

LITEON GROUP

Description

Power Innovations International's (Pii) 3.5 kW power supply unit (PSU) is an isolated DC-DC converter that converts input power from 48 Vdc bus to 350 Vdc voltage. This module can be used to provide boost power from a low voltage source to a voltage level suitable for a high input voltage inverter. It is designed to operate in a power shelf and supports Modbus RS-485 communication.

Features and Benefits

- 3.5 kW power rating
- 48 V nominal DC input
- Wide operating input and output voltage range
- Interleaved topology to reduce ripple on DC input
- Active current sharing and droop for fast response
- 95% efficiency at rated power (97% peak)
- Constant power and constant current protection
- Modbus RS-485 communication protocol



Specifications

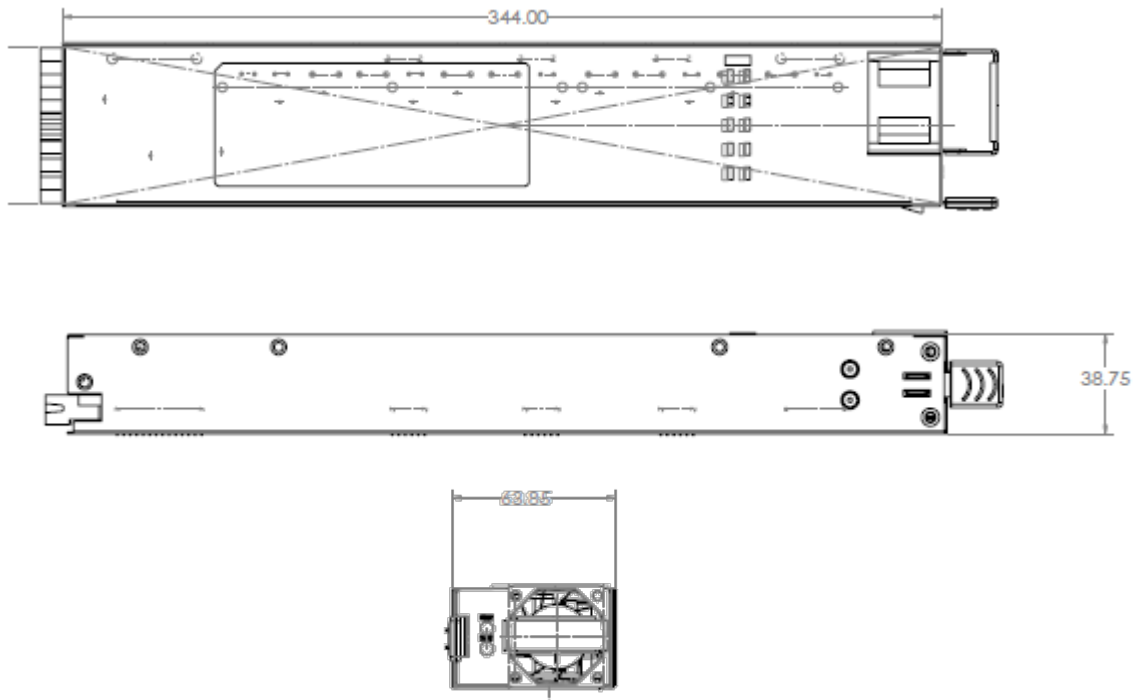
Electrical	
Input Voltage	48 Vdc nominal Operating range: 43 Vdc to 60 Vdc
Input Current	85 A maximum
Output Power	3.5 kW
Output Voltage	350 Vdc Adjustable range: 350 Vdc to 400 Vdc
Output Current	10 A maximum
Efficiency	>97% at full load
Current Share Method	Droop
Communication Protocol	Modbus RS-485
Auxiliary Standby Supply	12 V / 0.2 A
Mechanical	
Dimensions (W x H x D)	2.52" x 1.54" x 13.54" (64 mm x 39 mm x 344 mm)
Cooling	Forced air cooling
Weight	2.5 lbs (1.1 kg)

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Specifications (continued)

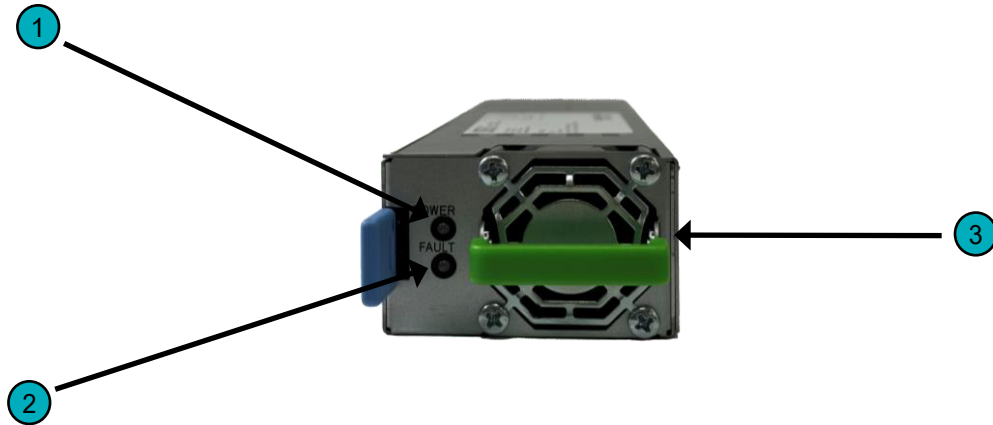
Environmental	
Operating Temperature	-40 °C to +65 °C at full load; de-rated from +65 °C to +85 °C
Storage Temperature	-40 °C to +85 °C
Humidity	10% to 90% relative (non-condensing)
Altitude	Operating: 0 m to 3000 m Storage: 0 m to 15000 m
EMI	CISPR 22 Class A -6dB
Configurations	
DD-2352-02P1-LF	Tab color: Blue Airflow direction: Front-to-back airflow
DD-2352-02P2-LF	Tab color: Green Airflow direction: Back-to-front airflow
General	
Safety Standards	Conforms to IEC 62368-1; CE marking

Product Dimensions (mm)



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Front Panel



1	“POWER” LED	Output power indicator: green-colored LED
2	“FAULT” LED	PSU fault indicator: amber-colored LED
3	Fans	Cooling fans

Front Panel LED Status

Status	LED Green: Power	LED Amber: FAULT
Output Normal	Solid Green	Off
Storage Temperature	Blinking Green @ 2 Hz	Off
Output Disable/Fault	Off	Solid Amber
Output Disable/Firmware Update	Off	Blinking Amber @ 2 Hz

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Power Innovations International
1305 South 630 East
American Fork, UT 84003
United States
www.PowerInnovations.com