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Introduction

The Site Management Controller (SMC) is a flexible monitoring solution for site management and control. Its web interface and SNMP capability provides the insight needed to monitor and control Lite-On power equipment, numerous devices, and sensors in your data center. The SMC supports system alarm notification via e-mail, SMS, SNMP Trap, or syslog.





General Safety Conventions

This user guide uses the safety conventions described below. Ensure that you follow the safety instructions in this guide and observe its directives to protect you from injury and to protect your equipment from damage.

	Indicates highly-dangerous consequences such as fire, serious injury, or death when
WARNING	failing to comply with the instructions.

Caution Indicates dangerous consequences such as moderate injury or equipment damage when failing to comply with the instructions.

Required Tools for Installation and Maintenance

The following tools are required for installing and maintaining the Power System.

- #2 and #3 Phillips screwdrivers
- #0 Flat blade screwdriver
- Torque driver to tighten connectors and cables
- Digital Multimeter (DMM) for testing and verifying power

Required Software

The SMC can be accessed through a network-connected client computer. The required OS and Web-based browser software for that computer is described below.

Operating System Software

Any modern operating system (OS) can be used that supports the web-based browsers described below. For automatic network discovery of the SMC (as described in section "SMC LAN Cabling Installation"), use an OS that supports Universal Plug and Play (UPNP) such as Microsoft Windows 7.

Web-based Browser Software

The SMC uses a web-based administration interface that can be accessed via either LAN-1 or LAN-2 and an internet browser. The most-current versions of these browsers are supported:

- Microsoft Internet Explorer
- Google Chrome
- Mozilla Firefox
- Apple Safari

SNMP Interface

The SMC can be accessed using the SNMP interface. An SNMP manager needs to be installed to access the SNMP interface of SMC.



The default community names of SMC are:

- read: public
- write: private

The SMC SNMP interface supports RFC1213 and Lite-On proprietary MIB file. To obtain the Lite-On MIB file, contact Lite-On Technical Support.

Unpacking and Checklist

Carefully unpack the SMC. Move all components to the staging area for assembly. It is recommended that you keep the packaging in case equipment needs to be returned to the supplier.

Use a box cutter or utility knife to open cardboard packaging.

To unpack items from cardboard shipping boxes:

- 1. If necessary, remove any shipping straps from around the box.
- 2. Place the box upright and cut through the tape on the top of the box.
- 3. Remove the item(s) from the box along with any shipping foam if necessary.
- 4. Remove the item(s) from any shipping foam or wrapping material.

After all items have been unpacked, verify that you have received all the items as specified by the shipping paperwork.

Equipment Inspection

After unpacking the equipment, inspect it for damage that might have resulted from shipment. Check for the items below and contact the shipper in the unlikely event that damage is found.

- Bent connectors, alignment pins, or chassis
- Any cracks or chips on plastic components
- Unusual scratches or marks
- Dents in sheet metal or panels
- Corrosion or evidence of water or chemical damage
- Indications that the device was dropped
- Loose parts inside the equipment

SMC and Rack Preparations

These instructions assume that the rack has been moved into place and is installed properly.

The SMC shelf slides into a 19-inch or 21-inch rack and is supported in the rack by shelf support brackets. If the Shelf Support Brackets are not already installed in the rack, follow the instructions below.

Rack Mounting Brackets Installation

The SMC is secured to the rack by supplied rack mounting brackets.



To Install Rack Mounting Brackets:

- 1. Remove rack mounting brackets and screws from the device packing box.
- 2. Install the left and right rack mounting brackets with the supplied screws.
- 3. Torque all rack mounting bracket screws to 0.8N-m (0.6 ft-lbs).

Shelf Support Brackets Installation

The weight of the SMC is supported in the rack by two Shelf Support Brackets. Each bracket is held in place by four M6 x 12mm self-threading screws.

Note: Use shelf support brackets that meet International Standard IEC 60297-3-105, for type B chassis.

To Install the Shelf Support Brackets:

- 1. Place a Shelf Support Bracket in the correct position in the rack and loosely attach it to the shelf with four M6 screws.
- 2. Place the other Shelf Support Bracket in the correct position in the rack and loosely attach it to the shelf with four M6 screws.
- 3. Torque all Shelf Support Bracket screws to 6.1 N-m (4.5 ft-lbs).

SMC Hardware Installation

After the Rack Mounting Brackets have been installed on the SMC and the Shelf Support Brackets have been installed into the rack, the SMC can be installed into the rack.

WARNINGTo prevent risk of electrical shock to personnel, ensure that power is not activated inside
the rack while installing equipment. Use a DMM to test any potentially live wires and
verify that electrical power is turned off to the rack.

WARNING To prevent risk of electrical shock to personnel, ensure that all installation and repairs are performed by AUTHORIZED SERVICE PERSONNEL ONLY.

SMC Clock Battery Installation and Replacement

The SMC may have shipped without a clock battery. If so, follow the instructions below to install a clock battery if necessary. **NOTE**: the SMC will operate without a clock battery, but the SMC time will not be retained after a power cycle unless NTP is used.

Caution	Risk of explosion if battery is replaced by an incorrect type.		
Caution	Dispose of used batteries according to the instructions from the manufacturer.		
Attention	Il y a danger d'explosion s'il y a remplacement incorrect de la batterie.		

Remplacer uniquement avec une batterie du même type ou d'un type equivalentAttentionrecommandé par le constructeur. Mettre au rebut les batteries usagées conformément
aux instructions du fabricant.



To install a clock battery into the SMC:

- 1. Remove 9 screws from the SMC top cover (3 bottom, 4 top, and 2 rear).
- 2. Remove the top cover from the SMC chassis.
- 3. As shown below, push a CR-2032 into the battery holder so that the "+" battery polarity is oriented towards the top of the SMC chassis. The battery snaps into place.



- 4. Replace the top cover and screws to the SMC chassis.
- 5. Torque the top cover screws to 0.76 N-m (0.56 ft-lbs).

Caution	Risk of explosion if battery is replaced by an incorrect type.
Caution	Dispose of used batteries according to the instructions from the manufacturer.
Attention	Il y a danger d'explosion s'il y a remplacement incorrect de la batterie.
Attention	Remplacer uniquement avec une batterie du même type ou d'un type equivalent recommandé par le constructeur. Mettre au rebut les batteries usagées conformément aux instructions du fabricant.



To replace a clock battery in the SMC:

- 1. If necessary, remove the SMC from the rack.
- 2. Remove 9 screws from the SMC top cover (3 bottom, 4 top, and 2 rear).
- 3. Remove the top cover from the SMC chassis.
- 4. Push in the battery release latch (see 1) below) until the battery pops out of the battery holder.



- 5. Push a replacement CR-2032 battery into the battery holder so the positive "+" battery polarity is oriented towards the top of the SMC chassis. The battery snaps into place.
- 6. Replace the top cover and screws to the SMC chassis.
- 7. Torque the top cover screws to 0.76 N-m (0.56 ft-lbs).
- 8. Reinstall the SMC back into the rack (see SMC Rack Installation below).
- 9. Reconnect SMC cabling.

SMC COM Port RS232 Setting

By default, COM-1, COM-2, and COM-3 ports are set to the RS-485 communication standard. They can be changed to the RS-232 communication standard by changing jumpers on the SMC motherboard.

Note: Serial port configuration must match those of the sensors for the SMC to communicate with the sensor successfully. The most common sensor configuration is 9600bps, 8 data bits, 1 stop bits and no parity.

To change COM-1, COM-2, or COM-3 ports to RS-232 (rather than the default setting of RS485):

- 1. If necessary, remove the SMC from the rack.
- 2. Remove 9 screws from the SMC top cover (3 bottom, 4 top, and 2 rear).
- 3. Remove the top cover from the SMC chassis.
- 4. Move the jumpers behind ports COM-1, COM-2, or COM-3 so they jump over the front pins and center pins rather than the rear pins and center pins (see the table below for RS232 and RS485 jumper settings).



CP-13EC-010U Site Management Controller



- 5. Replace the top cover and screws to the SMC chassis.
- 6. Torque the top cover screws to 0.76 N-m (0.56 ft-lbs).

SMC Rack Installation

To Install SMC into the Rack:

- 1. Carefully lift the SMC and move it into the rack on top of the Shelf Support Brackets.
- 2. Push the SMC into the rack until the Rack Mounting Brackets align with the rack and loosely attach it to the SMC shelf with four M6 screws.
- 3. Torque all M6 screws to 6.1 N-m (4.5 ft-lbs).
- 4. With a proper ground wire, connect it to chassis ground (see SMC Rear Panel below).
- 5. Torque ground bolt to 3.6 N-m (2.66 ft-Lbs).



6. Connect power plug(s) to the SMC (see SMC Rear Panel below). If either, or both, power plugs are energized, the SMC will boot up and the green Power light will illuminate solid. During the boot up sequence, the SMC Power light will blink; it takes approximately 30 seconds for the SMC to complete boot up.

SMC LAN Cabling Installation

The SMC provides two RJ-45 ports to connect to the LAN network; one port on the front (LAN-1) and one port on the rear (LAN-2). LAN-1 is the maintenance port (also known as a "craft" port) with a default static address of 169.254.200.200. The default setting for LAN-2 is DHCP. The settings of both ports can be changed though the SMC **Configuration** > **Network** interface. SMC LAN ports are summarized in the table below.

Property	LAN-1	LAN-2	
Location	Front port	Rear port	
Default address	Static address: 169.254.200.200	DHCP	
Туре	Maintenance (craft) port	LAN network port	

The SMC uses a web-based administration interface that can be accessed via either LAN-1 or LAN-2 and an internet browser. The following browsers are supported:

- Microsoft Internet Explorer
- Google Chrome
- Mozilla Firefox
- Apple Safari

Use the most current software version of your browser.

To login to the SMC via front maintenance port (LAN-1):

- 1. Ensure that the network adapter on your computer is set to "Obtain an IP address automatically."
- 2. Ensure that the SMC is energized and has fully booted (green Power light is solid).
- 3. Connect an RJ-45 cable from a computer or network device to LAN-1 on the SMC.
- 4. Enter http://169.254.200.200/login into the browser of a computer that is connected to the SMC. The SMC login screen displays.
- 5. Log into the SMC with the username/password of **admin/admin**. The SMC interface opens.

To login to the SMC via rear port (LAN-2):

- 1. Ensure that the SMC is energized and has fully booted (green Power light is solid).
- 2. Connect an RJ-45 cable from a computer or network device, such as a bridge, to LAN-2 on the SMC.
- 3. Open Windows Explorer and click on Network menu.
- 4. The SMC will appear under "Other Devices."
- 5. Double click on the SMC. The SMC login screen opens.
- 6. Log into the SMC with the username/password of **admin/admin**. The SMC interface opens.

Note: If the SMC does not show up automatically when connected to the rear port, use the maintenance port to inspect the IP address of the SMC by viewing **Configuration** > **Network** > **IP Config** settings.



SMC CAN Cabling Installation

The SMC provides one CAN bus port that is brought out to two connectors: CAN-1A on the front and CAN-1B on the rear. CAN ports are used to communicate with other Lite-On power equipment.

CAN ports can be daisy-chained from one Lite-On device to another and the ends of the chain must be terminated with terminator plugs as shown below.



Use provided Lite-On terminator plugs on the ends of a CAN cable chain (see 1 below).



To install SMC CAN cabling:

- 1. Connect an RJ-45 cable from a CAN port on the SMC to a CAN port of another Lite-On device.
- 2. If the SMC is the end of the CAN cable chain, install a Lite-On terminator plug to the other CAN port of the SMC
- 3. If the SMC is not the end of the CAN cable chain, install an RJ-45 cable from the other CAN port to a CAN port of another Lite-On device.
- 4. Install a Lite-On terminator plug to the end of the CAN cable chain.

SMC USB Device Installation

The SMC provides two USB ports to connect devices that connect via a USB port; USB-1 located on the front of the SMC and USB-2 located on the rear of the SMC.



The following USB devices are supported by the SMC:

• Huawei E173 3G Modem

To install SMC USB device:

- 1. Connect a USB cable from one of the SMC USB ports to the USB device.
- 2. If necessary, connect power to the USB device and turn on its power switch to active it.

Note: Connect the Huawei E173 3G modem only to USB-2 located at the rear of the SMC.

Note: You can verify that the 3G modem has connected and is communicating properly by viewing the **Configuration** > **Network** > **SMS** interface.

SMC COM Cabling and MODBUS Device Installation

The SMC provides three serial COM ports (COM-1, COM-2, and COM-3 located on the rear of the SMC) that can be used to communicate with MODBUS-based devices such as temperature, humidity, and power meters.

MODBUS Device Type	Description	Notes
BCTGD1000	Temperature/humidity	
	sensor	
EE071	Temperature/humidity	The EE071 comes with a default
	sensor	Modbus address of 247. First, add the
		sensor to the SMC using this default
		address, then the Modbus address
		can be changed from the SMC Sensor
		Configuration page.
BCT60	Power meter	
Acuvim	Power meter	The Modbus address of the Acuvim
		power meter can be changed from
		the SMC Sensor Configuration page.
Omron 61F-GPN-V50	Flood sensor	

The following MODBUS devices are supported for the SMC.

Note: the baud rate of serial devices on the same bus must match each other.

To use a MODBUS device that has flying leads, connect it to a Lite-On CZ-0001-000U interface (shown below) so the MODBUS device can be used with RJ-45 cable. Flying leads from the MODBUS device are connected to the green terminal block (see 1 below) on the top of the CZ-0001-000U interface.





As an aid in connecting flying leads to CZ-0001-000U interface, its green terminal block can be removed by pulling it off. It can then be reconnected after the leads have been installed to the terminal block. When the green terminal block is removed, terminal markings (GND, +12V, D-, and D+) are visible on the case.

Note: If the CZ-0001-000U is at the end of a MODBUS daisy chain, install a supplied Lite-On terminator plug to one port of the CZ-0001-000U.

To install a MODBUS device to the SMC:

- 1. Connect an RJ-45 cable from a COM port on the SMC to a COM port of a MODBUS device or a MODBUS device connected to a CZ-0001-000U interface.
- Login to the SMC and go to the Configuration > Environment > Sensors page. The Sensor Configuration page opens.
- 3. Type a Name for the device.
- 4. From the Type drop-down, choose a device type.
- 5. From the Com Port drop-down, choose the Com Port number that the cable is plugged into the SMC.
- 6. Enter a unique Address for the device. **Note**: the device may have its own interface where its address can be configured. In this case, enter the address of the device.
- 7. Click **Save**. The settings for the sensor are saved.

SMC Digital Input Cabling Installation

The SMC provides six digital inputs and 12-volt power for external sensors such as motion and smoke sensors.



The following Digital Input devices are supported for the SMC.

Digital Input Device Type	Description
JIC636	Smoke Alarm
SystemSensor4WB	Smoke Alarm
LK8200N	Motion Sensor
BV-300DP	Motion Sensor

Digital Input devices are connected to the SMC through a supplied Dinkle 0156-2 screwless connector. The pinout diagram of the Digital Input connector on the rear of the SMC is shown below.

24681012141618202224

1 3 5 7 9 11 13 15 17 19 21 23

Pin Number	I/O Configuration Number	Signal Name
1	1	Digital Input OB
2	1	Digital Input 0A
3	1	GND_0
4	1	+12V_0
5	2	Digital Input 1B
6	2	Digital Input 1A
7	2	GND_1
8	2	+12V_1
9	3	Digital Input 2B
10	3	Digital Input 2A
11	3	GND_2
12	3	+12V_2
13	4	Digital Input 3B
14	4	Digital Input 3A
15	4	GND_3
16	4	+12V_3
17	5	Digital Input 4B
18	5	Digital Input 4A
19	5	GND_4
20	5	+12V_4
21	6	Digital Input 5B
22	6	Digital Input 5A
23	6	GND_5
24	6	+12V_5

To install Digital input devices:

Note: Remove insulation from approximately 1/4-inch from the end of digital device wires before inserting into the Digital Input connector. Do not allow uninsulated wires to extend out of the connector.



 Using the above Digital input pinout table as a reference, connect wires from digital devices to the Digital Input connector. To secure a wire into the connector, press in the orange tab on the connector (see 1 below) and while it is pressed in, insert a wire into the corresponding hole.



- 2. After wires have been installed into the connector, push it into the DIGITAL INPUTS connector on the rear of the SMC.
- Login to the SMC and go to the Configuration > Environment > Digital Inputs page. The I/O Configuration page opens.
- 4. From the Type drop-down, choose a device type.
- 5. Type a Name for the device.
- 6. Click on the Switch Type for the device, either Normally Closed or Normally Open.
- 7. Click the Latch checkbox if the device needs it power to be cycled to reset it.
- 8. Click **Save** after all devices have been configured. The I/O Configuration page closes.

SMC Relay Cabling Installation

The SMC provides two dry-contact relays (type FORM-C) to indicate that a major or minor alarm has occurred. These relays can be used to trigger an audible or visual physical alarm such as a horn or flashing light.

Relay wires from the alarming devices are held into the supplied RELAYS connector by 2.4mm screws (see 1) below). Use a #0 flat blade screwdriver to tighten the screws and secure the wires into the connector; torque screws to 0.43 N-m (0.32 ft-lbs).



Note: Remove insulation from approximately 1/4-inch from the end of alarming device wires before inserting into the RELAYS connector. Do not allow uninsulated wires to extend out of the connector.

The pinout diagram of the relay connector on the rear of the SMC is described below.



123456

Pin Number	1	2	3	4	5	6
Relay Type	Major Alarm, Relay 1		Minor Alarm, Relay 2			
Definition	Normally	Common-	Normally	Normally	Common-	Normally
Definition	Closed-1	1	Open-1	Closed-2	2	Open-2

For example, to trigger a flashing light (normally-open type) whenever a major alarm occurs, connect the light relay wires between pins 2 and 3. To trigger a horn (normally-closed type) whenever a minor alarm occurs, connect the horn relay wires between pins 4 and 5.

To install SMC Relay cabling:

- 1. Determine the type of device to be used for major alarms, either normally open or normally closed.
- 2. Connect the relay wires from the major alarming device to the appropriate pins on the supplied RELAYS connector.
- 3. Determine the type of device to be used for minor alarms, either normally open or normally closed.
- 4. Connect the relay wires from the minor alarming device to the appropriate pins on the supplied RELAYS connector.
- 5. After wires have been connected to the relays connector, push it into the RELAYS connector on the rear of the SMC.



LiteFinder Application

The LiteFinder application lets you easily find the IP address of an SMC on your network.

terinder				
Board Type	Serial	Controller Name	IP	Firmware Version
am335x	6XXXX01X1F33301	SMC-Lite-1	10.200.176.69	02.00.08-1ee9661e
am335x	6XXXX01X2G42015	SMC-Lite-1	10.200.176.205	03.00.08-99679ad9
liteon_smc	6XXXX01X2F42023	SMC-IntegrationTest	10.200.176.211	03.00.11-673c5518
liteon_smc	6XXXX01X2F4203D	SMC-1	10.200.176.212	03.00.10-f03e0d58
liteon_smc	6XXXX01X1F2406T	SMC-Cantest	10.200.176.213	03.00.10-25d45daa
liteon_smc	6XXXX01X2F4201U	SMC-1	10.200.176.217	02.00.08-aaf42f9e
		Web	Configure Network	

To login to a power shelf via the SMC initially, you must first discover its IP address; the Windows-based LiteFinder application can be used to identify the IP address of an SMC connected in your network. After you know the IP address of the SMC, you can login directly and will not need the LiteFinder application.

You can also use the LiteFinder application to change the type of address (DHCP or Static), IP address, Mask, Gateway, DNS, and Alternative DNS. Contact Lite-On PSS Support to download the LiteFinder application.

LiteFinder is supported on PCs running Windows 7 and above.

Note: Ensure that the computer running the LiteFinder application is physically connected to the same network as the SMC.



To install the LiteFinder application:

- 1. Download the LiteFinder application from the Lite-On PSS Support site.
- 2. Double click LiteFinderSetup installer program. The LiteFinder Setup Wizard opens.

늻 LiteFinder	
Welcome to the LiteFinder Setup Wizard	
The installer will guide you through the steps required to install LiteFinder on your co WARNING: This computer program is protected by copyright law and international t Unauthorized duplication or distribution of this program, or any portion of it, may resu or criminal penalties, and will be prosecuted to the maximum extent possible under th	mputer. reaties. It in severe civil ne law.
Cancel < Back	Next >

3. Follow the instructions in the LiteFinder Setup Wizard to complete LiteFinder installation.

To run the LiteFinder application and discover SMC IP address:

- 1. Find the application LiteFinder on your PC.
- 2. Double click LiteFinder to open the application. The LiteFinder window opens.





Board Type	Serial	Controller Name	IP	Firmware Version
am335x	6XXXX01X1F33301	SMC-Lite-1	10.200.176.69	02.00.08-1ee9661e
am335x	6XXXX01X2G42015	SMC-Lite-1	10.200.176.205	03.00.08-99679ad9
liteon_smc	6XXXX01X2F42023	SMC-IntegrationTest	10.200.176.211	03.00.11-673c5518
liteon_smc	6XXXX01X2F4203D	SMC-1	10.200.176.212	03.00.10-f03e0d58
liteon_smc	6XXXX01X1F2406T	SMC-Cantest	10.200.176.213	03.00.10-25d45daa
liteon_smc	6XXXX01X2F4201U	SMC-1	10.200.176.217	02.00.08-aaf42f9e
		1M/ob	Configure Network	

Note: To configure a controller, click on a controller and click the Web button to configure it via a web page or click the Configure Network button to configure it via LiteFinder. Alternatively, you can right click on a controller and choose either "Configure Network" or "Web".

- 3. Record the IP address of the SMC that you want to login to. **Note**: the items in the LiteFinder window are sorted by IP addresses.
- If you want to change the address type (DHCP or Static) or IP address, double click the IP address in the LiteFinder window. Alternatively, you can highlight an IP address and press Configure Network. The Configure window opens.

🖳 Configure		
Туре	OHCP Static	
Password		
IP	10 . 200 . 176 . 105]
Mask	255 . 255 . 248 . 0	
Gateway	10 . 200 . 176 . 254	
DNS	10 . 200 . 176 . 10	
Alternative DNS		
Apply	Cancel	



5. Edit the SMC as necessary and click Apply.

Logging in to the SMC

You can login to the SMC with a supported web browser. Use the LiteFinder application (described above) to discover the IP address of the SMC.

To login to the SMC:

- 1. Connect an RJ-45 cable from a computer or network device to the LAN port on the SMC.
- 2. Enter http://<ip_address>/login into the browser of a computer that is connected to the SMC. The SMC login screen displays.
- 3. Log into the SMC with the username/password of **admin/admin**. The SMC interface opens.

SMC Web-based Interface

The SMC provides a web-based graphical interface to remotely configure and monitor site environmental devices as well as Lite-On power systems. The following features can be accessed through the web-based interface:

- Real-time reading of temperature, humidity, and power/voltage/current meters
- Detailed status of Lite-On power equipment
- View current alarms, historical signal data, and logs
- Configure system parameters such as IP address, time, alarm threshold, and user information
- Define site information, equipment names, signal names, and alarm levels
- Remotely download and upload configuration and system files

As shown below, all SMC interface pages contain a header area (see 1 below), a selector area (see 2 below) and a footer area (see 3 below) which both appear on every page.





The header area, located at the top of the page (see 1) above), contains the following information:

- Site Info and Configuration tabs. Click the Site Info tab to view system overview, environmental, and log information. Click the Configuration tab to configure site information, username and password settings, environmental settings, and network configuration.
- "Hello" Username. The name of the current user logged into the SMC.
- Logout. Click the logout button to logout of the SMC.

The selector area, located on the left side of the page (see 2) above), contains a list of items to select for additional information. The area is dynamic and can change depending on the choices made in the header area and the equipment connected to the SMC.

The footer area, located at the bottom of the page (see **3** above), contains the following information:

- Model. The model number of the SMC.
- Serial. The serial number of the SMC.
- Version. The version of the firmware of the SMC.
- Status. The status of the SMC.
- Name. The name of the SMC. SMC name, description, and location information can be changed in Configuration > System > Site
- System Time. The current time of the SMC. System time can be changed and configured in **Configuration** > **System** > **Site**



Login Page

The Login page is the first page presented by the SMC when accessed via the web. It contains login forms and shows the name and software version of the SMC. Refer to SMC LAN Cabling Installation for cabling information needed to login to the SMC.

The default login/password information is **admin/admin** or **user/user**. For security reasons, it is recommended that you change the default passwords immediately after initial login to the SMC.

Note: There are two levels of logins: admin is for read-write, and user is for read-only.

Login Name	Default Password
admin	admin
user	user

	LITEON® Site Management	
admin		
	Login	
	SMC-1 Ted	
	SMC 4.02	

To login to the SMC:

- 1. Enter login/password information in appropriate fields. The default login/password information is admin/admin.
- 2. Click Login. The SMC Site Info page opens upon correct login/password information.

Site Info Interface

After a user successfully logs into the SMC, the Site Info page displays.



LITEONI A site	e Info 🇳 Configuration			Hello Admin 👤	Logout
System Overview	Active Alarms No active alarms				
II Trends	Equipment Overview				
VPOC	Performance Total Output	Rack 1 DC UPS 1	Rack 2 DC UPS 3		
DC UPS			000000		
Environment					
🔳 Logs	105 Watte	Rack 3			
	100 Mails				
			Otatua		
Model: CP-13EC-0100 Serial: 6XXXX01X2F42	0 202∨		Status: Name ⁻	SMC-1	
Version: 03.00.11-340ad	b1a	POWER SYSTEM SOLUTIONS	Location:	Dallas	
			System Time:	Aug 9, 2017 3:42:37 PM	

System Overview Interface

The **Site Info > System Overview** page is the default page after successful login to the SMC. It contains this information:

- Environmental Summary. Displays a summary of active environmental alarms if they exist. Major alarms are shown with a red background and minor alarms are shown with an amber background.
- Active Alarms. Displays a list of all active alarms for this SMC. It shows the device name, the type of alarm, the severity of the alarm, and the date and time that the alarm occurred.
- Equipment Overview. Graphically displays the equipment in the system according to rack as well as power and output information.



Trends

The Trends feature shows data trends in realtime, daily, monthly, and yearly trend charts.



The following data trends are shown in each chart:

- Output Power. The total aggregate output power of all power shelves.
- Input Power. The total input power of all power shelves.
- Battery Charging Power. The total input power that is charging batteries.
- Battery Discharging Power. The total output power that is supplied by batteries.
- Efficiency Percentage. The total aggregate efficiency of all power shelves.

To show Data Trends:

- 1. Click **Site Info > Trends**. The Trends Realtime data chart shows data trends in realtime.
- 2. If desired, click an appropriate selector to show data trends in Daily, Monthly, or Yearly charts.



Note: To hide a specific data category in the chart, click on its text in the legend. The text will be striked out and the data will be hidden in the chart. To show the hidden data again, click on the striked out text in the legend.



Click the text to hide the category in the chart



VPOC Interface

If a VPOC is connected to the SMC, it will appear in the selector area. Click on the VPOC selector to view more information about the VPOC. Multiple VPOCs can be connected to the SMC.



The following information is displayed about the VPOC:

- VPOC mode and status
- An active graphic showing current electrical path and battery charge
- Input and output voltage
- Input and output amperes
- Input and output power frequency
- Input and output watts
- AC output power factor
- AC output load of the VPOC
- AC output efficiency of the VPOC
- Battery voltage, capacity, temperature, and type
- Output graph
- Efficiency meter
- Ambient and battery temperature meters



• VPOC model number, serial number, and firmware version

DC UPS Interface

If a DC UPS is connected to the SMC, it will appear in the selector area. Click on the DC UPS selector to view more information about the DC UPS. Multiple DC UPSs can be connected to the SMC.

LITEON	🔒 Site Info 🔅 Configura	ation		Hello Admir	n 👤 Logout
 System Overview Trends 	DC UPS DC UPS 2-3	Mode Normal Mode	Status Normal	¢	
VPOC CUPS DC UPS DC UPS 1-1 DC UPS 2-3	Input A R 225.2 225 0.19 0. 60.0 60 22	B 5.0 Vac 21 A 0.0 Hz 24 W	Battery	Output	
Modules Environment Logs	S 225.0 225 0.19 0. 60.0 60 19 T 225.0 0 0.39 0.	5.2 Vac 19 A 0.0 Hz 25 W 0.0 Vac 00 A	95%	0 Watts 12.5 Vdc 0.00 A 0.0 % Load	
	60.0 0 44 Inlet Temp. 0 50	0.0 Hz 0 W 21 °C 60 75	95 % Capacity 12.5 Vdc 22 °C battery	0.0% % Efficiency	
	PSC Model: CM-12CP-010U	0 PSC Seria 6XXXXI	50 6075 I: P! 01X2F440AC 02	SC Firmware: 2.00.14-7c5f5149	

The following information is displayed about the DC UPS:

- An active graphic showing current electrical path
- Name, mode, and status of the DC UPS
- Phase and input source if applicable
- Input voltage, amperage, frequency, and wattage for each leg
- Output voltage, amperage, wattage, percent load, and efficiency
- Power shelf output meter
- Efficiency meter
- Input Current chart
- Power shelf temperature
- DC UPS model number, serial number, and firmware version



System	Administration	
Site	Control	
Administration	Reboot	Reboot
Users VPOC	Clear Event Log	Clear
DC UPS	Clear Trends	Clear
Environment	Backup/Restore Configurat	tion
Network	Backup	Download
	Restore	Choose Files No file chosen
	Restore Factory Defaults	Restore
	Upgrade Firmware	
		Choose Files No file chosen O Upload

Click the **Modules** button to view status of the PSUs.

System Overview	St	atus													
di Trends	N	ormal													
VPOC	PSU	Status	Feed	1	Input		¢	Dutput		Amb.	Pri.	Sec.	Model	Serial	FW
4 00,000	1	0	А	207.5V	0.19A	36W	12.4V	0.00A	0W	23°C	24°C	30°C	PS-2252-6Q-LF	6XXXX01A1G043IJ	030B6Q06
9 DC OPS	2	0	А	207.7V	0.19A	35W	12.5V	0.00A	0W	22°C	25°C	28°C	PS-2252-6Q-LF	6XXXX01A1G043H3	030B6Q06
DC UPS 1-1	3	0	A	206.2V	0.21A	39W	12.5V	0.00A	0W	24°C	25°C	30°C	PS-2252-6Q-LF	6XXXX01A1G043JC	030B6Q06
Modules	6	0	В	206.5V	0.20A	36W	12.5V	0.00A	0W	22°C	23°C	29°C	PS-2252-6Q-LF	6XXXX01A1G043EX	030B6Q06
DC LIPS 2.2	7	0	В	207.0V	0.19A	36W	12.4V	0.00A	0W	22°C	24°C	28°C	PS-2252-6Q-LF	6XXXX01A1G043J1	030B6Q06
00 0F3 2-3	8	0	в	208.0V	0.19A	36W	12.5V	0.00A	0W	22°C	23°C	28°C	PS-2252-6Q-LF	6XXXX01A1G043GQ	030B6Q06
Environment	9	0	В	206.5V	0.20A	36W	12.4V	0.00A	0W	22°C	23°C	28°C	PS-2252-6Q-LF	6XXXX01A1G043FM	030B6Q06
i≣ Logs	Shell PF-	r Model: 2223-11	L1N				She 6X	If Serial XXXX01>	(1F49	93WE					

Servers Interface

If the Power Shelf has network connection to the Baseboard Management Controller (BMC) of a server and IPMI is configured, the following server information and status can be monitored:

- IP address of the server •
- Product name •
- Serial number of the server
- Power usage of the server



Click the **Servers** button to view server information and status.

Site Info	🌣 Co						Admin 👤	
System Overview	IPMI Se	ervers	Product ¢	Serial	÷	Pov	ver ¢	
Trends	0	10.200.176.130	DELL PowerEdge T420	5GWCY12		78 Watts		
VPOC				Total		78 Watts		
f DC UPS					10	25 50	100	
Servers								
Environment								
≣ Logs								

Environment Interface

The Environment selector shows video streams from connected IP cameras and provides the status of sensors connected to COM-1, COM-2, COM-3, and Digital Inputs ports.

Logs Interface

The Logs selector displays a list of alarms and events. The list can be filtered and sorted by device, info, and timestamp. Logs can be downloaded by clicking the Download button (see 1 below) and the list can be refreshed by clicking the Refresh button (see 2 below). Upon reboot of the SMC, only the last 1000 alarms and events are saved in the logs interface.



To sort logs by Device, Info, or Timestamp:

- 3. Click Site Info > Logs. The Events History page opens showing a list of events and alarms.
- 4. In the header of the list, click either Device, Info, or Timestamp to sort by device, information, or timestamp. Click the header title again to reverse the sort order.

To filter logs by Major, Minor, or Events:

- 1. Click Site Info > Logs. The Events History page opens showing a list of events and alarms.
- 2. Click either the Major, Minor, or Event button to show only major alarms, minor alarms, or events.

Configuration Interface

The Configuration interface allows the user to specify various SMC configurations such as set SMC clock, administer users and passwords, administer the SMC system, and configure environmental and network settings.



Click the Configuration tab to enter configuration mode.

System > Site Interface

The Site Configuration page lets the user change site information (name, description, and location) and configure SMC system time settings.

To change SMC site information:

1. Click **Configuration** > **System** > **Site**. The Site Configuration page opens.

LITEON A Site	Info Configuration		Hello Admin 👤	Logout
System	Site Configuration			
Site	Information			
Administration	Name	SMC		
VPOC	Description	Site Monitor Controller		
DC UPS				
Environment	Location	3001 Summit Ave Suite 400		
Network		Pidito, 1X 75074		
	Time			
	Synchronize with Client Computer	Synchronize Now		
	Timezone	Central •		
	NTP	Enable Disable		
	NTP Server	pool.ntp.org		
		Reset	l	

- 2. Enter a Name, Description, and Location information for the SMC.
- 3. Click **Save**. The site information is changed.



To change SMC system clock:

1. Click **Configuration > System > Site**. The Site Configuration page opens.

LITEON A Site	Info 🌣 Configuration		Hello Admin	L Logout
System	Site Configuration			
Site	Information			
Administration	Name	SMC		
VPOC	Description	Site Monitor Controller		
DC UPS				
Environment Network	Location	3001 Summit Ave Suite 400 Plano, TX 75074		
	Time			
	Synchronize with Client Computer	Synchronize Now		
	Timezone	Central •		
	NTP	Enable Disable		
	NTP Server	pool.ntp.org		
		Reset	ve	

- 2. Choose a timezone from the Timezone dropdown list.
- 3. Choose whether NTP is enabled or not. If enabled, enter the name of an NTP server.
- 4. Click **Save**. The SMC clock settings are changed.



To synchronize the SMC clock with the client computer:

1. Click **Configuration** > **System** > **Site**. The Site Configuration page opens.

LITEON A Site	Info 🌣 Configuration			Hello Admin 👤	Logout
System	Site Configuration				
Site	Information				
Administration	Name	SMC			
Users	Beredittien				
VPOC	Description	Site Monitor Controller			
DC UPS					
Environment	Location	3001 Summit Ave Suite 400			
Network		Plano, TX 75074			
	Time				
	Synchronize with	Synchronize Now			
	Client Computer				
	Timezone	Central			
	NTP	Enable Disable			
	NTP Server	pool.ntp.org			
		Reset	ve		

2. Click **Synchronize Now**. The SMC clock is synchronized with the client computer and a message indicates that synchronization is complete.

System > Administration Interface

The Administration interface lets the user reboot the SMC, backup and restore SMC configuration, clear alarms, and upgrade SMC system firmware.



To reboot the SMC:

1. Click **Configuration** > **System** > **Administration**. The Administration page opens.

System	Administration
Site	Control
Administration	Reboot Reboot
Users	
VPOC	
DC UPS	Clear Trends Clear
Environment	Backup/Restore Configuration
Network	Backup Download
	Restore Choose Files No file chosen O Upload
	Restore Factory Defaults Restore
	Upgrade Firmware
	Choose Files No file chosen O Upload

2. Click the Reboot button. The SMC reboots.

To clear the event log:

1. Click **Configuration > System > Administration**. The Administration page opens.

System	Administration
Site	Control
Administration	Reboot Reboot
Users	
VPOC	Clear Event Log Clear
DC UPS	Clear Trends Clear
Environment	Backup/Restore Configuration
Network	Backup Download
	Restore Choose Files No file chosen O Upload
	Restore Factory Defaults Restore
	Upgrade Firmware
	Choose Files No file chosen

2. Click the Clear button next to "Clear Event Log" text. The event log is cleared.



To clear the trends:

1. Click **Configuration** > **System** > **Administration**. The Administration page opens.

System	Administration
Site	Control
Administration	Reboot Reboot
VPOC	Clear Event Log Clear
DC UPS	Clear Trends Clear
Environment	Backup/Restore Configuration
Network	Backup Download
	Restore Choose Files No file chosen ① Upload
	Restore Factory Defaults Restore
	Upgrade Firmware
	Choose Files No file chosen

2. Click the Clear button next to "Clear Trends" text. The trends data is cleared.

To backup the SMC configuration:

1. Click **Configuration > System > Administration**. The Administration page opens.

System	Administration
Site	Control
Administration	Reboot Reboot
VPOC	Clear Event Log Clear
DC UPS	Clear Trends Clear
Environment	Backup/Restore Configuration
Network	Bickup Download
	Restore Choose Files No file chosen O Upload
	Restore Factory Defaults Restore
	Upgrade Firmware
	Choose Files No file chosen O Upload

2. In the Backup/Restore Configuration area, click the Download button.



3. The browser prompts the user to Open, Save, or Cancel the download. Click **Save**. The SMC configuration file is saved to the Downloads directory of the client computer.

To restore the SMC configuration:

1. Click **Configuration > System > Administration**. The Administration page opens.

System	Administration	
Site	Control	
Administration	Reboot Reboot	
Users		
VPOC		
DC UPS	Clear Trends Clear	
Environment	Backup/Restore Configuration	
Network	Backup Download	
	Restore Choose Files No file thosen	
	Restore Factory Defaults Restore	
	Upgrade Firmware	
	Choose Files No file chosen O Upload	

- 2. In the **Backup/Restore Configuration** area, click the Choose Files button and locate an SMC configuration file.
- 3. In the **Backup/Restore Configuration** area, click the **Upload** button. The configuration backup file it uploaded to the SMC.



To restore the SMC to factory default settings:

1. Click **Configuration** > **System** > **Administration**. The Administration page opens.

System	Administration	
Site	Control	
Administration	Reboot Reboot	
Users		
VPOC	Clear Event Log	
DC UPS	Clear Trends Clear	
Environment	Backup/Restore Configuration	
Network	Backup Download	
	Restore Choose Files No file chosen O Upload	
	Restore Factory Defaults Restore	
	Upgrade Firmware	
	Choose Files No file chosen O Upload	

- 2. In the **Backup/Restore Configuration** area, click the **Restore** button. A confirmation dialog asks if you want to Reset to factory defaults.
- 3. Click **OK**. The SMC is reset to factory default settings.



Note: You can also reset the SMC to factory default settings by pressing the Reset button for 5 seconds. The Reset button is located on the front of the SMC.

To upgrade the SMC firmware:

1. Click **Configuration > System > Administration**. The Administration page opens.

System	Administration
Site	Control
Administration	Reboot Reboot
VPOC	Clear Event Log Clear
DC UPS	Clear Trends Clear
Environment	Backup/Restore Configuration
Network	Backup Download
	Restore Choose Files No file chosen O Upload
	Restore Factory Defaults Restore
	Upgrade Firmware
	Choose Files No file chosen O Upload

- 2. In the Upgrade Firmware area, click the Choose Files button and locate an SMC firmware file.
- 3. Click **Upload**. A confirmation dialog asks if you want to upgrade the SMC firmware.
- 4. Click **OK**. The SMC is upgraded with the firmware file.



System > Users Interface

The User Management interface lets the user change the password for the Admin and User accounts.

To change the Admin or User account passwords:

1. Click Configuration > System > Users. The User management page opens.

Site Info	Configuration				Hello Admin 👤	
System	User Management					
Site	User Configuratio	n				
Administration						
Users	Admin					
VPOC						
DC UPS	user				1	
Environment						
Network	Active Users					
	Username	Remote IP	Protocol	Login Time		
	admin	10.200.176.49	HTTP	Aug 14, 2017 2:01:40 PM		

2. Click the Edit button on the user to change. The User Configuration page opens.

LITEON A Site	Info 🌣 Configurat	ion		Hello Admin 👤	Logout
System	User Management				
Site	User Configurat	ion			
Users	Use	ername admin			
VPOC	Pas	sword			
DC UPS	Repeat Pas	sword			
Network			Cancel Save changes		
	User user		1		
	Active Users				
	Username	Remote IP	Login Time		
	admin	10.200.176.46	Sep 21, 2016 10:15:57 AM		

- 3. Enter a new password in the **Password** and **Repeat Password** fields. **Note**: the password must be at least 8 characters long.
- 4. Click **Save changes**. The user password is changed.



VPOC Interface

The VPOC interface lets the user change following configuration information on the selected VPOC.

- Name of VPOC •
- Rack and shelf location of the VPOC •
- Battery installation date •
- Identify selected VPOC by blinking its lights •
- Enable/disable internal VPOC buzzer •
- Specify if dry contacts are normally open or closed •
- **Clear VPOC alarms** ٠
- Remove the selected VPOC from SMC monitoring •
- Start a battery test ٠
- Startup or shutdown the VPOC •
- Upgrade VPOC firmware

To change the VPOC name and location information:

1. Click **Configuration** > **VPOC**. The VPOC Configuration page opens.

Site Info		Hello Admin 👤	Logout
System VPOC Configuration			
VPOC Information			
VPOC 2-5 Name	VPOC		
DC UPS Rack	2		
Network Shelf	5		
Battery Installation	2016-7-14		
Date	Identify		
Configuration			
Buzzer	Enable Disable		
Dry Contact 1	Normally Open Normally Closed		
Dry Contact 2	Normally Open Normally Closed		
Dry Contact 3	Normally Open Normally Closed		
Dry Contact 4	Normally Open Normally Closed		
Dry Contact 5	Normally Open Normally Closed		
	Reset Save		

- 2. In the Information area, enter a VPOC name and specify the rack and shelf location of the VPOC. Note: It is recommended that you give each VPOC a unique name.
- 3. Click Save. The VPOC configuration is saved.



To specify the battery installation date:

1. Click **Configuration** > **VPOC**. The VPOC Configuration page opens.

LITEON	🔒 Site Info	Configuration		Hello Admin 👤	Logout
System	VF	POC Configuration			
VPOC		Information			
VPOC 2-5		Name	VPOC		
DC UPS		Rack	2		
Network		Shelf	5		
		Battery Installation Date	2016-7-14		
			Identify		
		Configuration			
		Buzzer	Enable Disable		
		Dry Contact 1	Normally Open Normally Closed		
		Dry Contact 2	Normally Open Normally Closed		
		Dry Contact 3	Normally Open Normally Closed		
		Dry Contact 4	Normally Open Normally Closed		
		Dry Contact 5	Normally Open Normally Closed		
			Reset Save		

- 2. In the Information area, click the calendar drop down icon and choose a date.
- 3. Click Save. The VPOC configuration is saved.



To identify selected VPOC:

1. Click **Configuration** > **VPOC**. The VPOC Configuration page opens.

LITEON	♠ Site Info ♦ Configuration	Hello Admin 💄 Logout
System	VPOC Configuration	
VPOC	Information	
VPOC 2-5	Name VPOC	
DC UPS	Rack 2	
Environment Network	Shelf 5	
	Battery Installation 2016-7-14	
	Identify	
	Configuration	
	Buzzer Enable Disable	
	Dry Contact 1 Normally Open Normally Closed	
	Dry Contact 2 Normally Open Normally Closed	
	Dry Contact 3 Normally Open Normally Closed	
	Dry Contact 4 Normally Open Normally Closed	
	Dry Contact 5 Normally Open Normally Closed	
		Reset

2. In the Information area, click the Identify button. The lights blink and its internal buzzer alarms on the selected VPOC.



To enable or disable VPOC internal buzzer:

1. Click **Configuration** > **VPOC**. The VPOC Configuration page opens.

LITEON	Site Info Configuration				Hello Admin 👤	Logout
System	VPOC Configuration					
VPOC	Information					
VPOC 2-5	Name	VPOC				
DC UPS	Rack	2				
Environment	Shelf	5				
Network	Battery Installation	2016-7-14	=			
	Date	20101114				
		Identify				
	Configuration	\frown				
	Buzzer	Enable Disable				
	Dry Contact 1	Normally Closed				
	Dry Contact 2	Normally Open Normally Closed				
	Dry Contact 3	Normally Open Normally Closed				
	Dry Contact 4	Normally Open Normally Closed				
	Dry Contact 5	Normaliy Open Normaliy Closed				
				Reset Save		

- 2. In the Configuration area, click either Enable or Disable to enable or disable the VPOC internal buzzer.
- 3. Click **Save**. The VPOC configuration is saved.



To specify VPOC dry contact type:

1. Click **Configuration** > **VPOC**. The VPOC Configuration page opens.

	e Info 🌣 Configuration			Hello Admin 👤	Logout
System	VPOC Configuration			l	
VPOC	Information				
VPOC 2-5	Name	VPOC			
DC UPS Environment	Rack	2			
Network	Shelf	5			
	Battery Installation Date	2016-7-14			
		Identify			
	Configuration				
	Buzzer Dry Contact 1	Normally Open Normally Closed			
	Dry Contact 2	Normally Closed			
	Dry Contact 3	Normally Open Normally Closed			
	Dry Contact 4	Normally Open Normally Closed			
	Dry Contact 5	Normally Open Normally Closed			
			Reset		

- 2. In the Configuration area, click either Normally Open or Normally Closed for each dry contact.
- 3. Click **Save**. The VPOC configuration is saved.



To clear VPOC alarms:

1. Click **Configuration** > **VPOC**. The VPOC Configuration page opens. Note: you might need to scroll down to see options.

Control			
Clear Alarms	Clear		
Remove VPOC	Remove		
Power	Startup		
Upgrade Firmware			
	VPOC		
	Hardware	00	
	Firmware	0426	
	Conflict Status	٠	
	Force		
	Choose Files No file chosen	🕑 Upload	

2. In the Control area, click the **Clear** button. The VPOC alarms are cleared.

Note: VPOC alarms can also be cleared from **Configuration** > **System** > **Administration**.

To remove selected VPOC from SMC monitoring if the VPOC is physically not connected:

1. Click **Configuration** > **VPOC**. The VPOC Configuration page opens. Note: you might need to scroll down to see options.



Control		
Clear Alarms	Clear	
Remove VPOC	Remove	
Power	Startup Shutdown	
Upgrade Firmware		
	VPOC	
	Hardware	00
	Firmware	0426
	Conflict Status	•
	Force	
	Choose Files No file chosen	• Upload

2. In the Control area, click the **Remove** button. The VPOC is removed from being monitored by the SMC.

To start VPOC battery test from the SMC:

- 1. Click Configuration > VPOC. The VPOC Configuration page opens. Note: you might need to scroll down to see options.
- 2. In the Control area, click the **Battery Test** > **Start** button. The battery test starts.



To startup a VPOC from the SMC:

1. Click Configuration > VPOC. The VPOC Configuration page opens. Note: you might need to scroll down to see options.

Control			
Clear Alarms	Clear		
Remove VPOC	Remove		
Power	Startup Shudown		
Upgrade Firmware			
	VPOC		
	Hardware	00	
	Firmware	0426	
	Conflict Status	•	
	Force		
	Choose Files No file chosen	• Upload	

2. In the Control area, click the **Power > Startup** button. The selected VPOC starts up.



To shutdown a VPOC from the SMC:

1. Click **Configuration** > **VPOC**. The VPOC Configuration page opens. Note: you might need to scroll down to see options.

Control		
Clear Alarms	Clear	
Remove VPOC	Remove	
Power	Startup Shutdown	
Upgrade Firmware		
	VPOC	
	Hardware	00
	Firmware	0426
	Conflict Status	•
	Force	
	Choose Files No file chosen	● Upload

2. In the Control area, click the **Power > Shutdown** button. The selected VPOC shuts down.

To upgrade VPOC firmware from the SMC:

1. Click **Configuration** > **VPOC**. The VPOC Configuration page opens. Note: you might need to scroll down to see options.

Control		
Clear Alarms	Clear	
Remove VPOC	Remove	
Power	Startup	
Upgrade Firmware		
	VPOC	
	Hardware	00
	Firmware	0426
	Conflict Status	•
	Force	
\langle	Choose Files No file chosen	• Upload



- 2. In the Upgrade Firmware area, click the Choose Files button, and select a VPOC firmware file.
- 3. Click **Upload**. The VPOC is upgraded with the firmware file.

DC UPS Interface

The DC UPS interface lets the user change following configuration information on the selected DC UPS.

- Name of DC UPS
- Rack and shelf location of the DC UPS
- Identify selected DC UPS by blinking its lights
- Clear DC UPS alarms
- Remove the selected DC UPS from SMC monitoring
- Upgrade DC UPS firmware

To change the DC UPS name and location information:

1. Click **Configuration** > **DC UPS**. The DC UPS Configuration page opens.

Site	nfo 🌣 Configuration	Hello Admin 💄 Logout
System	DC UPS Configuration	
VPOC	Information	
DC UPS	Name DC UPS	
DC UPS 1-2	Rack 1	
Environment		
Network	Shelf 2	
	Identify	
		Reset Save
	Control	
	Clear Alarms Clear	
	Remove DC UPS Remove	

- 2. In the Information area, enter a DC UPS name and specify the rack and shelf location of the DC UPS **Note**: It is recommended that you give each DC UPS a unique name.
- 3. Click **Save**. The DC UPS configuration is saved.



To identify selected DC UPS:

1. Click **Configuration** > **DC UPS**. The DC UPS Configuration page opens.

Site	Info Configuration		Hello Admin 👤	Logout
System	DC UPS Configuration			
VPOC	Information			
DC UPS	Name	DC UPS		
DC UPS 1-2	Rack	1		
Environment	Shelf	2		
Network		Identify		
		Reset		
	Control			
	Clear Alarms	Clear		
	Remove DC UPS	Remove		

2. In the Information area, click the Identify button. The lights blink on the selected DC UPS.

To clear DC UPS alarms:

1. Click **Configuration** > **DC UPS**. The DC UPS Configuration page opens.

LITEON A Site	e Info 🌣 Configuration		Hello Admin 👤	Logout
System	DC UPS Configuration			
VPOC	Information			
DC UPS	Name	DC UPS		
DC UPS 1-2	Rack	1		
Environment	Shelf			
Network	onen			
		Identify		
		Reset		
	Control			
	ClearAlarms	Clear		
	Remove DC UPS	Remove		

2. In the Control area, click the Clear button. The DC UPS alarms are cleared.



To remove selected DC UPS from SMC monitoring if the DC UPS is physically not connected:

1. Click **Configuration** > **DC UPS**. The DC UPS Configuration page opens.

Site I	Info Configuration	Hello Admin 👤	Logout
System	DC UPS Configuration		
VPOC	Information		
DC UPS	Name DC UPS		
DC UPS 1-2	Rack 1		
Environment	Shelf 2		
NEWOIK	Identify		
	Reset Save		
	Control		
	Clear Alarms Clear		
	Remove DF UPS Remove		

2. In the Control area, click the Remove button. The DC UPS is removed from being monitored by the SMC.



To upgrade DC UPS firmware from the SMC:

1. Click **Configuration** > **DC UPS**. The DC UPS Configuration page opens. Note: you might need to scroll down to see options.

Remove DC UPS	Remove		
Upgrade Firmware			
Select Type	Power Shelf Controller (PSC)		¥
	PSC		
	Hardware	2	
	Firmware	1	
	Conflict Status	•	
	Force		
Start Upgrade	Choose Files No file chosen	• Upgrade	

- 2. In the Upgrade Firmware area, click the Choose Files button, and select a DC UPS firmware file.
- 3. Click **Upgrade**. The DC UPS is upgraded with the firmware file.

Environment > Alarms Interface

The Alarms interface allows the user to set acceptable temperature and humidity ranges. Temperature and humidity values outside these ranges will trigger an alarm.



To set temperature and humidity ranges:

1. Click **Configuration > Environment > Alarms**. The Alarm Configuration page opens.

Site In	ifo 🌣 Configuration		Hello Admin 👤	Logout
System	Alarm Configuration			
VPOC	Temperature			
DC UPS	High Temperature	60 °C		
Environment Alarms	Low Temperature	20 °C		
Serial Ports	Humidity			
Sensors (RS232/485)	High Humidity	70 %		
Digital Inputs	Low Humidity	20 %		
Network		Reset		

- 2. Enter high temperature, low temperature, high humidity, and low humidity alarm values.
- 3. Click Save.

Environment > Serial Ports Interface

The Com Port Configuration interface allows the user to set the baud rates for COM-1, COM-2, and COM-3. **Note**: the Mode (RS485 / RS232) of serial ports is assigned by setting jumpers on the SMC motherboard and by setting values in the Com Port Configuration interface. Refer to "SMC COM Port RS232 Setting" for more details on setting com port motherboard jumpers.



To set serial port communication values:

1. Click **Configuration > Environment > Serial Ports**. The Com Port Configuration page opens.

Site I	nfo 🌣 Configuration		Hello Admin 👤	. Logout
System	Com Port Configuration	1		
VPOC	Com 1			
DC UPS	Mode	RS485 RS232		
Environment	Speed (baud)	9600 •		
Alarms Serial Ports	Data bits	8 *		
Sensors (RS232/485)	Stop bits	1 •		
Digital Inputs	Parity	None		
Camera Network	Com 2			
	Mode	RS485 RS232		
	Speed (baud)	9600 •		
	Data bits	8 •		
	Stop bits	1 •		
	Parity	None		

- 2. For each com port, set the serial port values.
- 3. Click **Save**. The serial com port values are saved.

Environment > Sensors Interface

The Sensor Configuration interface allows the user to add or delete sensors and edit existing communication settings for sensors connected to serial ports COM-1, COM-2, and COM-3.



To add a sensor:

1. Click **Configuration** > **Environment** > **Sensors**. The Sensor Configuration page opens.

Site In	fo 🌣 Configuration					Hello Admin 👤	Logout
System	Sensor Configuration						
VPOC DC UPS	BCTGD1000 Type: BCTGD1000	ComPort: 1	Address: 1	Status: OK	/ 💼		
Environment Alarms	EE071_1 Type: EE071	ComPort: 3	Address: 16	Status: OK	1		
Serial Ports Sensors (RS232/485)	EE071_2 Type: EE071	ComPort: 3	Address: 17	Status: OK	1		
Digital Inputs	Add Sensor				+		
Camera							
Network							

- 2. Click the "+" symbol at the bottom of the end of the list of sensors. The New Sensor dialog opens.
- 3. Enter the Name, type, com port, and address of the new sensor.
- 4. Click Save. The new sensor is added.

To edit sensor settings:

1. Click **Configuration** > **Environment** > **Sensors**. The Sensor Configuration page opens.

LITEON A Site	e Info 🌣 Configuration					Hello Admin 👤	Logout
System	Sensor Configuration						
VPOC	BCTGD1000						
DC UPS	Type: BCTGD1000	ComPort: 1	Address: 1	Status: OK	×		
Environment Alarms	EE071_1 Type: EE071	ComPort: 3	Address: 16	Status: OK	/ 1		
Serial Ports Sensors (RS232/485)	EE071_2 Type: EE071	ComPort: 3	Address: 17	Status: OK	/ 💼		
Digital Inputs	Add Sensor				+		
Camera							
Network							

- 2. Click the edit icon on the sensor to edit. The Edit Sensor dialog opens.
- 3. Make changes to the dialog and click **Save**. The settings are saved.



To delete a sensor:

1. Click **Configuration** > **Environment** > **Sensors**. The Sensor Configuration page opens.

Site In	fo 🌣 Configuration					Hello Admin 👤	Logout
System	Sensor Configuration						
VPOC DC UPS	BCTGD1000 Type: BCTGD1000	ComPort: 1	Address: 1	Status: OK	1		
Environment Alarms	EE071_1 Type: EE071	ComPort: 3	Address: 16	Status: OK	× â		
Serial Ports Sensors (RS232/485)	EE071_2 Type: EE071	ComPort: 3	Address: 17	Status: OK	/ 💼		
Digital Inputs	Add Sensor				+		
Camera							

2. For the sensor to delete, click on its trash can. The sensor is deleted.

Environment > Digital Inputs Interface

The Digital Inputs interface allows the user configure DIGITAL INPUTS ports on the SMC.

To configure digital input settings:

1. Click **Configuration** > **Environment** > **Digital Inputs**. The I/O Configuration page opens.

Site	Info 🌣 Configuration		Hello Admin 👤	Logout
System	I/O Configuration			
VPOC	Input 1			
DC UPS	Туре	Motion		
Environment	Name	Motion-1		
Serial Ports	Switch Type	Normally Closed Normally Open		
Sensors (RS232/485)	Latched			
Digital Inputs	Input 2			
Camera	Туре	Smoke •		
Network	Name	Smoke-1		
	Switch Type	Normally Closed Normally Open		
	Latched	2		

- 2. From the Type dropdown, choose the type of digital sensor: Motion, Smoke, Flood, or Door.
- 3. Enter a name for the sensor.
- 4. Specify whether the sensor is normally closed or open.



- 5. Click the Latched checkbox if the sensor latches and requires a power cycle to reset.
- 6. Click Save. The digital input settings are saved.

Environment > Camera Interface

The Camera interface allows the user configure IP cameras. Nexcom IP cameras are supported by the SMC, refer to <u>www.nexcom.com</u> for more details.

To configure IP cameras settings:

1. Click **Configuration** > **Environment** > **Camera**. The Camera Configuration page opens.

Site	Info 🌣 Configuration		Hello Admin 👤	Logout
System	Camera Configuration			
VPOC	Camera 1			
DC UPS	Name	camera 1		
Environment	URL	10.200.176.203		
Alarms	Username	admin		
Serial Ports	Password			
Sensors (RS232/485)	Camera 2			
Digital Inputs	Name	camera 2		
Camera	URL	Address		
INCLIVION	Username	Username		
	Password	Password		

- 2. For each camera, enter a name, URL, username, and password.
- 3. Click **Save**. The camera settings are saved.

Network > IP Config Interface

The SMC provides two network ports: the one on the front (LAN-1) is the maintenance port by default with a static address of 169.254.200.200, the network port (LAN-2) on the rear is a DHCP network port by default. The settings for both ports can be changed.



To configure network port settings:

1. Click **Configuration > Network > IP Config.** The Network Configuration page opens.

LITEONI	🔒 Site Info	Configuration				Hello Admin 👤	Logout
System	Ne	etwork Configuration					
VPOC		Network Port (LAN-2)		St	atus: Up		
DC UPS		Туре	DHCP Static				
Environment		IP	10.200.176.211				
Network		Mask	255.255.248.0				
IP Config Webserver		Gateway	10.200.176.254				
IPMI		DNS	10.200.176.10				
SNMP		Alternative DNS	209.18.47.61				
SMTP		Maintenance Port (I A	N-1)	St	atus: Un		
Syslog		Type	DHCP Static				
		IP	169.254.200.200				
		Mask	255.255.0.0				
		Gateway	Gateway				
		DNIC	DNR				
		DNS					
		Alternative DNS	Alternative DNS				

- 2. For each port, choose either the DHCP or Static button. If Static is chosen, enter an IP address, mask, and gateway IP.
- 3. Click **Save**. The network settings are saved.



Network > Webserver

The SMC has the capability to use a custom SSL Certificate.

To upload an SSL Certificate file:

1. Click **Configuration > Network > Webserver**. The HTTP Configuration page opens.

Site	e Info 🌣 Configuration				Hello Admin 👤	Logout
System	HTTP Configuration					
VPOC	Mode	HTTP/HTTPS •				
DC UPS				Reset Save		
Network	SSL Certificate					
IP Config	Upload	Choose Files No file chosen	• Upload			
Webserver		or create				
IPMI						
SNMP	Common Name (CN)	Common Name				
SMTP	Organization (O)	Organization				
SMS						
Syslog	Organizational Unit (OU)	Organizational Unit				
				Reset Create		

- 2. In the SSL Certificate area, choose an SSL Certificate to upload.
- 3. Click **Upload**. The SSL Certificate is uploaded.

Network > Webserver Interface (Create SSL Certificate)

The SMC has the capability to generate an SSL Certificate.



To generate an SSL Certificate:

1. Click **Configuration** > **Network** > **Webserver**. The HTTP Configuration page opens.

Site	Info 🌣 Configuration		Hello Admin 💄 Logout
System	HTTP Configuration		
VPOC	Mode	HTTP/HTTPS •	
DC UPS Environment		Reset	ave
Network	SSL Certificate		
IP Config	Upload	Choose Files No file chosen ③ Upload	
Webserver		or create	
IPMI			
SNMP	Common Name (CN)	Common Name	
SMTP	Organization (O)	Organization	
SMS			
Syslog	Organizational Unit (OU)	Organizational Unit	
		Reset	rate

- 2. In the SSL Certificate area, enter a Common Name, Organization, and Organizational Unit.
- 3. Click Create. The SSL Certificate is generated.

Network > IPMI Interface

The SMC can be used to communicate with a compatible IPMI device.

Note: IPMI over LAN must be enabled on the BMC.

Note: The SMC supports IPMI v2.0.



To add an IPMI device:

1. Click **Configuration > Network > IPMI**. The IPMI Configuration page opens.

LITEON A Site	Info Configuration	Hello Admin 👤	Logout
System	IPMI Configuration		
VPOC	Servers		
DC UPS			
Environment	10.200.176.130 Status: OK DELL PowerEdge T420 Power: 79 Watts		
Network	Add Server +)	
IP Config			
Webserver	вмс		
IPMI			
SNMP	Username		
SMTP	Password		
SMS	Reset Save		
Syslog		-	

- 2. Click the plus (+) button in the "Add Server" area to add an IPMI device.
- 3. Enter the host IP address, username, and password of the IPMI device.
- 4. Click Save. The IPMI settings are saved.

To edit IPMI settings:

1. Click **Configuration > Network > IPMI**. The IPMI Configuration page opens.

LITEON A Site	Info Configuration	Hello Admin 👤	Logout
System	IPMI Configuration		
VPOC	Servers		
DC UPS			
Environment	10.200.176.130 Status: OK DELL PowerEdge T420 Power: 79 Watts		
Network	Add Server +		
IP Config			
Webserver	ВМС		
IPMI			
SNMP	Username		
SMTP	Password		
SMS	Reset		
Syslog			

- 2. Click the edit button of an existing IPMI device to edit it.
- 3. Click **Save**. The IPMI settings are saved.



To delete IPMI settings:

1. Click **Configuration > Network > IPMI**. The IPMI Configuration page opens.

LITEON	↑ Site Info	Configuration					Hello Admin 👤	Logout
System	IP	MI Configuration						
VPOC		Servers						
DC UPS								
Environment		10.200.176.130 Status: OK	DELL PowerEdge T420	Power: 79 Watts	1)		
Network		Add Server			+			
IP Config								
Webserver		BMC						
IPMI								
SNMP		Username	liteonipmi					
SMTP		Password						
SMS					Reset Sav	/e		
Syslog								

2. Click the trash button of an existing IPMI device to delete it. The IPMI device is deleted.

The SMC can be configured as a BMC server by giving it a username and password.

Note: the default BMC password is liteonpw.

To configure the SMC as a BMC server:

1. Click Configuration > Network > IPMI. The IPMI Configuration page opens.

Site I	Info 🍄 Configuration	Hello Admin 👤	Logout
System	IPMI Configuration		
VPOC	Servers		
DC UPS			
Environment	10.200.176.130 Status: OK DELL PowerEdge T420 Power: 79 Watts		
Network	Add Server +		
IP Config			
Webserver	BMC		
IPMI			
SNMP	Username		
SMTP	Password ·····		
SMS	Reset Save		
Syslog			



- 2. Enter a username and password in the BMC area.
- 3. Click **Save**. The SMC is a BMC server.

Network > SNMP Interface

The SMC has the capability to send SNMP traps. SNMP MIBs for the SMC can be downloaded from Lite-On PSS Support page.

Specifications for SNMP are as follows:

- Authentication Protocol Supported: MD5, SHA1, SHA224, SHA256, SHA384, SHA512 (RFC7630)
- Privacy Protocol Supported: DES, AES128

Default SNMP v2c community names of SMC are:

- read: public
- write: private

Default SNMP v3 settings are:

User Name	admin	user	trap
Authentication Protocol	SHA (SHA1)	SHA (SHA1)	SHA (SHA1)
Authentication Password	admin1234	user1234	trap1234
Privacy Protocol	AES (AES128)	AES (AES128)	AES (AES128)
Privacy Password	admin1234	user1234	trap1234
Access	Read-write	Read-Only	Trap Only



To configure SNMP v2c settings:

- 1. Click **Configuration** > **Network** > **SNMP**. The SNMP Configuration page opens.
- 2. Click Version v2c.

LITEON A Site	Info 🌣 Configuration		Hello Admin 👤	Logout
System	SNMP Configuration			
VPOC	Version	v2c v3		
DC UPS	Traps			
Environment	Trap Destination 1	10.200.176.141		
Network	Trap Destination 2	0.0.0.0		
Webserver	Trap Destination 3	0.0.0		
IPMI	Trap Destination 4	0.0.0.0		
SNMP SMTP	Credentials			
SMS	Read Community			
Syslog	Write Community			
	Trap Community			
		Reset		

- 3. Enter trap destination addresses and community information.
- 4. Click **Save**. The SNMP settings are saved.

To configure SNMP v3 settings:

1. Click **Configuration** > **Network** > **SNMP**. The SNMP Configuration page opens.



2. Click Version v3.

System	SNMP Configuration			
DC UPS	Version	v2c v3		
Network	Traps			
IP Config Webserver	Trap Destination 1	0.0.0.0		
IPMI	Trap Destination 2	0.0.0.0		
SNMP	Trap Destination 3	0.0.0.0		
SMTP Syslog	Trap Destination 4	0.0.0.0		
	Users			
	admin Auth: SHA	Priv: AES	Access: Read/Write	1
	user Auth: SHA	Priv: AES	Access: Read Only	1
	trap Auth: SHA	Priv: AES	Access: Notify	1
	Add User			+
				Reset

- 3. Enter trap destination addresses information.
- 4. Add or edit user information by clicking the edit button (pencil) or the Add User (+) button.
- 5. Click **Save**. The SNMP settings are saved.

Network > SMTP Interface

The SMC can send alarm information via SMTP communications.



To configure SMTP settings:

1. Click **Configuration > Network > SMTP**. The SMTP Configuration page opens.

Site	Info 🌣 Configuration			Hello Admin 👤	Logout
System	SMTP Configuration				
VPOC	Server				
DC UPS	IP				
Environment	Port	587			
Network	TLS	Ø			
Webserver	Username	admin			
IPMI	Password				
SNMP	Notification				
SMTP	Email 1				
Syslog	Email 2				
	Email 3				
	2.141 0		Reset	e	

- 2. For the email server that will be sending out the alarm message, enter IP, port, TLS, username, and password information.
- 3. In the Notification area, enter 1 to 3 email addresses to be notified.
- 4. Click **Save**. The SMTP settings are saved.

Network > SMS Interface

If an SMS modem is connected to the SMC, text alert messages can be sent to 1 to 2 mobile phone numbers.

Note: an SMS modem must be connected to USB-2 located at the rear of the SMC.

To configure SMS settings:

1. Click **Configuration** > **Network** > **SMS**. The SMS Configuration page opens.



	Site Info	Configuration		Hello Admin 👤	
System	SI	MS Configuration			
VPOC		Notification	Modem: Huawei E173		
DC UPS		Phone 1			
Environment		Phone 2			
Network			Reset Save		
IP Config			Read and		
Webserver					
IPMI					
SNMP					
SMTP					
SMS					
Syslog					

- 2. In the Notification area, enter 1 to 2 mobile phone numbers addresses to be notified.
- 3. Click Save. The SMS settings are saved.

Network > Syslog Interface

Syslog information from the SMC can be sent to a remote server.

To enable and configure syslog settings:

1. Click **Configuration > Network > Syslog**. The SMS Configuration page opens.

	Site Info	Configuration		Hello Admin 👤	Logout
System	Sy	slog Configuration			
VPOC		Server			
DC UPS		Enable			
Environment		IP			
Network		Port	514		
IP Config			Reset Save		
IPMI					
SNMP					
SMTP					
SMS					
Sysiog					

- 2. Click the Enable checkbox to enable syslog monitoring.
- 3. Enter an IP address and port number for the remote server.
- 4. Click **Save**. Syslog monitoring is enabled and syslog settings are saved.



SMC Front Panel Controls and Lights

Refer to the graphic and table below for an explanation of the buttons and lights located on the SMC front panel.

1	CAN-1A CAN port 1A with 12V sensor power (connected to same CAN bus as connector on rear)			
2	LAN-1	LAN port 1, RJ45 10 / 100 / 1000M dynamic Ethernet port supporting IPV4-based HTTP and SNMP v2c / v3		
3	USB-1	USB host port 1		
			On: Minor / Major Alarm	
4	Alarm LED	Alarm indicator LED (red)	Blinking: Minor Alarm. When red and green LEDs alternate, indicates firmware upgrade in process.	
			Off: No Alarm	
			On: SMC power on	
5	Power LED	Power indicator LED (green)	Blinking: Boot up. When red and green LEDs alternate, indicates firmware upgrade in process.	
			Off: SMC power off	
6	Reset	Hold for 5 seconds to reset SMC to factory-default values		

SMC Rear Panel

1	PWR-A	12VDC / 6A input power
2	PWR-B	12VDC / 6A input power
3	RELAYS	2 Relays (type FORM-C) / dry-contact connector
4	DIGITAL INPUTS	6 Digital inputs for external sensors with 12V sensor power (fused separately at 0.5A)
6	COM-1	RS232 / RS485 communication port 1 with 12V sensor power (fused at 0.5A)
6	COM-2	RS232 / RS485 communication port 2 with 12V sensor power (fused at 0.5A)
0	COM-3	RS232 / RS485 communication port 3 with 12V sensor power (fused at 0.5A)
8	USB-2	USB host port 2
9	LAN-2	LAN port 2, RJ45 10 / 100 / 1000M dynamic Ethernet port supporting IPV4-based HTTP and SNMP v2c / v3
10	CAN-1B	CAN port 1B with 12V sensor power (connected to same CAN bus as connector on front)
1	SERVICE port	For internal Lite-On use only; do not use
12	Chassis Ground	Grounding point to connect electrical ground to chassis

Warranty

If you experience any problems with your Lite-On equipment, contact Lite-On Power Systems Solutions at 1-469-331-9838.

Related Documentation

For information about the SMC, refer to the Lite-On SMC Datasheet.

For more information related to the Lite-On Power Systems, visit the Lite-On Power Systems Solutions web site at: <u>http://www.liteon-pss.com</u>.

CP-13EC-010U Site Management Controller

Innovative Power Management Solutions for Critical Infrastructure

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