

LITEON GROUP

### Description

Power Innovations International's (Pii) 3 kVA power supply unit (PSU) is an isolated DC-DC converter that converts input power from high voltage DC bus to 24 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 24 Vdc bus. Multiple PSUs can be arranged to operate in parallel, and this module supports Modbus RS-485 communication.

### Features and Benefits

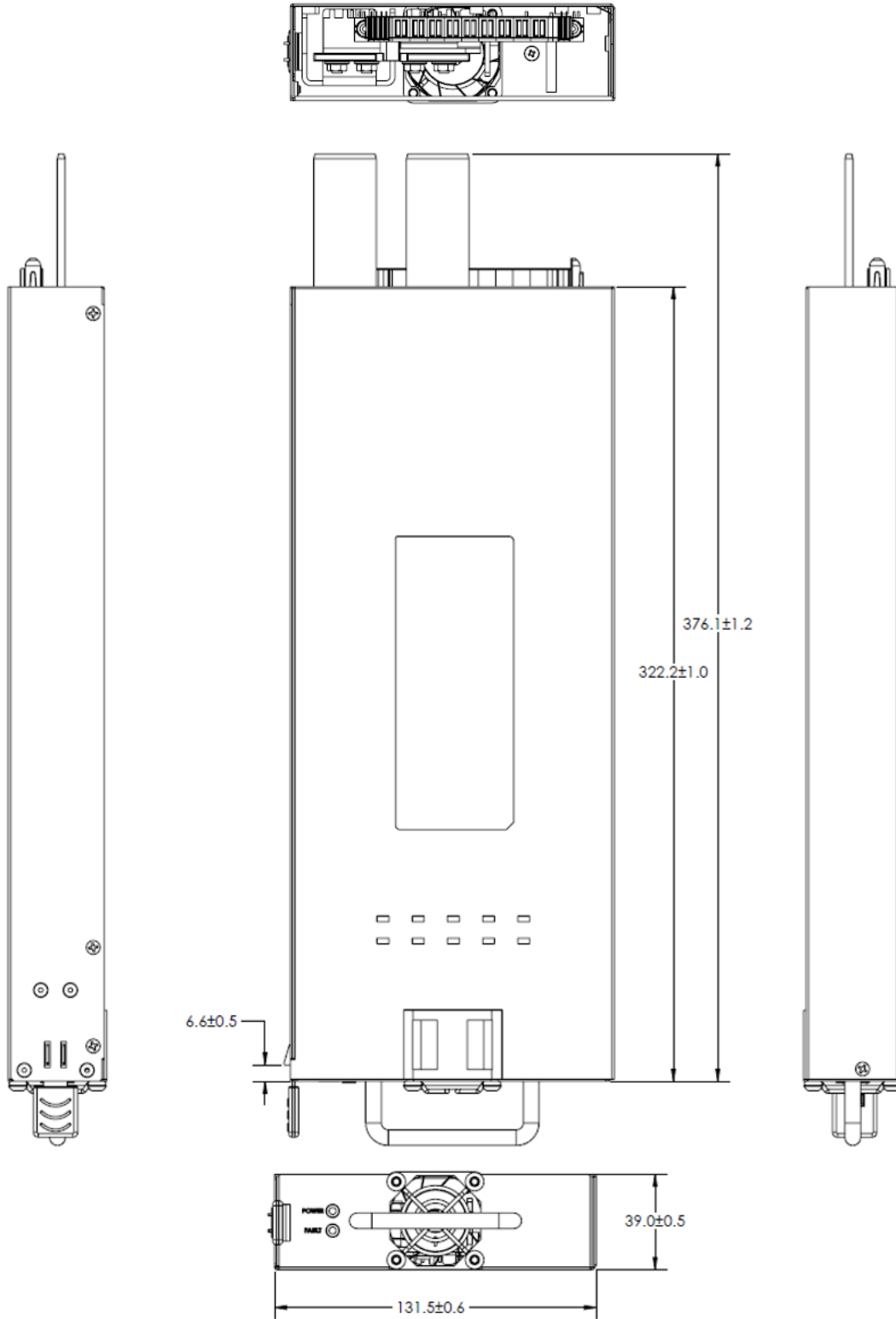
- 3 kVA power rating
- High voltage DC input: 300 V to 440 V
- Low voltage DC output: 27.6 V nominal
- Active current sharing and droop for fast response
- 95% efficiency at rated power (97% peak)
- Constant power and constant current protection
- Modbus RS-485 communication protocol
- Parallelable in power shelves
  - Pii part number: PF-1602-P20N



### Specifications

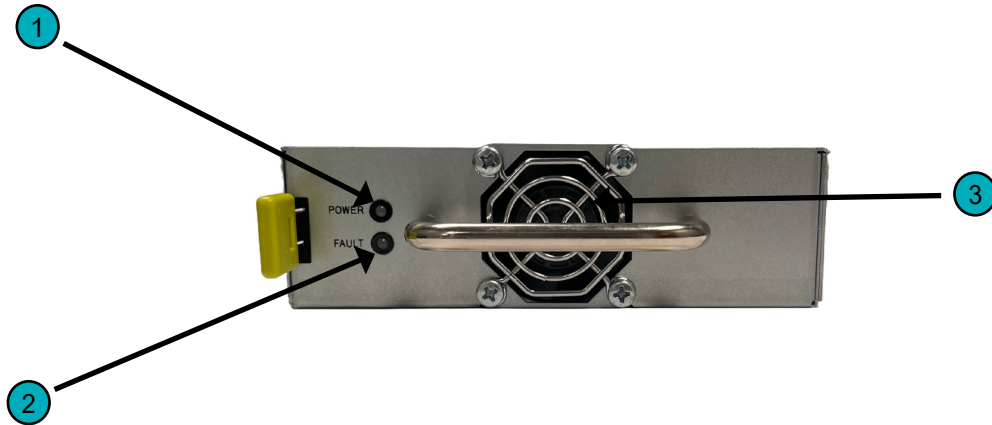
| Electrical               |   |
|--------------------------|---|
| Input Voltage            | <b>DC range:</b> 300 V to 440 V                                       |
| Input Current            | 12 A maximum  |
| Output Power             | 3 kVA   |
| Output Voltage           | 27.6 Vdc nominal<br><b>Adjustable range:</b> 21.6 Vdc to 28 Vdc       |
| Output Current           | 110 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 ( <b>DD-1302-01P1-ROHS:</b> front-to-back airflow) |
| Weight                   | 5.5 lbs (2.5 kg)  |
| 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<br>Storage: 0 m to 15000 m                   |
| EMI                      | CISPR 22 Class A -6dB   |
| 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                  | <b>Solid Green</b>           | Off                          |
| Storage Temperature            | <b>Blinking Green @ 2 Hz</b> | Off                          |
| Output Disable/Fault           | Off                          | <b>Solid Amber</b>           |
| Output Disable/Firmware Update | Off                          | <b>Blinking Amber @ 2 Hz</b> |

**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.

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