

LITEON GROUP

Description

Power Innovations International's (Pii) shelf controller (SC) is a management and communication module for Pii's PSU (rectifier), inverter, and DC/DC converter modules. The shelf controller communicates with these power conversion modules via Modbus RS-485. The upstream system controller can communicate with the shelf controller via Modbus RS-485 to control the shelf, change parameters, and collect data from the power conversion modules. The shelf controller receives power from the power conversion module's auxiliary standby power within the shelf.

Features and Benefits

- Manages Pii's rectifiers, inverters, and DC/DC converters within a shelf
- Realtime parameter adjustment and monitoring of power conversion modules by controlling respective settings
 - **PSU settings:** voltage, power/current limit, ON/OFF
 - **Inverter settings:** RMS voltage, phasing, power/current limit, ON/OFF
 - **DC/DC converter settings:** voltage, power/current limit, ON/OFF
- Multiple shelf controllers can be daisy-chained to receive commands from common upstream controller
- Communicates via Modbus RS-485 with upstream controllers and power conversion modules

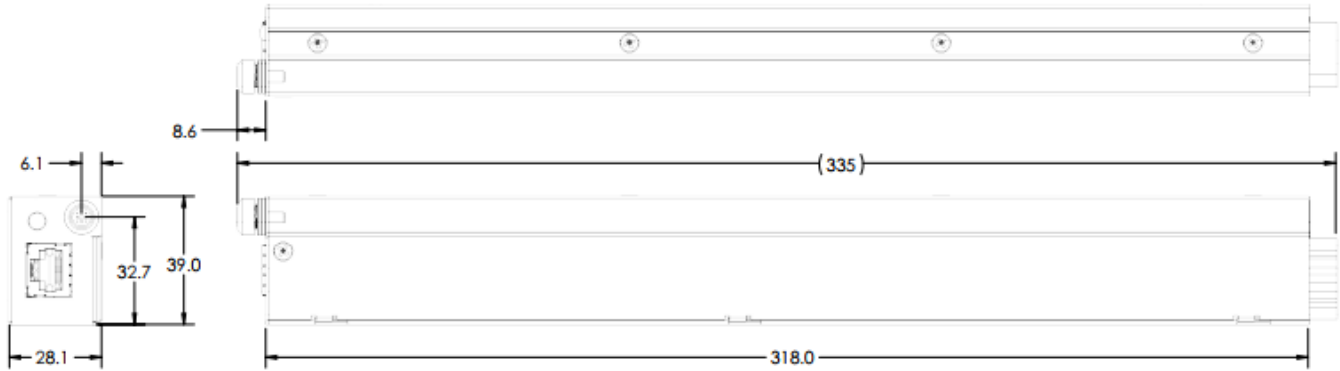


Specifications

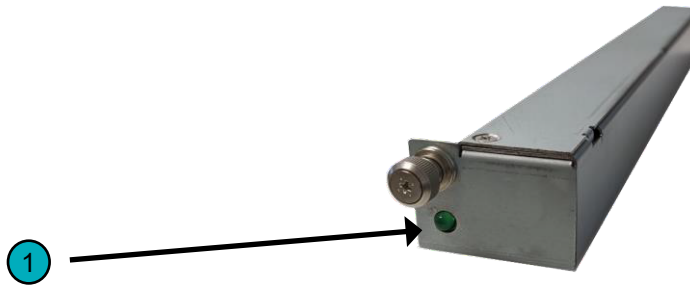
Electrical	
Input Voltage	12 Vdc ± 10% (from module)
Input Current	0.1 A maximum (from module)
Monitors	Input: Voltage, current, frequency, VA, real power Output: Voltage, current, VA, real power Status & alarm
Downstream Communication (to PSU or Inverter Module)	Modbus RS-485 (read, write, broadcast)
Upstream Communication	Modbus RS-485 (read, write, broadcast)
Mechanical	
Dimensions (W x H x D)	1.89" x 1.57" x 13.78" (48 mm x 40 mm x 350 mm)
Weight	0.5 lbs (0.24 kg)
Environmental	
Operating Temperature	-40 °C to +65 °C
Storage Temperature	-40 °C to +85 °C
Humidity	10% to 90% relative (non-condensing)
Altitude	Operating: 0 m to 3000 m Storage: 0 m to 15000 m
EMI	CISPR 22 Class A -6dB
General	
Safety Standards	Conforms to IEC 62368-1; CB certification; CE marking

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Product Dimensions (mm)



Front Panel



1	LED	Shelf controller status indicator
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Front Panel LED Status

LED	Status
Solid Green	Normalizing
Blinking Green	Initializing
Solid Red	Alarm

Life Support Policy: Power Innovations International (Pii) does not authorize the use of any of its products for use in life support devices or systems without the express written approval of an officer of the Company. Life support systems are devices which support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in significant injury to the user.

Pii reserves the right, without notice, to change design or construction of any products and to discontinue or limit distribution of any products. Pii also reserves the right to change or update, without notice, any technical information contained in this bulletin.

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