The Site Management Controller (SMC) is a flexible monitoring solution for site management and control. Its web interface provides the insight and assurance needed to monitor and control Lite-On power equipment, numerous devices, and sensors in your data center.

Key Features

- Real-time monitoring of equipment and environment
- Real-time alarm logging and delivery
- Web interface
- USB host ports for future expansion
- Monitoring capabilities for power shelves and VPOC
- Digital inputs for remote sensors
- CAN Communication port
- Multiple RS232 / RS485 communication ports with MODBUS support
- Dual 10 / 100 / 1000 Ethernet ports support IPV4-based HTTP and SNMP V1/V2c
- Two alarm-definable relay outputs

Specifications

Electrical	
Input	12VDC, 6A maximum
Output	12VDC current limited to 0.5A per port for sensor power, 5A total power available to all sensors
Communications	CAN, Ethernet, RS232C, RS485, USB 2.0, 6 digital input ports for sensors
Physical	
Dimensions (H x W x D)	1.72” x 17.52” x 7.87” (43.65 mm x 445.00 mm x 200.00 mm)
Weight	5.6 lbs (453.6 g)
Form Factor	1U
Environment	
Temperature	Operating: -5° – 50°C, Storage: -40° – 60°C
Humidity	5% – 95% relative (non-condensing)
Altitude	Operating: 0 m – 3000 m, from 3000 m – 5000 m reduce operating temperature to 30°C, Storage: 0 m – 15000 m
Acoustic	0 dB at 1 m

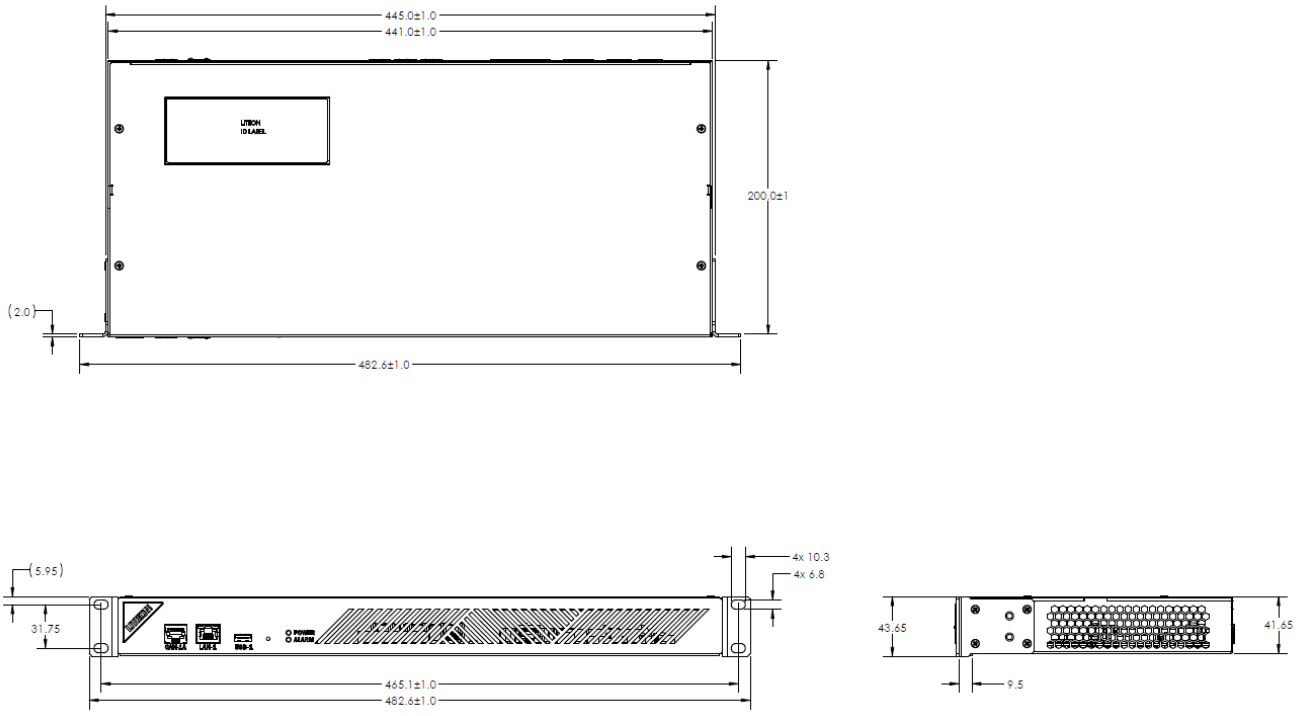
Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com

Specifications

General	
Approvals	UL60950-1, IEC60950-1 International, GB4943, RoHS
Mounting Hardware	2 mounting brackets and 8 screws are included
Warranty	2 years

Mechanical



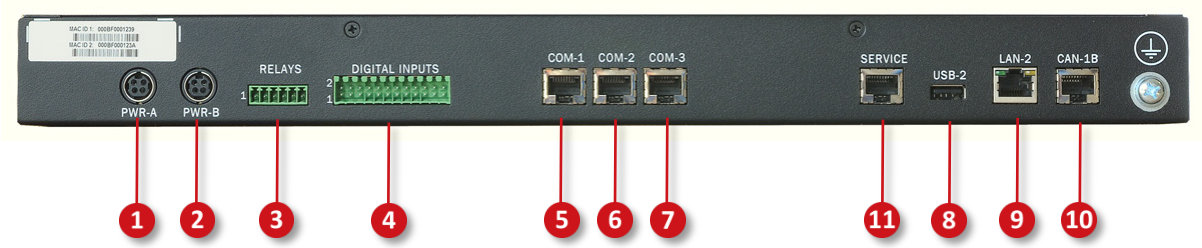
Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com

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	
3	USB-1	USB host port 1	
4	Alarm LED	Alarm indicator LED (red)	On: Critical / Major Alarm
			Blinking: Minor Alarm
			Off: No Alarm
5	Power LED	Power indicator LED (green)	On: SMC power on
			Off: SMC power off
6	Reset	Resets SMC to factory-default values	

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)

Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com

5	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)
7	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
10	CAN-1B	CAN port 1B with 12V sensor power (connected to same CAN bus as connector on front)
11	SERVICE port	For internal Lite-On use only; do not use

Power, Data, and Network Connectors

The connectors below are provided on the SMC.

CAN Ports

The SMC supports one CAN port brought out to two connectors for communication with Lite-On power equipment.

Pin Assignment	1	2	3	4	5	6	7	8
Definition	CAN-H	CAN-L		+12V	+12V		GND	GND

LAN Ports

The SMC supports two RJ45 10 / 100 / 1000M dynamic Ethernet ports. Ethernet supports IPV4-based HTTP and SNMPv1/v2.

Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com

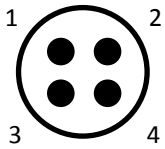
USB Ports

The SMC supports two USB host ports for future expansion.

Pin Assignment	1	2	3	4
Definition	VBUS	DATA-	DATA+	GND

12VDC Input Power Ports

The SMC uses dual 12VDC input ports for input power.



Pin Number	1	2	3	4
Definition	+12VDC	+12VDC	Ground	Ground

Relay Ports

The SMC provides a dual Relay (type FORM-C) / Dry-contact connector.

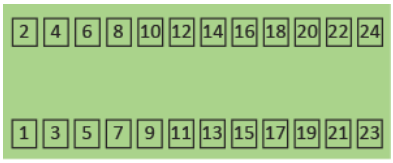
Pin Number	1	2	3	4	5	6
Output	Relay 1			Relay 2		
Definition	Normal Close-1	Common-1	Normal Open-1	Normal Close-2	Common-2	Normal Open-2

Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com

Digital Inputs

The SMC provides digital inputs for external sensors. The signal information is configurable through the SMC software. It also provides 12V sensor power through 6 individually-fused outputs.



Pin Number	I/O Configuration Number	Signal Name
1	1	Digital Input 0B
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

Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com

COM Ports

The SMC supports three independent RS232/RS485 COM ports: COM1, COM2, and COM3. Their communication modes can be configured individually. Each connector provides individually-fused 12V sensor power.

Pin Assignment	1	2	3	4	5	6	7	8
Definition		RS485+ (RX)		+12V	+12V	RS485- (TX)	GND	GND

Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com

System Components

Lite-On power system solutions provide a comprehensive power management and battery backup capability based on multiple building blocks with configuration flexibility to suit specific power, size, and run-time requirements. The table below provides additional information on the different building blocks available to create a customized power solution. Please visit our website for more in-depth information or contact your local Lite-On PSS representative for support.

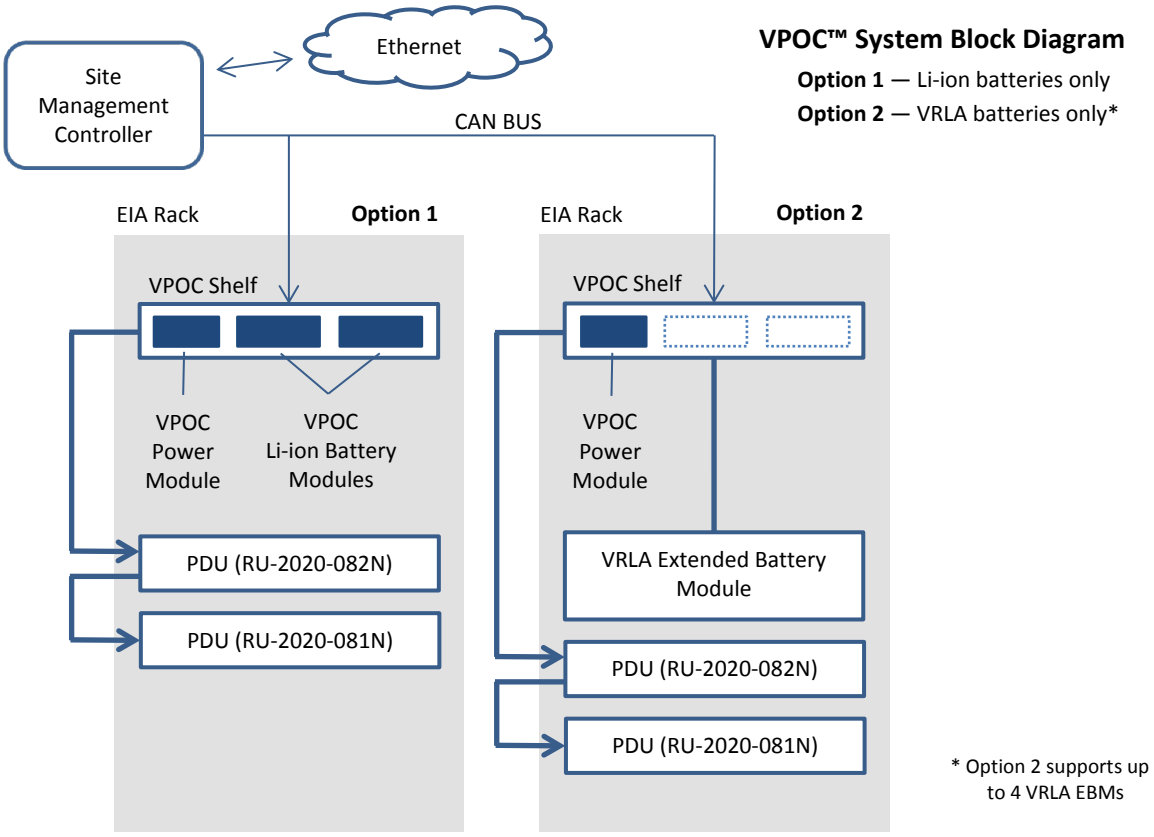
VPOC™ System Components

The following table and system block diagram shows the VPOC™ system and how the SMC fits into this unique solution.

Component	Model Number	Description
VPOC™ Shelf	VP-3103-111U	1U VPOC™ Power Shelf with 3 slots: • VPOC™ Power Module slot (1) • VPOC™ Li-ion Battery Module slots (2)
VPOC™ Power Module	VM-3101-111U	10kW Power Module
VPOC™ PDU	RU-2020-082N	1U or 0U Cabinet PDU with 20A fuse and IEC320-C13 receptacles (6) plus IEC320-C19 receptacles (2)
	RU-2020-081N	1U or 0U expansion PDU with 20A fuse and IEC320-C13 receptacles (6) plus IEC320-C19 receptacles (2)
VPOC™ Li-ion Battery Module	BM-1502-010U	2.5 minute run-time at 5kW (2 battery units provide 2.5 minutes at 10kW)
VRLA Extended Battery Module	BK-1151-010U	3U EBM equipped with VRLA batteries for 3.5 minutes run-time at 10kW
Site Management Controller	CP-13EC-010U	Rack management and control
19” Rack	KT-1942-10-1	19-inch EIA rack

Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com



Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

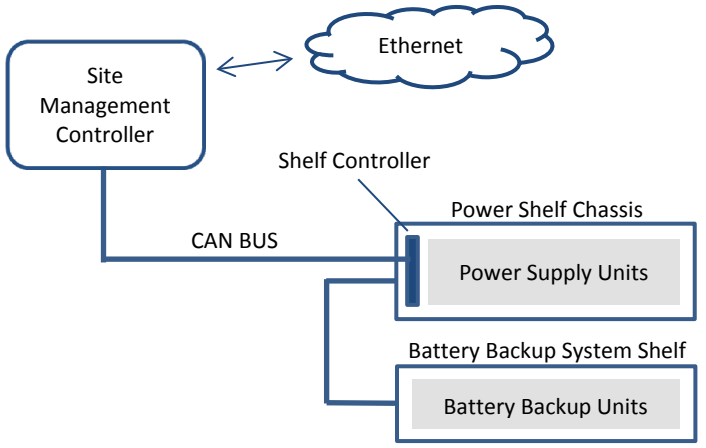
Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com

DC Power System Components

The following table and system block diagram shows the Lite-On DC power system and how the SMC fits into this power solution.

Component	Model Number	Description	
18kW Power Shelf and matching Power Supply Unit	PF-2183-1L1M	Power Shelf	3-Phase includes 1 Shelf Controller slot and 5 PSU Module slots
	PS-2452-1L1M	Power Supply Unit (PSU)	3-phase, 380VAC / 480VAC Input, 12.5V / 360A Output
22.5kW Power Shelf and matching Power Supply Unit	PF-2223-1L1M	Power Shelf	3-Phase includes 1 Shelf Controller slot and 10 PSU Module slots
	PS-2252-1LDU	Power Supply Unit (PSU)	Single phase, 200 – 240VAC Input, 12.5V / 200A Output
Battery Backup System and matching Battery Backup Unit	BP-1442-01X	21-inch, 4-slot Battery Backup System (BBS)	
	BM-1112-01X	Li-ion Battery Backup Unit (BBU)	
Shelf Controller	CM-12CP-010U	Manages the Power Shelf and Li-ion Battery Backup System	
Site Management Controller	CP-13EC-010U	Rack management and control	
21" OCP Rack	KT-2141-121	21-inch Open Compute Project (OCP) - compliant rack	

DC UPS System Block Diagram



Lite-On Power System Solutions USA
3001 Summit Avenue, Suite 400, Plano, TX 75074
+1 (469) 331-9838
www.liteon-pss.com
email: pss.sales@liteon.com

Lite-On Power System Solutions Taiwan
No. 90, Chien 1 Rd., Chung Ho Dist, New Taipei City 23585
+886 -2-2226181 ext 5026
www.liteon-pss.com
email: pss.sales@liteon.com