

DATA SHEET



- **Output Current up to 200 A**
- **Up to 300 μ s pulse width**
- **Rise-time of <10 μ s**
- **Single-shot to 20 PPS**
- **Current monitor output 1 volt/100 amps**
- **Optimized for driving up to 12 bar stacks**
- **Only 4.7 oz**
- **Higher currents available**

The PLDD-200-12-20 is a compact, ultra light weight pulsed current source designed to drive laser diode bars, arrays of laser diode bars, or any low impedance load. The unit features a high peak current of 200 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.

This driver's amplitude and pulse width are controlled by either an analog or digital input. It has a built-in intelligent energy limiter which allows maximum possible output under all operating conditions. This allows for up to 50% greater output current under certain conditions. Should

the maximum energy limit be exceeded the user is alerted and the unit can be reset.

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

Multiple units can be operated in parallel allowing the user to achieve unprecedented current levels in a small, compact, and battery operated system.

The PLDD-200-12-20 requires a user supplied +15 to +28 volt input supply.

OMNIPULSE TECHNOLOGY

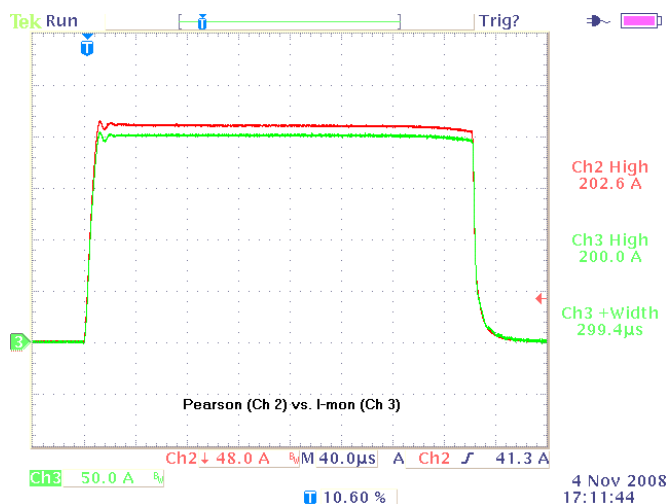
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SPECIFICATIONS†	
Parameter	Value
Pulse Output Current	
Amplitude Range	0 – 200 A
Means of Adjustment	Analog input/internal adjustment with potentiometer
Pulse Rise Time	<10 μ s
Pulse Width	0-300 μ s (analog or digital input)
Pulse Recurrence Frequency Range	Up to 20 PPS at max current (300 μ s pulse)
Compliance Voltage	30 V*
Output Voltage	24 V max**
Output Connection	Twisted pair AWG 16
Trigger Requirements	
Type	Analog pulse 0-2 V (0-200 A) Or 3.3/5 volt CMOS Input
Outputs	
Current Monitor	1 volt/100 amps into >10 kOhm 0.5 volt/100 amps into 50 Ohms
General	
Input Power	15-28 volts, ~40 mA typ. (idle) 24 volts, 1.6 A (20 PPS, 200 Apk, 300 μ s, 22 V load)
Dimensions (H X W X D) inches	1.11" X 1.3" X 5.46" (Approximate)

Current Monitor Output
200 A / 300 μ s pulse



Comparison of the I-mon output and a Pearson current monitor.

Warning: Please discharge capacitor before connecting or removing any load

* No load voltage

**At 200 amps and 300 μ s and 65°C measured at output driver. Consult factory for other load requirements

†Specifications are subject to change without notice.

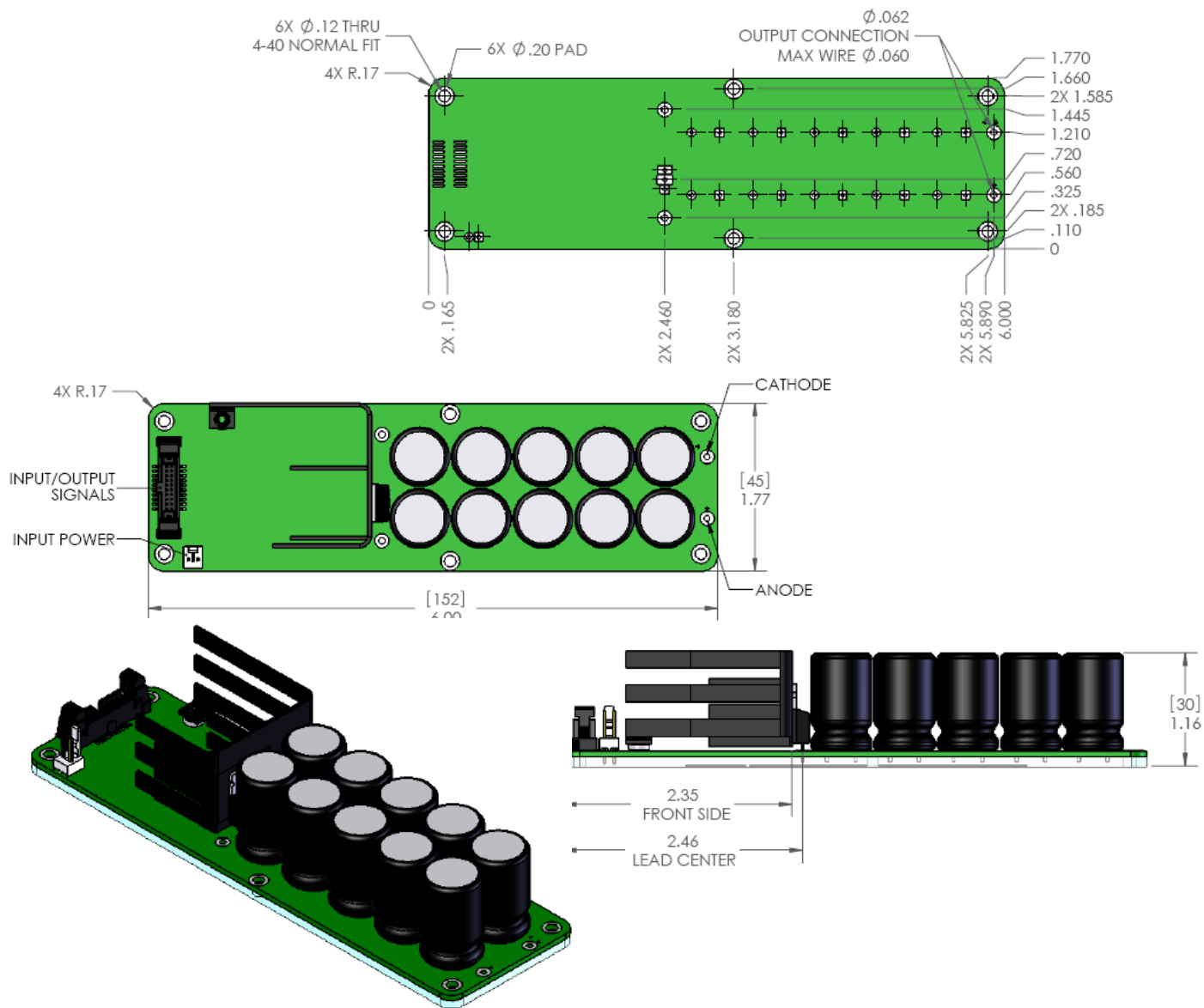
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PHYSICAL DIMENSIONS*



**Dimensions subject to change without notice.*

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