions to create an entry :



- **Create** : Click "Add" to create a new task.
- **Edit** :
 - Step1.** Choose the task from the "Schedules" list, the highlighted blue bar is the chosen task.
 - Step2.** Set UPS and "Schedules" items.
 - Step3.** Click "Edit" to modify your selection.
- **Delete** : Choose the task from the "Schedules" list, the highlighted blue bar is the chosen task. Click "Delete" to delete the task you choose.
- **Exit** : Exit the "Schedules"

2.8.1. Add

Task

UPS name : UPS 1

Date : 2018/12/11 Tuesday

Time : 18:14

Frequency Once Daily Weekly Monthly

A

Control

UPS Self-Test 10 second

UPS Self-Test (1 - 99)

1 Minute

UPS Self-Test until Battery condition

20 %

UPS Self-Test until Low Battery condition

Shutdown Operating System and UPS

Turn On UPS

B

C Add Cancel

Task

UPS name : UPS 1

UPS & OS Shutdown : 2018/12/11 18:14

UPS Reboot : 2018/12/11 18:16

Frequency Once Daily Weekly Monthly

Control

UPS Self-Test 10 second

UPS Self-Test (1 - 99)

1 Minute

UPS Self-Test until Battery condition

20 %

UPS Self-Test until Low Battery condition

Shutdown Operating System and UPS

Turn On UPS

Add Cancel

Task

UPS name : UPS 1

UPS & OS Shutdown : 2018/12/11 18:14

Frequency Once Daily Weekly Monthly

Control

UPS Self-Test 10 second

UPS Self-Test (1 - 99)

1 Minute

UPS Self-Test until Battery condition

20 %

UPS Self-Test until Low Battery condition

Shutdown Operating System and UPS

Turn On UPS

Add Cancel

A. Execution Time :

- UPS Name : Choose the UPS.
- Date : Date Setting.
- Time : Time Setting.
- OS & UPS Shutdown : Set the shutdown time for OS & UPS.
- UPS Reboot : Set the restart time for UPS.
- Frequency: Set executes cycle of the "Schedules".

B. Control :

1. Self-test for 10 seconds.
 2. Self-test for 10 minutes.
 3. Self-test until under xx%
 4. Self-test until battery low.
 5. Shutdown the OS & UPS.
- ※ Check "Turn On UPS" Check box to Restart the UPS after Shutdown is completed in X Minutes.

C. Function : Add Or Cancel

2.8.2. Edit

Task

UPS name : UPS 1

A

Date : 2018/12/11 Tuesday

Time : 18:13

Frequency Once Daily Weekly Monthly

B

Control

UPS Self-Test 10 second

UPS Self-Test (1 - 99)

Minute

UPS Self-Test until Battery condition

%

UPS Self-Test until Low Battery condition

Shutdown Operating System and UPS

Turn On UPS

C Edit Cancel

Task

UPS name : UPS 1

UPS & OS Shutdown : 2018/12/11 18:14

UPS Reboot : 2018/12/11 18:16

Frequency Once Daily Weekly Monthly

Control

UPS Self-Test 10 second

UPS Self-Test (1 - 99)

Minute

UPS Self-Test until Battery condition

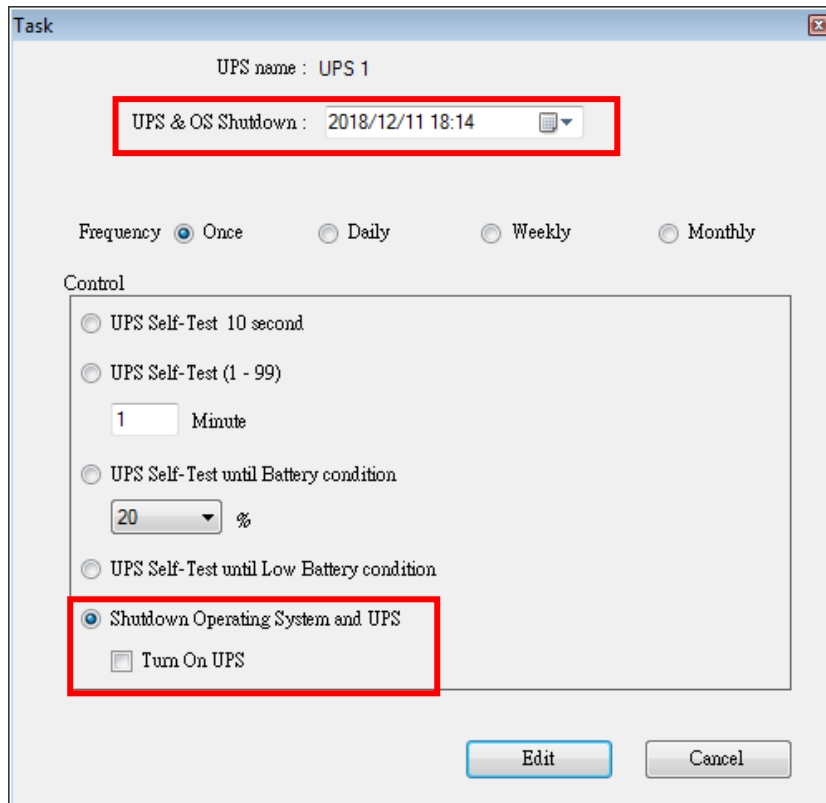
%

UPS Self-Test until Low Battery condition

Shutdown Operating System and UPS

Turn On UPS

Edit Cancel



A. Execution Time :

- UPS Name : Choose the UPS.
- Date : Date Setting.
- Time : Time Setting.
- OS & UPS Shutdown : Set the shutdown time for OS & UPS.
- UPS Reboot : Set the restart time for UPS.
- Frequency: Set execute cycle of the "Schedules".

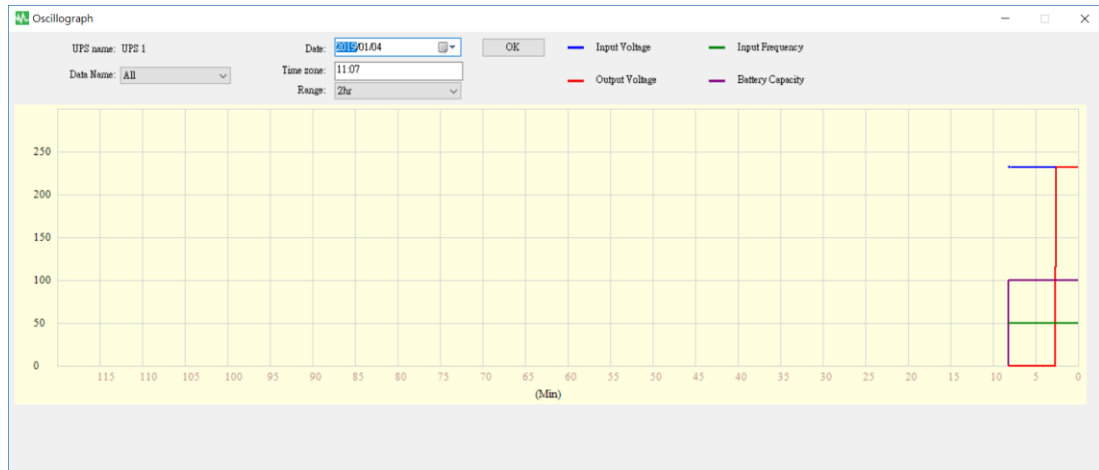
B. Control :

1. Self-test for 10 seconds.
 2. Self-test for 10 minutes.
 3. Self-test until under xx%
 4. Self-test until battery low.
 5. Shutdown the OS & UPS.
- ※ Check "Turn On UPS" Check box to Restart the UPS after Shutdown is completed in X Minutes.

C. Function : Edit Or Cancel

2.9. Oscillograph

The “Oscillograph” provides a summarized report of the recorded UPS operating data. The recorded data are represented in line curves to provide an easy to read summary of the Utility & UPS power quality.



2.9.1. Tools

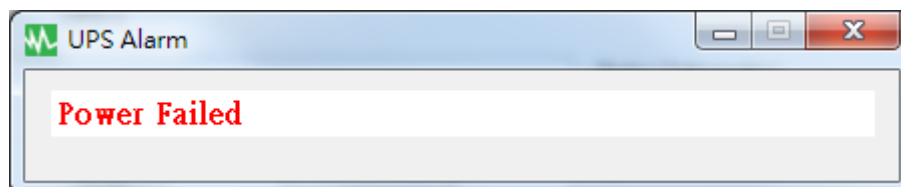
This image shows a detailed view of the configuration tools in the Oscillograph software. It includes the same controls as the screenshot above, but with a legend box below the main controls. The legend box contains the following items:

- Input Voltage (Blue line)
- Input Frequency (Green line)
- Output Voltage (Red line)
- Battery Capacity (Purple line)

- **UPS Name** : Choose the UPS which you want to show.
- **Date** : Set the date of data you want to show.
- **Data Name** : 5 items can be chosen: “ALL”, “Input Voltage”, “Output Voltage”, “Input Frequency”, “Battery Capacity”.
- **Time zone** : Choose the time interval.

2.10. Pop-up Alarms for Power Events

When UPS events occur, such as Power Failed, Low Battery, Battery Error and Overload, UPSCAPO will show Alarm window to alert user for appropriate action.



2.11. About

Click About to see the software version.

Click "Help" to read the user manual.

