

Description

Power Innovations International's (Pii) 2 kW isolated DC-DC converter converts input power from high voltage DC bus to 12 Vdc voltage. This module can be used to charge low voltage batteries or to provide a stable, low voltage bus to power equipment connected to 12 Vdc bus. Multiple DC/DC converters can be arranged to operate in parallel, and this module supports Modbus RS-485 communication.

Features and Benefits

- 2 kW power rating
- High voltage DC input (300 V to 440 V)
- Low voltage DC output (13.8 V nominal)
- Active current sharing and droop for fast response
- 95% efficiency at rated power (97% peak)
- Constant power and constant current protection
- Parallelable in power shelves
 - Pii part number: PF-1602-P20N
- Modbus RS-485 communication protocol



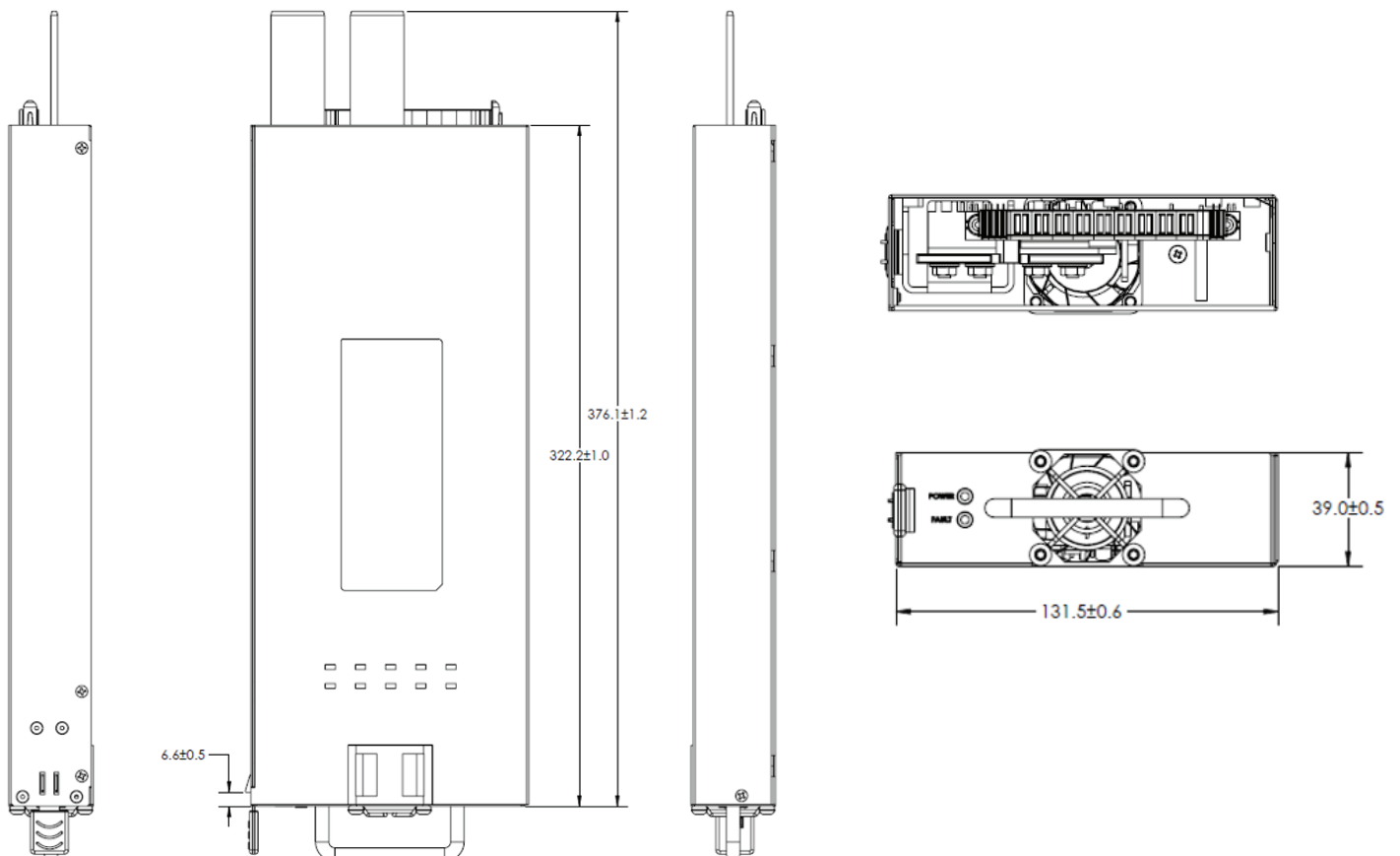
Specifications

Electrical	
Input Voltage	DC range: 300 V to 440 V
Input Current	7 A maximum
Output Power	2 kW
Output Voltage	13.8 Vdc nominal Adjustable range: 10.8 Vdc to 14 Vdc
Output Current	167 A maximum
Efficiency	>95% 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)	5.18" x 1.57" x 12.71" (131.5 mm x 40 mm x 322.8 mm)
Cooling	Forced air cooling
Weight	5.5 lbs (2.5 kg)

Specifications (continued)

Environmental	
Operating Temperature	-40 °C to +45 °C at full load
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-1202-TR01-ROHS	Handle color: Chrome Airflow direction: Front-to-back airflow
DD-1202-TR02-ROHS	Handle color: Black Airflow direction: Back-to-front airflow
General	
Safety Standards	Conforms to IEC 62368-1; CE marking

Product Dimensions (mm)



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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