CS102
UPS SNMP HTTP AGENT

User's Manual

Version 0.94
July, 2023

Summary

Electronic Emission Notice

This device complies with the EMC directive of the European Community and meets or exceeds the following technical standard:

EN 55032: 2015+AC: 2016, Class B
EN 61000-3-2: 2014
EN 61000-3-3: 2013
AS/NZS CISPR 32: 2015

EN 55024: 2010+A1: 2015
IEC 61000-4-2 Ed. 2.0: 2008
IEC 61000-4-3 Ed. 3.2: 2010
IEC 61000-4-4 Ed. 3.0: 2012
IEC 61000-4-5 Ed. 3.1: 2014 +A1: 2017
IEC 61000-4-6 Ed. 4.0: 2013
IEC 61000-4-8 Ed. 2.0: 2009
IEC 61000-4-11 Ed. 2.1: 2004 +A1: 2017

Safety Information

All the service of this equipment must be performed by qualified service personnel. Remove rings, watches, and other jewelry before servicing the unit.

Chapter 1 - Introduction

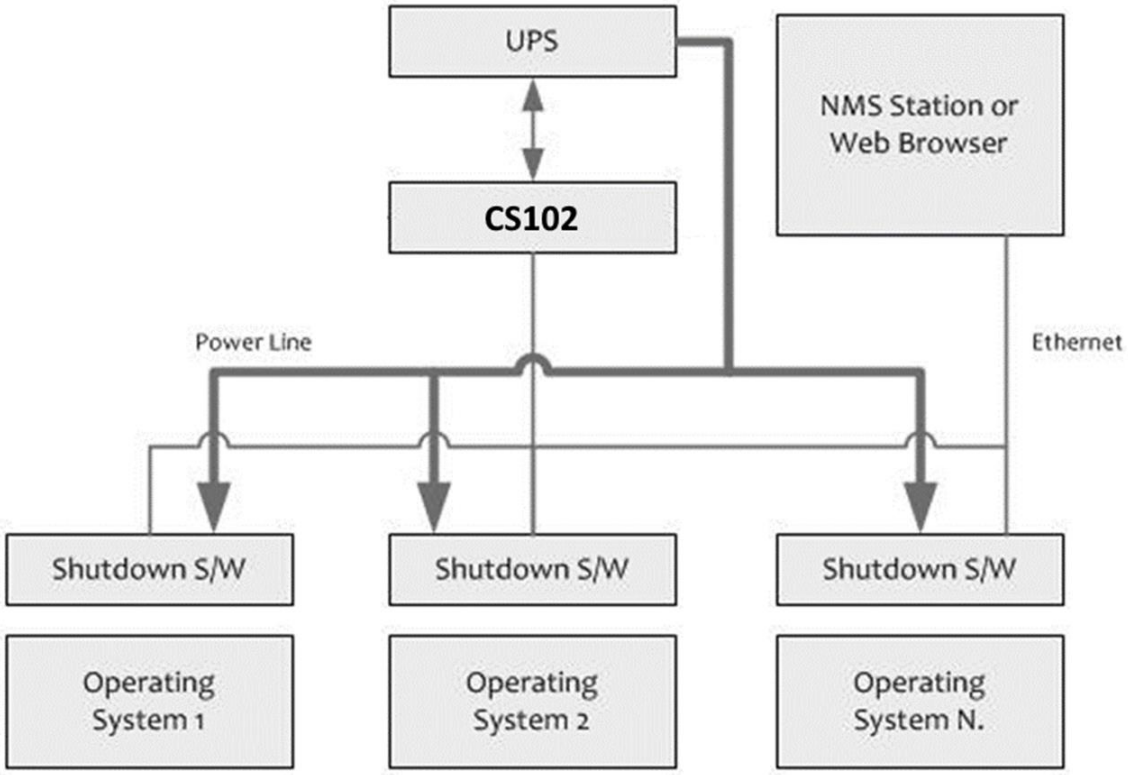
CS102 can manage UPS systems using their native serial protocols. User can use web browser or any NMS, SNMP, or MODBUS manager to manage UPS via Ethernet.
The CS102 also provides shutdown schedules for different operating systems: for example, it can send a shutdown command in the event of a scheduled shutdown, utility power failure, UPS low battery condition, UPS overload, UPS overtemperature, and other alarms. All extinguishing events are user configurable. The shutdown software will perform an orderly automatic shutdown to avoid crashing clients or servers.

1.1. Features

- Real-time UPS health monitoring
- Comprehensive UPS management and flexible configuration via Web Browser, NMS, Telnet, and SNMP.
- Automatic events notification via E-mail, and SNMP Trap.
- Graceful shutdown to protect up to 250 servers/workstations from data loss due to power outage.
- Assigned IP automatically via DHCP or BOOTP.
- Scheduling shutdown/startup/reboot of UPS via remote control.
- Regularly records UPS parameters for statistical analysis and event diagnostics.
- Support for standard UPS MIB (RFC1628).
- Auto-sense to works in the 10/100Mbps fast Ethernet network environment.
- WOL function supported.
- Configuration utility simplifies the firmware upgrade process.
- Support Radius and NTLM V1.
- IPv4 and IPv6 dual stack.

1.2. CS102 System Application

The following diagram shows how the CS102 SNMP Web Card which can be used in a network application. It supports various kinds of protocol such as HTTP, SNMP, MODBUS, etc…
Through the SNMP NMS and Web Browser, user can obtain the UPS status, issue commands of UPS and set up CS102 configuration via the network.
CS102 also provides shutdown software tool for sending the event notifications to the connected clients. The shutdown software can be installed on various operating systems. It can communicate with the CS102 automatically via a proprietary protocol. CS102 will issue the shutdown command to shutdown software in the event of AC failure, battery low and scheduled shutdown. Shutdown software will proceed to the shutdown process to prevent the abnormal shutoff of host or server.



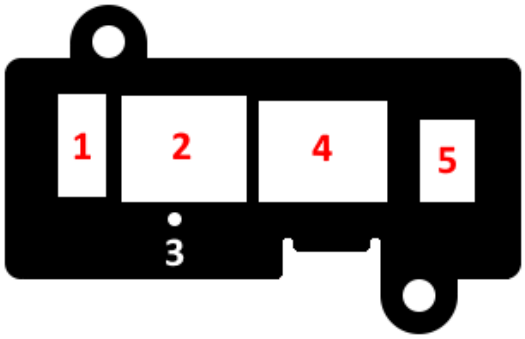
1.3. Package Contents

Please carefully check the CS102 card and the included accessories. If there is any missing or damaged, please contact your dealer.

Item	Quantity	311058	311059
CS102 card	1	✓	✓
Additional mounting bracket (for Keor SPE UPS)	1	✓	✓
Wi-Fi dongle	1		✓
Quick Installation Guide	1	✓	✓

1.4. Interface of CS102

The interface of CS102 includes a USB port, Network port, Dip Switch, Reset button, and an AUX port (currently unused):



No.	Item	Description
1	USB port	Connection port for the Wi-Fi dongle.
2	LAN port	LED indication: LAN 10/100 link, Activity. See "Appendix" paragraph for details.
3	Restart button/ Reset button	Software restart CS102 only. This will not affect the operation of UPS. 1. Press and hold the restart button for 1~3 seconds: Warm boot. 2. Press and hold the restart button for 3~6 seconds: Reset Administrator Name and Password. 3. Press and hold this restart button for more than 6 seconds: Reset to factory default.
4	AUX port	This port is currently unused. **Don't connect anything to it.**
5	Dip switch	Reserved. For normal operation, **both must remain in the OFF position.**

Chapter 2 - Installation

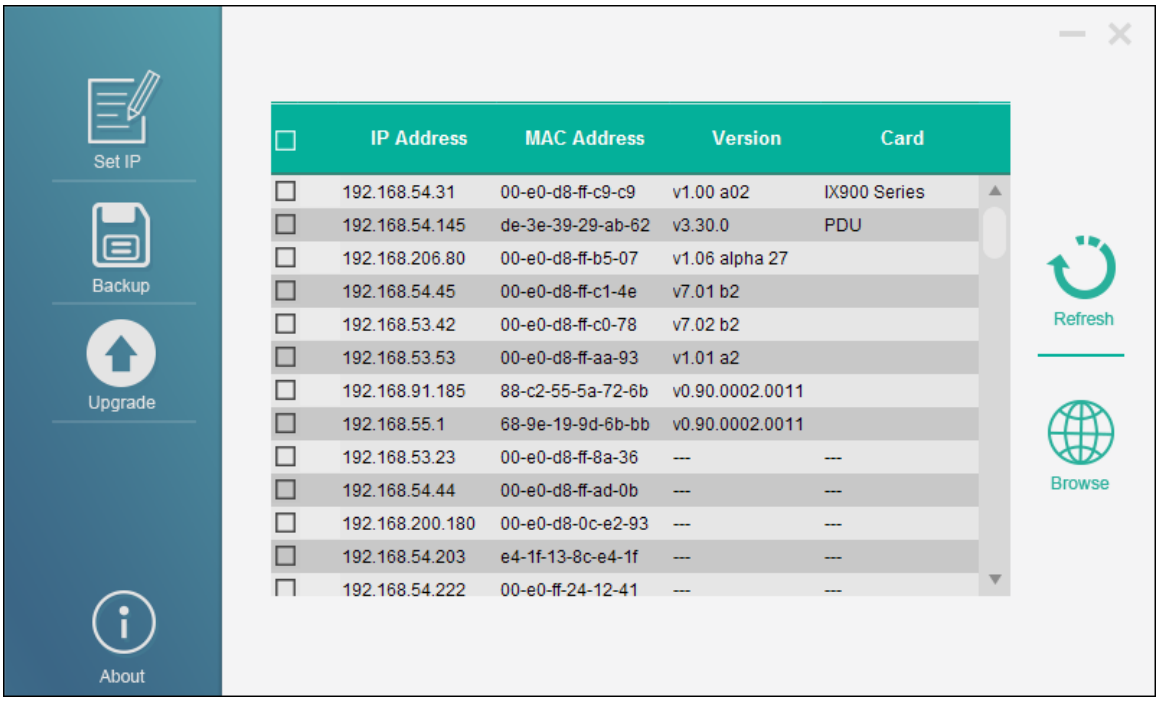
2.1. Install the CS102 on UPS

Please follow the procedures below to install the CS102 card on the UPS.

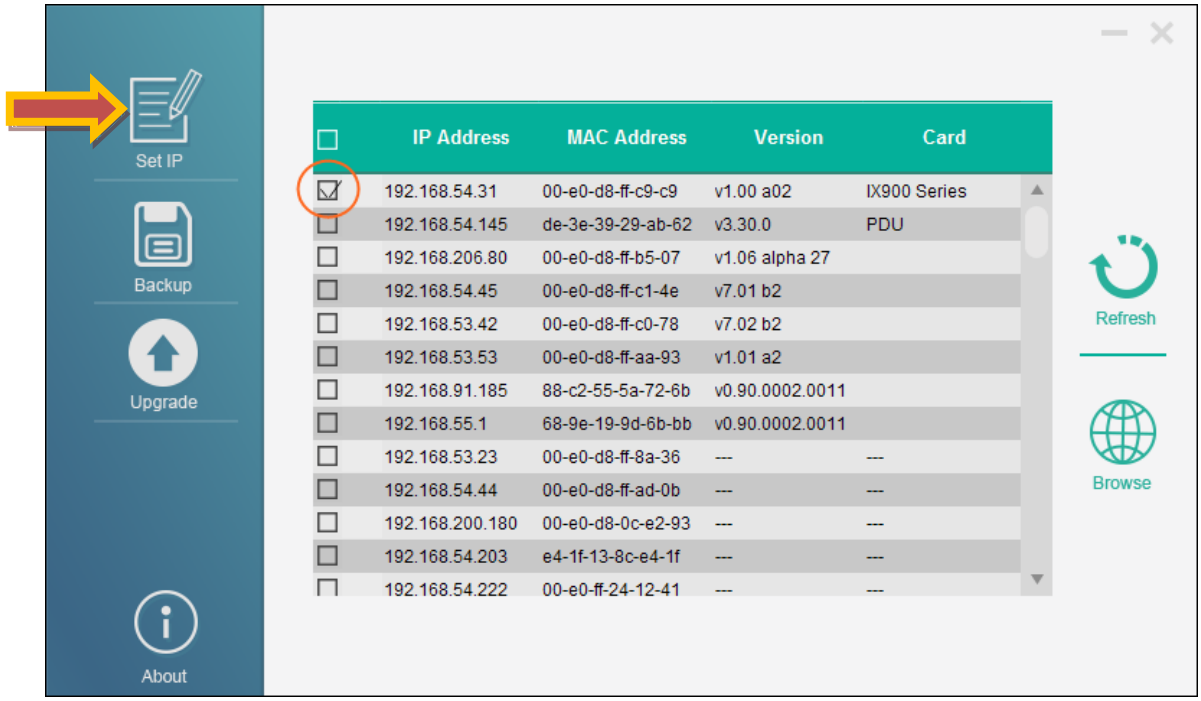
Step 1 In case of Keor SPE UPS, replace the metal bracket of the CS102 card with the one included in the package
Step 2 If present, insert the Wi-Fi dongle in the dedicated USB port of the CS102 card.
Step 3 Remove the UPS SNMP slot cover cap by unscrewing the appropriate screws (refer to the UPS user manual for details).
Step 4 Insert the CS102 card into the UPS slot.
Step 5 Lock the screws of the CS102 card bracket.
Step 6 Insert the Ethernet cable into LAN port of CS102 card.
Step 7 Turn on the UPS.
Step 8 Get a PC (Microsoft Windows 7 or above).

2.2. To find your CS102 card by using "SNMP FITility" software

Step1. Install the Upgrade Tool on your PC: download the "SNMP FITility" tool from hiips://ups.legrand.com and install it on your PC.
Step2. Execute SNMP FITility and it will auto discover and list up the devices on your LAN.



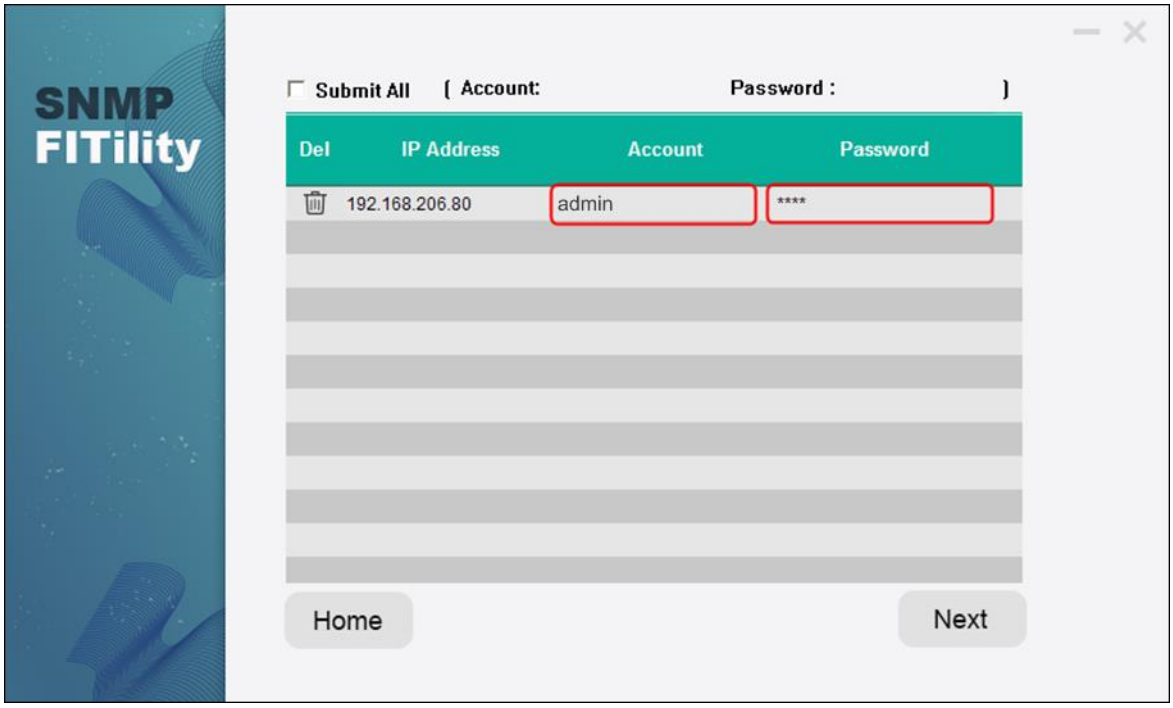
Step3. Select the device and then click "Set IP" to change the IP address to the same network segment as your LAN.



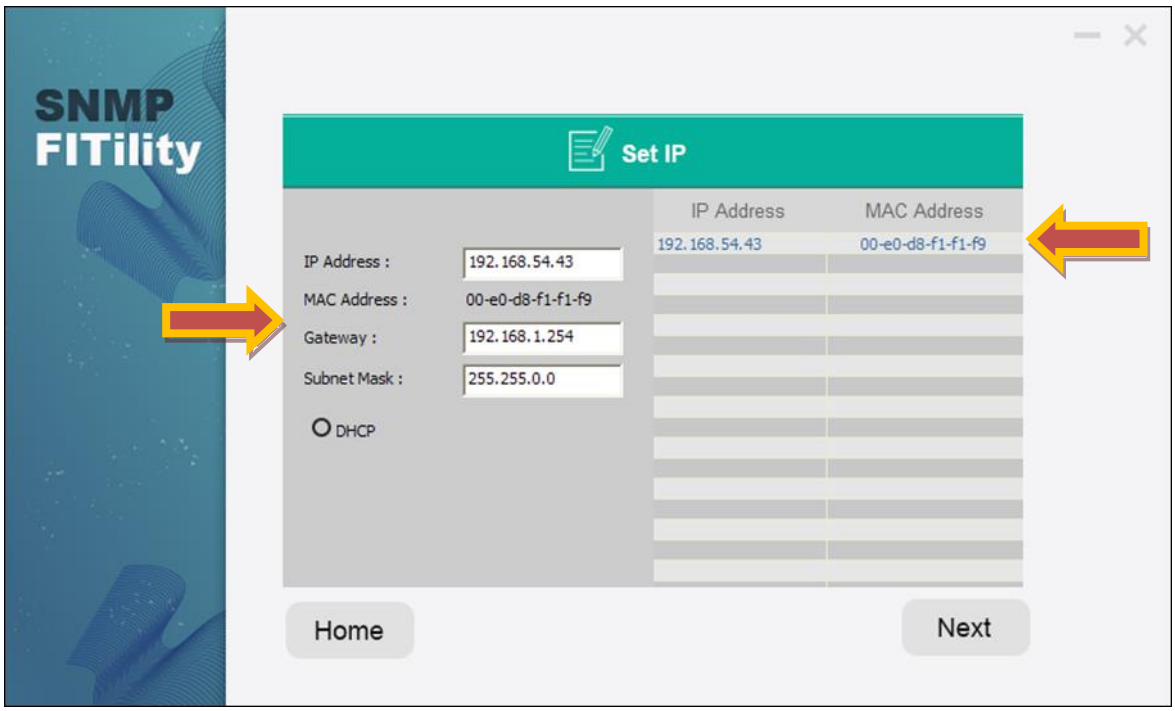
Step4. Type in Account and Password and click on "Next" button. The default administrator account is:

Account: **admin**

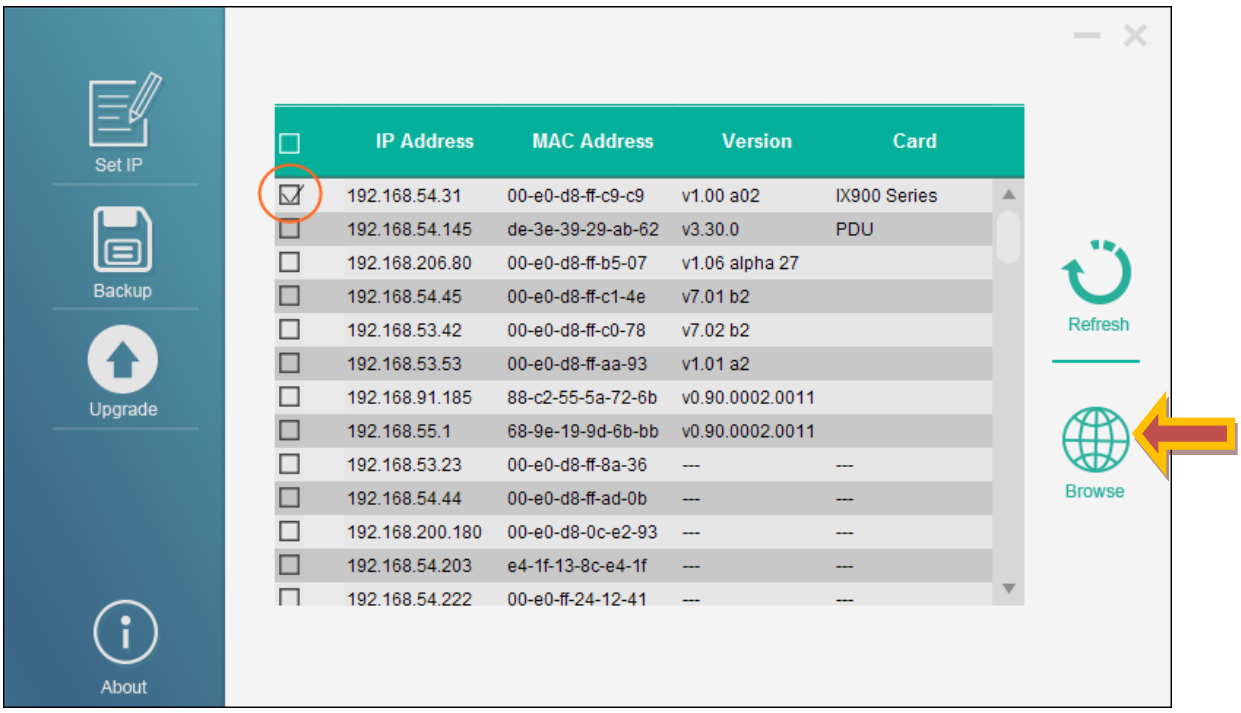
Password: **cs102snmp**



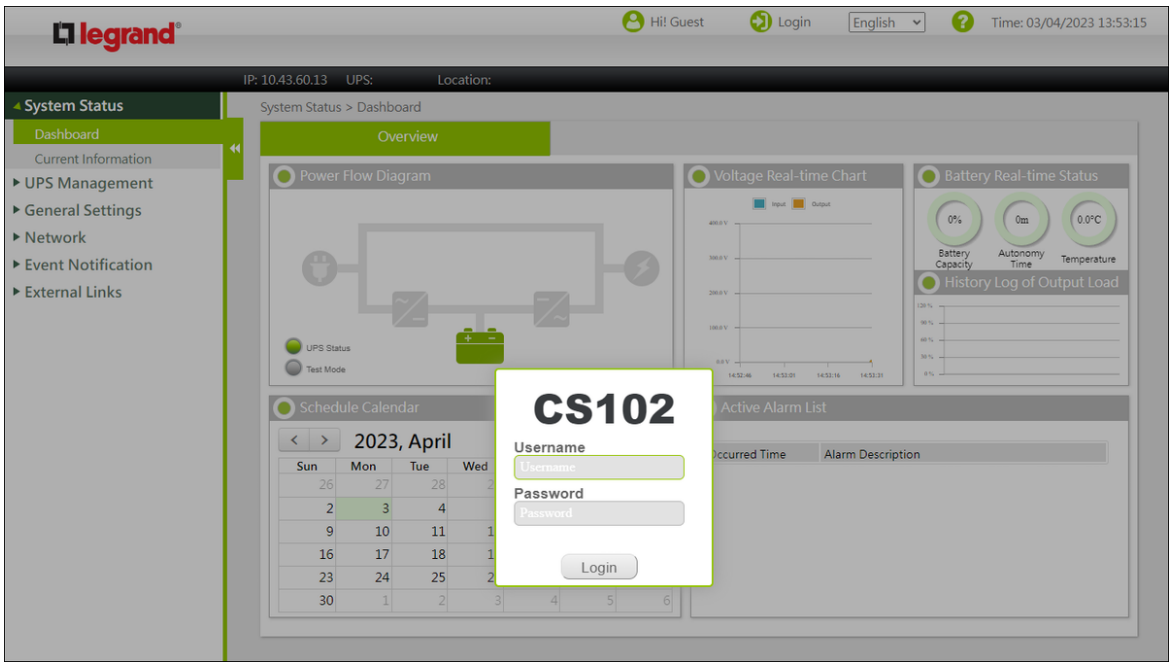
Step5. Select the IP address you need to change, type in new settings, then click "Next" to finish.



Step6. Select your device and click "Browse" to open the CS102 webpage.



Step7. The browser will display the CS102 login page:

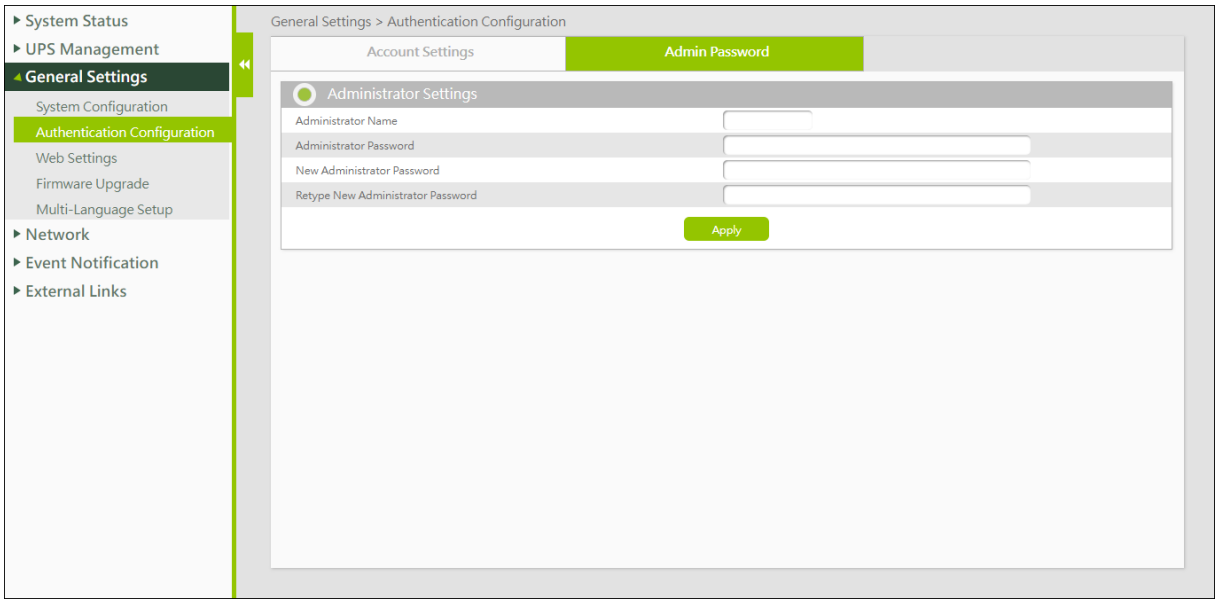


Chapter 3 - Initial configuration

3.1. Changing the Administrator Password

By default, all CS102 devices have the same administrator password, therefore, for security reasons, it is mandatory to change it during the first configuration phase.

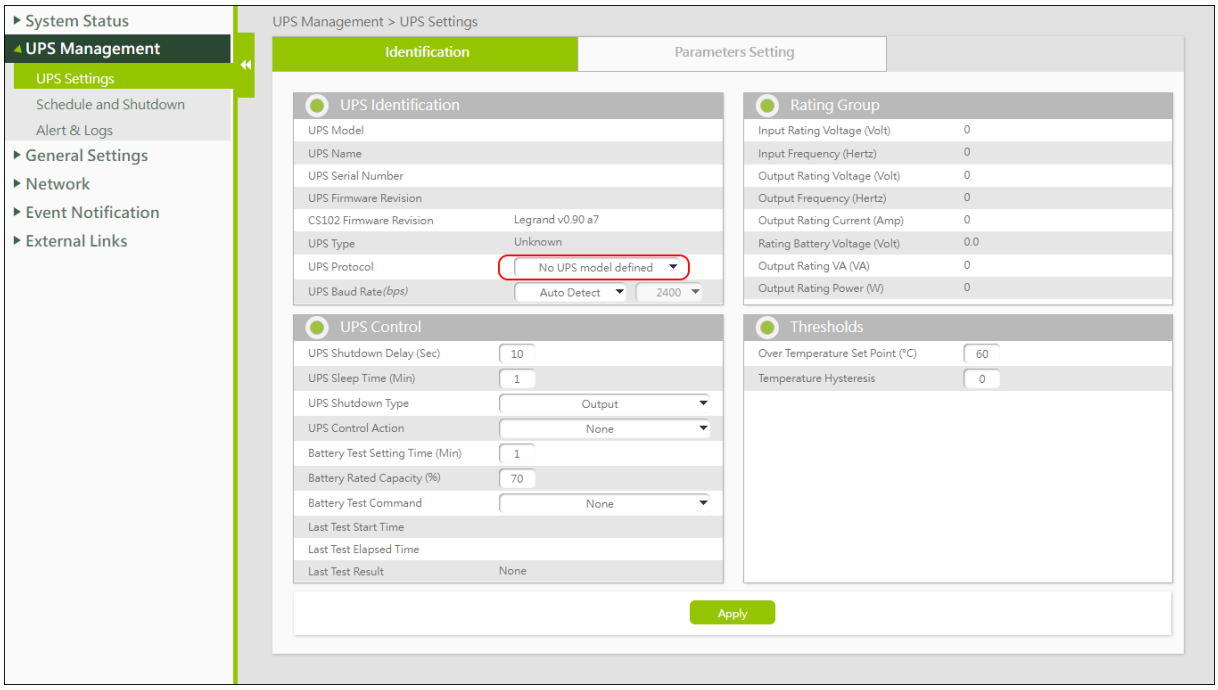
1. Select "General Settings → Authentication Configuration" from the main menu.
2. Click on "Admin Password" tab.



3. Administrator Name: **admin** (it cannot be changed).
4. Administrator Password: the current administrator password.
5. New Administrator Password: the new password (minimum 5 characters).
   Currently the only accepted characters are: "0 .. 9", "A .. Z", "a .. z"
6. Retype New Administrator Password: type again the new password.
7. Click "Apply" to save the settings.

3.2. UPS Model

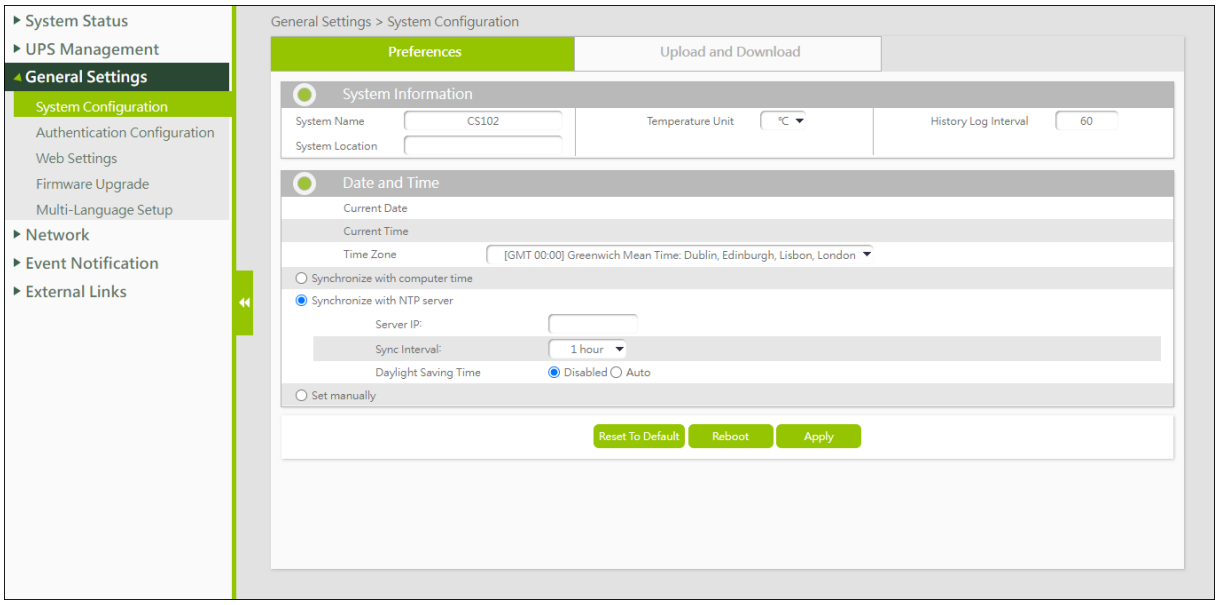
1. Select "UPS Management → System Configuration" from the main menu
2. Select the correct UPS from the "UPS Protocol" drop-down menu and click the "Apply" button (if is not visible, scroll down the page).



3. Confirm the changes and the CS102 will reboot; after about 1 minute the login page will be displayed again (if not, refresh the web browser page)

3.3. Date and Time

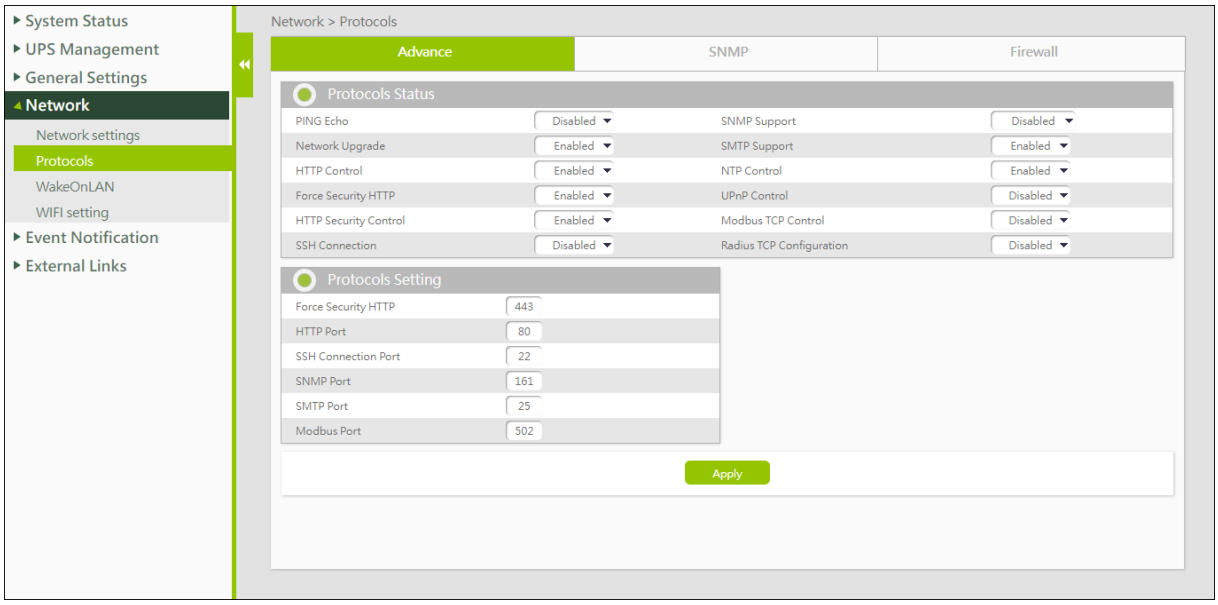
1. Select "General Settings → System Configuration" from the main menu:



2. Enter the appropriate date and time information in the specified format and click "Apply" to save the settings.

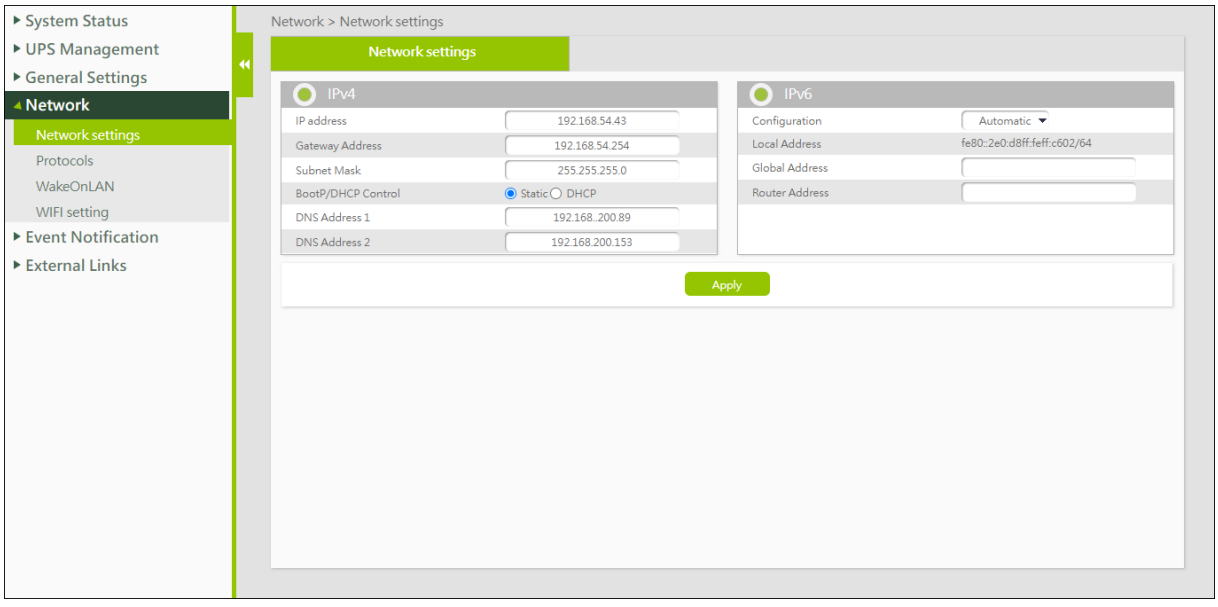
3.4. Network Protocols

By default, only strictly necessary network protocols are enabled.
Select "Network → Protocols" from the main menu to enable the required additional network protocols. In case you are not sure what to enable, please leave the default.



3.5. Network Configuration

1. Select "Network → Network settings" from the main menu:



2. Enter the required information: IP address, Gateway, Subnet Mask, DNS

3. Click "Apply" to save the settings.
4. **Note:** by changing the IP address, the web browser will lose connection with the CS102. Wait a few seconds, then type the new IP address into your web browser.

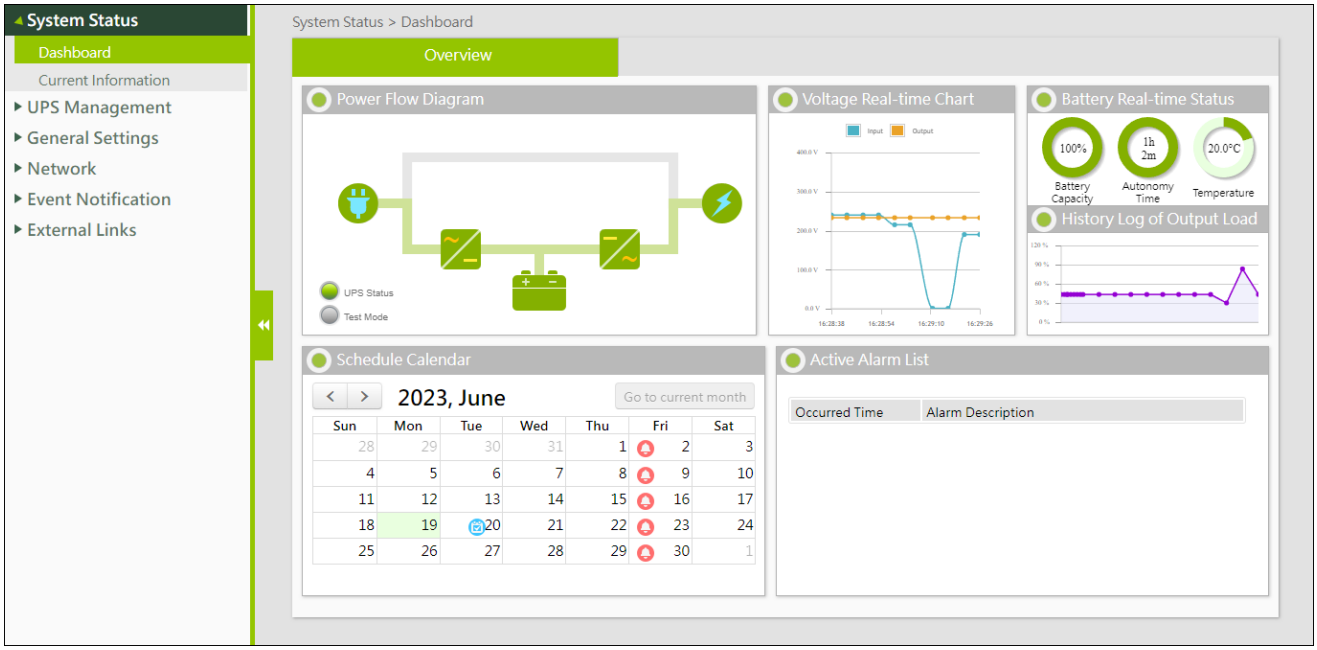
Chapter 4 - Web Interface

4.1. System Status

In this section you can check the real time operating status of the UPS, Schedule, Alarms, and other product information.

4.1.1. Dashboard

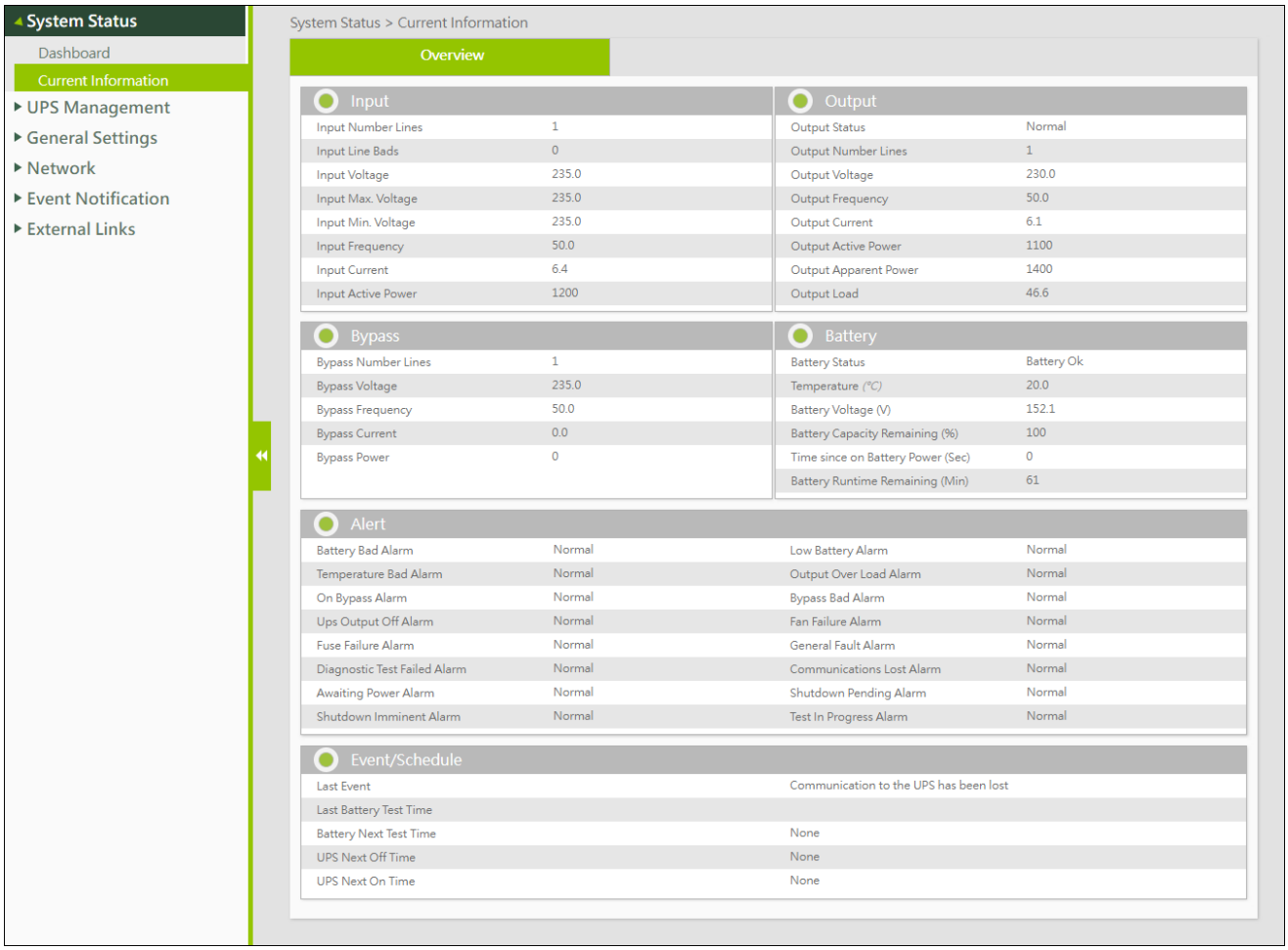
In the dashboard, you can check the operational status, scheduling, and other data of the UPS. This page updates automatically.



Section	Description
Power Flow Diagram	This area displays the input/output power status of the UPS in a diagram. The most important is the "UPS status" light at the bottom left: if it turns yellow or red, check the "Active Alarm list".
Voltage Real time Chart	This chart displays the input/output voltages of the UPS in real-time in graph format
Battery Real time Status	■ Battery Capacity: displays the estimated charge level of the UPS batteries. ■ Autonomy Time: displays the estimated remaining back-up time of the UPS. For some UPSs this data is not available. ■ Temperature: displays the internal temperature of the UPS.
History Log of Output Load	This chart displays the power consumption of the devices connected to the UPS as percentages.
Schedule Calendar	UPS schedules can be checked for each month.
Active Alarm List	This table displays the currently active alarms.

4.1.2. Current Information

Here you can check the status of the UPS, the latest alarm and schedule.
Note: not all data is available for all UPSs.



Input

Item	Description
Input Number Lines	The number of UPS input lines
Input Line Bads	The number of times one (or more) input line has gone out of tolerance. The counter resets each time the CS102 is restarted
Input Voltage	The current input voltage, in Volts
Input Max. voltage	The maximum input voltage, in Volts
Input Min. Voltage	The minimum input voltage, in Volts
Input Frequency	The current input frequency, in Hertz
Input Current	The current input current, in Ampere
Input Active Power	The current input power, in Watt

Output

Item	Description
Output Status	The status of the output source: "Other", "None", "Normal", "Bypass", "Battery", "Booster" and "Reducer".
Output Number Lines	The number of UPS output lines
Output Voltage	The current output voltage, in Volts
Output Frequency	The current output frequency, in Hertz
Output Current	The current output current, in Ampere
Output Active Power	The current output power, in Watt
Output Apparent Power	The current output power, in VA
Output load	The current output load, in percentage

Bypass

Item	Description
Bypass Number Lines	The number of UPS bypass lines
Bypass Voltage	The current bypass voltage, in Volts
Bypass Frequency	The current bypass frequency, in Hertz
Bypass Current	The current bypass current, in Ampere
Bypass Power	The current bypass power, in Watt

Battery

Item	Description
Battery Status	The status of the UPS batteries: "Unknown", "Battery OK", "Low battery", "Battery depleted", "Battery discharging" and "Battery failure"
Temperature	The current internal UPS temperature, in Celsius degrees
Battery Voltage	The current total voltage of the battery, in Volts
Battery Capacity Remaining	The estimated remaining battery capacity, in percentage
Time since in Battery Power	The elapsed time (in seconds) since the UPS switched to battery power. The value resets each time the UPS returns to normal mode
Battery Runtime Remaining	The estimated remaining backup time, in minute

Alert

This section shows the active alarms of the UPS.

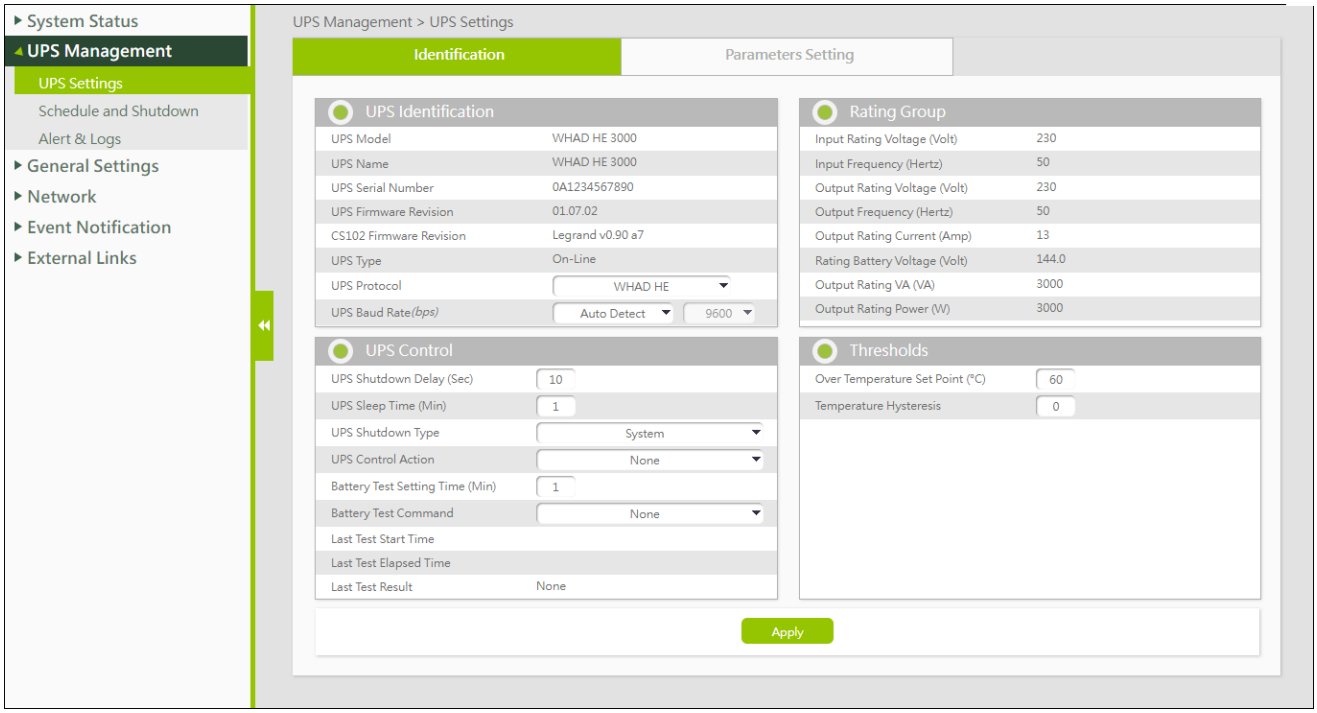
Event/Schedule

Item	Description
Last Event	Displays the last recorded event
Last Battery Test Time	Displays the latest date and time (in dd/mm/yyyy hh:mm format) a battery test was executed
Battery Next Test Time	Displays the date and time (in dd/mm/yyyy hh:mm format) of the next scheduled battery test
UPS Next Off Time	The date and time of the next UPS shutdown, according to what is set in the scheduler (weekly or special day)
UPS Next On Time	The date and time of the next restart of the UPS, according to what is set in the scheduler (weekly program or special day)

4.2. UPS Management

4.2.1. UPS Settings

Not all data and settings are available for all UPSs.



Identification

UPS Identification

Item	Description
UPS Model	The UPS model name (e.g., "Daker DK Plus 3000")
UPS Name	The unique name of the UPS, as configured by the Administrator (default is the same as displayed in "UPS Model")
UPS Serial Number	The serial number of the UPS
UPS Firmware Revision	The firmware version of the UPS
CS102 Firmware Revision	The firmware version of the CS102 SNMP card
UPS Type	Type of the UPS: "On-Line", "Off-Line", "Line-Interactive", "3 Phase" or "Three-phase in One Out"
UPS Protocol	This allows the user to choose the model/family of the UPS connected to the CS102
UPS Baud Rate	It allows to select the communication parameters between the CS102 and the UPS. Except in very special cases, leave the default setting ("Auto Detect")

Rating Group

Item	Description
Input Rating Voltage	The nominal input voltage (P-N) of the UPS, in Volts
Input Frequency	The nominal input frequency of the UPS, in Hertz
Output Rating Voltage	The nominal output voltage (P-N) of the UPS, in Volts
Output Frequency	The nominal output frequency of the UPS, in Hertz
Output Rating Current	The nominal output current of the UPS, in Ampere
Rating Battery Voltage	The total nominal voltage of the UPS battery, in Volts
Output Rating VA	The nominal apparent output power of the UPS, in VA
Output Rating Watt	The nominal active output power of the UPS, in Watt

UPS Control

This section let you perform control such as stopping/starting the UPS and running a battery test.

Item	Description
UPS Shutdown Delay	The delay (in seconds) that the UPS stays on after being told to shut down; it will be added to any shutdown schedule you set. To avoid improper shutdown of computers, this time should always be greater than the time required for the computers to shut down properly
UPS Sleep Time	The duration (in minutes) that the UPS remains in sleep mode. During this mode, the UPS does not provide output power regardless of the status of the input line. After the specified time, the output power will resume.

Item	Description
UPS Shutdown Type	Allows you to choose whether to switch off the entire UPS or just its outputs, in case of executing one of the commands in the "UPS Control Action" drop-down menu
UPS Control Action	■Turn Off UPS with Delay: the UPS (or its outputs) shuts down after the time specified in "UPS Shutdown Delay" ■UPS Sleep: it causes the UPS (or its outputs) to shut down after the delay time configured in "UPS Shutdown Delay" and stay off for the time specified by "UPS Sleep Time". Once the specified time has elapsed, the UPS (or its outputs) will automatically turn back on ■Turn On UPS / Cancel UPS Shutdown: it causes the UPS to cancel any shutdown processes in progress. If the UPS has already shut down, immediately turn the UPS (or its outputs) back on ■Turn On/Off Beep: enable or disable the UPS buzzer
Battery Test Setting Time	Allows you to set the total time for the battery test when "Timed Test" has been selected in the "Battery Test Command" drop down menu
Battery Rated Capacity	Sets the remaining battery capacity at which the "Test Until Battery Rated Capacity" test will end
Battery Test Command	■None: no action (default) ■Quick Battery Test: performs battery test for a short time (typically 10 seconds to 2 minutes - UPS dependent) ■Test Until Battery Low: runs the battery test until the battery is empty ■Timed Test: run the battery test for the period set in the "Battery Test Setting Time" parameter ■Test Until Battery Rated Capacity: performs a battery test until the battery charge percentage drops to the level set in "Battery Rated Capacity" parameter ■Cancel Test: cancel the battery test ■Clear Test Information: clears information about the last battery test performed by the CS102
Last Test Start Time	The start time of the last battery test
Last Test Elapsed Time	The elapsed time of the last battery test
Last Test Result	The result of the last battery test

Thresholds

This lets you set the temperature and load threshold point for the UPS.

Item	Description
Over Temperature Set Point	Set the upper temperature limit of the UPS. When the UPS temperature exceeds this limit, the CS102 takes the action specified in the "UPS Management → Schedule and Shutdown → Event Shutdown" page. Range: 10~100 ℃

Item	Description
Temperature Hysteresis	When the temperature is very close to the set threshold, its oscillation can generate many alarm notifications. The hysteresis setting defines how many degrees the measured value must change before the alarm is cleared. For example, if the temperature limit is set to 60 °C and the hysteresis is set to 2 °C, the alarm will activate at 60 °C but will not clear until the temperature drops below 58 °C. The default setting of the hysteresis is 0 °C, while the setting range is 0~20 °C.
Overload Set Point	Displays the UPS output overload alarm threshold. When the UPS output load exceeds this limit, the CS102 takes the action specified in the "UPS Management → Schedule and Shutdown → Event Shutdown" page

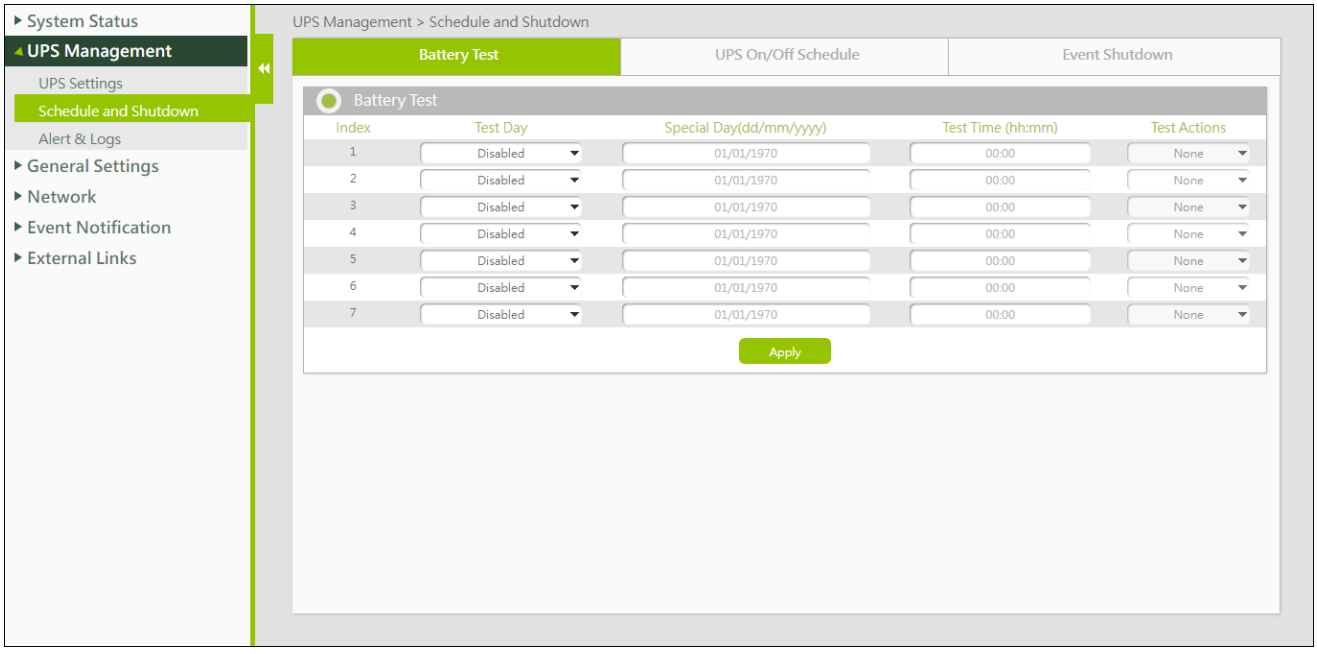
Parameters Setting

This page allows you to set the battery replacement dates.
It's just a reminder, it has no effect on the operation of the CS102.

4.2.2. Schedule and Shutdown

Battery Test

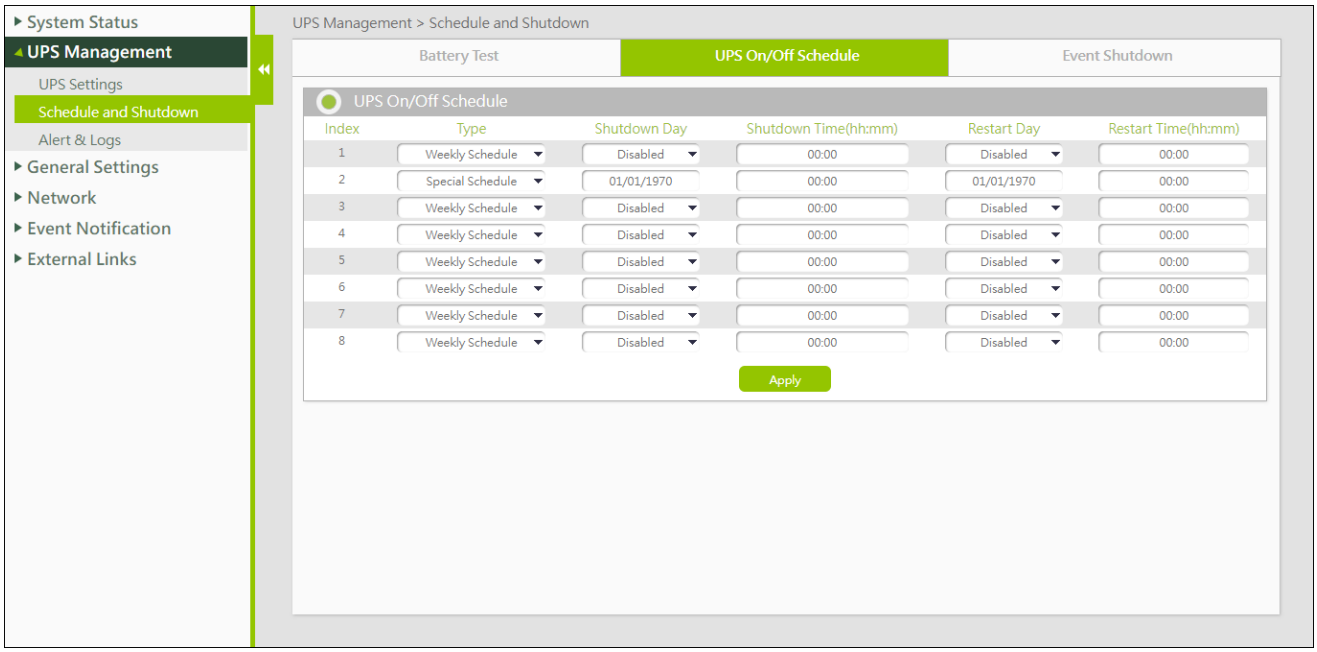
This page let you set a schedule for Battery Auto Test. A maximum of 7 schedules can be registered.



Item	Description
Test Day	When to start the test. The frequency can be weekly (choosing the day of the week) or one-off (choosing "Special Day")
Special Day	If "Special Day" was chosen in "Test Day", specify the test execution date (dd/mm/yyyy format)
Test Time	The start time of the test (24-hour format)
Test Actions	The type of battery test to perform: ■None: no action ■Quick Battery Test: runs the battery test for a short time ■Test Until Battery Low: runs the test until the battery is empty ■Timed Test: runs the test for the period specified in "UPS Management → UPS Settings → Battery Test Setting Time" parameter ■Test Until Battery Rated Capacity: runs the test up to the remaining battery capacity value specified in " UPS Management → UPS Settings → Battery Rated Capacity " parameter

UPS On/Off Schedule

This page lets you modify the parameters of the shutdown / restart events associated with the days of the week or specific day.
Note: please make sure the "Weekly Schedule" or "Special Day" option is enabled in the "Event Shutdown" page.

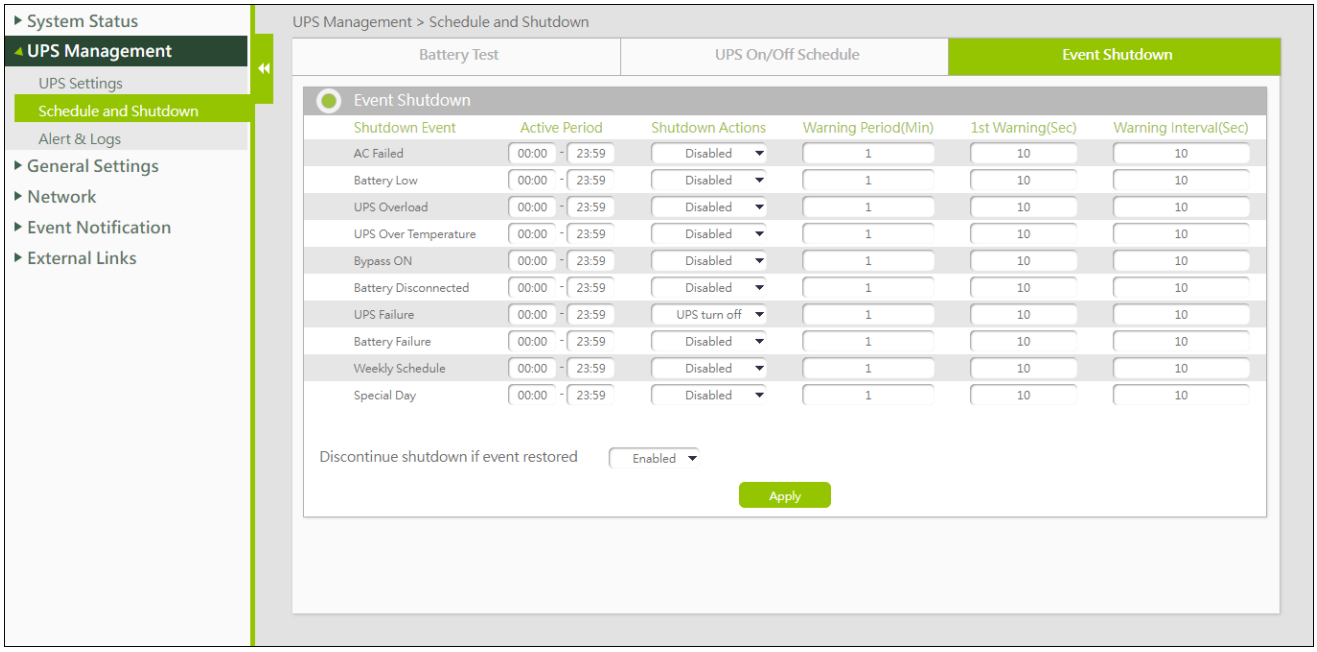


Item	Description
Type	When to execute the job. The frequency can be weekly or one-off
Shutdown Day	The UPS shutdown date (dd/mm/yyyy format) or day of the week, as set in "Type"
Shutdown Time	The shutdown time of the UPS (24-hour format)

Item	Description
Restart Day	The UPS restart date (dd/mm/yyyy format) or day of the week, as set in "Type"
Restart Time	The restart time of the UPS (24-hour format)

Event Shutdown

This page lets you set related shutdown operation of the UPS can be performed. Not all the events are available for all UPSs.



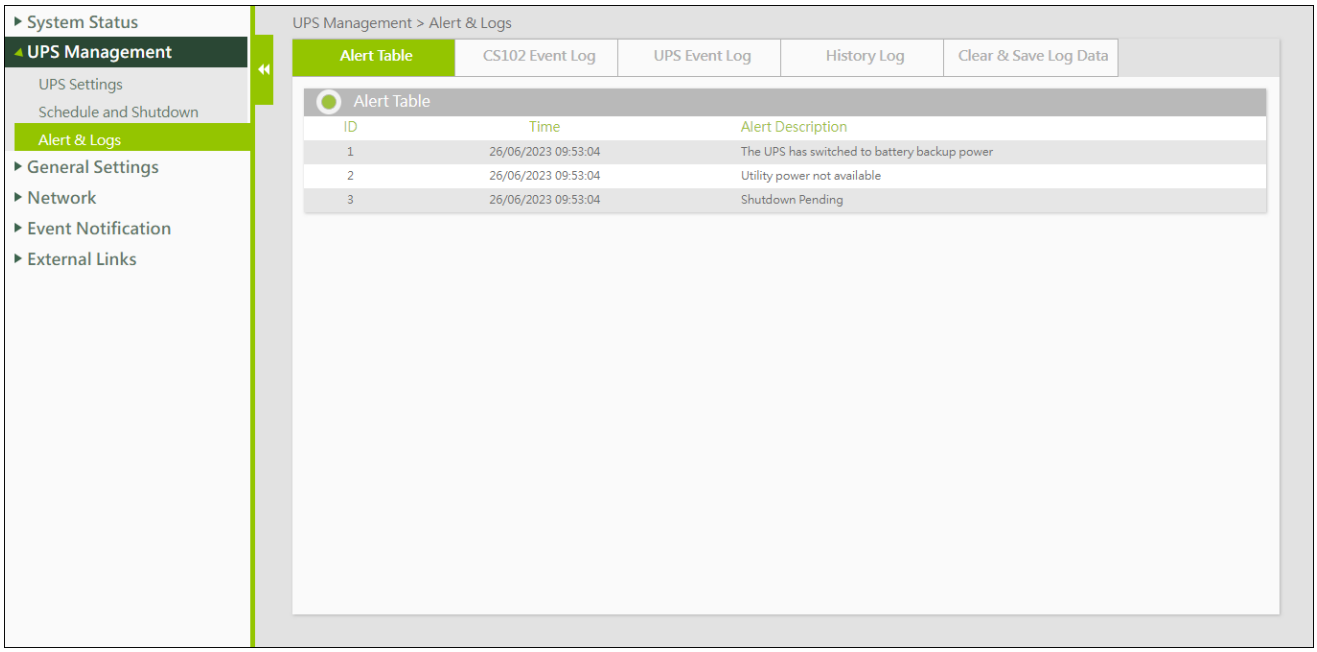
Item	Description
Shutdown Event	The type of event that causes the UPS to shut down.
Active Period	Time interval for which the action will be performed in case the event is triggered
Shutdown Actions	Specifies the type of action to perform: ■ Disabled: the action is disabled. ■ UPS Shutdown: a shutdown command will be sent to the UPS.
Warning Period	Specifies the delay in minutes after which the shutdown command will be sent to the UPS. The time set in the "UPS Shutdown Delay" ("UPS Settings" paragraph) will always be added to this time.
1st Warning	Currently not used
Warning Interval	Currently not used
Discontinue shutdown if event restored	■ Enabled: the action will be performed only if the event is still active after the time specified in the warning period has elapsed ■ Disabled: the action will always be performed at the end of the warning period, independently if the event is still active or not

Note
"Weekly Schedule" and "Special Day" are events related to the scheduler (see "UPS On/Off Schedule"), so the "Discontinue shutdown if event restored" option does not apply to these events.

4.2.3. Alert & Logs

Alert Table

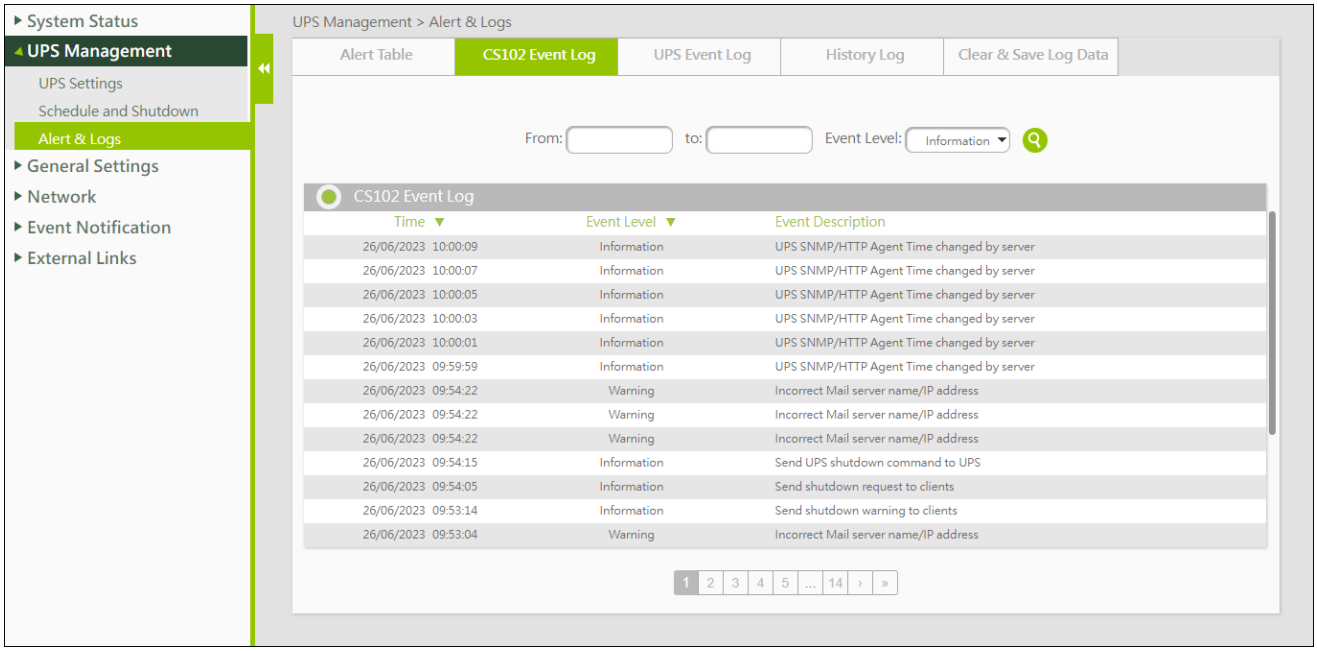
This table displays the currently active alarms. This page will refresh automatically.



Item	Description
ID	Sequential number, it indicates the sequence of activation of alarms. This number will be reset after CS102 reboot.
Time	Data and time in which the CS102 detected the alarm. The correctness of the date/time depends on the clock inside the CS102.
Description	The description of the alarm

CS102 Event Log / UPS Events Log

You can check events that occurred in CS102/UPS. This table lists all the events that have occurred since the table was cleared. The existing values are overwritten when the maximum number of entries (rows) has been reached. You can clear the log data in "Clear & Save Log Data" page.



Search bar

Item	Description
From / To	You can view logs by specifying a period. Click the From (to) field and when the calendar appears, click the target date. You can also insert the date (dd/mm/yyyy) in the text.
Event Level	Logs can be displayed after being narrowed down by event level: ■ Information: displays all the logs (Information/Warning/Critical). ■ Warning: displays the logs which level are Warning or Critical. ■ Critical: Displays only the logs which level are Critical.
"Search" button	After you are done specifying the period in the "From" and "To" fields, click the "Search" button on the right. The events that meet the conditions will be displayed.

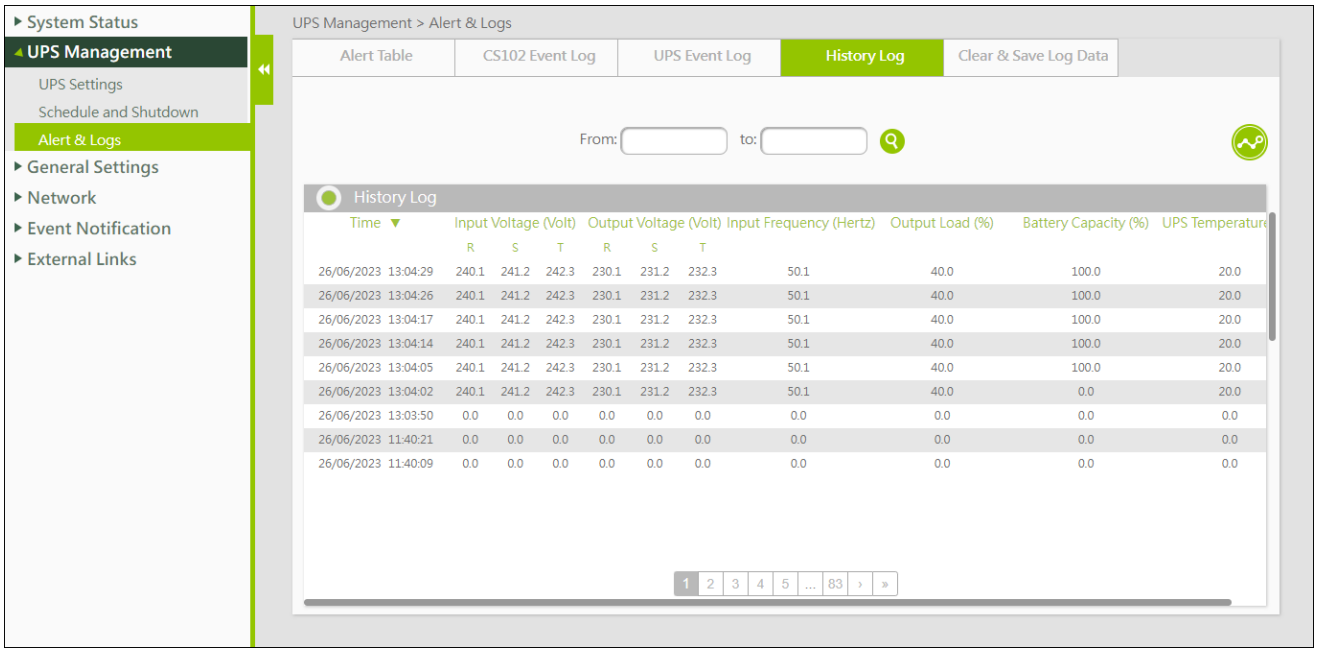
Event table

Item	Description
Time	Data and time (dd/mm/yyyy hh:mm:ss format) in which the CS102 detected the event. Click on the title to change the sort order. The correctness of the date/time depends on the clock inside the CS102.
Event Level	The level of the event. Click the title to change the sort order.
Event Description	The description of the event.

History Log

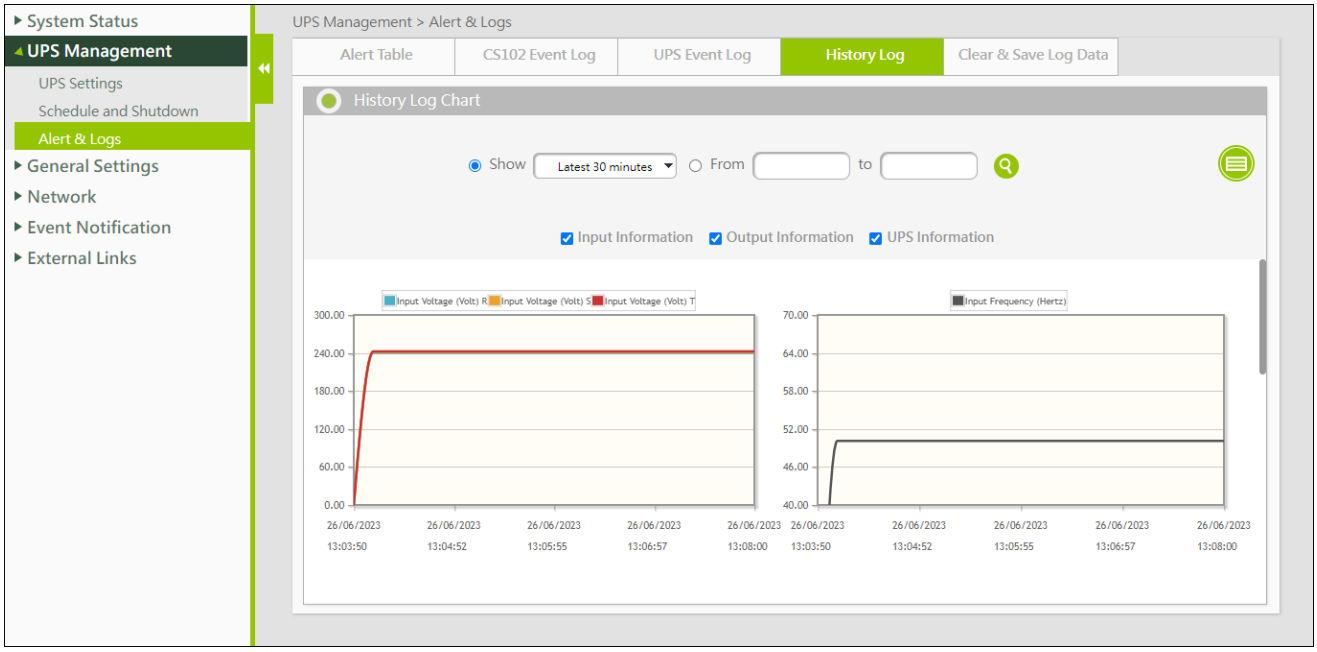
This page provides a snapshot of all basic UPS parameters. The logging interval can be changed by the Administrator by changing the "Log Interval" variable in the "System Configuration" page. Existing values are overwritten when the maximum number of entries (rows) is reached. You can clear the log data in the "Clear & Save Log Data" page.

List View



Item	Description
From / To	You can display logs by specifying a period. Click over the “From” and “To” fields, and when the calendar appears, click the target date. You can also enter the date (dd/mm/yyyy) in text. The correctness of the date/time depends on the clock inside the CS102.
“Search” button	After you are done specifying the period in the “From” and “To” fields, click the "Search" button on the right
“Graphic” button	This button is used to display data logs in graphic form.

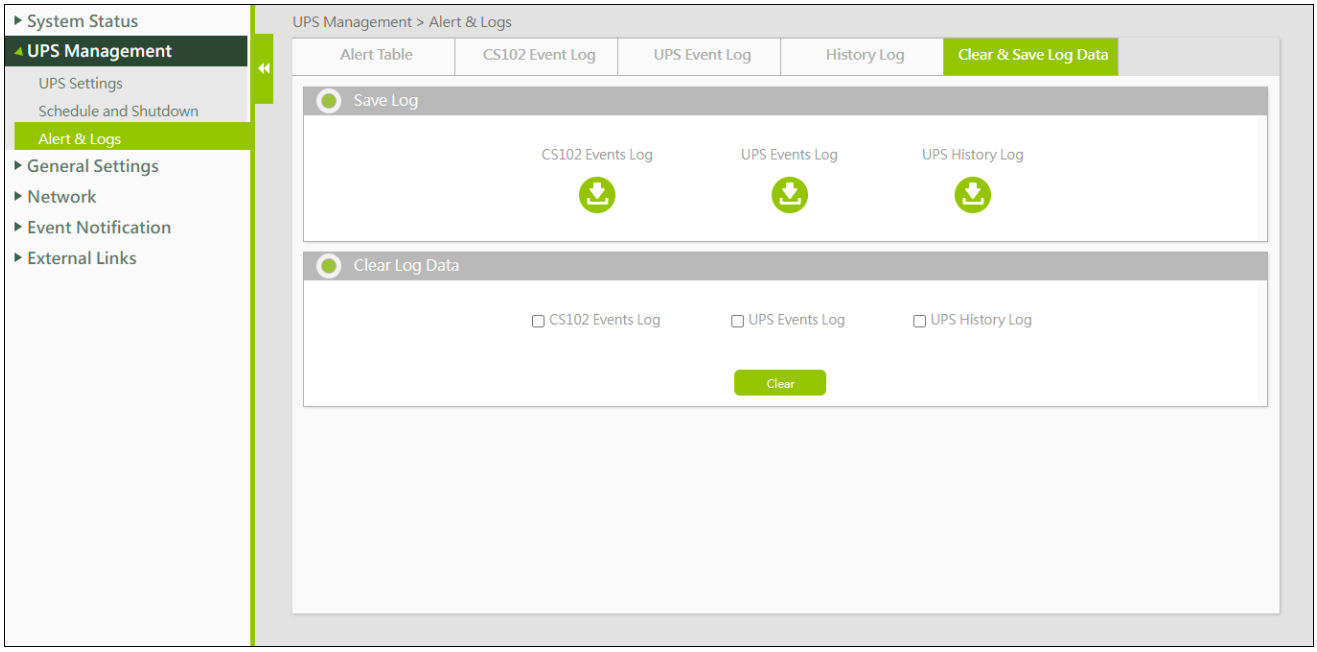
Graphical view



Item	Description
Show	Specifies a data viewing period. It is used as an alternative to the "From" and "To" fields.
From / To	You can display graphs by specifying a period. Click over the “From” and “To” fields, and when the calendar appears, click the target date. You can also enter the date (dd/mm/yyyy) in text. The correctness of the date/time depends on the clock inside the CS102.
“Search” button	After you are done specifying the period in the “From” and “To” fields, click the "Search" button on the right
“List” button	This button is used to display data logs in list form.

Clear & Save Log Data

This page lets you save or clear the log files.

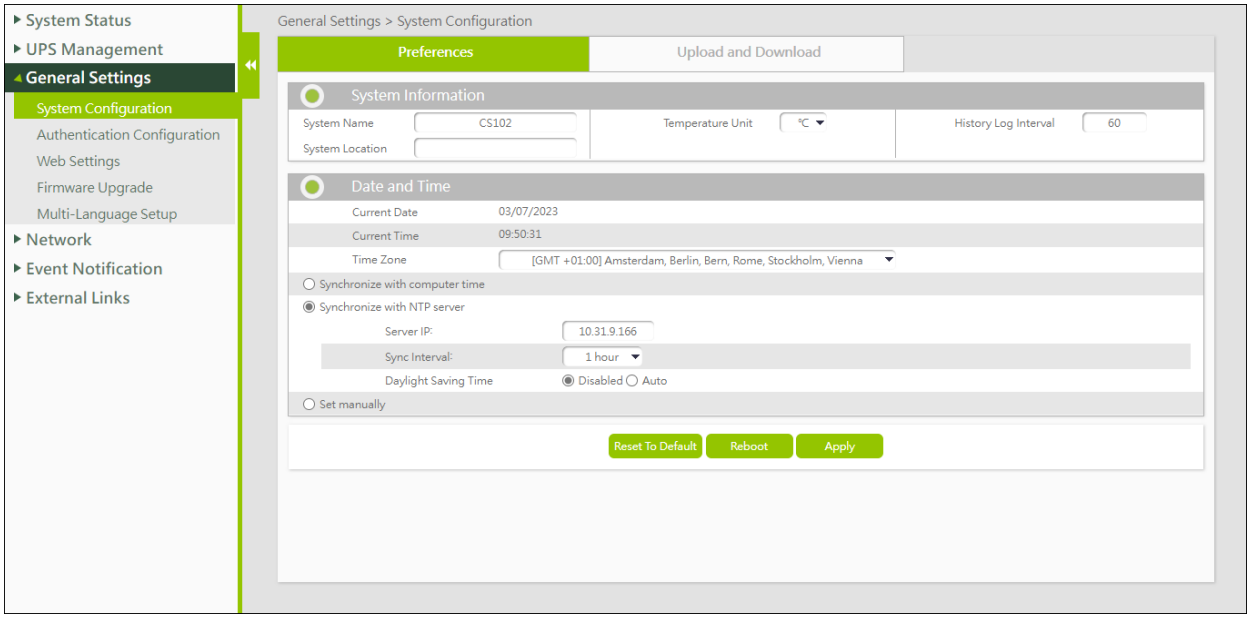


Item	Description
Save Log	Click the download button below the desired item. You can save the various CS102 log data to a file with the ".csv" extension.
Clear Log Data	Administrator can clear the specific log data by putting a check mark beside it and click the "Clear" button.

4.3. General Settings

4.3.1. System Configuration

Preferences



System Information

Item	Description
System Name	A name that identifies the UPS on the network. Corresponds to the SNMP protocol "upsIdentName" variable.
System Location	It specifies where the UPS is installed. Also used in SNMP protocol. Optional field.
Temperature Unit	The unit of measurement for temperature (Fahrenheit or Celsius). The default is Celsius.
History Log Interval	How often the main UPS operating parameters are recorded in the "UPS History Log" file. The minimum value is 1 second.

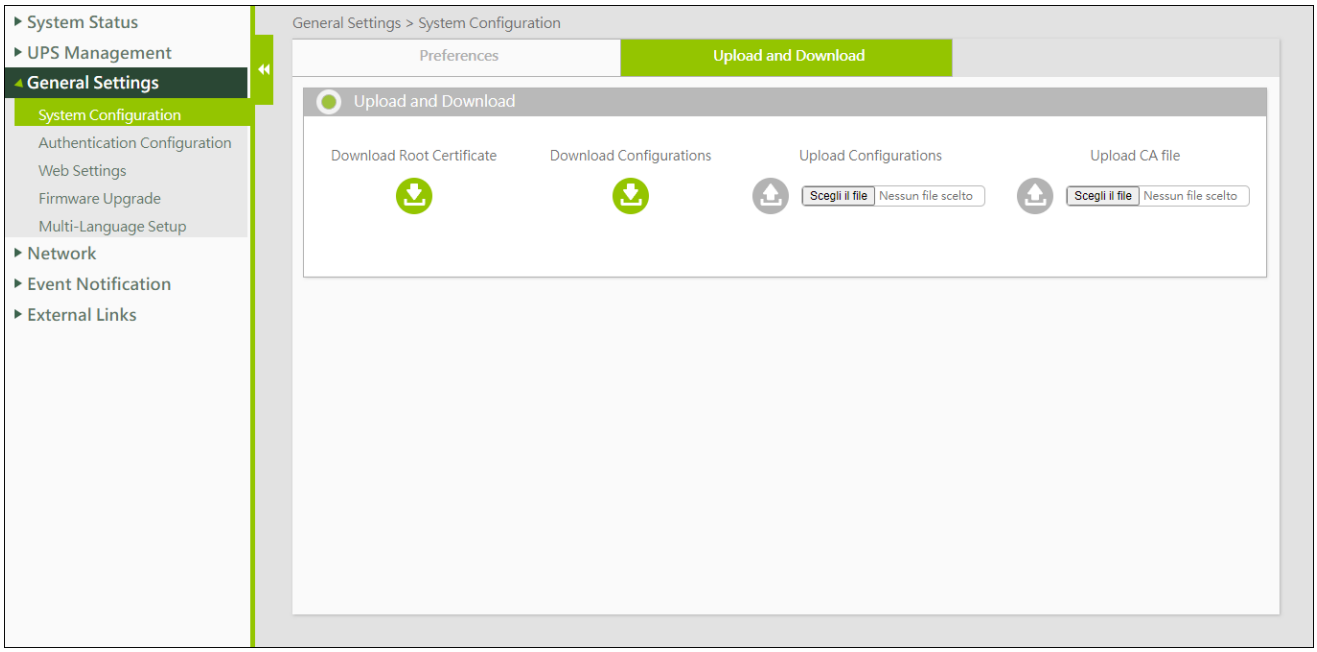
Date And Time

Item	Description
Current Date/Time	Display the current Date and Time of the CS102. This can be changed to synchronize with a computer, an enquiry from a time server (NTP) or manually.
Time Zone	Select the time zone of the area where the CS102 is installed.
Synchronize with computer time	Select this option and click "Set Value" to synchronize with the time from the computer clock.
Synchronize with NTP server	The CS102 synchronizes its clock with a time server (NTP). Make sure that "Time Zone" and "Daylight Saving Time" parameters are set correctly.
Set Manually	To manually set Date and Time (dd/mm/yyyy and hh:mm:ss format)

Buttons

Item	Description
Reset To Default	To reset the CS102 configuration to the factory default.
Reboot	Restart the CS102. It has no effect on the UPS.
Apply	To save the changes made in this page

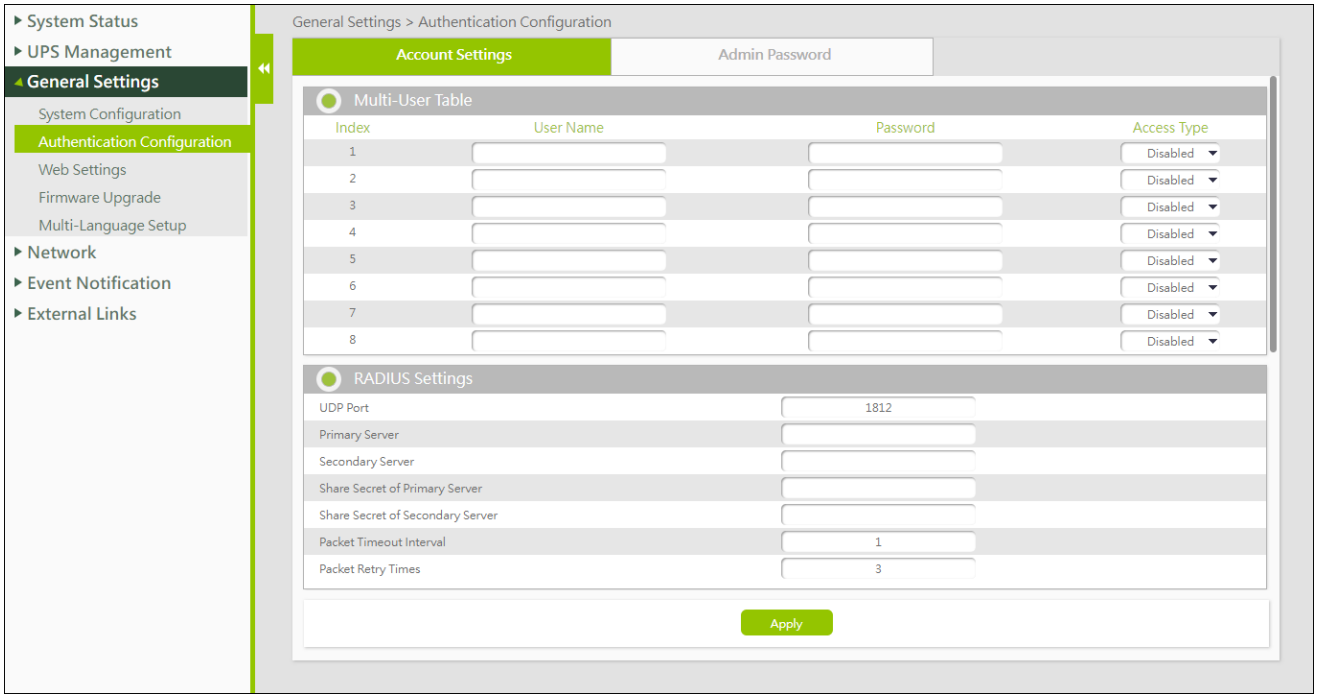
Upload and Download



Item	Description
Download Root Certificate	To download the current certificate of the CS102
Download Configurations	Allows to create a backup file of the current CS102 configuration.
Upload Configurations	Allows to restore a configuration previously saved using “Download Configurations” button
Upload CA file	To upload and use a custom certificate file.

4.3.2. Authentication Configuration

Account Settings



Multi-User Table

This section lets you to enable multi-user access.

Item	Description
User Name	The username with the access type set by Administrator.
Password	The password of the user with the access type set by Administrator.
Access Type	Available options are: Disabled, Read Only, and Read/Write.

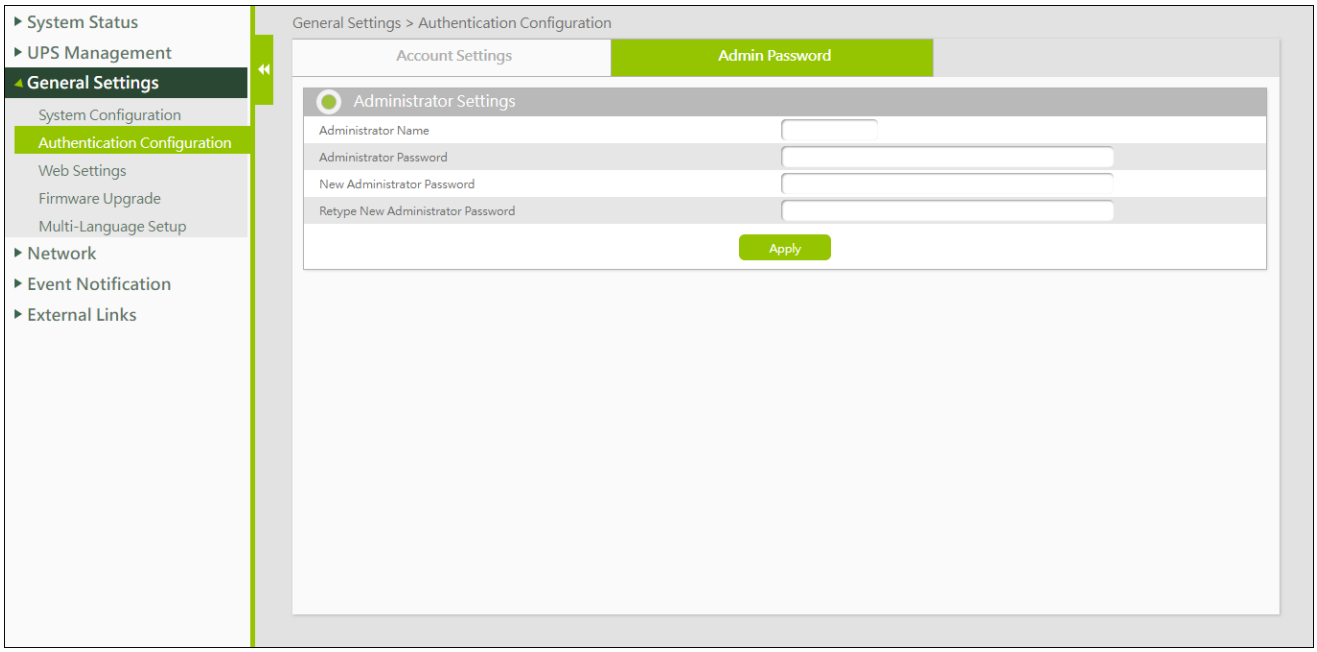
RADIUS Settings

This section lets you set RADIUS authentication.

Item	Description
UDP Port	The UDP port to use. Default value: 1812
Primary Server	The IP address of the primary RADIUS server.
Secondary Server	The IP address of the secondary RADIUS server.
Share Secret of Primary Server	The share secret string of the primary server.
Share Secret of Secondary Server	The share secret string of the secondary server.
Packet Timeout Interval	The packet timeout time. Default value: 1 second.
Packet Retry Times	The number of retries. Default value: 3.

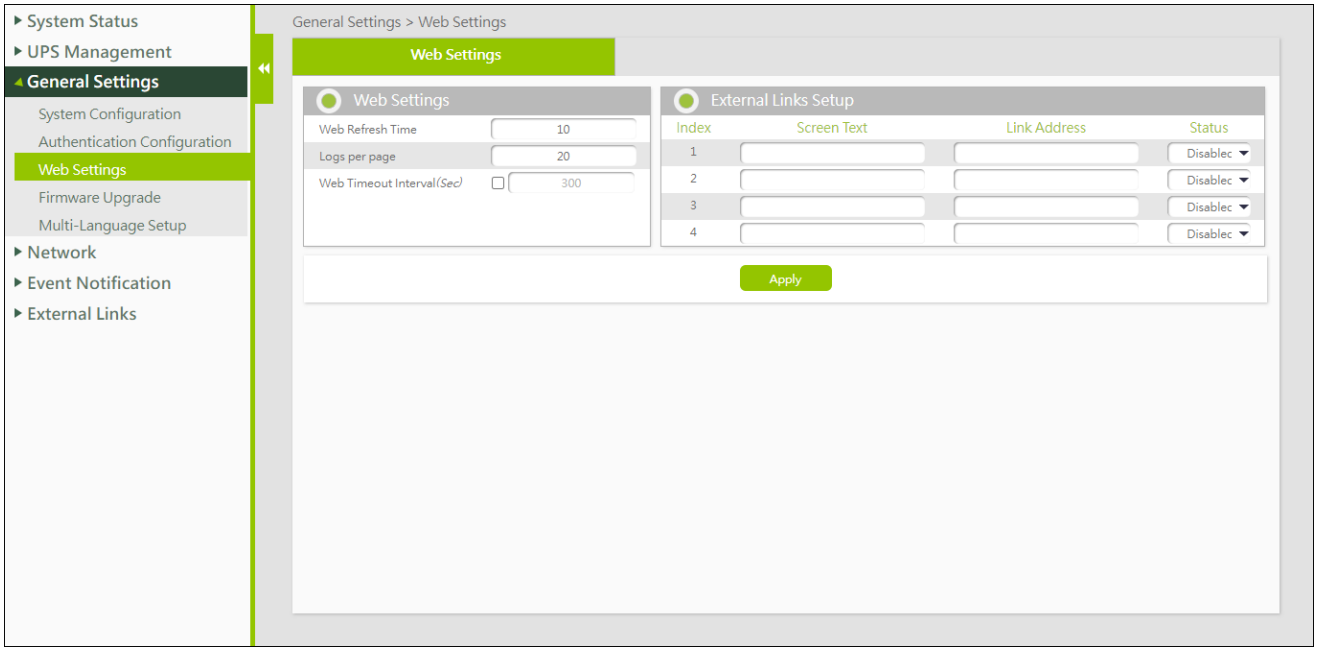
Admin Password

This page lets you change the administrator's password.



Item	Description
Administrator Name	The name of the administrator. It cannot be changed.
Administrator Password	Enter the current "administrator password".
New Administrator Password	Enter a new "administrator password".
Retype New Administrator Password	Retype the new "administrator password".

4.3.3. Web Settings



Web Settings

This page lets you configure the settings related to the Web monitor refresh interval and timeout when you log in.

Item	Description
Web Refresh Time	The refresh interval (in seconds) of web pages.
Logs per page	Set the number of lines displayed on each log pages "CS102 Event Log", "UPS Event Log", "History Log" (UPS Management → Alerts & Logs)
Web Timeout Interval	It specifies the time interval (in seconds), to log out the user if the user has no action on the web page.

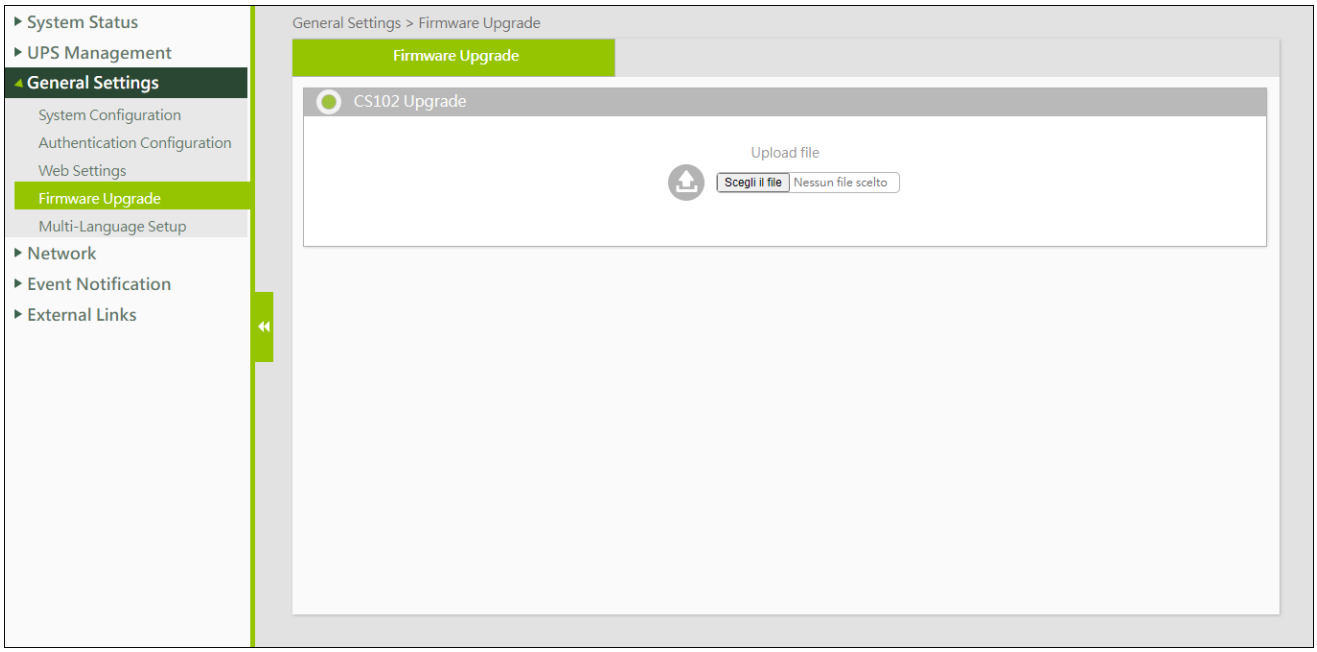
External Links Setup

This page describes setting up links to web pages and/or external websites. For example, another UPS or the technical support home page. Up to four links can be set.

Item	Description
Screen Text	The description of the link name that will be displayed in the menu structure, within the "External Links" menu.
Link Address	The real name of web page to be connected, in URL format.
Status	This field controls the visibility of the link on menu tree. Setting "Disable" will make this link invisible from menu tree.

4.3.4. Firmware Upgrade

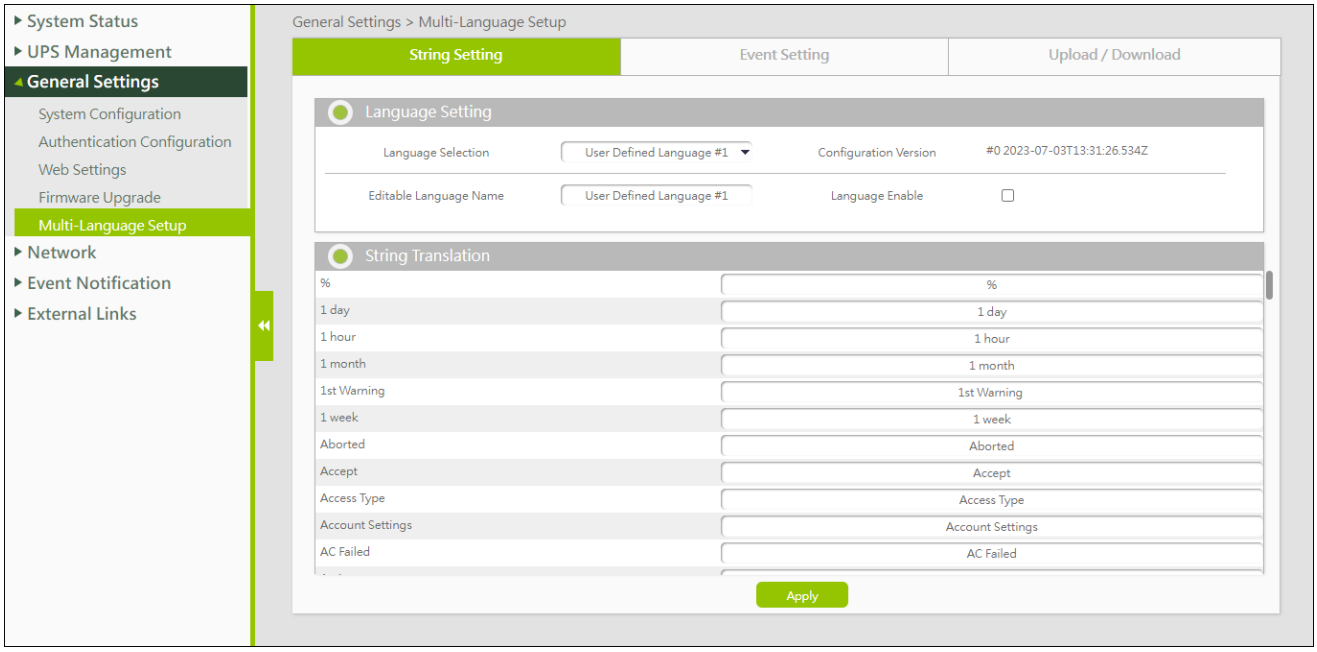
This page allows you to update the firmware of the CS102. Select the firmware with the "Choose file" button and click the "Upload" button. At the end of the process, the CS102 will restart automatically.



4.3.5. Multi-Language Setup

This page allows you to add a new language to the web interface or edit an existing one.

String Setting



Language Setting

Item	Description
Language Selection	This field selects the custom language you want to view or edit.
Editable Language Name	This field defines the language name that will be displayed in language combo box. The maximum size is 30 characters.
Configuration Version	This field shows the language configuration version.
Language Enable	This field determines whether or not a custom language is displayed in the language combo box.

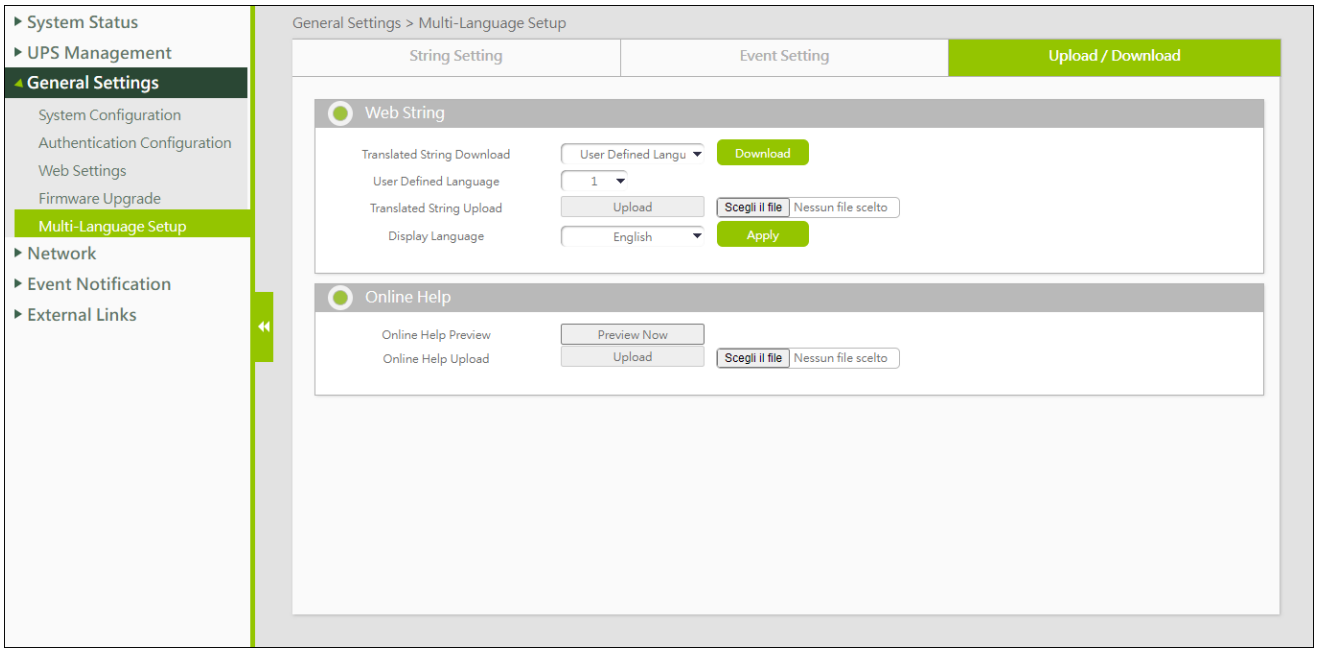
String Translation

This table lists all strings used in all web pages and users can translate them into any language.

Event Setting

This page is identical to the "String Setting" page, but concerns events that are recorded in log files.

Upload/ Download



Web String

On this section, users can download all translated language strings to a file and upload them to other CS102 cards. Users can also upload the files to the CS102 card.

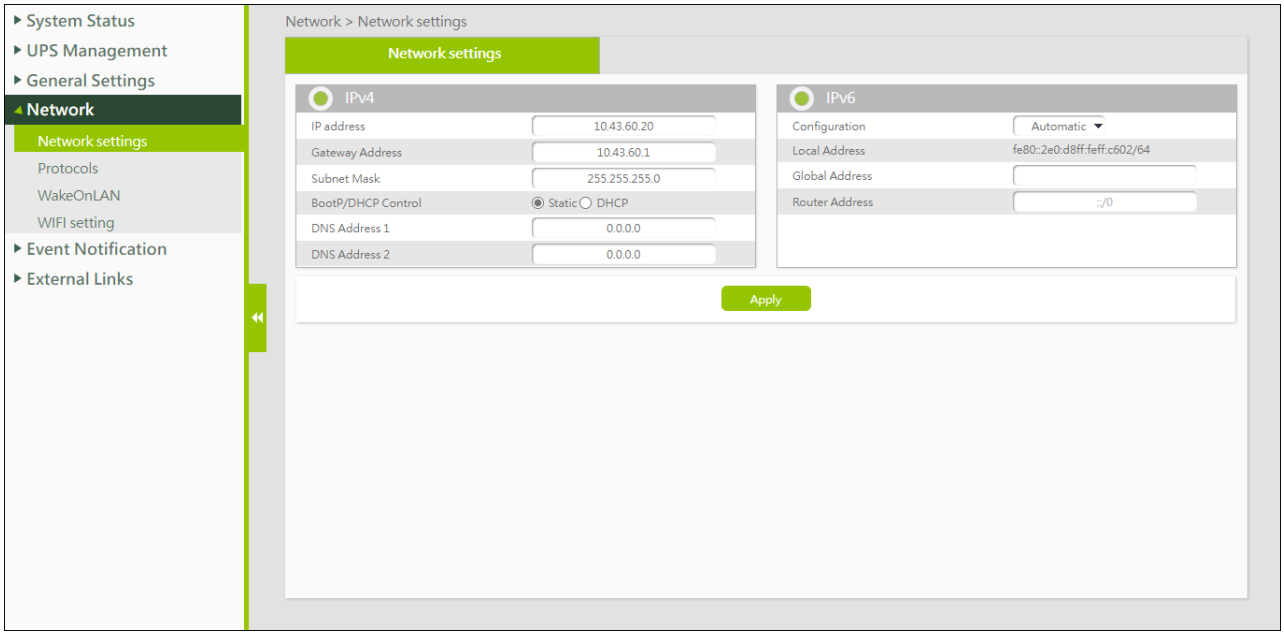
Online Help

On this page, users can view the default online help or upload a customized one.

4.4. Network

4.4.1. Network settings

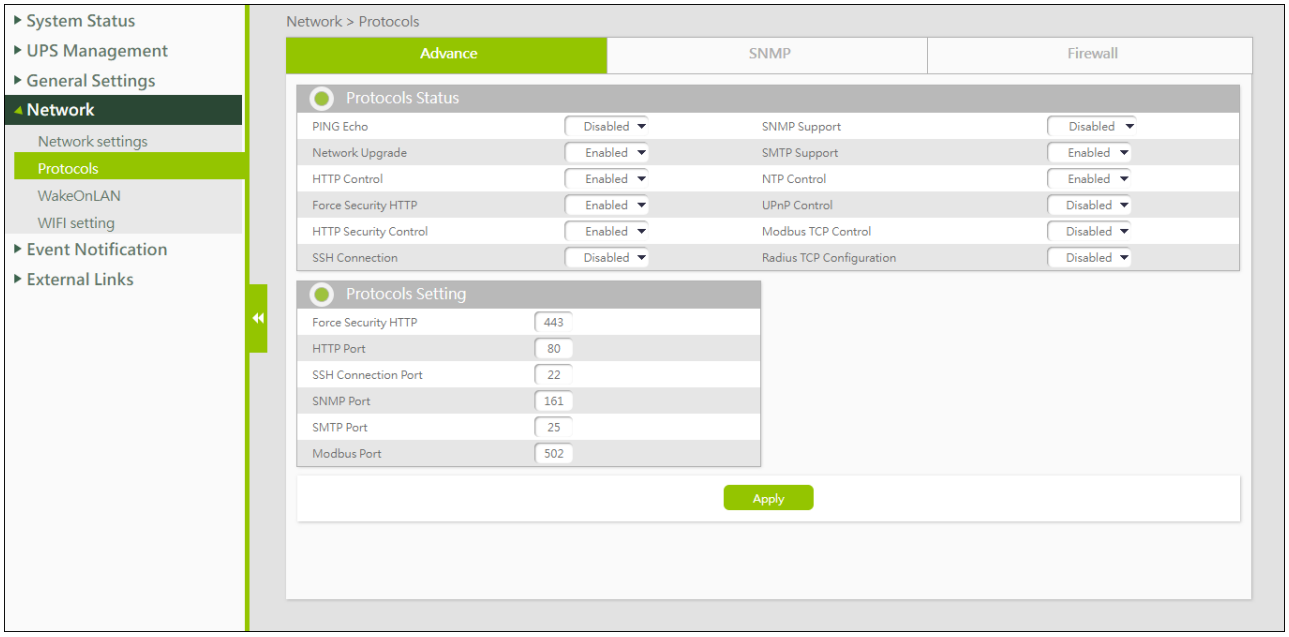
This page allows the administrator to set up the network configuration of the CS102.



4.4.2. Protocols

Advance

In this page it is possible to enable or disable the network communication protocols available in the CS102, and the related IP communication ports. For security reasons, only strictly necessary protocols are enabled by default: activating unnecessary protocols decreases the security level.



Protocol Status

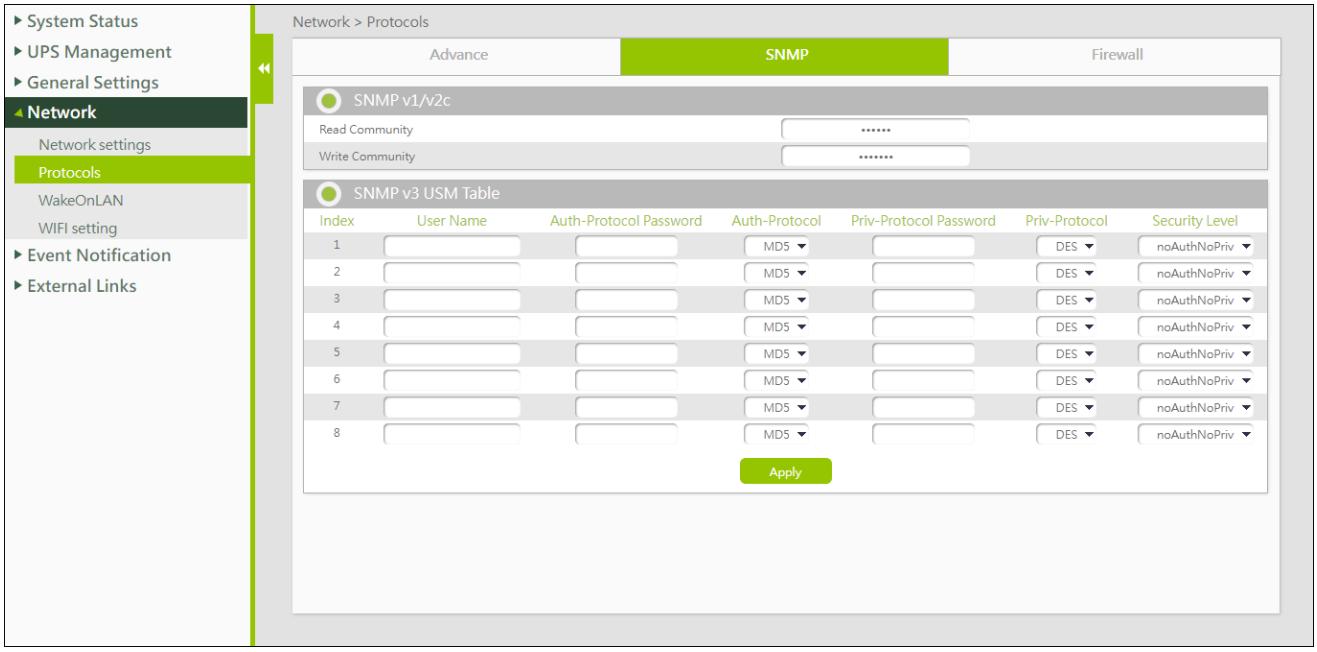
Item	Description
PING Echo	Enable/disable the CS102 to respond to Ping requests. Default: disabled
Network Upgrade	Enable/disable the Trivial File Transfer Protocol (TFTP) upgrade control. You can use the provided upgrade utility on Windows via TFTP to upgrade the CS102 firmware. Default: enabled
HTTP Control	Enable/disable the HTTP connection with the CS102. Default: enabled
Force Security HTTP	Enable/disable the HTTPs protocol. Default: enabled
HTTP Security Control	Enable/disable forced login when accessing the web interface. Default: enabled
SSH Connection	Enable/disable the SSH protocol. Default: disabled
SNMP Support	Enable/disable the SNMP protocol. Available options: "Disabled", "v1/v2c/v3", "v3 only" Default: disabled
SMTP Support	Enable/disable the SMTP protocol, used to send emails. Default: enabled
NTP Control	Enable/disable the time synchronization with the NTP server. Default: enabled
UPnP Control	Enable/disable the Universal Plug and Play (UPnP) feature. Default: disabled
Modbus TCP Control	Enable/disable the "Modbus over TCP" protocol. Default: disabled
Radius TCP Configuration	Enable/disable the "Radius over TCP" configuration. Default: disabled

Protocols Setting

Item	Description
Force Security HTTP	The IP port used by the HTTPs protocol. Default: 443
HTTP port	The IP port used by the HTTP protocol. Default: 80
SSH Connection Port	The IP port used by the SSH protocol. Default: 22
SNMP Port	The IP port used by the SNMP protocol. Default: 161
SMTP Port	The IP port used by the SMTP protocol. Default: 25
Modbus Port	The IP port used by the MODBUS protocol. Default: 502

SNMP

This page lets the administrator to configure the SNMP access to the CS102.



SNMP v1/v2c

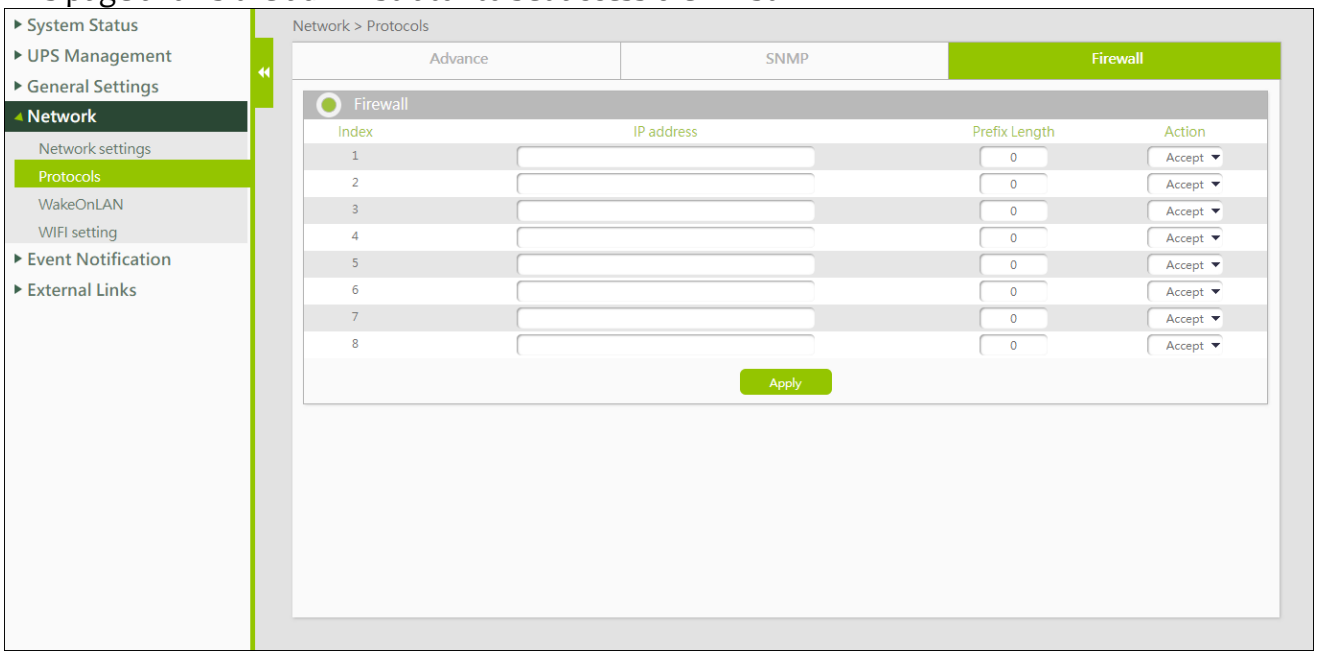
Item	Description
Read Community	The string used to read the values of the SNMP protocol. Default: "public"
Write Community	The string used to read and write the values of the SNMP protocol. Default: "private"

SNMP v3 USM Table

Item	Description
User Name	This field allows you to set the username for accessing the CS102 via SNMP v3.
Auth-Protocol Password	This field allows to set the authentication password of the associated user.
Auth Protocol	This field allows to set the authentication protocol: "HMAC-MD5" or "HMAC-SHA".
Priv-Protocol Password	This field allows to set the privacy password of the associated user.
Priv-Protocol	This field allows to set the privacy protocol: "DES" or "AES".
Security Level	This field allows to set the access type for the user. The available options are: ■ **noAuthNoPriv:** no authentication and no privacy passwords ■ **authNoPriv:** authentication password but no privacy password ■ **authPriv:** no authentication password but with privacy password

Firewall

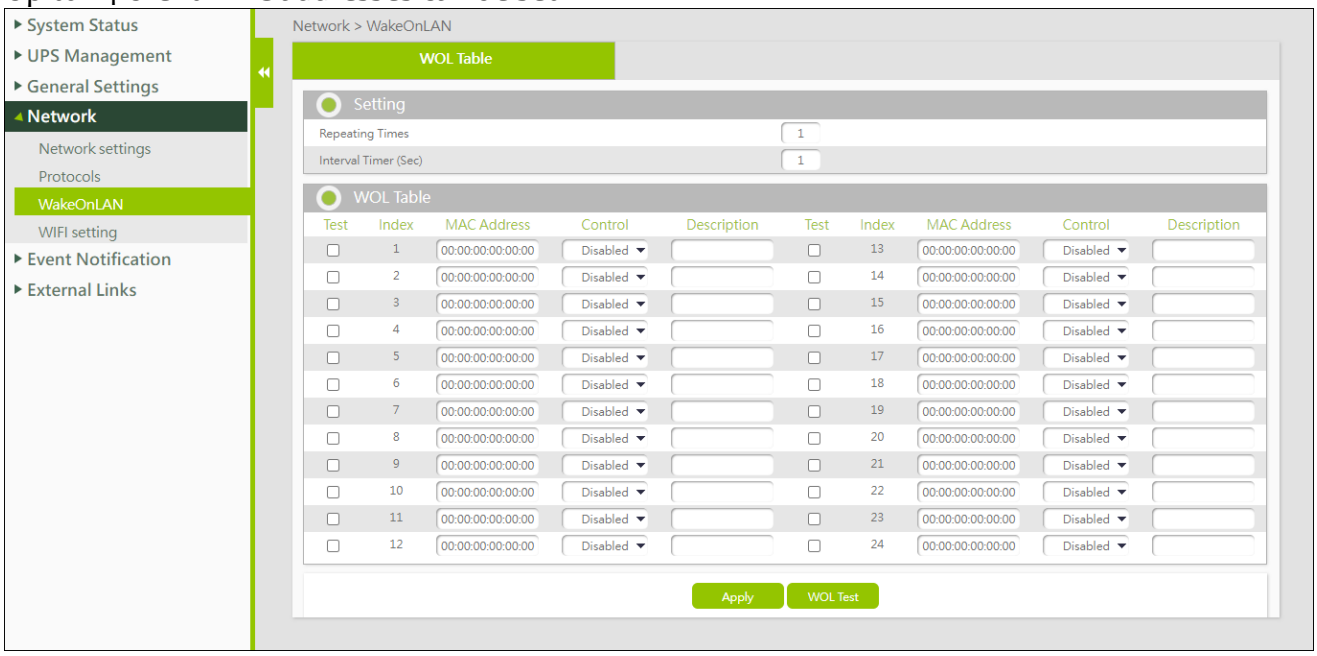
This page allows the administrator to set accessible IP list.



Item	Description
IP Address	This field allows to set the IPv4/IPv6 address. Only "dotted decimal notation" (i.e., 192.168.60.229) or "hexadecimal" (i.e., 2001:1234:100:f101:2e0:d8ff:feff:b522) formats are accepted.
Prefix Length	This field allows to set the Prefix Length and only accept an integer between 0-32 (IPv4) or 0-128 (IPv6).
Action	**Accept:** the specified IP address (or IP segment) can access the CS102. **Reject:** the specified IP address (or IP segment) cannot access the CS102.

4.4.3. WakeOnLAN

The Wake On LAN ("WOL") feature can turn on a PC or compatible device, via its MAC address. After the clients shut down due to UPS shutdown events and after the shutdown events return to normal, the WOL packet will be sent to the client to restart the PC.
Up to 24 client MAC addresses can be set.



Setting

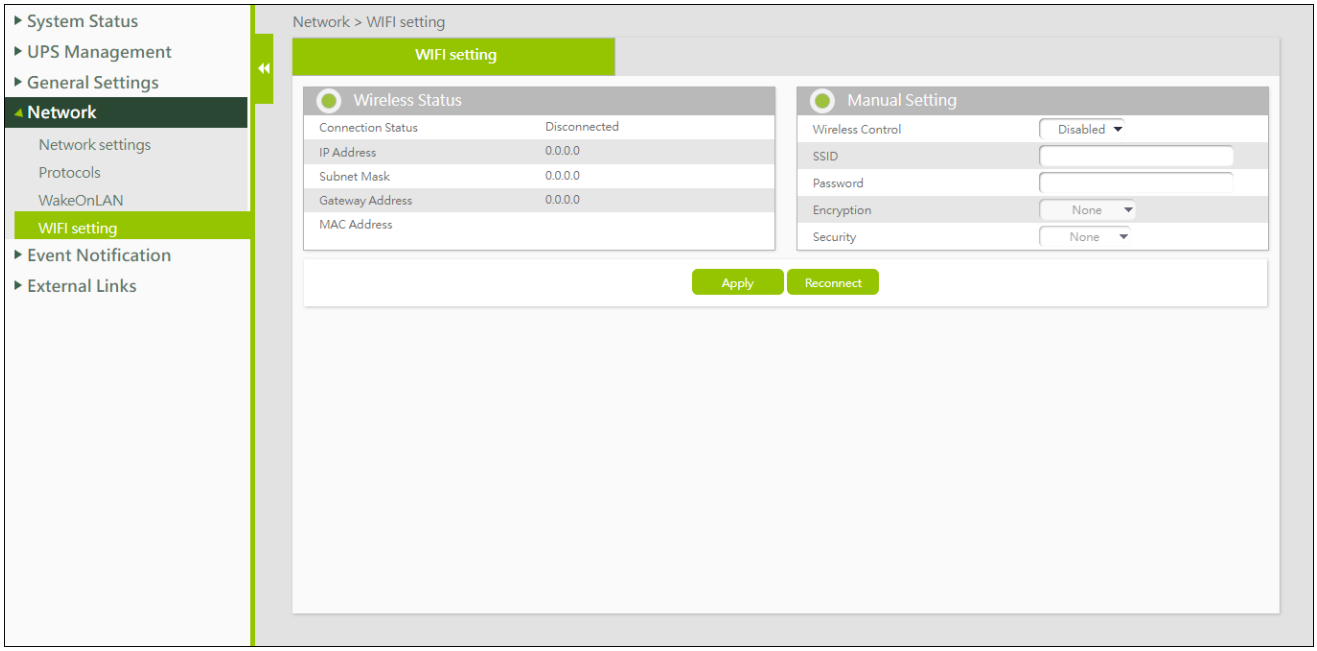
Item	Description
Repeating Times	The repeat times of sending WOL packet to client. Range: 1~99.
Interval Timer	The time interval (in seconds) between two actions of sending the WOL packet to the client. Range: 1~999 seconds.

WOL Table

Item	Description
Test	If this option is selected, the WOL packet will send to client to start up PC after pressing the "WOL Test " button.
MAC Address	Enter the MAC address of the device you want to boot using a WOL packet.
Control	Enable, or disable, the WOL function.
Description	User description. The maximum length of the string is 31 characters.

4.4.4. Wi-Fi setting

This page allows you to connect the CS102 to a Wi-Fi network.
Note: The Wi-Fi dongle, if included in the package, must be plugged into the USB port of the CS102 before starting setup.



Wireless Status

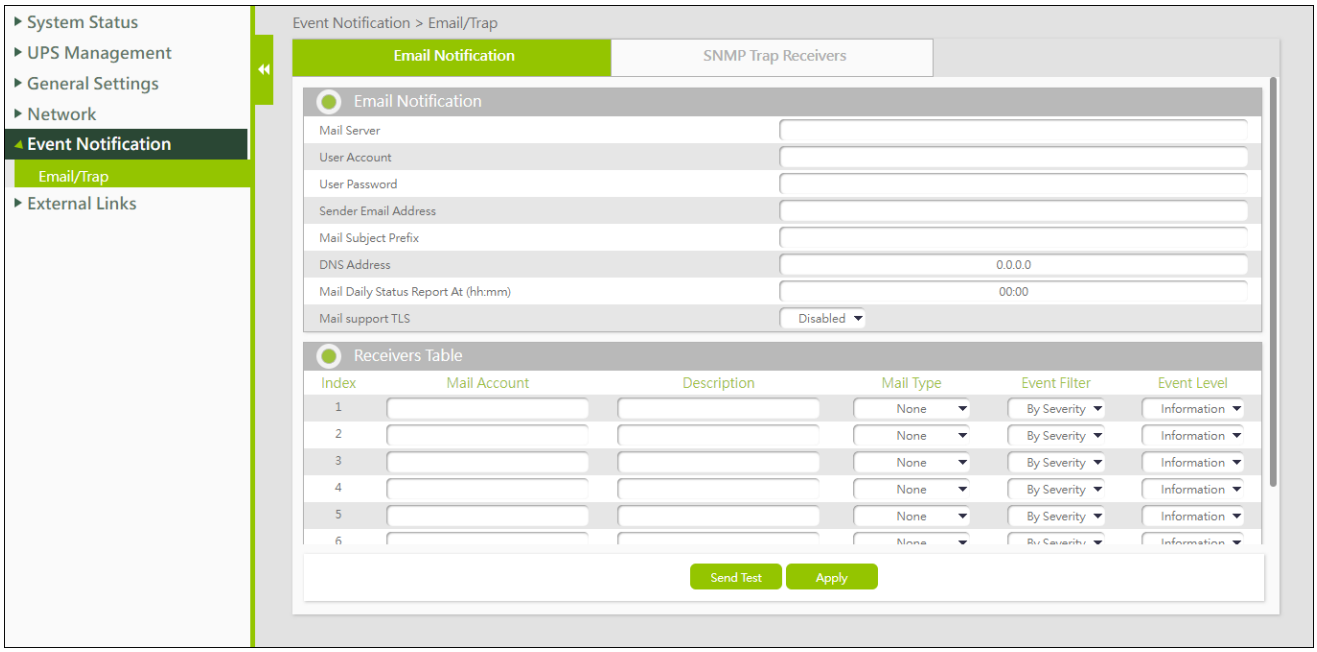
Item	Description
Connection Status	View the status of the WI-FI connection
IP Address	The IP address of the CS102 in the Wi-Fi network
Subnet Mask	The subnet of the CS102 in the Wi-Fi network
Gateway Address	The gateway IP address of the Wi-Fi network
MAC Address	The MAC address of the CS102 Wi-Fi dongle

Manual Setting

Ask your IT manager about how to set up your Wi-Fi network.

Item	Description
Wireless Control	It enables, or disables, the Wi-Fi connection.
SSID	The name of the Wi-Fi network
Password	The password associated to the Wi-Fi network
Encryption	The encryption method used by the Wi-Fi network. Available options: None, WPA-PSK, WPA2-PSK
Security	The security method used by the Wi-Fi network. Available options: None, TKIP, AES, TKIP + AES

4.5. Event Notification



Email Notification

Manual Setting

Item	Description
Mail Server	The IP address (or hostname) of an SMTP mail server that will be used to send email messages. If you enter a hostname, you must also enter the DNS address ("DNS Address" field); if instead you enter an IP address, the DNS Address field will be automatically populated based on the IP address you entered.
User Account	The user account of the mail server that will be used to login mail server to forward mails.
User Password	The password of the user account.
Sender Email Address	The email address used to send emails.
Mail subject Prexix	The prefix of the string in the email subject (usually used to identify the device sending the email)
DNS Address	The IP address of the DNS server if you entered a hostname for the mail server. If not specified, this field will contain "0.0.0.0".
Mail Daily Status Report	If you want the CS102 to send an email (see "Receivers table --> Mail type") containing a daily report of the UPS status, enter the time of day (in 24-hour format).
Mail support TLS	Enable/disable TLS support for sending emails.

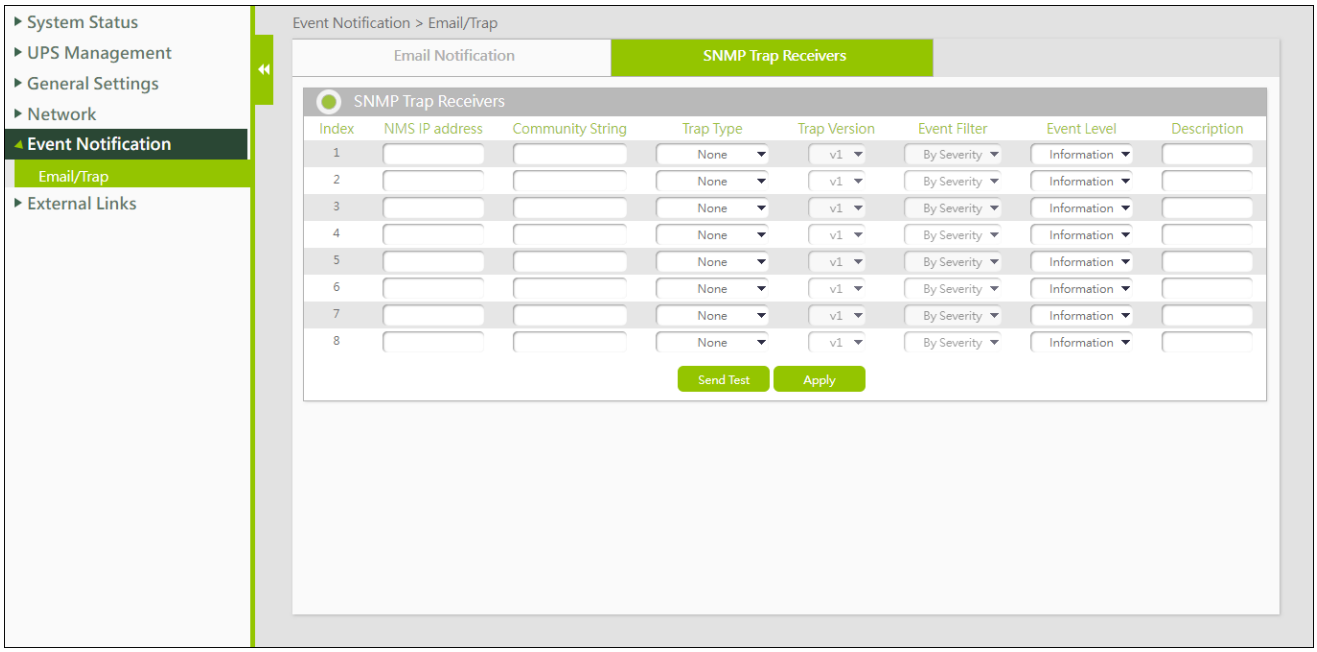
Receivers Table

A maximum of 8 receivers can be registered.

Item	Description
Mail Account	The email address of the person you want the CS102 to send mail to.
Description	The description (for reference only) for the configured mail account.
Mail Type	Allows you to select the type of email to send to a specific email account. ■ None: no emails are sent to the recipient (default). ■ Events: the recipient receives short messages related to the events. ■ Daily Status: the recipient receives an email that contains three file attachments: History Log, Event Log, UPS Event & Agent Event. All files are in ".csv" format, viewable with Microsoft Excel or similar software. ■ Events / Status: combine the options "Events" and "Daily Status".
Event Filter	Allows you to select how to filter the sending of emails when "Events" or "Events / Status" option is selected in the "Mail Type" field. The available options are: "By Severity" and "By Event".
Event Level	■ Event Filter = Severity: this filter is based on the SNMP-based traps (events) and allows selection of Information, Warning or Severe level. Refer to the SNMP MIB documentation for more information. ■ Event Filter = Event: click "Select Event" button to select for which events emails should be sent.

SNMP Trap Receivers

This page lists the recipients of SNMP trap messages (for SNMP network management systems).



Item	Description
NMS IP Address	The IP Address, in dotted format, of the NMS station to which the trap should be sent.
Community String	The community string of the trap PDU to be sent. The maximum length of the string is 19 characters.
Trap Type	Types of the traps to send: ■ None: traps are not sent. ■ RFC1628 Trap: traps are sent according to the specifications described in the RFC1628 MIB file. ■ CS102 Trap: traps are sent according to the RFC1628 MIB file specification plus CS102 private extensions.
Trap Version	It allows to select the SNMP trap version. If you select the v3 version, you need to set the authorization information in the SNMP v3 USM table ([Network] → [Protocols] → [SNMP] → [SNMP v3 USM table]), and the username specified in this table must be the same to the one where the SNMP trap receiver community string is set.
Event Filter	Allows you to select how to filter the sending of SNMP traps. The available options are "By Severity" and "By Event".
Event Level	■ Event Filter = By Severity: set the level of the trap to be received (refer to the SNMP MIB documentation for more information). ▪ **Information**: all traps are sent. ▪ **Warning**: a trap is sent that needs to be noticed and can be dangerous. ▪ **Severe**: Significant traps (such as UPS failure or low battery) are sent that can cause immediate UPS shutdown. ■ Event Filter = By Event: click "Select Event" button to select for which events the trap message should be sent.
Description	Customer descriptive string.

Chapter 5 - Configuring the CS102 via SSH

The SSH protocol allows you to access the configuration of the CS102 without using the web interface. For security reasons, the SSH protocol is disabled by default; you can enable it here: [Network] → [Protocols] → [SSH Connection]

5.1. Login

Use SSH software (like "PuTTY") to connect to the CS102. When the following message appears on the screen, enter your username and password:

```
Login as : admin
admin@192.168.53.23's password: *****
```

The CS102 Configuration Utility main menu will then be displayed.

5.2. CS102 setup

From the main menu, digit "**1**" to enter the **SNMP/WEB Card Settings** page:

```
        ============================================================
                        CS102 Configuration Utility
                          [CS102 Legrand v0.90 a7]
        ============================================================
  1. SNMP/WEB Card Settings
  2. Reset Accounts/Passwords to Default
  3. Reset Configuration to Default
  4. Restart SNMP/WEB Card
  0. Exit

Please Enter Your Choice => 1
```

5.2.1. IP Address, Gateway, Network Mask and Date/Time

1. Select "1" to enter the **IP, Time and System Group** page.

```
        ============================================================
                        CS102 Configuration Utility
                           UPS Model :  Keor SPE
        ============================================================
  1. IP, Time and System Group
  2. Network Control Group
  3. Account Control Group
  4. Email Group
  5. SNMP Group
  0. Back to Main Menu

Please Enter Your Choice => 1
```

2. Depending on your network type, select "1" to enter the **IPv4 Group** page or "2" to enter the **IPv6 Group** page:

```
        ============================================================
                        CS102 Configuration Utility
                        [IP, Time and System Group]
        ============================================================
    SNMP/WEB Card Version  :  Legrand v0.90 a7
    Ethernet Address       :  00:E0:D8:FF:B4:41
  1. IPv4 Group
  2. IPv6 Group
  3. Date and Time Group
  4. System Contact        :
  5. System Name           :  CS102
  6. System Location       :
  0. Return to previous menu

Please Enter Your Choice =>
```

3. Enter the related IPv4 or IPv6 setting as shown below.

```
        ============================================================
                          IP, Time and System Group
                                [IPv4 Group]
        ============================================================
  1. IP Address              :  10.1.6.118
  2. Gateway Address         :  10.1.1.254
  3. Network Subnet          :  255.255.255.0
  0. Return to previous menu

Please Enter Your Choice => 0
```

or

```
        ============================================================
                          IP, Time and System Group
                                [IPv6 Group]
        ============================================================
  1. IP v6 Address          : 2001:1234:100:f101:2e0:d8ff:feff:b406/64
  0. Return to previous menu

Please Enter Your Choice => 0
```

After completing these settings, press "0" to return to the previous menu.

4. Select "3" to enter the **Date and Time Group** page:

```
        ============================================================
                          IP, Time and System Group
                              [Date and Time Group]
        ============================================================
  1. System Date (dd/mm/yyyy)        : 23/12/2022
  2. System Time (hh:mm:ss)          : 15:03:15
  3. NTP Server                      :
  4. NTP Time Zone                   : 28
  5. Daylight Saving Time Control    : Disabled
  0. Return to previous menu

Please Enter Your Choice =>
```

After completing these settings, press "0" to return to the previous menu, then press again "0" to return to the main configuration menu.

5.2.2. Network Control Group setting

From the main configuration menu, press "2" to enabled/disabled the network protocols:

```
    ============================================================
                    CS102 Configuration Utility
                       UPS Model :  Keor SPE
    ============================================================
  1. IP, Time and System Group
  2. Network Control Group
  3. Account Control Group
  4. Email Group
  5. SNMP Group
  0. Back to Main Menu

Please Enter Your Choice => 2
```

1. Select "6~9" to enter the related network control pages.

```
    ============================================================
                    CS102 Configuration Utility
                      [Network Control Group]
    ============================================================
  1. BOOTP/DHCP Control     : Disabled
  2. Upgrade Control        : Enabled
  3. Ping Echo Control      : Disabled
  4. UPnP Control           : Disabled
  5. HTTP Security          : Enabled
  6. HTTP Control Group
  7. SNMP Control Group
  8. SMTP Control Group
  9. SSH Control Group
  0. Return to previous menu

Please Enter Your Choice =>
```

2. Enter the related HTTP setting as shown below.

```
    ============================================================
                      Network Control Group
                      [HTTP Control Group]
    ============================================================
  1. HTTP Control           : Enabled
  2. HTTP Port              : 80
  0. Return to previous menu

Please Enter Your Choice =>
```

After completing these settings, press "0" to return to the previous menu.

3. Enter the related SNMP setting as shown below.

```
    ============================================================
                        Network Control Group
                        [SNMP Control Group]
    ============================================================
  1. SNMP Control                   :  Enabled
  2. SNMP Port                      :  161
  3. On Battery Trap Repeat Time    :  1
  0. Return to previous menu

Please Enter Your Choice =>
```

After completing these settings, press "0" to return to the previous menu.

4. Enter the related SMTP setting as shown below.

```
    ============================================================
                        Network Control Group
                        [SMTP Control Group]
    ============================================================
  1. SMTP Control           :   Enabled
  2. SMTP Port              :   25
  0. Return to previous menu

Please Enter Your Choice =>
```

After completing these settings, press "0" to return to the previous menu.

5. Enter the related SSH setting as shown below.

```
    ============================================================
                        Network Control Group
                        [SSH Control Group]
    ============================================================
  1. SSH Control            :   Disabled
  2. SSH Port               :   22
  0. Return to previous menu

Please Enter Your Choice =>
```

After completing these settings, press "0" to return to the previous menu, then press "0" again to return to the main configuration menu.

5.2.3. Account Control Group Setting

From the main configuration menu, press "3" to modify the related account control identification information.

```
    ============================================================
                    CS102 Configuration Utility
                       UPS Model :  Keor SPE
    ============================================================
  1. IP, Time and System Group
  2. Network Control Group
  3. Account Control Group
  4. Email Group
  5. SNMP Group
  0. Back to Main Menu

Please Enter Your Choice => 3
```

1. Select "1~3" to enter the related account control pages.

```
    ============================================================
                    CS102 Configuration Utility
                      [Account Control Group]
    ============================================================
  1. RADIUS Group
  2. Access Control Table
  3. Super User Group
  0. Return to previous menu

Please Enter Your Choice =>
```

2. Press "1" to enter the related RADIUS settings:

```
    ============================================================
                        Account Control Group
                           [RADIUS Group]
    ============================================================
  1. RADIUS Port           :   1812
  2. RADIUS Server Settings
  3. Packet Timeout        :   1
  4. Packet Retry          :   3
  0. Return to previous menu

Please Enter Your Choice =>
```

After completing these settings, press "0" to return to the previous menu.

3. Press “2” to enter the related access control setting as shown below.

```
============================================================
                    Account Control Group
                  [Access Control Table]
============================================================
     User Name          User Password      User Level
------------------------------------------------------------------------
[1]                     *                   Disabled
[2]                     *                   Disabled
[3]                     *                   Disabled
[4]                     *                   Disabled
[5]                     *                   Disabled
[6]                     *                   Disabled
[7]                     *                   Disabled
[8]                     *                   Disabled

Command :
  1. Display one entry
  2. Modify one entry
  0. Return to previous menu

Please Enter Your Choice =>
```

After completing these settings, press “0” to return to the previous menu.

4. Press “3” to enter the related super user setting as shown below.

```
============================================================
                Super User Name & Password Group
                    [Super User Group]
============================================================
  1. User Name              :    admin
  2. User Password          :    *
  0. Return to previous menu

Please Enter Your Choice => 0
```

After completing these settings, press “0” to return to the previous menu, then press “0” again to return to the main configuration menu.

5.2.4. Email Group Setting

From the main configuration menu, press "4" to modify the Email configuration.

```
    ============================================================
                    CS102 Configuration Utility
                       UPS Model :  Keor SPE
    ============================================================
  1. IP, Time and System Group
  2. Network Control Group
  3. Account Control Group
  4. Email Group
  5. SNMP Group
  0. Back to Main Menu

Please Enter Your Choice => 4
```

1. Enter the related Email settings:

```
    ============================================================
                    CS102 Configuration Utility
                           [Email Group]
    ============================================================
  1. Mail Server                          :
  2. User Account                         :
  3. User Password                        : *
  4. Sender Email Address                 :
  5. Mail Subject Prefix                  :
  6. DNS IP Address                       : 0.0.0.0
  7. Mail Daily Status Report At (hh:mm) : 00:00
  8. Mail support TLS                     : Disabled
  9. Mail Receiver Table
  0. Return to previous menu

Please Enter Your Choice =>
```

2. Enter the related mail receiver setting as shown below.

```
    ============================================================
                            Email Group
                      [Mail Receiver Table]
    ============================================================
       Mail Account        Description    Mail Type    Event Level
------------------------------------------------------------------------
[1]                                       None         Information
[2]                                       None         Information
[3]                                       None         Information
[4]                                       None         Information
[5]                                       None         Information
[6]                                       None         Information
[7]                                       None         Information
[8]                                       None         Information

Command :
  1. Display one entry
  2. Modify one entry
  0. Return to previous menu

Please Enter Your Choice =>
```

After completing these settings, press “0” to return to the previous menu, then press “0” again to return to the main configuration menu.

5.2.5. SNMP Group Setting

From the main configuration menu, press “5” for the SNMP Group:

```
    ============================================================
                    CS102 Configuration Utility
                       UPS Model :  Keor SPE
    ============================================================
  1. IP, Time and System Group
  2. Network Control Group
  3. Account Control Group
  4. Email Group
  5. SNMP Group
  0. Back to Main Menu

Please Enter Your Choice => 5
```

If you want to perform the "trap" function of the SNMP manager, the IP address of the PC must be added to the CS102 list.

Note: The Set Trap Receivers configuration is used only for SNMP Network Manager.

```
============================================================
                CS102 Configuration Utility
                     [SNMP Group]
============================================================
  1. Trap Receiver Table
  2. SNMPv3 USM Table
  0. Return to previous menu

Please Enter Your Choice => 1
```

1. Enter the related Trap receiver setting as shown below.

```
============================================================
                        SNMP Group
                   [Trap Receiver Table]
============================================================
   IP Address    Community/Name  Trap Type     Severity     Description
------------------------------------------------------------------------
[1]              *                  None      Information
[2]              *                  None      Information
[3]              *                  None      Information
[4]              *                  None      Information
[5]              *                  None      Information
[6]              *                  None      Information
[7]              *                  None      Information
[8]              *                  None      Information

Command :
  1. Display one entry
  2. Modify one entry
  0. Return to previous menu

Please Enter Your Choice =>
```

After completing these settings, press “0” to return to the previous menu.

2. Press “2” to enter the related SNMPv3 USM setting. If you want to use a workstation with SNMP Manager or set up more restrictive access, you can add the IP address of the clients on the access control table for the access permissions.

```
                    ============================================================
                                          SNMP Group
                                    [SNMPv3 USM Table]
                    ============================================================
     User Name      Auth Password     Auth.    Priv Password       Privacy        Security
-------------------------------------------------------------------------------------------------
[1]                      *              MD5      *                   DES         noAuthNoPriv
[2]                      *              MD5      *                   DES         noAuthNoPriv
[3]                      *              MD5      *                   DES         noAuthNoPriv
[4]                      *              MD5      *                   DES         noAuthNoPriv
[5]                      *              MD5      *                   DES         noAuthNoPriv
[6]                      *              MD5      *                   DES         noAuthNoPriv
[7]                      *              MD5      *                   DES         noAuthNoPriv
[8]                      *              MD5      *                   DES         noAuthNoPriv

Command :
  1. Display one entry
  2. Modify one entry
  0. Return to previous menu

Please Enter Your Choice => 0
```

After completing these settings, press “0” to return to the previous menu, then press “0” again to return to the main configuration menu.

5.2.6. End of CS102 Console Configuration

After completing the configuration, press “0” to return to the main menu.
Then press “0” again to end the SSH connection. Reboot CS102 is not required, unless you press “4” to end the SSH connection and force a CS102 reboot.

```
    ============================================================
                    CS102 Configuration Utility
                      [CS102 Legrand v0.90 a7]
    ============================================================
  1. SNMP/WEB Card Settings
  2. Reset Account/Password to Default
  3. Reset Configuration to Default
  4. Restart SNMP/WEB Card
  0. Exit

Please Enter Your Choice =>
```

Chapter 6 - Managing CS102/UPS via SNMP

For security reasons, the SNMP protocol is disabled by default; you can enable it here:
[Network] → [Protocols] → [SNMP Support]

6.1. Setting SNMP parameters in CS102

If you intend to manage your CS102/UPS via SNMP NMS (Network Management Station), you may want to customize some of the SNMP settings (such as System Name, System Contact and System Location and so on). Check "Chapter 4 → General Settings → System Configuration" for the details.

6.1.1. SNMP Access Control Setting

Because of the CS102 supports SNMP network protocol, you can use SNMP NMS to manage UPS through the network. The IP address of the server must be set up in the CS102 write access table to prevent unauthorized users from configuring CS102 via HTTP or SNMP protocols.

Note: If you do not enter the IP address of the server to the Access Control Table (via SSH) or the SNMP/HTTP Access Control (via Web Browser) in CS102, the SNMP NMS can only view the UPS status; it will not be able to perform any configuration on CS102/UPS.

6.1.2. Set up SNMP Manager Software

1. Add the MIB file of CS102, downloaded from hiips://ups.legrand.com , to the MIB database of the SNMP manager
2. Search the CS102 equipment in the network
3. To access the CS102 SNMP agent, set the GET and SET community strings.
   See the "Chapter 4 → Network → Protocols → SNMP" page for details.

6.1.3. SNMP Trap Receivers Setting

To receive the trap messages automatically sent by the CS102, you must configure the appropriate section. See "Chapter 4 → Event Notification → SNMP Trap Receivers" page for details.

Chapter 7 - UPS Power Management

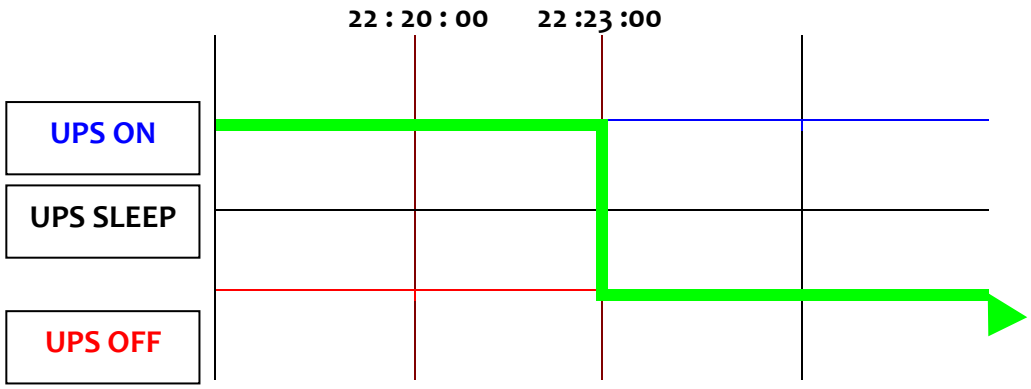
One of the most significant features of the CS102 is dealing with almost all the power crisis confront to a UPS and protect your valuable information reside in your server from being damage due to the abrupt shutdown of the server. In addition, CS102 can help corporate to cut down the expensive energy bill by shutdown all the computer workstations in the office automatically during holiday or after office-hour by using the Weekly Shutdown schedule or Special Day schedule.

7.1. UPS Shutdown during an Event

The CS102 responds to eight different types of UPS shutdown events. Go to [UPS Management] [Schedule and Shutdown] [Event Shutdown], configure the UPS Shutdown table to meet your needs and then click the "Apply" button.

Scenario:

AC failed at:	22:20:00	
Status:	UPS Turn Off	(default value)
Delay (Min):	1	(default value)
UPS Shutdown Delay (Sec):	180	(default value)



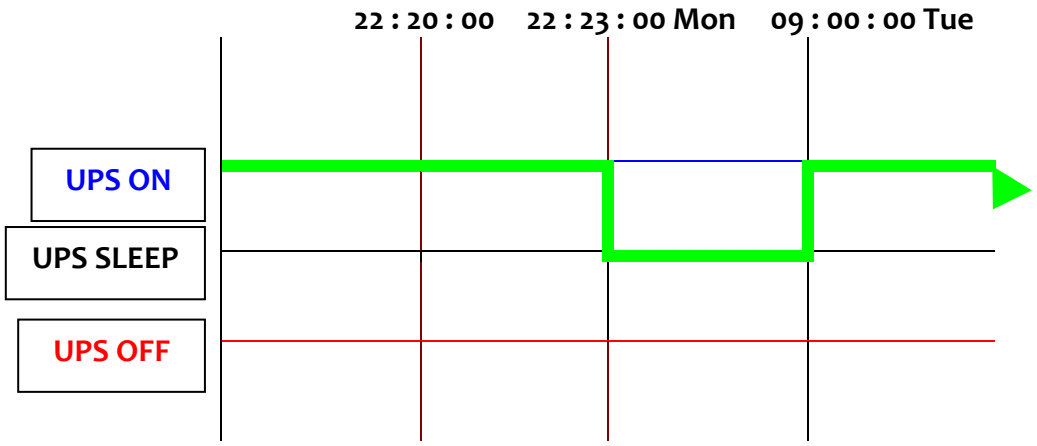
7.2. Managing the UPS Shutdown Schedule

CS102 supports two kinds of shutdown schedules: "Weekly Schedule" and "Special Day Schedule".

Note: Before managing the UPS Shutdown Schedule, please make sure that the Date and Time configured in CS102 is correct.

Scenario

Status:	Special Day Schedule	
Delay (Min):	1	(default value)
1st Warning (Sec):	10	(default value)
Warning Interval (sec):	10	(default value)
UPS Shutdown Delay (Sec):	180	(default value)
Shutdown day & time:	Monday 22:20:00	
Restart day & time:	Tuesday 09:00:00	

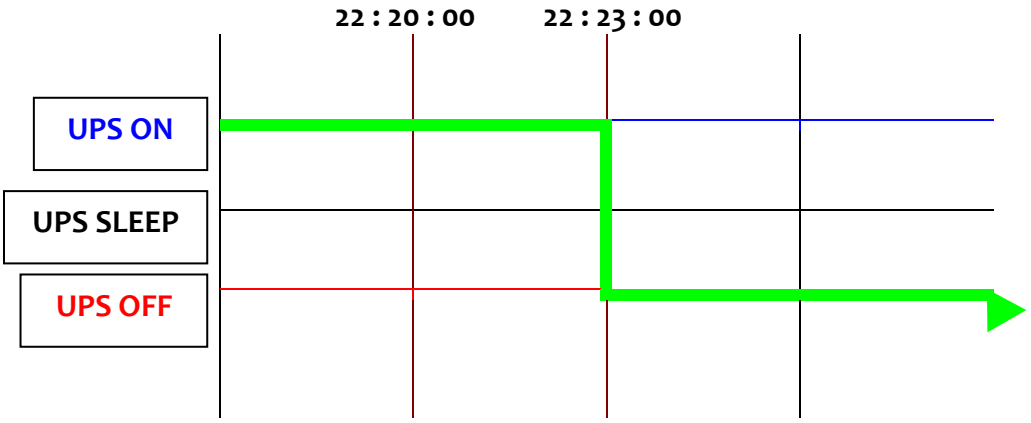


7.3. Turn off UPS Manually

Go to the "Identification" page of the "UPS Management" main menu, open the "UPS Control Action" drop-down menu select "Turn Off UPS with Delay" and then click on the "Apply" button.

Scenario:

Turn off the UPS manually at: 22:20:00
UPS Shutdown Delay (Sec): 180 (default value)

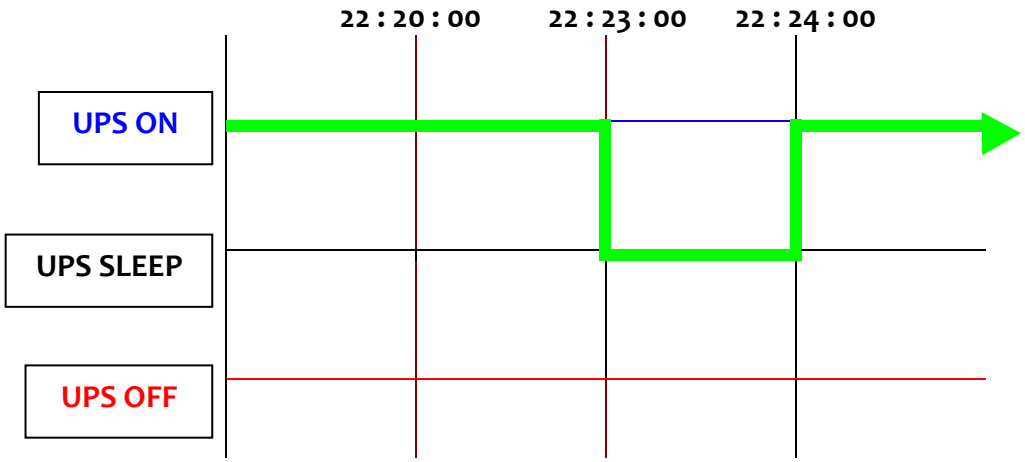


7.4. Set UPS into Sleep Mode

Go to the "Identification" page of the "UPS Management" main menu, open the "UPS Control Action" drop-down menu select "UPS Sleep " and then click on the "Apply" button.

Scenario:

Set UPS to sleep manually at: 22:20:00
UPS Shutdown Delay (Sec): 180 (default value)
UPS Sleep Time (Min): 1 (default value)



Appendix - Technical Information

LED Definition

The function of the CS102 are indicated by the Status and Network LEDs, as listed in the following table.

Port	Green LED	Yellow LED	Function
Network	ON	Flashing	Ethernet 100 Traffic
	OFF	Flashing	Ethernet 10 Traffic
	ON	OFF	100 Base-TX Ready
	OFF	ON	10 Base-T Ready
	OFF	OFF	Ethernet Disconnection
Status	ON	OFF	Power On (Normal Status)
	ON	Flashing	RS232 Port Activity (UPS site)
	Two LED cross Flashing	Two LED cross Flashing	Auto Diagnostic Mode (MFG mode)
	ON	ON	Auto Diagnostic Failed (MFG mode)
	OFF	ON	Hardware Error

Technical Specification

Function	Description
Processor	ARM9 180 MHz
Memory	8 MB Flash memory (32 bit)
Network	Auto-sense 10/100 Mbps Fast Ethernet
Power Input	DC +5.5 ~ 40V
Power Consumption	Maximum 3.0 Watts
Operating Temperature	0 ~ 40 °C
Operating Humidity	20 ~ 95 % (non-condensing)
Dimensions (W x D x H)	68 x 133 x 43
Weight	69 g
WI-FI dongle Standard	2.4GHz: IEEE 802.11b, 802.11g, 802.11n
WI-FI dongle Security	WEP 64/128-bit, WPA, WPA2, and WPA3
EMC Regulation	CE