

Power Manager II

Help

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1. Introduction

Powermanager II is a smart software, used for monitoring and controlling the UPS. It offers both local and remote monitoring functions over the network using COM or USB ports.

Powermanager II displays real-time UPS status parameters (e.g. input and output voltage, frequency, load, temperature and battery capacity) in both numerical and graphical form, helping users to monitor the power quality. You can remotely monitor your UPS over a network and manage your power system more efficiently at the same time. In the event of a power failure or when the UPS battery is nearly discharged, Powermanager II will automatically perform scanning functions. In addition to automatic file-saving and secure shutdown functions, Powermanager II has several alarm notification capabilities, such as automatic modem dialing, as well as, sending alarm messages via Email. Users can be assured that no data will be lost due to power outages and can immediately take appropriate steps to prevent this from happening again. The system records UPS performance history data for long-term monitoring purposes.

Moreover, Powermanager II has a Windows NT service feature that automatically launches the monitoring program and does not require the user to log on. The software is available in many languages, users can select the most familiar language for them in order to configure and operate the software.

Nowadays, with the rapid widespread use of the Internet, information is crucial. Computers and servers are used to receive and send information 24/7, so software that automatically manages UPS energy has become a necessity. Powermanager II with its full range of functions, will be the best partner for your UPS.

2. Powermanager II system requirements

Supported operating systems:

- MS-Windows® 98
- Windows® Me
- MS-Windows® 2000
- MS-Windows® XP
- MS-Windows® 2003
- MS-Windows® Vista

3. System settings

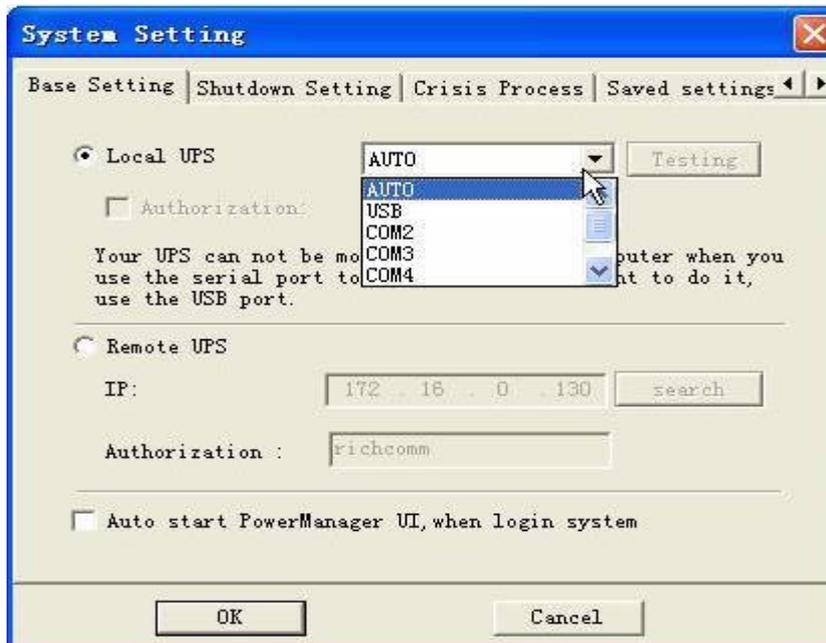
Basic settings

Clicking on the “**System settings**” option, the following interface window of “**Basic settings**” will appear:



This particular window is used to select monitoring modes and associated with them options for UPS monitoring.

1. Local UPS



Displayed above, local UPS search mode, which is enabled by default, provides users with 3 available options "AUTO", "COM", and "USB".

Selecting "AUTO", the software will automatically search for available modes of communication with the UPS.

Selecting "USB", will result in software, only searching for active UPS communication with the USB port. Here, users can also enable monitor of network authorization.

Available functions of Network Monitoring: One UPS can be monitored and managed by several computers, for the purposes of crisis management.

Conditions of Network monitoring: Each computer has to have Powermanager II installed, as well as, selected "Remote UPS" mode, in the basic settings of the software.

User has to keep in mind that, when performing PowerManager II monitoring, there must be a communication present, via the USB port, between the UPS and the computer.



Choosing the "COM" options, the software will only search for active communications between the COM ports and the UPS. Users must select the correct COM port, otherwise the device(s) will not communicate with software properly.



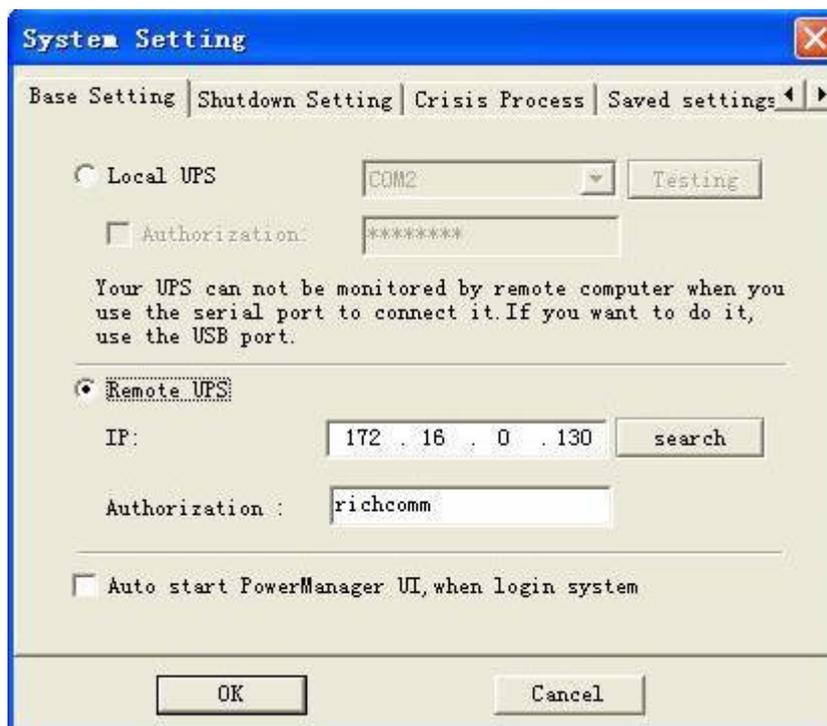
2. Test

Feature, by which the software can verify the communication mode, in order to check its correctness.

3. Remote UPS

UPS Mode, using which, only the remote UPS can be monitored (Feature cannot be used to monitor any local UPS).

First, user has to enter the IP address of the computer, where PowerManager II is already installed. After clicking "Search" button, the software will browse all IP addresses of computers, that have PowerManager II installed. When they are displayed, users can choose which PC(s) he/she intends to monitor. The authorization content must be the same as the one assigned to the monitored network, otherwise the operation will be unsuccessful.



4. Auto-start Powermanager II, after system launch

The following option, when selected, will automatically launch the Powermanager II software, so that window interface of this application will remind users of its features.

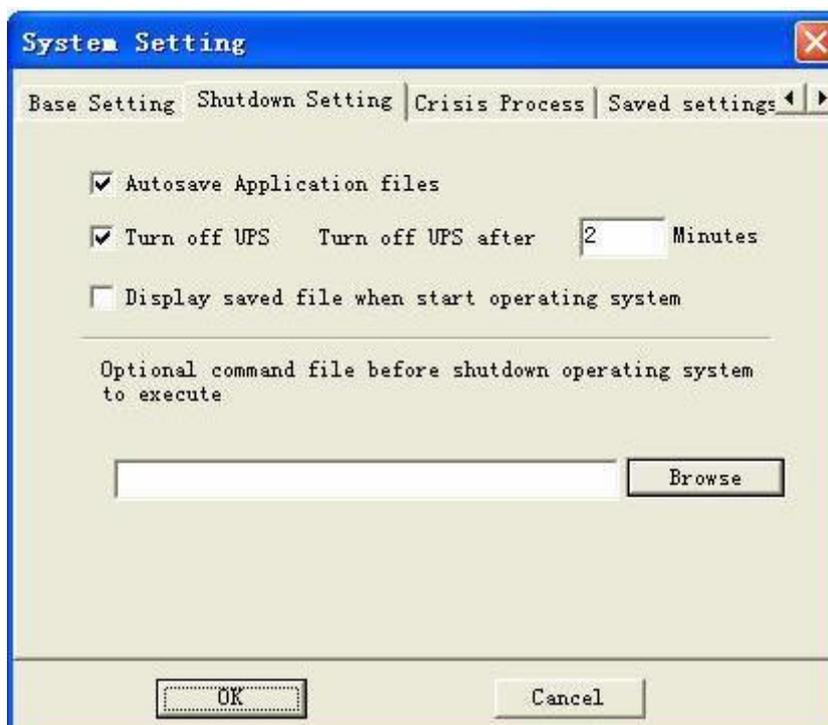


After selecting the desired options for the main interface, a confirmation window, like the one displayed below, will appear (Please note, that selecting the Powermanager II auto-start option, the software will launch along with system startup, so the following window will not be displayed.):



3.1 Shutdown settings

After choosing the "Shutdown Settings" tab (bookmark), the software will display the following window interface:



1. "Auto-save files" - It is recommended to enable this feature.

A) If this option is enabled, the software will save the files, while UPS is running, when the system will be shutdown.

B) If this feature is disabled, the software will not save files while UPS is running, when the system will be shutdown.

2. "Turn off UPS after X minutes"

The UPS shutdown time must be set accordingly to the UPS back-up duration and computer shutdown time.

A) If this option is selected, the UPS will be turned off within X minutes after shutting down the system.

B) If this option is unchecked, the UPS will not turn off after shutting down the system.

3. "Display saved files when operating system starts".

A) If this feature is enabled, a pop-up window will appear showing recently closed program and the location of saved files, after launching Powermanger II software.

B) If this feature is disabled, a pop-up window (with above mentioned, information) will not be displayed, after launching Powermanager II software.

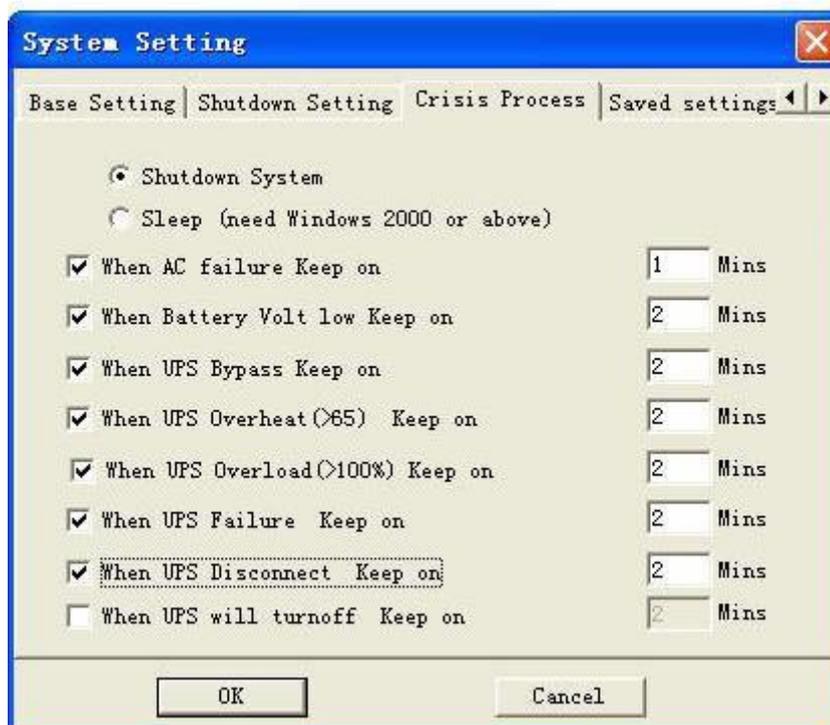
4. Optional command to execute before operating system shutdown.

If this feature is enabled, the software will turn on the selected program, according to the user command, before shutting down the system.

3.2 Crisis Management

After choosing the "Crisis management" tab, the software will display the following window interface. Users have two available operations to choose from - "Shutdown system" and "Sleep mode".

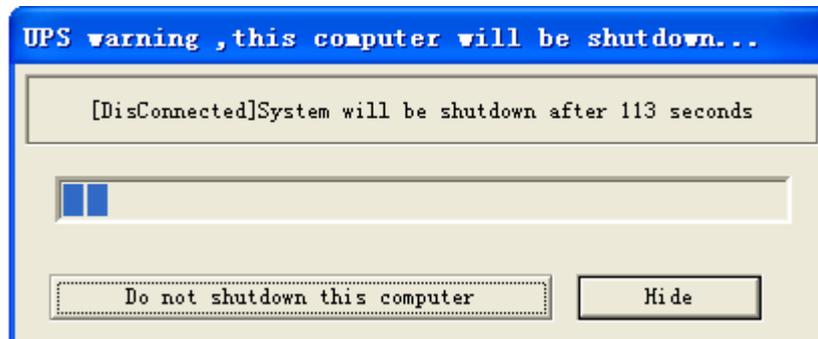
1. Shutdown system



When this particular crisis management operation is enabled and its options correctly configured, the software will shut down the system during, above displayed, critical UPS situations, in a period of time selected by the users.

Critical management options include AC failure, low voltage of UPS battery, UPS bypass mode, overheated UPS, overloaded UPS, UPS fault, UPS disconnection, and UPS shutdown.

For example, enabling option "**When UPS disconnected, leave system on for 2 minutes**" will result in system being shut down in 2 minutes, after UPS is disconnected, with visible countdown window, displaying the remaining time until the full system shutdown.

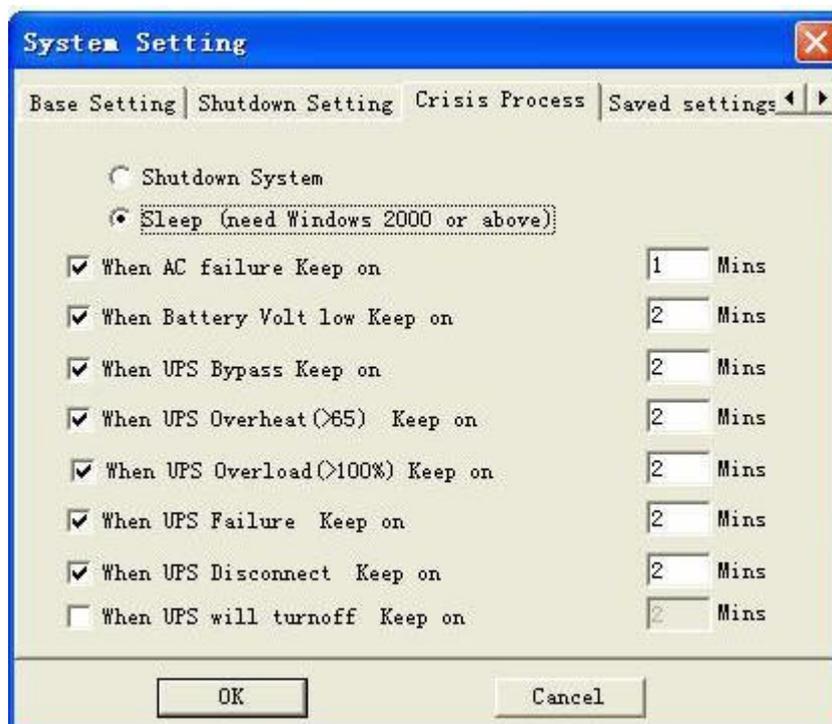


After the 2-minute countdown elapses, the system will turn off all running programs and shut itself down.

Pressing "**Do not Shutdown this computer**" button will cancel the system shutdown.

Pressing "**Hide**" button will cause the countdown window to be hidden, while the PC will automatically shut down in 2 minutes.

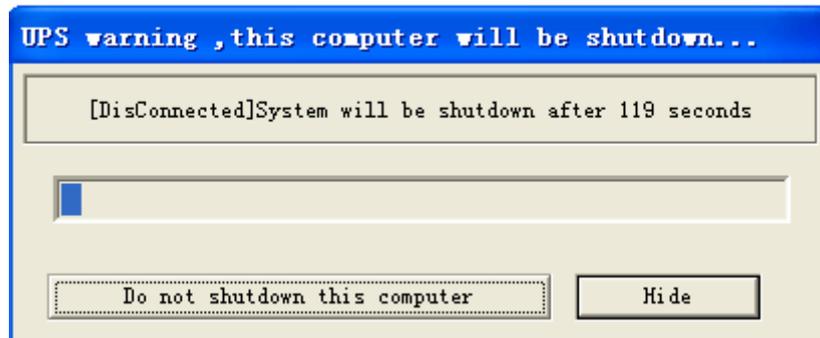
2. Sleep mode



Enabling system sleep mode is only possible on computers running Windows 2000 or later.

Similarly, like in the case of system shutdown operation, in the event of AC failure, low voltage of UPS battery, UPS Bypass mode, overheated UPS, overloaded UPS, UPS error, UPS disconnection; the software will start counting down remaining time, until the computer goes into sleep mode.

For example, enabling option "**When UPS Disconnected, leave system turned on for 2 minutes**" will result in system going into sleep mode in 2 minutes, after the UPS is disconnected, with visible countdown window, displaying the remaining time left, until the system sleep mode is enabled.



After the 2-minute countdown elapses, the system will shut down and go into sleep mode. Pressing "**Do not Shutdown this computer**" button will cancel the sleep mode from being enabled. Pressing "**Hide**" button will cause the countdown window to be hidden, while the PC will automatically go into sleep mode in 2 minutes.

3.3 Saved history data settings

After selecting the "Saved history data settings" tab, the following window interface will be displayed:



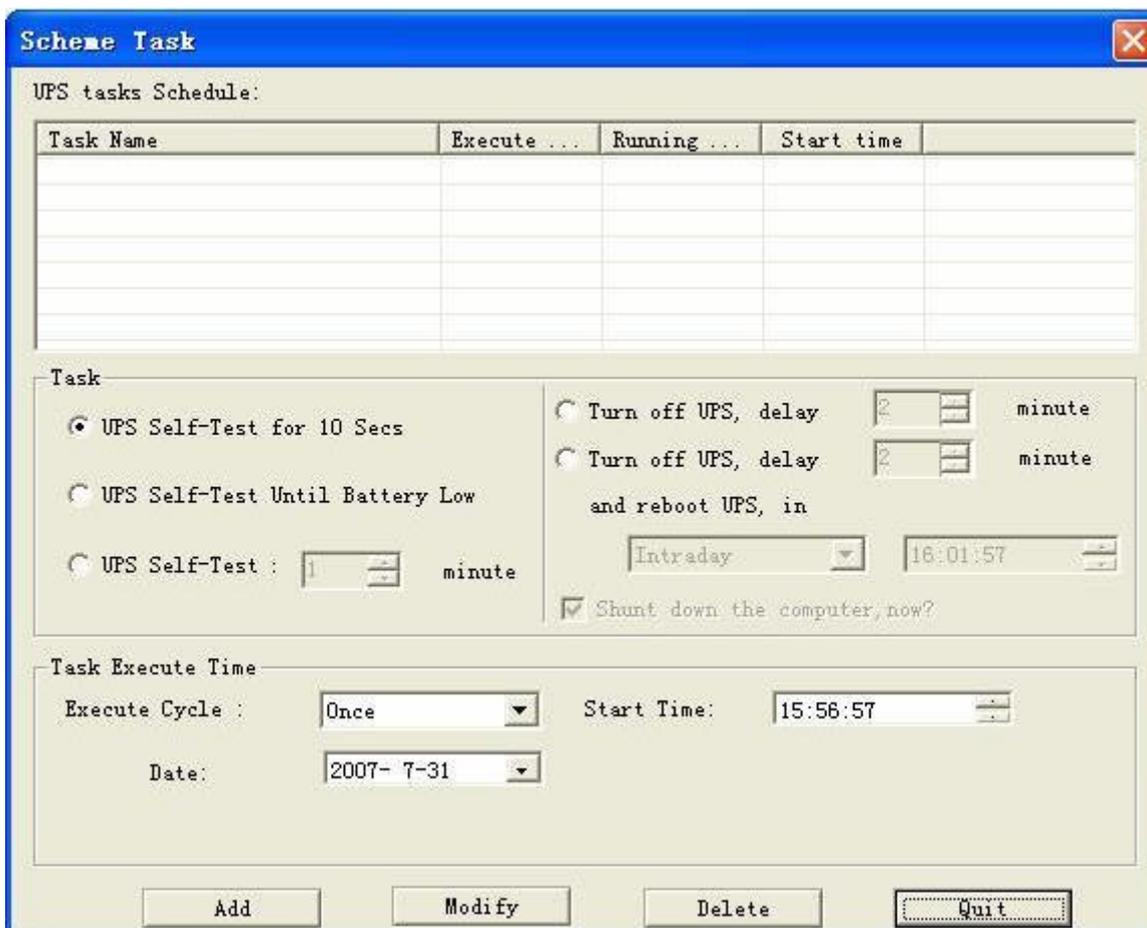
By enabling option "**Save UPS history data**", the software will record UPS history data according to the interval, specified by the users. (If there is no need for such feature, it is recommended to set the value of "**Interval**" equal or longer than 1 hour).

In the event of an invalid value of the interval, between UPS history data saves, software will not record any UPS history data.

4. Control panel

4.1 UPS Scheme Task

Clicking on the "Scheme UPS Task" option, will display the following interface window:



The screenshot shows a window titled "Scheme Task" with a close button in the top right corner. The window is divided into several sections:

- UPS tasks Schedule:** A table with columns: Task Name, Execute ..., Running ..., Start time. The table is currently empty.
- Task:** A section with radio buttons for task selection:
 - UPS Self-Test for 10 Secs
 - UPS Self-Test Until Battery Low
 - UPS Self-Test : minute
 - Turn off UPS, delay minute
 - Turn off UPS, delay minute and reboot UPS, in
- Shunt down the computer, now?
- Task Execute Time:** A section with:
 - Execute Cycle :
 - Start Time:
 - Date:
- Buttons:** Add, Modify, Delete, and Quit (highlighted with a dashed border).

The following tasks are available for this useful feature:

- 1) UPS Self-test for 10 seconds
- 2) UPS Self-test Until Low Battery
- 3) UPS Self-test for X minutes
- 4) Turn off UPS in X minutes
- 5) Turn off UPS in X minutes and reboot after Y minutes.

Additionally, users have the option to choose cycles, located in the “**Execute cycle**” section of this interface window, during which the scheduled tasks are to be repeated:

- 1) Once
- 2) Everyday
- 3) Every week
- 4) Every month
- 5) Every X days

Users can easily combine the available tasks with the cycle options, when they are to be performed, and then press “**Add**” button, so that the selected task will be added, as presented below.

The screenshot shows a window titled "Scheme Task" with a close button in the top right corner. The window contains the following sections:

- UPS tasks Schedule:** A table with columns: Task Name, Execute ..., Running ..., Start time.
- Task:** Radio buttons for selecting a task, and options for "Turn off UPS, delay" with a numeric input and "minute" unit. A checkbox for "Shunt down the computer, now?" is also present.
- Task Execute Time:** Fields for "Execute Cycle" (dropdown), "Start Time" (time input), and "Date" (date dropdown).
- Buttons:** "Add", "Modify", "Delete", and "Quit" buttons at the bottom.

Task Name	Execute ...	Running ...	Start time
UPS Self-Test for 10 Secs	Once	2007-7-31	15:58:57

Task

UPS Self-Test for 10 Secs

UPS Self-Test Until Battery Low

UPS Self-Test : 1 minute

Turn off UPS, delay 2 minute

Turn off UPS, delay 2 minute and reboot UPS, in

Intraday 16:01:57

Shunt down the computer, now?

Task Execute Time

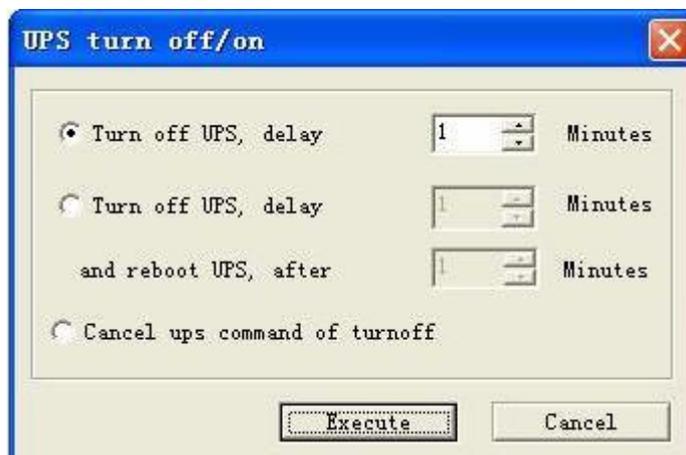
Execute Cycle : Once Start Time: 15:58:57

Date: 2007- 7-31

Add Modify Delete Quit

4.2 UPS Turn off/on options

Selecting the “Turn off/Turn on” options, will display the following window interface:

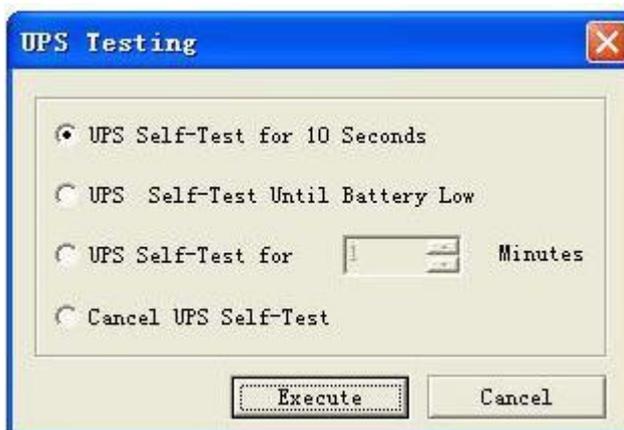


This particular option contains 3, displayed above, features:

- 1) Enabling option “**Turn off UPS in X minutes**” combined with clicking on the “**Execute**” button will result in UPS automatic shutdown in X minutes.
- 2) Enabling option “**Turn off UPS in X minutes and reboot UPS after Y minutes**” combined with clicking on the “**Execute**” button will result in UPS shutdown in X minutes along with device reboot after Y minutes.
- 3) Enabling option “**Cancel UPS Turn off command**”, while the software is counting down the time remaining for UPS shutdown, will result in UPS turn off command being cancelled.

4.3 UPS Test

Choosing the "UPS Test" option will display, presented below, window interface:



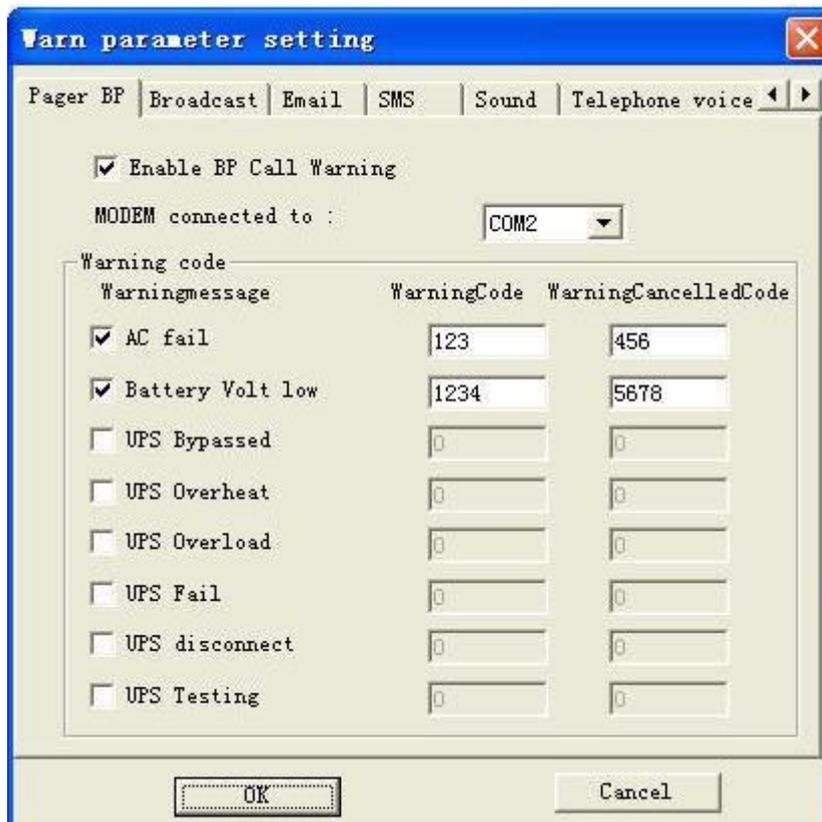
Users are provided here with 4 basic features:

- 1) Selecting the "UPS Self-Test for 10 seconds" option and clicking on the "Execute" button, will prompt UPS to start the self-test, lasting 10 seconds.
- 2) Selecting the "UPS Self-Test Until Low Battery" option and clicking on the "Execute", button, will prompt UPS to start the self-test until it's battery level is low.
- 3) Selecting the "UPS Self-Test for X minutes" option and clicking on the "Execute", button, will prompt UPS to start the self-test, lasting X minutes.
- 4) Choosing the "Cancel UPS Self-Test" option, will cancel any ongoing UPS self-test.

5. Warning parameters settings

5.1 Pager notifications

Before using this alarm feature, users, at first, have to tick the "Enable Pager notifications" option, located in the "Pager notification" tab. In addition to that, appropriate port has to be selected in order for this feature to work successfully. (Chosen port should not conflict, in any way, with UPS). Below is the interface window, of this notification function.



"Warning message", "WarningCode" and "CancelWarningCode" boxes are defined by the users. For example, the following "AC fail" message can be set along with "123" warning code and "456" alarm cancel code. At the time of the power failure, the end users will receive a "123" alarm message on their Pagers.

By following above described way, it is possible to send various alarm messages to the selected recipients, on their Pagers. (Before sending an alarm message, users have to be certain, that Pager notification option is enabled and all 3 warning content boxes are filled in properly)

After pressing the "OK" button, in the event of UPS status change, the software will send a notification message X times according to the individual needs.

When the actual UPS status change takes place, all computers connected to the particular LAN network will receive an alert message, shown below. (If the user sets the field "Number of messages sent" to N, all the computers connected to the same LAN network will receive the N alarms.)



5.3 Email notifications

Before using this alarm feature, users, at first, have to tick the "Enable NT messenger notifications" and "SMTP Authentication" options, located in the "Email address" tab. Below is the interface window, of this notification function.



User has to fill in the following boxes: "SMTP Server", "Recipient Email Address", "User Name" and "Password" in order to properly to send an Email notification to the recipient.

Correctly filled in fields for the recipient with sample Email address - test@163.com, can be seen below:



Then user has to select appropriate communication port, to which GSM modem is connected "**GSM Modem connected to**" and set the "**Baud rate**" according to actual usage. The last field left to fill in, is "**SMS center**". Sample SMS Center value is e.g.: **+8613800200500**.

5.5 Sound warnings

Before using this alarm feature, users, at first, have to tick the "**Enable sound warnings**" option, located in the "**Sounds**" tab. Below is the interface window, of this notification function.



In the event of actual UPS status change, the software will send a sound alarm (signal) X times according to the individual needs.

For example, if the UPS battery voltage is low, the software will emit signal "**UPS battery voltage low**" using user's computer speakers.

5.6 Telephone notifications

Before using this alarm feature, users, at first, have to tick the "Enable sound notifications" option, located in the "Sounds" tab. Below is the interface window, of this notification function.



If the system already has a voice modem available, user has to choose the correct item from "Voice Modem" list, otherwise, the list will be empty.

5.7 Pop-up Warning

Before using this alarm feature, users, at first, have to tick the "Enable Pop-Up Warnings" option located in the "Pop-up windows" tab. Below is the interface window, of this notification function.



In the event of actual UPS status change, the software will display a pop up warning window. Pressing the "Close" button will close this window, which will reappear, only when the next alarm situation occurs.

While minimizing this particular window, users have to keep in mind that, during the next UPS fault, error, pop-up window must be maximized first, so that consumer can find out, what exactly is causing the particular pop-up warning.

To remove the contents of all previous warnings, users can utilize "Clear all" button. Pressing this option will result in all previous alarm events being deleted.

Below displayed is the interface window of "Pop-Up window history" that contains all previously described features. Each alarm "Event" has a brief description of the problem, "Time" and "Date" of the occurrence, the "Type" of the warning, unique event "Number" and the information "From", telling users, where the alarm messages are coming from.

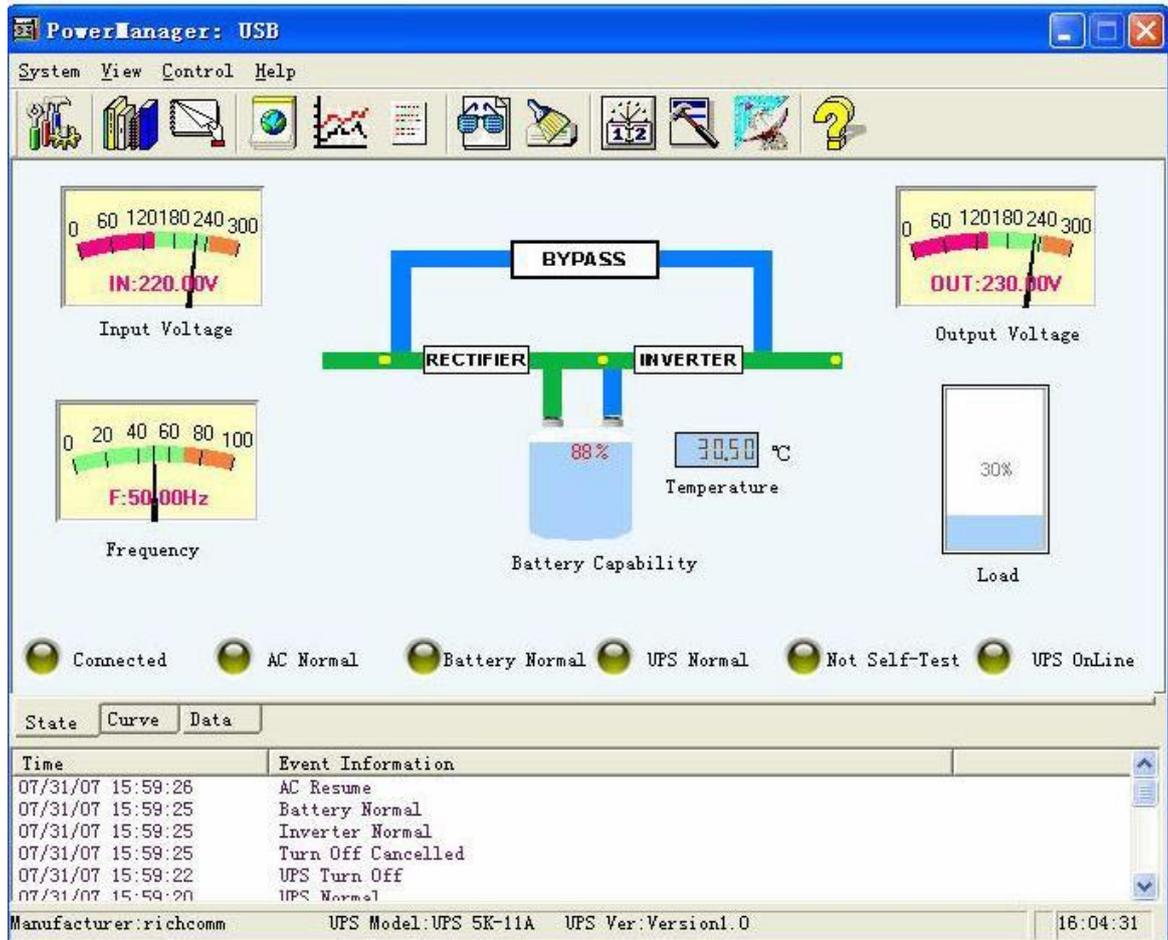


The screenshot shows a window titled "Window Message" with a table of event logs. The table has columns for Type, N..., Date, Datetime, From, and Event. The events listed are related to UPS operations, including bypass, testing, normal status, failure, turn off, battery status, and AC resume/fail. At the bottom of the window are "Clear All" and "Close" buttons.

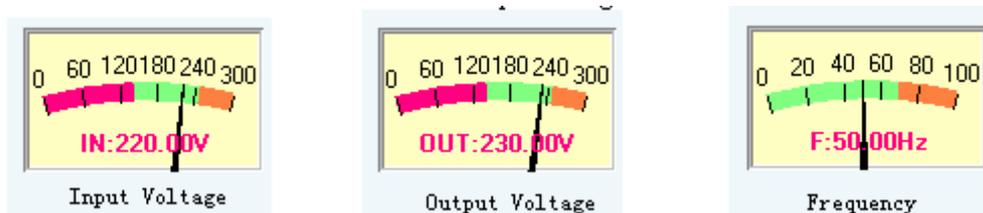
Type	N...	Date	Datetime	From	Event
▲ W...	0029	2007-7-31	16:10: 2	User:SYSTEM	UPS Bypass
ⓘ I...	0028	2007-7-31	16:10: 1	User:SYSTEM	UPS Test Completed
ⓘ I...	0027	2007-7-31	16: 9:36	User:SYSTEM	UPS Testing
ⓘ I...	0026	2007-7-31	16: 9:34	User:SYSTEM	UPS Normal
▲ W...	0025	2007-7-31	16: 9: 9	User:SYSTEM	UPS Failure
ⓘ I...	0024	2007-7-31	16: 9: 7	User:SYSTEM	Turn Off UPS Cancelled
▲ W...	0023	2007-7-31	16: 8:41	User:SYSTEM	UPS Turn Off
ⓘ I...	0022	2007-7-31	16: 8:36	User:SYSTEM	UPS Battery Normal
▲ W...	0021	2007-7-31	16: 8: 7	User:SYSTEM	UPS Battery Voltage Low
ⓘ I...	0020	2007-7-31	16: 8: 3	User:SYSTEM	AC Resume
▲ W...	0019	2007-7-31	16: 7:29	User:SYSTEM	AC Fail
ⓘ I...	0018	2007-7-31	16: 7:21	User:SYSTEM	UPS Connected
▲ W...	0017	2007-7-31	16: 6:30	User:SYSTEM	UPS DisConnected
ⓘ I...	0016	2007-7-31	15:59:25	User:SYSTEM	AC Resume
ⓘ I...	0015	2007-7-31	15:59:25	User:SYSTEM	UPS Battery Normal
ⓘ I...	0014	2007-7-31	15:59:25	User:SYSTEM	UPS Inverter Normal
ⓘ I...	0013	2007-7-31	15:59:25	User:SYSTEM	Turn Off UPS Cancelled
▲ W...	0012	2007-7-31	15:59:22	User:SYSTEM	UPS Turn Off

6. View Status Chart

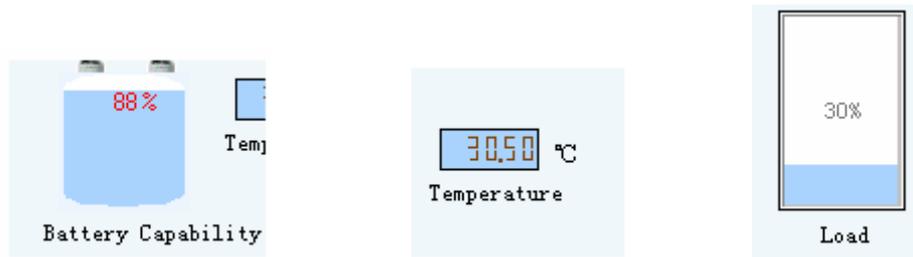
Choosing the “View Status Chart” option will display, presented below, window interface containing most important UPS status information. The chart below shows the UPS during its normal, fault-free operation.



Using this chart, user can quickly check the following UPS status information: “Input Voltage”, “Output Voltage”, “Frequency”, “Battery Capacity”, “UPS Temperature” and “UPS Load”.



Utilizing the available indicators, users can read the current status of the UPS, which is as follows: The Input voltage is 220V, the output voltage 220V, and the frequency equals 50Hz.

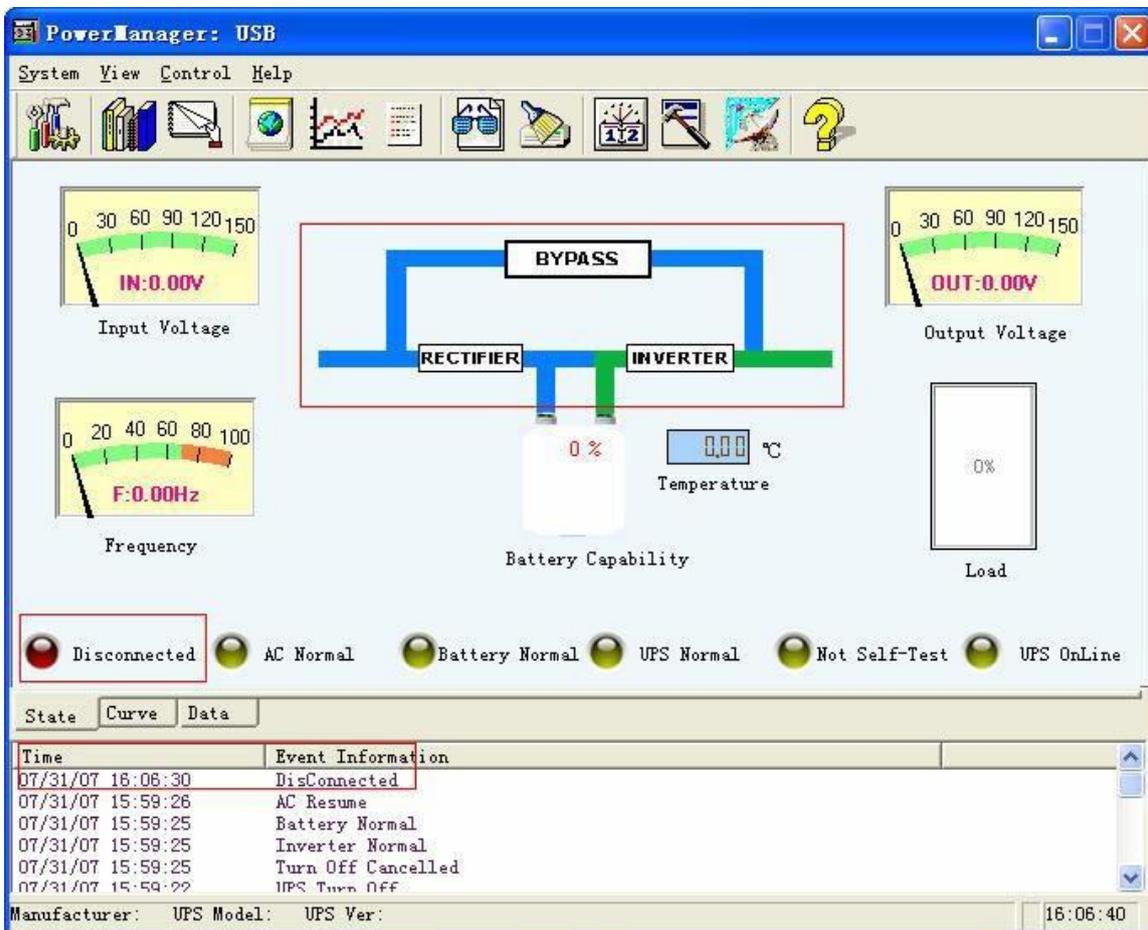


Further indicators illustrate the UPS battery capacity, which is at 88%, while the device temperature equals 30.50°C with the load level of 30%.

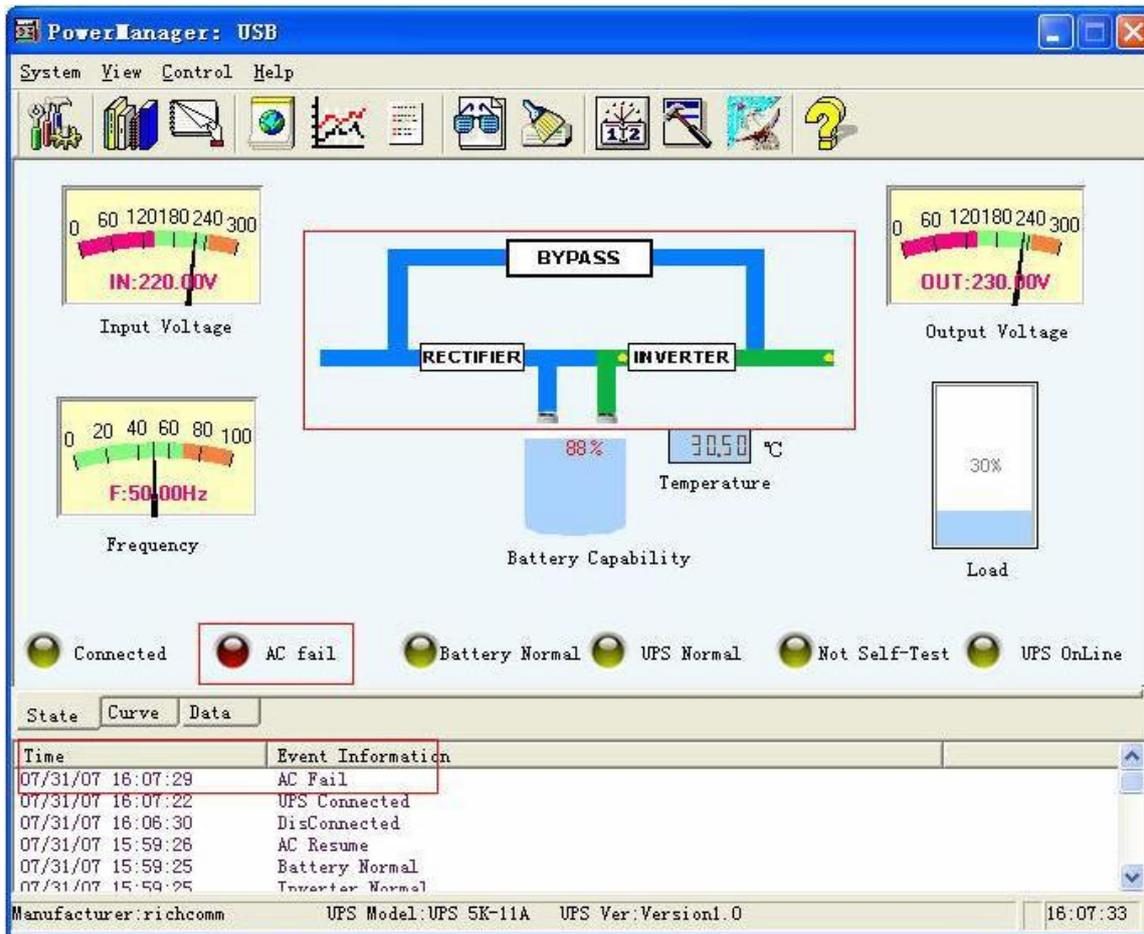
The UPS status chart will vary, depending on the occurrence of specific critical, alarm events. The most important of them, are as follows: "UPS disconnected", "AC fail", "Battery Voltage Low", "UPS Shutdown", "UPS error", "UPS test" and "UPS Bypass Mode."

The following graphs illustrates the UPS status graph interface in the event of the situations mentioned above:

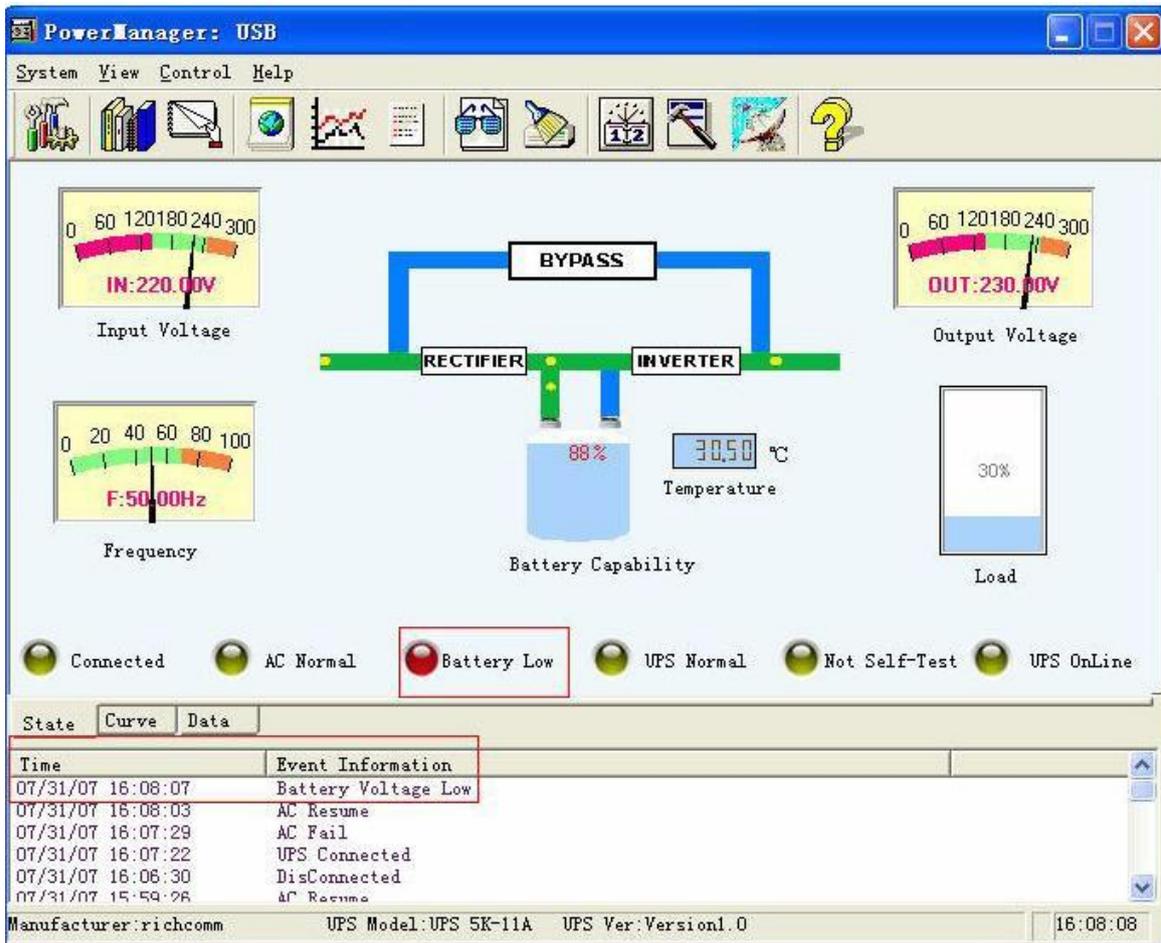
1. "UPS disconnected": Status line of the UPS has been stopped, indicator "UPS Disconnected" is glowing red and software is displaying brief information, regarding this particular, critical UPS event.



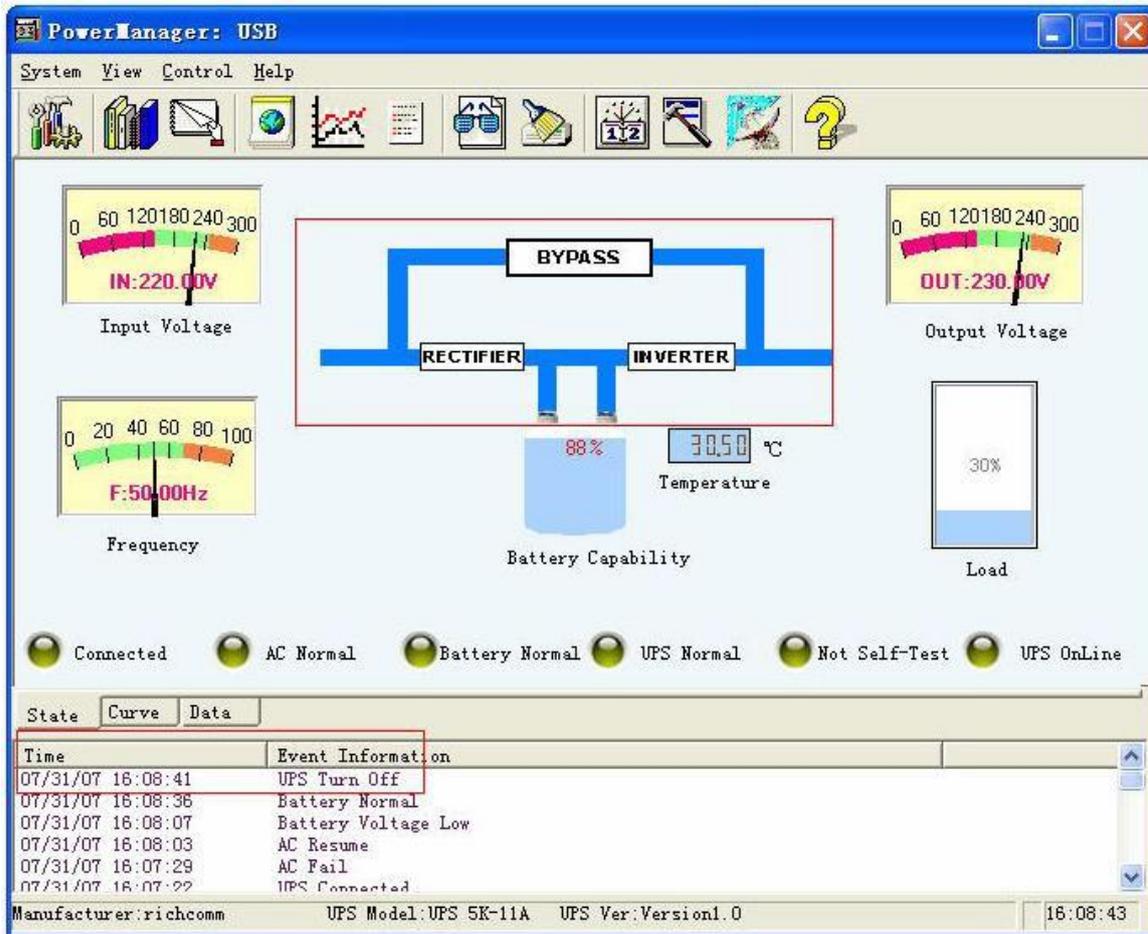
2. "AC fail" (error): Status line of the UPS has visibly changed, indicator "AC fault" is glowing red and software is displaying brief information, regarding this particular, critical UPS event.



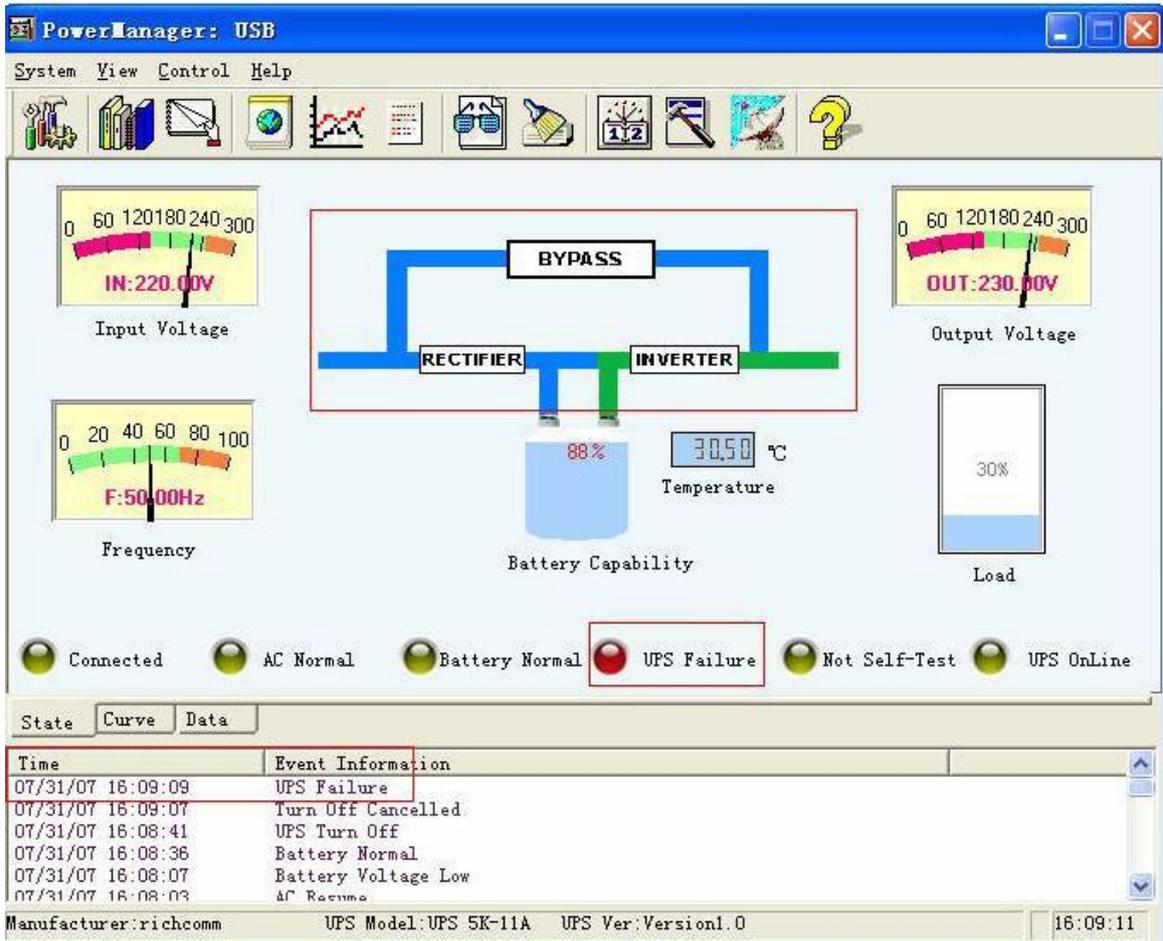
3. "UPS Battery Voltage Low": Status line of the UPS has visibly changed, indicator "Battery voltage low" is glowing red and software is displaying brief information, regarding this particular, critical UPS event.



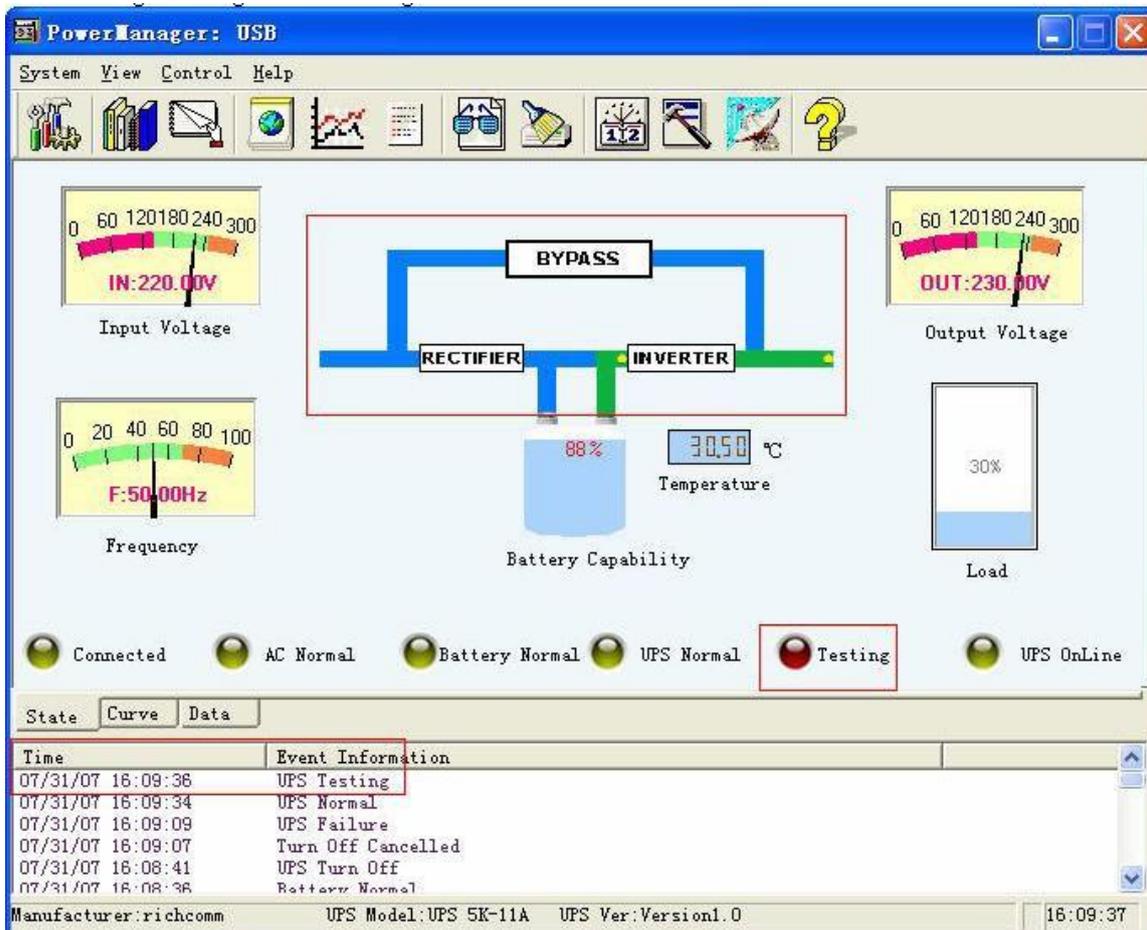
4. **“UPS turned Off”**: Status line of the UPS has visibly changed and software is displaying brief information, regarding this particular, critical UPS event.



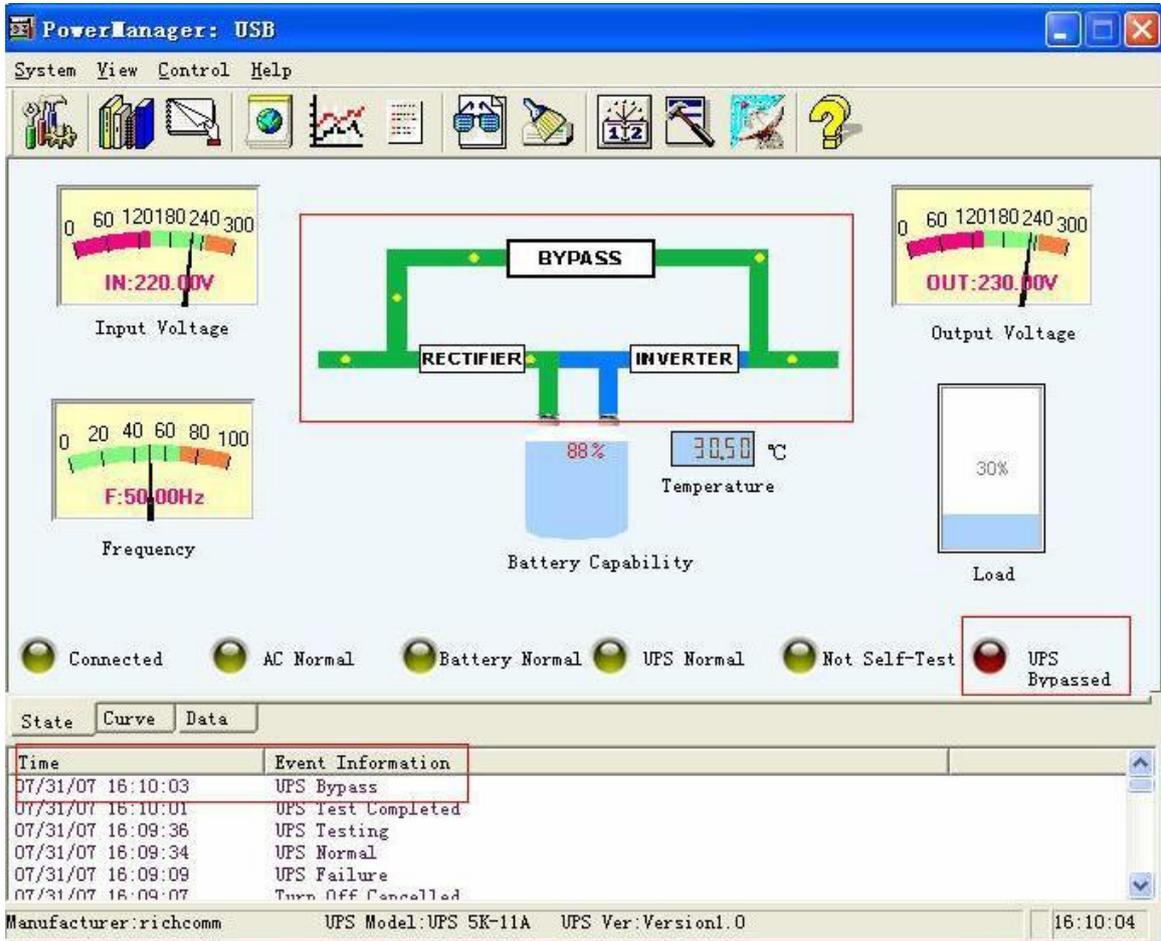
5. “UPS Fault” (error): Status line of the UPS has visibly changed, indicator “UPS failure” is glowing red and software is displaying brief information, regarding this particular, critical UPS event.



6. **“UPS Test”**: Status line of the UPS has visibly changed, indicator **“UPS Test”** is glowing red and software is displaying brief information, regarding this particular, critical UPS event.

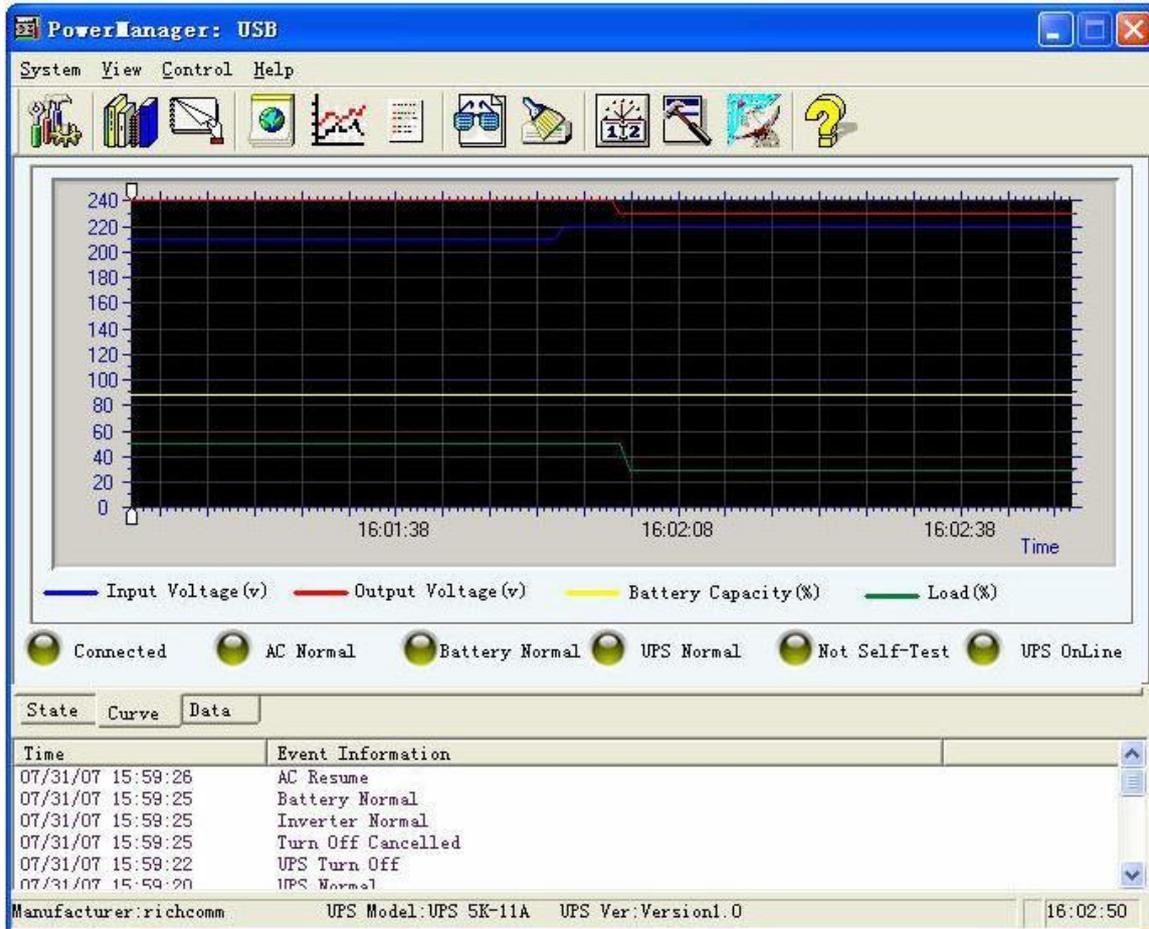


7. “UPS Bypass” (mode): Status line of the UPS has visibly changed, steam line has passed the Bypass, indicator “UPS Bypass” is glowing red and software is displaying brief information, regarding this particular, critical UPS event.



7. View Curve Chart

Choosing "View Curve Chart" option, will display a window interface, showing the most vital UPS status information, presented on the curve chart. This UPS status monitoring option, displays the changes of UPS parameters, using various colored lines, reflecting values such as "Input Voltage(V)", "Output Voltage(V)", "Battery Capacity(%)", "Battery Capacity(%) and "Load(%)".



8. View List Chart

Choosing "View List Chart" option, will display a window interface, showing the most vital UPS status information, presented on the list chart.

The screenshot shows the 'PowerManager: COM5' window. The main area is a table with three columns: '信号名称' (Signal Name), '信号量' (Signal Value), and '单位' (Unit). Below the table are several status indicators with green circles, and a log of events.

信号名称	信号量	单位
输入电压	230.00	V
输出电压	210.00	V
电池容量	100	%
频率	50.00	Hz
输出负载	50	%
机内温度	30.50	Celsius
市电输入指示	市电正常	
电池电压指示	电池电压正常	
旁路指示	非旁路	
故障指示	UPS正常	
UPS类型	在线式UPS	
测试状态	非测试状态	
关机激活指示	非关机状态	
喇叭激活指示	没有激活UPS喇叭	
UPS连接断线指示	UPS连线	

设备连线 市电正常 电池电压正常 UPS正常 非测试状态 非旁路状态

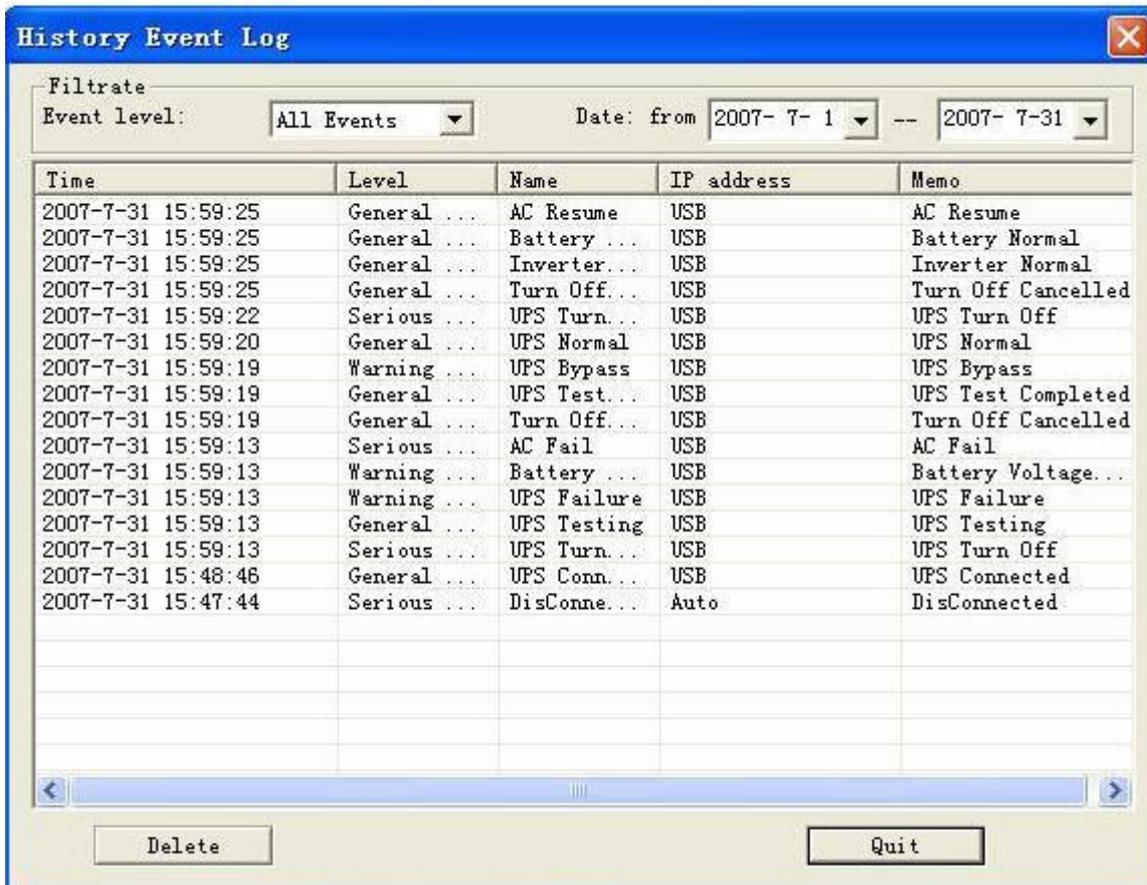
状态 曲线 数据

时间	事件信息
07/24/07 11:19:41	UPS旁路恢复
07/24/07 11:07:18	UPS旁路
07/24/07 11:07:14	UPS测试完毕
07/24/07 11:05:03	UPS测试中
07/24/07 11:05:01	UPS工作正常
07/24/07 11:02:44	UPS故障

厂商: richcomm 型号: UPS 5K-11A 版本: Version1.0 11:20:28

9. UPS events history

Clicking the "UPS Events history" option, will display a window interface, showing the history of all previously recorded events, reporting status changes or alarm situations, during UPS operation.



Time	Level	Name	IP address	Memo
2007-7-31 15:59:25	General ...	AC Resume	USB	AC Resume
2007-7-31 15:59:25	General ...	Battery ...	USB	Battery Normal
2007-7-31 15:59:25	General ...	Inverter...	USB	Inverter Normal
2007-7-31 15:59:25	General ...	Turn Off...	USB	Turn Off Cancelled
2007-7-31 15:59:22	Serious ...	UPS Turn...	USB	UPS Turn Off
2007-7-31 15:59:20	General ...	UPS Normal	USB	UPS Normal
2007-7-31 15:59:19	Warning ...	UPS Bypass	USB	UPS Bypass
2007-7-31 15:59:19	General ...	UPS Test...	USB	UPS Test Completed
2007-7-31 15:59:19	General ...	Turn Off...	USB	Turn Off Cancelled
2007-7-31 15:59:13	Serious ...	AC Fail	USB	AC Fail
2007-7-31 15:59:13	Warning ...	Battery ...	USB	Battery Voltage...
2007-7-31 15:59:13	Warning ...	UPS Failure	USB	UPS Failure
2007-7-31 15:59:13	General ...	UPS Testing	USB	UPS Testing
2007-7-31 15:59:13	Serious ...	UPS Turn...	USB	UPS Turn Off
2007-7-31 15:48:46	General ...	UPS Conn...	USB	UPS Connected
2007-7-31 15:47:44	Serious ...	DisConne...	Auto	DisConnected

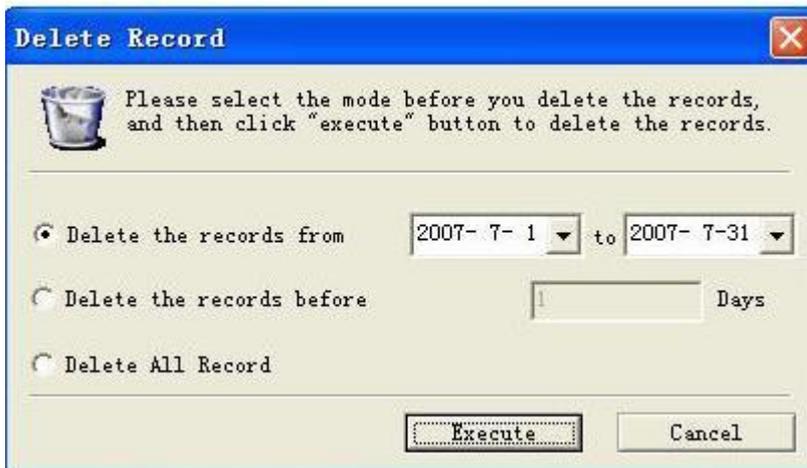
Presented above, window interface displays the features users have to their disposal, in order to easily organize, sort recorded UPS events, according to their:

- 1) "**Classification**" – consumer can view, just the specific type of events, such as: "Critical event", "General event" or "All Events".
- 2) "**Date from, to**" - The user can sort all events by introducing the specific time period, thus eliminating the rest of events, that occurred earlier/later.

Moreover, if specific events are not worth the user's attention - they are outdated or there are simply too many records, consumers can easily reduce the amount of unnecessary data by pressing "Delete" button.

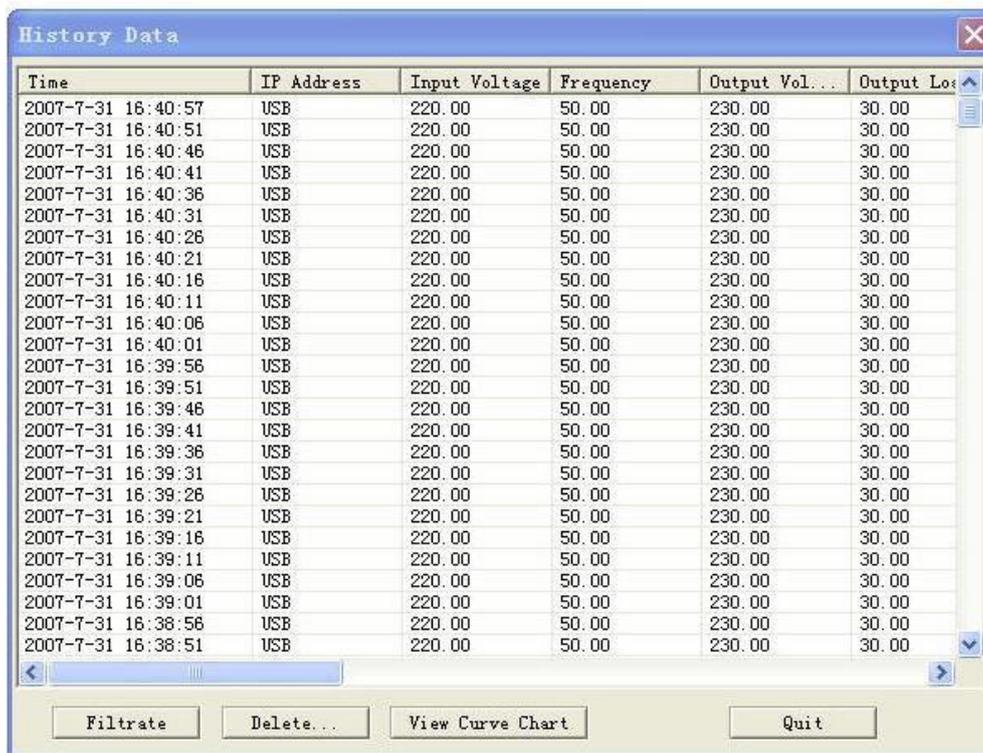
Events data deletion feature, similarly to the previously described filter function, possesses sorting options in order to delete events, such as:

- 1) **“Delete the records from, to”** – deletion of data from the selected period of time, defined by the user,
- 2) **“Delete the records before X Days”** – deletion of data, before specified amount of days,
- 3) **“Delete All Data”** – deletion of all recorded UPS event data, thereby complete history wipe.



10. View History Data

Clicking the "Data History" option, will display a window interface, showing the complete history of previously recorded parameter values, during the UPS operation, saved during specified by the user time intervals.



The screenshot shows a window titled "History Data" with a table of recorded parameters. The table has six columns: Time, IP Address, Input Voltage, Frequency, Output Vol..., and Output Lo... (likely Output Load). The data shows a series of readings from 2007-7-31 16:38:51 to 2007-7-31 16:40:57. All readings show an input voltage of 220.00, a frequency of 50.00, an output voltage of 230.00, and an output load of 30.00. The IP address is consistently "USB".

Time	IP Address	Input Voltage	Frequency	Output Vol...	Output Lo...
2007-7-31 16:40:57	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:51	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:46	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:41	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:36	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:31	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:26	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:21	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:16	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:11	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:06	USB	220.00	50.00	230.00	30.00
2007-7-31 16:40:01	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:56	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:51	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:46	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:41	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:36	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:31	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:26	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:21	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:16	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:11	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:06	USB	220.00	50.00	230.00	30.00
2007-7-31 16:39:01	USB	220.00	50.00	230.00	30.00
2007-7-31 16:38:56	USB	220.00	50.00	230.00	30.00
2007-7-31 16:38:51	USB	220.00	50.00	230.00	30.00

Displayed above, interface window contains information, how, during the user-specified periods of time, fluctuated values of parameters such as: **Input Voltage**, **Output Voltage**, **Frequency**, **Load Output**, etc.

On the other hand, the "IP address" column, provided that LAN connection is available, informs the users regarding the selected communication port of UPS, such as **USB**, **COM1** etc. In case of remote UPS, its IP address will be shown here e.g. **192.168.0.2**

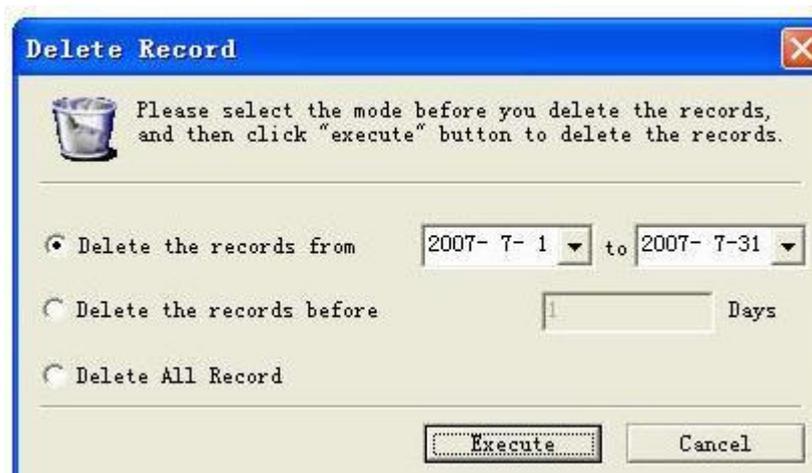
Additionally, this particular window interface provided user with 3 different features:

1. **UPS Data filter options:**



Feature, displayed above allows the users to sort the scope of UPS parameter data, using their "Parameter Name", as well as the time period, during particular events were recorded. Ticking the "Enable filter" option, then selecting specific filter scope "Event filter" and finally, pressing the "OK" button, will result in software, sorting the historic parameter data according to the user-selected guidelines.

2. **UPS Data deletion options:**



Data deletion feature of UPS history data has filter functions; therefore, users can delete events using options like:

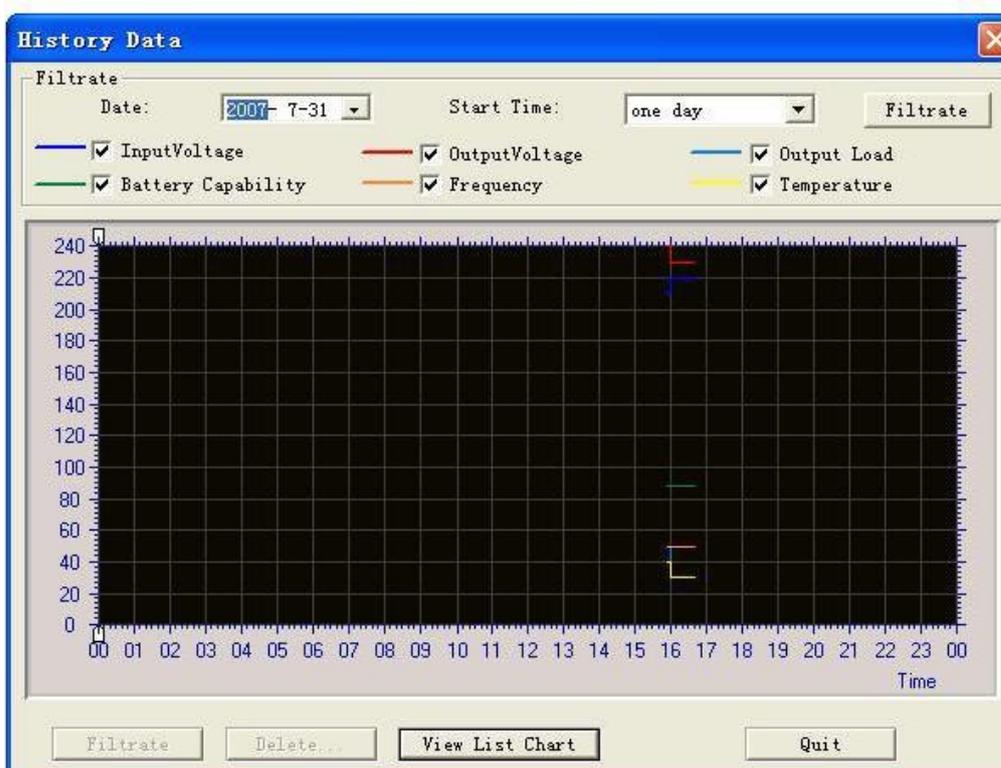
- A) **"Delete the records from, to"** – deletion of data from selected period of time, defined by the user,
- B) **"Delete the records before X Days"** – deletion of data, before specified amount of days,
- C) **"Delete All Data"** – deletion of all recorded UPS event data, thereby complete history wipe

3. Curve chart of recorded parameters option:

Pressing **"View Curve Chart"** user is able to see, how the recorded UPS history parameters appear graphically. At the top of the window interface, located are the filtering options **"Filter"**. These include particular time period **"Date"** along with the **"Start Time"**.

Every, each selected parameter visible on the graph is illustrated by different colored lines, for which corresponding legend is located, under the above described, filtering options.

In order to return to the previous view of UPS data history, press the **"View List Chart"** button.



11. About

To view interface window showing, additional information regarding Powermanger II software users, have to press first the Powermanger II icon and then select **"About"** option in main menu of the software.