

CS102 SNMP Card User Manual

CS102 UPS SNMP HTTP AGENT

User's Manual



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CS102 SNMP Card

User Manual

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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.

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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	\checkmark	\checkmark
Additional mounting bracket (for Keor SPE UPS)	1	\checkmark	\checkmark
Wi-Fi dongle	1		\checkmark
Quick Installation Guide	1	\checkmark	\checkmark

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 <u>hiips://ups.legrand.com</u> and install it on your PC.

Step2. Execute SNMP FITility and it will auto discover and list up the devices on your LAN.

						\rightarrow
Set IP	IP Address	MAC Address	Version	Card		
	192.168.54.31	00-e0-d8-ff-c9-c9	v1.00 a02	IX900 Series		
	192.168.54.145	de-3e-39-29-ab-62	v3.30.0	PDU		
	192.168.206.80	00-e0-d8-ff-b5-07	v1.06 alpha 27			• • ``)
Backup	192.168.54.45	00-e0-d8-ff-c1-4e	v7.01 b2			
	192.168.53.42	00-e0-d8-ff-c0-78	v7.02 b2			Refresh
	192.168.53.53	00-e0-d8-ff-aa-93	v1.01 a2			
Upgrade	192.168.91.185	88-c2-55-5a-72-6b	v0.90.0002.0011			
	192.168.55.1	68-9e-19-9d-6b-bb	v0.90.0002.0011			(##1)
	192.168.53.23	00-e0-d8-ff-8a-36				
	192.168.54.44	00-e0-d8-ff-ad-0b				Browse
	192.168.200.180	00-e0-d8-0c-e2-93				
	192.168.54.203	e4-1f-13-8c-e4-1f				
\bigcirc	192.168.54.222	00-e0-ff-24-12-41			V	
\cup						
About						



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

	IP Address	MAC Address	Version	Card		
	192.168.54.31	00-e0-d8-ff-c9-c9	v1.00 a02	IX900 Series		
	192.168.54.145	de-3e-39-29-ab-62	v3.30.0	PDU		
	192.168.206.80	00-e0-d8-ff-b5-07	v1.06 alpha 27			
Backup	192.168.54.45	00-e0-d8-ff-c1-4e	v7.01 b2			
	192.168.53.42	00-e0-d8-ff-c0-78	v7.02 b2			
	192.168.53.53	00-e0-d8-ff-aa-93	v1.01 a2			-
	192.168.91.185	88-c2-55-5a-72-6b	v0.90.0002.0011			
	192.168.55.1	68-9e-19-9d-6b-bb	v0.90.0002.0011			
	192.168.53.23	00-e0-d8-ff-8a-36				
	192.168.54.44	00-e0-d8-ff-ad-0b				
	192.168.200.180	00-e0-d8-0c-e2-93				
	192.168.54.203	e4-1f-13-8c-e4-1f				
	192.168.54.222	00-e0-ff-24-12-41			¥	
(i)						
About						

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

Account: admin Password: cs102snmp

CHINE	🗆 Submit All 🛛 🕻 Acco	ount: Password	i:)	
FITility	Del IP Address	Account	Password	
	前 192.168.206.80	admin		
-21/	Home		Next	



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

SNMP FITility		E Set IP		- ×
	IP Address : 192.168.5 MAC Address : 00-e0-d8-4 Gateway : 192.168.1 Subnet Mask : 255.255.0 O DHCP	IP Address 192.168.54.43 11-f1-f9 .254 .0	MAC Address 00-e0-d8-f1-f1-f9	-
- Qu	Home		Next	

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

							$- \times$
Set IP		IP Address	MAC Address	Version	Card		
	(☑)	192.168.54.31	00-e0-d8-ff-c9-c9	v1.00 a02	IX900 Series		
		192.168.54.145	de-3e-39-29-ab-62	v3.30.0	PDU		
		192.168.206.80	00-e0-d8-ff-b5-07	v1.06 alpha 27			(
Backup		192.168.54.45	00-e0-d8-ff-c1-4e	v7.01 b2			
		192.168.53.42	00-e0-d8-ff-c0-78	v7.02 b2			Refresh
		192.168.53.53	00-e0-d8-ff-aa-93	v1.01 a2			
Upgrade		192.168.91.185	88-c2-55-5a-72-6b	v0.90.0002.0011			
		192.168.55.1	68-9e-19-9d-6b-bb	v0.90.0002.0011			
		192.168.53.23	00-e0-d8-ff-8a-36				
		192.168.54.44	00-e0-d8-ff-ad-0b				Browse
		192.168.200.180	00-e0-d8-0c-e2-93				
		192.168.54.203	e4-1f-13-8c-e4-1f				
î	Π	192.168.54.222	00-e0-ff-24-12-41			V	
About							



Step7. The browser will display the CS102 login page:



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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 \rightarrow Authentication Configuration" from the main menu.
- 2. Click on "Admin Password" tab.

System Status	General Settings > Authentication Configuration	1
UPS Management	Account Settings	Admin Password
General Settings System Configuration Authentication Configuration Web Settings Firmware Upgrade	Administrator Settings Administrator Name Administrator Password New Administrator Password Beta New Administrator Password	
Multi-Language Setup	Retype New Administrator Password	Analy
 Event Notification External Links 		

- 3. Administrator Name: **admin** (it cannot be changed).
- 4. Administrator Password: the <u>current</u> 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.

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3.2. UPS Model

- 1. Select "UPS Management \rightarrow 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).

LIDE Management				
	Identification		Parameters Setting	
UPS Settings				
Schedule and Shutdown	UPS Identification		Rating Group	
Alert & Logs	UPS Model		Input Rating Voltage (Volt)	0
General Settings	UPS Name		Input Frequency (Hertz)	0
Network	UPS Serial Number		Output Rating Voltage (Volt)	0
	UPS Firmware Revision		Output Frequency (Hertz)	0
Event Notification	CS102 Firmware Revision	Legrand v0.90 a7	Output Rating Current (Amp)	0
 External Links 	UPS Type	Unknown	Rating Battery Voltage (Volt)	0.0
	UPS Protocol	No UPS model defined 🔻	Output Rating VA (VA)	0
	UPS Baud Rate(bps)	Auto Detect 💌 2400	Output Rating Power (W)	0
	UPS Control		Thresholds	
	UPS Shutdown Delay (Sec)	10	Over Temperature Set Point (°C)	60
	UPS Sleep Time (Min)	1	Temperature Hysteresis	0
	UPS Shutdown Type	Output	•	
	UPS Control Action	None	•	
	Battery Test Setting Time (Min)	1		
	Battery Rated Capacity (%)	70		
	Battery Test Command	None	•	
	Last Test Start Time			
	Last Test Elapsed Time			
	Last Test Result	None		

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 \rightarrow System Configuration" from the main menu:

System Status	General Settings > System Configuration
UPS Management	Preferences Upload and Download
 UPS Management General Settings System Configuration Authentication Configuration Web Settings Firmware Upgrade Multi-Language Setup Network Event Notification External Links 	Preferences Upload and Download O System Information System Name CS102 System Location 60 O Date and Time Current Date Current Time Current Time Time Zone Synchronize with NPD server Server IP: Synchronize with NPD server Server IP: Synch Interval: 1 hour • Daylight Saving Time O Disabled Auto O Stet manually Reset To Default Rebot



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 \rightarrow 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.

System Status	Network > Protocols			
UPS Management	Adva	nce	SNMP	Firewall
General Settings				
A Network	Protocols Status			
Network settings	PING Echo	Disabled 🔻	SNMP Support	Disabled 🔻
Protocols	Network Upgrade	Enabled 🔻	SMTP Support	Enabled 💌
WakeOpt AN	HTTP Control	Enabled 💌	NTP Control	Enabled V
WakeonLAN	Force Security HTTP	Enabled 💌	UPnP Control	Disabled 💌
WiFi setting	HTTP Security Control	Enabled 🔻	Modbus TCP Control	Disabled 🔻
Event Notification	SSH Connection	Disabled 🔻	Radius TCP Configuration	Disabled 🔻
	Force Security HTTP	443		
	Force Security HTTP	443		
	HTTP Port	80		
	SSH Connection Port	22		
	SNMP Port	161		
	SMTP Port	25		
	Modbus Port	502		

3.5. Network Configuration

1. Select "Network \rightarrow Network settings" from the main menu:

	Network > Network settings			
· UPS Management	Network setti	ngs		
· General Settings				
Network	IP address	192.168.54.43	Configuration	Automatic 🔻
Network settings	Gateway Address	192.168.54.254	Local Address	fe80::2e0:d8ff:feff:c602/64
Protocols	Subnet Mask	255.255.255.0	Global Address	
WakeOnLAN	BootP/DHCP Control	● Static ○ DHCP	Router Address	
WIFI setting	DNS Address 1	192.168200.89		
Event Notification	DNS Address 2	192.168.200.153		

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.

 System Status 	System Stat	us > Dashb	oard						
Dashboard		Ov	erview						
Dashboard Current Information • UPS Management • General Settings • Network • Event Notification • External Links	Pow UPS Test	er Flow Dia	ngram	÷	- 7			3	Voltage Real-time Chart
	Sche	edule Caler	ndar						• Active Alarm List
	< >	2023	8, June			Go to ci	urrent m	onth	Occurred Time Alarm Description
	Sun	Mon	Tue	Wed	Thu	Fri		Sat	Occurred nine Alann Description
	2	8 29		31	1	0	2	3	
		4 5	6	7	8	0	9	10	
	1	1 12	13	14	15	0	16	17	
		8 19	@20	21	22	0	23	24	
	2	5 26	27	28	29	0	30	Ţ	

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	This chart displays the power consumption of the devices						
Load	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.

System Status		System Status > Current Informati	on		
Dashboard		Overview			
Current Information					
JPS Management		🔵 Input		Output	
Conoral Sottings		Input Number Lines	1	Output Status	Normal
Selleral Settings		Input Line Bads	0	Output Number Lines	1
Network		Input Voltage	235.0	Output Voltage	230.0
vent Notification		Input Max. Voltage	235.0	Output Frequency	50.0
xternal Links		Input Min. Voltage	235.0	Output Current	6.1
		Input Frequency	50.0	Output Active Power	1100
		Input Current	6.4	Output Apparent Power	1400
		Input Active Power	1200	Output Load	46.6
		Bypass		Battery	
		Bypass Number Lines	1	Battery Status	Battery Ok
		Bypass Voltage	235.0	Temperature (°C)	20.0
		Bypass Frequency	50.0	Battery Voltage (V)	152.1
•		Bypass Current	0.0	Battery Capacity Remaining (%)	100
	••	Bypass Power	0	Time since on Battery Power (Sec)	0
				Battery Runtime Remaining (Min)	61
		 Alert 			
		Battery Bad Alarm	Normal	Low Battery Alarm	Normal
		Temperature Bad Alarm	Normal	Output Over Load Alarm	Normal
		On Bypass Alarm	Normal	Bypass Bad Alarm	Normal
		Ups Output Off Alarm	Normal	Fan Failure Alarm	Normal
		Fuse Failure Alarm	Normal	General Fault Alarm	Normal
		Diagnostic Test Failed Alarm	Normal	Communications Lost Alarm	Normal
		Awaiting Power Alarm	Normal	Shutdown Pending Alarm	Normal
		Shutdown Imminent Alarm	Normal	Test In Progress Alarm	Normal
		Event/Schedule			
		Last Event		Communication to the UPS has been lo	st
		Last Battery Test Time			
		Battery Next Test Time		None	
		UPS Next Off Time		None	
		UPS Next On Time		None	

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.

System Status	UPS Management > UPS Settings			
UPS Management	Identification	Par	ameters Setting	
UPS Settings				
Schedule and Shutdown	UPS Identification		Rating Group	
Alert & Logs	UPS Model	WHAD HE 3000	Input Rating Voltage (Volt)	230
▶ General Settings	UPS Name	WHAD HE 3000	Input Frequency (Hertz)	50
▶ Network	UPS Serial Number	0A1234567890	Output Rating Voltage (Volt)	230
Freed Marifiantian	UPS Firmware Revision	01.07.02	Output Frequency (Hertz)	50
Event Notification	CS102 Firmware Revision	Legrand v0.90 a7	Output Rating Current (Amp)	13
External Links	UPS Type	On-Line	Rating Battery Voltage (Volt)	144.0
	UPS Protocol	WHAD HE 🔻	Output Rating VA (VA)	3000
	UPS Baud Rate(bps)	Auto Detect 💌 9600 🔹	Output Rating Power (W)	3000
	UPS Control		Thresholds	
	UPS Shutdown Delay (Sec)	10	Over Temperature Set Point (°C)	60
	UPS Sleep Time (Min)	1	Temperature Hysteresis	0
	UPS Shutdown Type	System	•	
	UPS Control Action	None		
	Battery Test Setting Time (Min)	1		
	Battery Test Command	None	•	
	Last Test Start Time			
	Last Test Elapsed Time			
	Last Test Result	None		
			Apply	



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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 Туре	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.

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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	■ <u>Turn Off UPS with Delay</u> : the UPS (or its outputs) shuts down
	after the time specified in "UPS Shutdown Delay"
	■ <u>UPS Sleep</u> : 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
	back on
	■ <u>Turn On UPS / Cancel UPS Shutdown</u> : 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
	<u>Turn On/Off Beep</u> : 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
	sets the remaining butter, a support of the rest of the butter,
	Rated Capacity" test will end
Battery Test Command	Rated Capacity" test will end None: no action (default)
Battery Test Command	 Rated Capacity" test will end <u>None</u>: no action (default) <u>Quick Battery Test</u>: performs battery test for a short time
Battery Test Command	 Rated Capacity" test will end <u>None</u>: no action (default) <u>Quick Battery Test</u>: performs battery test for a short time (typically 10 seconds to 2 minutes - UPS dependent)
Battery Test Command	 Rated Capacity" test will end <u>None</u>: no action (default) <u>Quick Battery Test</u>: performs battery test for a short time (typically 10 seconds to 2 minutes - UPS dependent) <u>Test Until Battery Low</u>: runs the battery test until the battery is empty
Battery Test Command	 Rated Capacity" test will end 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
Battery Test Command	 Rated Capacity" test will end <u>None</u>: no action (default) <u>Quick Battery Test</u>: performs battery test for a short time (typically 10 seconds to 2 minutes - UPS dependent) <u>Test Until Battery Low</u>: runs the battery test until the battery is empty <u>Timed Test</u>: run the battery test for the period set in the "Battery Test Setting Time" parameter
Battery Test Command	 Rated Capacity" test will end 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
Battery Test Command	 Rated Capacity" test will end 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 test until test until the battery test until tes
Battery Test Command	 Rated Capacity" test will end 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 test until the battery test until the battery test in "Battery Rated Capacity" parameter
Battery Test Command	 Rated Capacity" test will end 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 test until the battery test in "Battery Rated Capacity" parameter Cancel Test: cancel the battery test
Battery Test Command	 Rated Capacity" test will end 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 test until the battery test in "Battery Rated Capacity" performs a battery test in "Battery Rated Capacity" parameter Cancel Test: cancel the battery test Clear Test Information: clears information about the last battery
Battery Test Command	 Rated Capacity" test will end 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 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
Battery Test Command	 Rated Capacity" test will end 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 test until the battery test 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 The start time of the last battery test
Battery Test Command Last Test Start Time Last Test Elapsed Time	 Rated Capacity" test will end 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 test until the battery test in "Battery Rated Capacity" performs a battery test 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 The start time 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 \rightarrow Schedule and Shutdown
	→ Event Shutdown" page. Range: 10~100 °C

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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 o °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 \rightarrow Schedule and Shutdown \rightarrow 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.

System Status	UPS Management	> Schedule and Shutdown				
UPS Management		Battery Test	UPS On/Off Schedule	Event	Event Shutdown	
UPS Settings	Battery T	est				
Schedule and Shutdown	Index	Test Day	Special Dav(dd/mm/yyyy)	Test Time (hh:mm)	Test Actions	
Alert & Logs	1	Disabled -	01/01/1970	00:00	None	
eneral Settings	2	Disabled 🔻	01/01/1970	00:00	None	
etwork	3	Disabled 🔻	01/01/1970	00:00	None	
vent Notification	4	Disabled 🔻	01/01/1970	00:00	None	
xternal Links	5	Disabled -	01/01/1970	00:00	None 🔻	
	6	Disabled -	01/01/1970	00:00	None	
	7	Disabled 🔻	01/01/1970	00:00	None	



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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:
	■ <u>None</u> : 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 \rightarrow
	UPS Settings $ ightarrow$ Battery Test Setting Time" parameter
	Test Until Battery Rated Capacity: runs the test up to the remaining battery
	capacity value specified in " UPS Management $ ightarrow$ UPS Settings $ ightarrow$ 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.

UPS Management UPS Settings Battery Test UPS On/Off Schedule Event Shutdown Alert & Logs	System Status	UPS Manage	ement > Schedule and Shute	down			
UPS Settings Schedule and Shutdown Alert & Logs General Settings Network Event Notification External Links Ø Weekly Schedule I Disabled I 00:00 Ø Weekly Schedule I DisableI IIII 00:00 Ø Weekly Schedule I DisableI IIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII	UPS Management		Battery Test	le l	JPS On/Off Schedule	Ev	ent Shutdown
Schedule and Shutdown Alert & Logs I Veckly Schedule Disabled 0000 Disabled 0000 1 Weekly Schedule 01/01/1970 0000 01/01/1970 0000 2 Special Schedule 01/01/1970 0000 01/01/1970 0000 3 Weekly Schedule Disabled 0000 Disabled 0000 4 Weekly Schedule Disabled 0000 Disabled 0000 5 Weekly Schedule Disabled 0000 Disabled 0000 6 Weekly Schedule Disabled 0000 Disabled 0000 6 Weekly Schedule Disabled 0000 Disabled 0000 7 Weekly Schedule Disabled 0000 Disabled 0000 8 Weekly Schedule Disabled 0000 Disabled 0000 8 Weekly Schedule Disabled 0000 Disabled 0000 8 Weekly Schedule Disabled 0000 Disabled 0000	UPS Settings						
Alert & Logs Index Type Shutdown Day Shutdown Time(nmm) Restart Day Restart Day Restart Day Restart Day > General Settings 1 Weekly Schedule Disabled 00:00 Disabled 00:00 2 Special Schedule 01/01/1970 00:00 01/01/1970 00:00 3 Weekly Schedule Disabled 00:00 Disabled 00:00 4 Weekly Schedule Disabled 00:00 Disabled 00:00 5 Weekly Schedule Disabled 00:00 Disabled 00:00 6 Weekly Schedule Disabled 00:00 Disabled 00:00 6 Weekly Schedule Disabled 00:00 Disabled 00:00 7 Weekly Schedule Disabled 00:00 Disabled 00:00 8 Weekly Schedule Disabled 00:00 Disabled 00:00 8 Weekly Schedule Disabled 00:00 Disabled	Schedule and Shutdown		S On/Oπ Schedule	Charles Day	Charless Time (Linear)	P. I. I.P.	Destant Time (Linear)
General Settings Network Event Notification External Links Weekly Schedule Other Other	Alert & Logs	Index	Type	Shutdown Day	Shutdown Time(nn:mm)	Restart Day	Restart Time(nn:mm)
 Network Event Notification External Links Weekly Schedule Disabled 	General Settings	1	Weekly Schedule	Disabled	00:00	Disabled	00:00
S Weekly Schedule Disabled 00:00 Disabled 00:00 External Links 4 Weekly Schedule Disabled 00:00 Disabled 00:00 5 Weekly Schedule Disabled 00:00 Disabled 00:00 6 Weekly Schedule Disabled 00:00 Disabled 00:00 7 Weekly Schedule Disabled 00:00 Disabled 00:00 8 Weekly Schedule Disabled 00:00 Disabled 00:00 Apply Schedule Disabled 00:00 Disabled 00:00	Network	2	Special Schedule	01/01/19/0	00:00	01/01/19/0	00:00
4 Weekly Schedule • Disabled • 00:00 Disabled • 00:00 5 Weekly Schedule • Disabled • 00:00 Disabled • 00:00 6 Weekly Schedule • Disabled • 00:00 Disabled • 00:00 7 Weekly Schedule • Disabled • 00:00 Disabled • 00:00 8 Weekly Schedule • Disabled • 00:00 Disabled • 00:00 Apply	Event Notification	3	Weekly Schedule	Disabled 🔻	00:00	Disabled	00:00
S Weekly Schedule Disabled 00:00 Disabled 00:00 6 Weekly Schedule Disabled 00:00 Disabled 00:00 7 Weekly Schedule Disabled 00:00 Disabled 00:00 8 Weekly Schedule Disabled 00:00 Disabled 00:00	Event Notification	4	Weekly Schedule 🔻	Disabled 🔻	00:00	Disabled 🔻	00:00
6 Weekly Schedule Disabled 00:00 Disabled 00:00 7 Weekly Schedule Disabled 00:00 Disabled 00:00 8 Weekly Schedule Disabled 00:00 Disabled 00:00 Apply Apply Apply Apply Apply	· External Links	5	Weekly Schedule 🔻	Disabled 🔻	00:00	Disabled 🔻	00:00
7 Weekly Schedule Disabled 00:00 Disabled 00:00 8 Weekly Schedule Disabled 00:00 Disabled 00:00		6	Weekly Schedule 🔻	Disabled 🔻	00:00	Disabled 🔻	00:00
8 Weekly Schedule Disabled OD:00 Disabled OD:00 Apply		7	Weekly Schedule 🔻	Disabled 🔻	00:00	Disabled 🔻	00:00
		8	Weekly Schedule 🔻	Disabled 🔻	00:00	Disabled 🔻	00:00
					Αρρίγ		

Item	Description
Туре	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)

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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.

Battery Test Event Shutdown Shutdown Event AC Failed	Active Period 00:00 - 23:59	UPS On/C	off Schedule Warning Period(Min)	Event	t Shutdown
Event Shutdown Shutdown Event AC Failed	Active Period	Shutdown Actions	Warning Period(Min)	1st Warning(Sec)	
Shutdown Event AC Failed	Active Period	Shutdown Actions	Warning Period(Min)	1st Warning(Sec)	
AC Failed	00:00 - 23:59	Shutdown Actions	warning Period(win)	ISE Warning Sect	
AC railed	25.39		1	10	
Dathan (and	00:00 - 22:50	Disabled	1	10	10
LIDC Ourdeed	00:00 23:59	Disabled •		10	10
UPS Over Temperature	00:00 - 23:59	Disabled V	1	10	10
Bypass ON	00:00 - 23:59	Disabled		10	10
Battery Disconnected	00:00 - 23:59	Disabled	1	10	10
UPS Failure	00:00 - 23:59	UPS turn off 🔻	1	10	10
Battery Failure	00:00 - 23:59	Disabled 🔻	1	10	10
Weekly Schedule	00:00 - 23:59	Disabled 🔻	1	10	10
Special Day	00:00 - 23:59	Disabled 🔻	1	10	10
	UPS Overload UPS Over Temperature Bypass ON Battery Disconnected UPS Failure Battery Failure Weekly Schedule Special Day	UPS Overload 00:00 - (23:59) UPS Over Temperature 00:00 - (23:59) Bypass ON 00:00 - (23:59) Battery Disconnected 00:00 - (23:59) UPS Failure 00:00 - (23:59) Battery Failure 00:00 - (23:59) Weekly Schedule 00:00 - (23:59) Special Dey 00:00 - (23:59)	UPS Overload 00:00 23:59 Disabled UPS Over Temperature 00:00 - 23:59 Disabled Bypass ON 00:00 - 23:59 Disabled Battery Disconnected 00:00 - 23:59 Disabled UPS Failure 00:00 - 23:59 UPS turn off Battery Failure 00:00 - 23:59 Disabled Weekly Schedule 00:00 - 23:59 Disabled Special Day 00:00 - 23:59 Disabled	UPS Overload 00:00 23:59 Disabled 1 UPS Over Temperature 00:00 - 23:59 Disabled 1 Bypass ON 00:00 - 23:59 Disabled 1 Bytess ON 00:00 - 23:59 Disabled 1 Battery Disconnected 00:00 - 23:59 Disabled 1 UPS Failure 00:00 - 23:59 UPS turn off 1 Battery Failure 00:00 - 23:59 Disabled 1 Weekly Schedule 00:00 - 23:59 Disabled 1 Special Day 00:00 - 23:59 Disabled 1	UPS Overload 00:00 - 23:59 Disabled 1 10 UPS Over Temperature 00:00 - 23:59 Disabled 1 10 Bypass ON 00:00 - 23:59 Disabled 1 10 Battery Disconnected 00:00 - 23:59 Disabled 1 10 UPS Failure 00:00 - 23:59 UPS turn off 1 10 Battery Failure 00:00 - 23:59 Disabled 1 10 Battery Failure 00:00 - 23:59 Disabled 1 10 Weekly Schedule 00:00 - 23:59 Disabled 1 10 Special Day 00:00 - 23:59 Disabled 1 10

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.
1 st Warning	Currently not used
Warning Interval	Currently not used
Discontinue shutdown	Enabled: the action will be performed only if the event is still active
if event restored	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.

 System Status 	UPS Management > Aler	t & Logs				
UPS Management	 Alert Table	CS102 Event Log	UPS Event Log	History Log	Clear & Save Log Data	
UPS Settings Schedule and Shutdown	Alert Table	Time	Al and S			_
Alert & Logs	1	26/06/2023 09:53:04	Alert L	Description IS has switched to battery back	up power	
General Settings	2	26/06/2023 09:53:04	Utility p	power not available	ap ponto	
► Network	3	26/06/2023 09:53:04	Shutdo	own Pending		
Event Notification						
External Links						

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.

System Status		UPS Management > Alert &	Logs			
UPS Management		Alert Table	CS102 Event Log	UPS Event Log	History Log	Clear & Save Log Data
UPS Settings	1					
Schedule and Shutdown	Γ.					
Alert & Logs			From:	to:	Event Level:	ormation 👻 🝳
General Settings						•
▶ Network		CS102 Event Log				
Event Notification		Time 🔻	Event	Level 🔻	Event Description	
Extornal Links		26/06/2023 10:00:09	Info	mation	UPS SNMP/HTTP Agent Time of	hanged by server
External LINKS		26/06/2023 10:00:07	Info	mation	UPS SNMP/HTTP Agent Time of	hanged by server
		26/06/2023 10:00:05	Info	mation	UPS SNMP/HTTP Agent Time of	hanged by server
		26/06/2023 10:00:03	Info	mation	UPS SNMP/HTTP Agent Time of	hanged by server
		26/06/2023 10:00:01	Info	mation	UPS SNMP/HTTP Agent Time of	hanged by server
		26/06/2023 09:59:59	Info	mation	UPS SNMP/HTTP Agent Time of	hanged by server
		26/06/2023 09:54:22	Wa	irning	Incorrect Mail server name/IP a	address
		26/06/2023 09:54:22	Wa	irning	Incorrect Mail server name/IP a	address
		26/06/2023 09:54:22	Wa	irning	Incorrect Mail server name/IP a	address
		26/06/2023 09:54:15	Info	mation	Send UPS shutdown command	I to UPS
		26/06/2023 09:54:05	Info	mation	Send shutdown request to clier	nts
		26/06/2023 09:53:14	Info	mation	Send shutdown warning to clie	ents
		26/06/2023 09:53:04	Wa	irning	Incorrect Mail server name/IP a	address
				1 2 3 4	5 14 > »	

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.
	<u>Critical</u> : 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

System Status	ι	JPS Management > Ale	ert & Lo	ogs								
UPS Management		Alert Table	0	: S102 E	vent Lo	og	UPS	Event	Log History I	Log Cle	ear & Save Log Data	
UPS Settings												
Schedule and Shutdown												
Alert & Logs					1	From:			to:	2		\sim
General Settings												
Network		History Log										
Event Notification		Time 🔻	Input	Voltage	e (Volt)	Outpu	t Voltag	e (Volt)	Input Frequency (Hertz)	Output Load	(%) Battery Capacity (%)	UPS Temperature
External Links			R	S	т	R	S	т				
External Ellings		26/06/2023 13:04:29	240.1	241.2	242.3	230.1	231.2	232.3	50.1	40.0	100.0	20.0
		26/06/2023 13:04:26	240.1	241.2	242.3	230.1	231.2	232.3	50.1	40.0	100.0	20.0
		26/06/2023 13:04:17	240.1	241.2	242.3	230.1	231.2	232.3	50.1	40.0	100.0	20.0
		26/06/2023 13:04:14	240.1	241.2	242.3	230.1	231.2	232.3	50.1	40.0	100.0	20.0
		26/06/2023 13:04:05	240.1	241.2	242.3	230.1	231.2	232.3	50.1	40.0	100.0	20.0
		26/06/2023 13:04:02	240.1	241.2	242.3	230.1	231.2	232.3	50.1	40.0	0.0	20.0
		26/06/2023 13:03:50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		26/06/2023 11:40:21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		26/06/2023 11:40:09	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
								1 2	3 4 5 83 5	~		
								1 2	3 4 3 03 7	11		

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.
(2) "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

 System Status 	UPS Management > Aler	t & Logs				
UPS Management	 Alert Table	CS102 Event Log	UPS Event Log	History Log	Clear & Save Log Data	
UPS Settings Schedule and Shutdown Alert & Logs	• History Log Cl	nart				
General Settings		Show Latest 30 m	ninutes 🔻 🔿 From 🦳	to		
▶ Network						
Event Notification		Input	Information 🔽 Output	Information 🔽 UPS Info	rmation	
▶ External Links	300.00 240.00 180.00 60.00 26/06/2023 26/06 13:03:50 13:04	(Volt) R Input Voltage (Volt) S Inp /2023 26/06/2023 52 13:05:55	ut Voltage (Volt) T	70.00 64.00 58.00 46.00 40.00 3 26/06/202 13:03:50 13:04:52	Trequency (Hertz)	/06/2023 26/06/2023 :06:57 13:08:00

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.
Q "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.

System Status	UPS Management > Aler	t & Logs			
UPS Management	 Alert Table	CS102 Event Log	UPS Event Log	History Log	Clear & Save Log Data
UPS Settings Schedule and Shutdown	• Save Log				
Alert & Logs General Settings Network Event Notification		CS102 Event	ts Log UPS E	vents Log UP	S History Log
External Links	Clear Log Data	3			
		CS102 Ever	nts Log 🛛 UPS	Events Log 🛛 U	PS History Log

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 Status G	eneral Settings > System Configuration		
► UPS Management	Preferences	Upload and Download	
 > UPS Management - General Settings - System Configuration - Authentication Configuration - Web Settings - Firmware Upgrade - Multi-Language Setup > Network > Event Notification > External Links 	Preferences System Information System Name CS102 System Location Date and Time Current Date 03/07/2023 Current Time 09-50-31 Time Zone [GMT +01:00] Amsterdant Synchronize with computer time Image: Computer time Synchronize with NTP server Server IP: Sync Interval: 1 hour Daylight Saving Time Image: Disabled () Au O Set manually Reset Te	Upload and Download Temperature Unit C m, Berlin, Bern, Rome, Stockholm, Vienna m, Berlin, Bern, Rome, Stockholm, Vienna to Default Reboot Apply	History Log Interval 60

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	Select this option and click "Set Value" to synchronize with the time
computer time	from the computer clock.
Synchronize with NTP	The CS102 synchronizes its clock with a time server (NTP). Make sure
server	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

System Status	(General Settings > System Configuration		
UPS Management		Preferences Upload and Download		
 General Settings 				
System Configuration Authentication Configuration Web Settings		Download Root Certificate Download Configurations Upload Configurations Upload CA file		
Firmware Upgrade				
► Network				
Event Notification				
▶ External Links				

Item	Description	
Download Root Certificate	te 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

System Status	General Settings > Authentication Configuration				
► UPS Management	Account Settings		Admin Password		
General Settings				_	
System Configuration	Multi-User la	ble			
Authentication Configuration	Index	User Name	Pas	sword	Access Type
Web Settings	2				Disabled
Firmware Upgrade	2				Disabled •
Multi-Language Setup	4				Disabled V
Network	5				Disabled V
Event Notification	6				Disabled V
External Links	7				Disabled V
	8				Disabled T
	RADIUS Settings				
	UDP Port		1812		
	Primary Server				
	Secondary Server				
	Share Secret of Primary S	server			
	Share Secret of Secondar	ry Server	1		
	Packet Timeout Interval				
	Packet Retry Times		5		
			Apply		

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.

System Status	General Settings > Authentication Configuration
UPS Management	Account Settings Admin Password
 UPS Management General Settings System Configuration Authentication Configuration Web Settings Firmware Upgrade Multi-Language Setup Network Event Notification External Links 	Account Settings Admin Password Image: Contract Contrect Contract Contract Conte

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

System Status	General Settings > Web Settings	
UPS Management	Web Settings	
 UPS Management General Settings System Configuration Authentication Configuration Web Settings Firmware Upgrade Multi-Language Setup Network Event Notification External Links 	Web Settings External Links Setup Web Refresh Time 10 Logs per page 20 Web Timeout Interval(Sec) 300 Apply	Status Disablec Disablec Disablec Disablec

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	
	\rightarrow Alerts & Logs)	
Web Timeout Interval	erval It specifies the time interval (in seconds), to log out the user if the use	
	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.

System Status	General Settings > Firmware Upgrade
UPS Management	Firmware Upgrade
General Settings	
System Configuration	CS102 Upgrade
Authentication Configuration	Upload file
Web Settings	Scegli il file Nessun file scelto
Firmware Upgrade	
Multi-Language Setup	
▶ Network	
Event Notification	
► External Links	

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

System Status	General Settings > Multi-Language Setup				
UPS Management	String Setting	Event	Setting	Upload / Download	
 General Settings 					
System Configuration	Language Setting				
Authentication Configuration	Language Selection	User Defined Language #1 🔻	Configuration Version	#0 2023-07-03T13:31:26.534Z	
Web Settings					
Firmware Upgrade	Editable Language Name	User Defined Language #1	Language Enable		
Multi-Language Setup					
▶ Network	String Translation				
Event Notification	%			96	
▶ External Links	1 day			1 day	
	1 hour			1 hour	
	1 month			1 month	
	1st Warning			1st Warning	
	1 week			1 week	
	Aborted			Aborted	
	Accept			Accept	
	Access Type			Access Type	
	Account Settings			Account Settings	
	AC Failed			AC Failed	
			Annels		
			Арріу		



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

System Status	General Settings > Mu	lti-Language Setup			
UPS Management	String Setting		Event Setting		Upload / Download
General Settings					
System Configuration	🕘 Web String	J			
Authentication Configuration	Translated Stri	ng Download User	Defined Langu 🔻	Download	
Web Settings	User Defined	Language 1	•		
Firmware Upgrade	Translated St	ing Upload	Upload	Scegli il file Nessun file scelto	
Multi-Language Setup	Display La	inguage	English 🔻	Apply	
Network					
Event Notification	Online Hel	р			
External Links	Online Hel	o Preview P	review Now		
	Online Hel	p Upload	Upload	Scegli il file Nessun file scelto	

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.

 System Status 	Network > Network settings			
UPS Management	Network sett	ings		
General Settings				
Network				
Network settings	IP address	10.43.60.20	Configuration	
Protocols	Gateway Address	10.43.60.1	Local Address	te80::2e0:d8tt:tett:c602/64
WakeOnLAN	Subnet Mask	255.255.255.0	Global Address	
WIELsetting	BootP/DHCP Control	Static O DHCP	Router Address	::/0
Event Notification	DNS Address 1	0.0.0.0		
Event Notification	DNS Address 2	0.0.0.0		

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: <u>activating unnecessary protocols decreases the security level</u>.

System Status	Ν	Network > Protocols			
UPS Management		Advance		SNMP	Firewall
General Settings					
A Network		Protocols Status			
Network settings		PING Echo	Disabled 🔻	SNMP Support	Disabled V
Protocols		Network Upgrade	Enabled 💌	SMTP Support	Enabled 🔻
WakeOnLAN		HTTP Control	Enabled 🔻	NTP Control	Enabled 🔻
W/IEL sotting		Force Security HTTP	Enabled 🔻	UPnP Control	Disabled 🔻
VVIPI setung		HTTP Security Control	Enabled 🔻	Modbus TCP Control	Disabled 🔻
Event Notification		SSH Connection	Disabled 💌	Radius TCP Configuration	Disabled 💌
	**	Protocols Setting Force Security HTTP HTTP Port SSH Connection Port SNMP Port SMTP Port Modbus Port	443 80 22 161 25 502		
				Арріу	



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.

Network > Pr	otocols					
	Advance		SNMP		Firew	all
	ИР v1/v2c					
Read Comn	nunity			•••••		
Write Comr	nunity			•••••		
🔵 SNM						
Index	User Name	Auth-Protocol Password	Auth-Protocol	Priv-Protocol Password	Priv-Protocol	Security Level
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 🔻
			Apply			
	SINN Read Comm Write Comm Write Comm Index 1 2 3 4 5 6 7 8	Advance Advance SNMP v1/v2c Read Community Write Community O SNMP v3 USM Table Index User Name 1	Advance • SNMP v1/v2c Read Community Write Community Write Community • SNMP v3 USM Table Index User Name 4 5 6 7 8	Advance SNMP SNMP v1/v2c Read Community Write Community SNMP v3 USM Table Index User Name Auth-Protocol Password Auth-Protocol Password MD5 • MD5 •	Advance SNMP Advance SNMP SIMP v1/v2c Read Community Write Community ······ SNMP v3 USM Table Index User Name Auth-Protocol Password Auth-Protocol	Advance SNMP Fireward Advance SNMP Fireward Image: Style particular Style particular Style particular Write Community Image: Style particular Style particular Image: Style particular Auth-Protocol Password Auth-Protocol Password Image: Style particular Auth-Protocol Password Auth-Protocol Password Image: Style particular Image: Style particular Image: Style particular Image: Style particular Auth-Protocol Password Auth-Protocol Password Image: Style particular Image: Style particular Image: Style particular Image: Style particular Auth-Protocol Password Auth-Protocol Password Image: Style particular Image: Style particular Image: Style particular Image: Style particular Auth-Protocol Password Auth-Protocol Password Image: Style particular Image: Style particular Image: Style particular Image: Style particular Auth-Protocol Password Auth-Protocol Password Image: Style particular Image: Style particular Image: Style particular Image: Style particular Image: Style particular Image: Style particular Image: Style particular Image: Style particular Image: Style particular Image: Style particular

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.

Advance Firewall		SNMP	Fir	rewall
Firewall Index	I			
Firewall				
Index	10			
4	IP a	address	Prefix Length	Action
1			0	Accept V
2			0	Accept -
3			0	Accept 🔻
4			0	Accept 🔻
5			0	Accept 🔻
6			0	Accept 🔻
7			0	Accept 💌
8			0	Accept 🔻
		Apply		
	2 3 4 5 6 7 8	2 [3 [4 [5 [6 [7 [8 [2 3 4 5 6 7 8 Apply	2 3 3 4 0 0 4 0 0 5 0 0 0 6 7 0 0 8 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

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.

System Status	Network >	WakeOn	ILAN							
UPS Management	WOL Table									
General Settings						_				_
A Network	O S	etting								
Network settings	Repeati	ng Times								
Protocols	Interval	Timer (Sec)	1			[1				
WakeOnLAN	O V	VOL Tabl	e							
WIFI setting	Test	Index	MAC Address	Control	Description	Test	Index	MAC Address	Control	Description
• Event Notification		1	00:00:00:00:00:00	Disabled 🔻			13	00:00:00:00:00	Disabled 🔻	
Extornal Links		2	00:00:00:00:00:00	Disabled 🔻			14	00:00:00:00:00:00	Disabled 🔻	
External LINKS		3	00:00:00:00:00:00	Disabled 🔻			15	00:00:00:00:00:00	Disabled 🔻	
		4	00:00:00:00:00:00	Disabled 🔻			16	00:00:00:00:00:00	Disabled 🔻	
		5	00:00:00:00:00:00	Disabled 🔻			17	00:00:00:00:00	Disabled 💌	
		6	00:00:00:00:00:00	Disabled 🔻			18	00:00:00:00:00:00	Disabled 🔻	
		7	00:00:00:00:00:00	Disabled 💌			19	00:00:00:00:00	Disabled 💌	
		8	00:00:00:00:00:00	Disabled 🔻			20	00:00:00:00:00:00	Disabled 🔻	
		9	00:00:00:00:00:00	Disabled 🔻			21	00:00:00:00:00:00	Disabled 🔻	
		10	00:00:00:00:00:00	Disabled 🔻			22	00:00:00:00:00:00	Disabled 🔻	
		11	00:00:00:00:00:00	Disabled 🔻			23	00:00:00:00:00:00	Disabled 🔻	
		12	00:00:00:00:00:00	Disabled 🔻			24	00:00:00:00:00:00	Disabled 🔻	

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.

System Status	Network > WIFI setting					
UPS Management	WIFI settir	ng				
General Settings			_			
A Network	Wireless Status	D:		Manual Setting		
Network settings	LD Address	Disconnected		Wireless Control	Disabled 🔻	
Protocols	Subnet Mask	0.0.0.0		SSID		
WakeOnLAN	Gateway Address	0.0.0.0		Fassword	Ners	
WIFI setting	MAC Address			Encryption	None V	
Event Notification				Security	inone .	-
External Links			Apply	Reconnect		

Wireless Status

ltem	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

PS Management	Email Notifica	tion	SNMP Trap Receiver	n Receivers					
eneral Settings									
letwork	Email Notification								
cont Netification	Mail Server								
ent Notification	User Account								
imail/Trap	User Password								
External Links	Sender Email Address								
	Mail Subject Prefix								
	DNS Address				0.0.0.0				
	Mail Daily Status Report At (hh:r	mm)		00:00					
	Mail support TLS		Disable	Disabled 🔻					
	Receivers Table								
	Index Mail Ad	ccount	Description	Mail Type	Event Filter	Event Level			
	1			None 💌	By Severity 💌	Information 💌			
	2			None 🔻	By Severity 🔻	Information 🔻			
	3			None 🔻	By Severity 🔻	Information 💌			
	4			None 🔻	By Severity 🔻	Information 🔻			
	5			None 🔻	By Severity 🔻	Information 🔻			
	6			None	Ry Cavarity -				

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 "o.o.o.o".
Mail Daily Status	If you want the CS102 to send an email (see "Receivers table> Mail
Report	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.

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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. <u>None</u>: no emails are sent to the recipient (default). <u>Events</u>: the recipient receives short messages related to the events. <u>Daily Status</u>: 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).

System Status	Event Notif	ication > Email/Trap)					
UPS Management		Email Notificati	ion	SNMP Tra	p Receivers			
General Settings								_
▶ Network		NMP Trap Receiver	rs		Tanking	5	E a charach	D
 Event Notification 	Index 1	NMS IP address	Community string	None		By Severity	Event Level	Description
Email/Trap	2			None -	v1 -	By Severity -		
· External Links	3			None 🔻	v1 🔻	By Severity 🔻	Information 🔻	
	4			None 🔻	v1 🔻	By Severity 🔻	Information 🔻	
	5			None 🔻		By Severity 🔻	Information 💌	
	6			None 🔻	v1 🔻	By Severity 🔻	Information 🔻	
	7			None 🔻	v1 🔻	By Severity 🔻	Information 🔻	
	8			None 🔻	v1 🔻	By Severity 🔻	Information 🔻	
				Send Test	Apply			

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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:			
	■ <u>None</u> : traps are not sent.			
	■ <u>RFC1628 Trap</u> : traps are sent according to the specifications described			
	in the RFC1628 MIB file.			
	■ <u>CS102 Trap</u> : 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] \rightarrow [Protocols] \rightarrow [SNMP] \rightarrow [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.			



User Manual

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: $[Network] \rightarrow [Protocols] \rightarrow [SSH Connection]$

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:



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:





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 r	nenu
Please Enter Your Choice	=> 0

After completing these settings, press "o" 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 "o" to return to the previous menu, then press again "o" 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
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 men	u
Please Enter Your Choice =>	

2. Enter the related HTTP setting as shown below.

1	eeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeeee
1. HTTP Control	: Enabled
2. HTTP Port	: 80
0. Return to previous	nenu
Please Enter Your Choice	=>

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



3. Enter the related SNMP setting as shown below.

	Network Cont	== tro	DI Group
	[SNMP Contr	ol	Group]
		==	
1.	SNMP Control	:	Enabled
2.	SNMP Port	:	161
3.	On Battery Trap Repeat Time	:	1
0.	Return to previous menu		
Plea	se Enter Your Choice =>		

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

4. Enter the related SMTP setting as shown below.

		Networ [SMTP	ck Control Group Control Group]
1.	SMTP Control	:	Enabled
2.	SMTP Port	:	25
0.	Return to previous	menu	
Plea	ase Enter Your Choice	e =>	

After completing these settings, press "o" 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			
Plea	ase Enter Your Choic	e =>	

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



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

Account Control Group							
[RADIUS Group]							
	=======						
1.	RADIUS	Port	:	1812			
2.	RADIUS	Server Setti	ngs				
З.	Packet	Timeout	:	1			
4.	Packet	Retry	:	3			
Ο.	Return	to previous	menu				
Plea	se Ente	r Your Choice	∋ =>				

After completing these settings, press "o" 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 Passwo	rd User Level						
[1]	*	Disabled						
[2]	*	Disabled						
[3]	*	Disabled						
[4]	*	Disabled						
[5]	*	Disabled						
[6]	*	Disabled						
[7]	*	Disabled						
[8]	*	Disabled						
Command :								
1. Display on	e entry							
2. Modify one	entry							
0. Return to	0. Return to previous menu							
Please Enter Yo	our Choice =>							

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

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



After completing these settings, press "o" to return to the previous menu, then press "o" 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	Mail Account Description Mail Type Event Lovel							
[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	e =>							

After completing these settings, press "o" to return to the previous menu, then press "o" 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:



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 SNMP Card





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.

	======================================						
]]	IP Address	Community/Name	Тгар Туре	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			
Com	mand :						
1.	. Display one	e entry					
2.	. Modify one	entry					
0.	0. Return to previous menu						
Ple	ase Enter Yo	ur Choice =>					

After completing these settings, press "o" 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		
Comma	nd :							
1. 1	Display one e	ntry						
2.1	Modify one en	try						
0.1	Return to pre	vious menu						
Pleas	Please Enter Your Choice => 0							

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

5.2.6. End of CS102 Console Configuration

After completing the configuration, press "o" to return to the main menu.

Then press "o" 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 =>



User Manual

Chapter 6 - Managing CS102/UPS via SNMP

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

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 \rightarrow General Settings \rightarrow 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 <u>hiips://ups.legrand.com</u>, 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 \rightarrow Event Notification \rightarrow 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

ecial Day Schedule
(default value)
(default value)
(default value)
(default value)
onday 22:20:00
esday 09:00:00

	22:2	0:00 22:23	:00 Mon 09	: 00 : 00 Tue
UPS ON				
UPS SLEEP				
UPS OFF				



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:



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: UPS Shutdown Delay (Sec):		22:20: 180	oo (default va	lue)	
UPS Sleep Time (Min):		1	(default va	lue)	
I	22:20	00:00	22:23:00	22:24:00	
UPS ON					
UPS SLEEP					
UPS OFF					



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		OFF	Power On (Normal Status)	
	ON	Flashing	RS232 Port Activity (UPS site)	
	Two LED cross	Two LED cross	Auto Diagnostic Mode (MFG mode)	
	Flashing	Flashing		
	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			