

DATA SHEET

- **Output Current up to 100 A**
- **Two channels**
- **Up to 300 μ s pulsewidth**
- **Rise/fall time of <10 μ s**
- **Single-shot to 20 PPS at max current**
- **Optimized for driving up to 10 bars on one channel and 20 bars on the other**
- **Only 3.6 oz**
- **Higher output current available**

The PLDD-100-20-20D is a compact, ultra-light weight pulsed current source designed to drive up to two independent laser diode bars, arrays of laser diode bars, or any low impedance load. One channel can operate up to 20 stacked diode bars while the other channel will operate up to a 10 diode bar stack.* The user switches between channels by toggling an input line. This ensures that the loads are not driven at the same time. The unit features a high peak current of 100 amps with a rise-time of <10 μ s (load dependent) and a maximum pulse width of 300 μ s. The pulse repetition frequency can be varied from single shot to 20 PPS.

Using the optional Universal Interface Board (UIB-01) the user has easy access to all control pins. Commonly used signals such as the input trigger and the current monitor which allows the user a real time view of the laser diode current are available through BNC connections on the UIB-01 board.

The PLDD-100-20-20D requires a user supplied +11 to +28 volt input supply.

[†]*TD Channel Only.*

**Second channel can be modified to drive 20 bars as well—consult factory for details.*

OMNIPULSE TECHNOLOGY

6355 Nancy Ridge Drive, San Diego, CA 92121

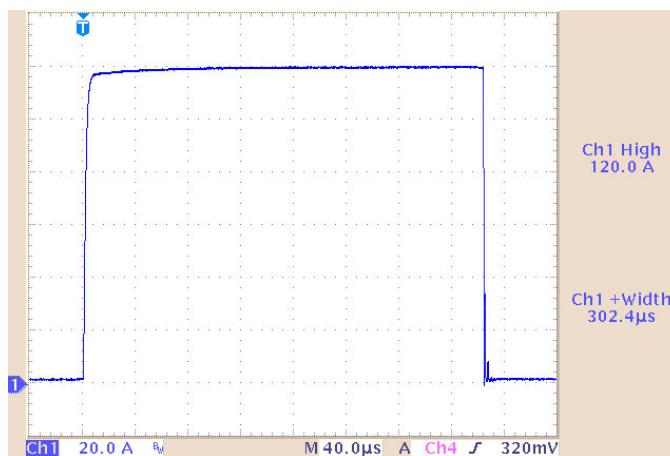
Tel: (858) 452-7700 • Fax: (858) 452-8788

Email: sales@omnipulsetechnology.com • <http://www.omnipulsetechnology.com>



SPECIFICATIONS [†]	
Parameter	Value
Pulse Output Current	
Amplitude Range	0 – 100 A*
Means of Adjustment	DC input/internal adjustment with potentiometer
Pulse Rise/Fall Time	<10 μ s (typ)
Pulse Width	0-300 μ s
Pulse Recurrence Frequency Range	Up to 20 PPS at max current (300 μ s pulse)*
Load Voltage	TD Channel - 40 V** RF Channel - 20 V**
Output Connection	(2) Twisted pairs AWG 16, 6" length
Trigger Requirements	
Type	+3.3/5 volt "VHC" CMOS Input
Outputs	
Current Monitor	1.00 volt/100 amps into >10 kOhm 0.50 volt/100 amps into 50 Ohms
General	
Input Voltage Range	11-28 VDC
Input Current @ 11 Vin	Approx 4.0 amps
Input Current @ 28 Vin	Approx 2.5 amps
Dimensions (H X L X W) in.	1.32" X 3.70" X 1.40"
Weight	3.6 oz.

Current Monitor Output
100 A / 300 μ s pulse



Warning: Always discharge capacitor bank before connecting or removing any load

* Applies to either channel. The two channels will not operate at the same time.

**At 100 amps and 300 μ s

[†]Specifications are subject to change without notice.

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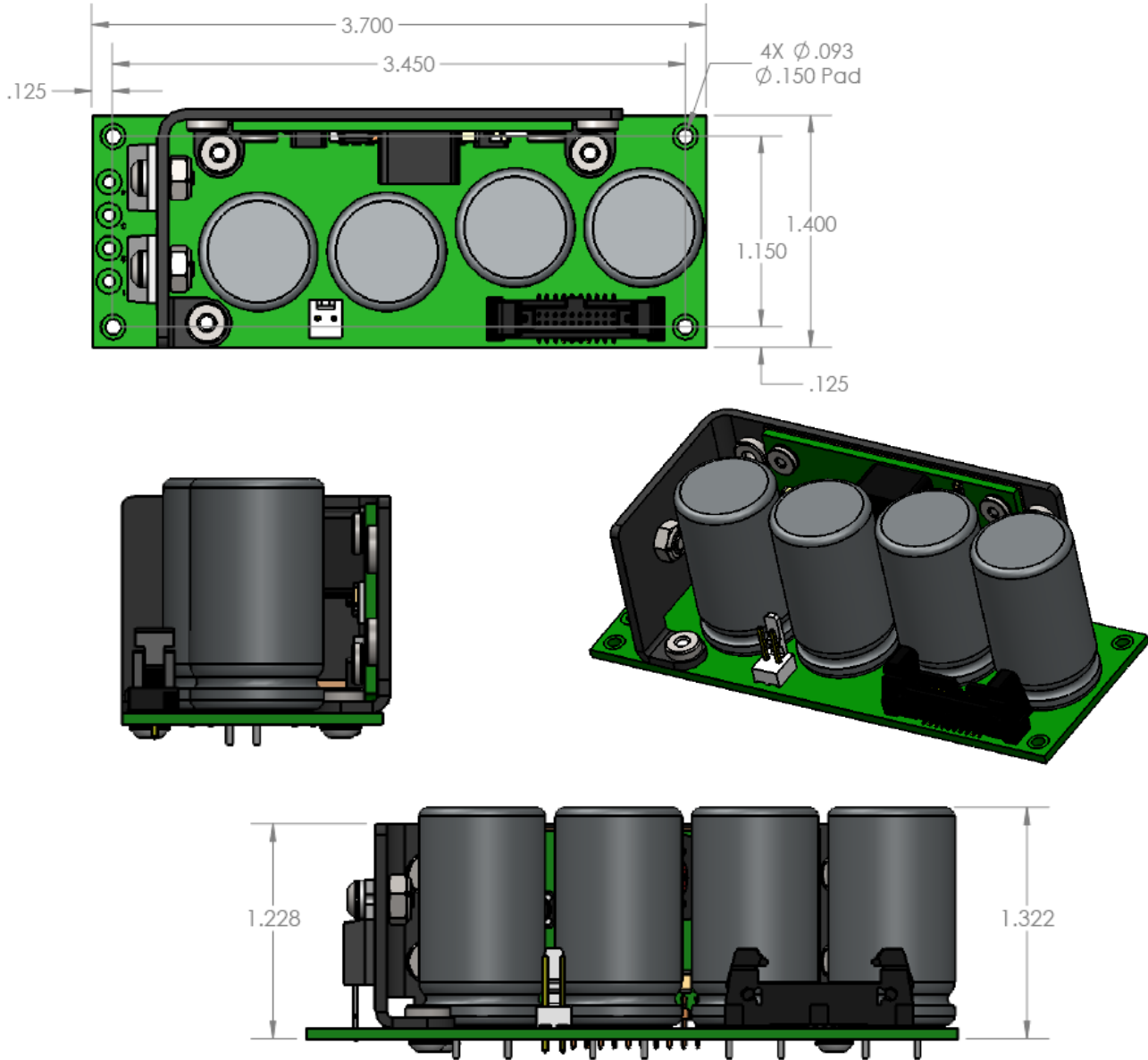
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PLDD-100-20-20D

100 AMP, 20 BAR[†], DUAL CHANNEL PULSED LASER DIODE DRIVER

PHYSICAL DIMENSIONS*



**Subject to change without notice.*

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