



PLDD-2500

Pulsed Laser Diode Driver

Data Sheet



- **0 to 1.0 kA output**
- **Up to 50 μ s pulse width**
- **Rise-time of <100 ns**
- **Single-shot to 10 PPS**
- **Current monitor output**
- **Patent pending approach**
- **Higher currents available**

The PLDD-2500 is a compact all solid-state, pulsed current source designed to drive laser diode bars, arrays of laser diode bars or any low impedance load. The unit features an ultra-high peak current of 1.0 kA with a rise-time of <100 ns (load dependent) and a maximum pulse width of 50 μ S. The pulse repetition frequency can be varied from single shot to 10 PPS.

Also located on the front panel is a current monitor. The current monitor output may be viewed with an oscilloscope allowing the user a real time view of the current.

The PLDD-2500 requires a user supplied +24-30 volt input supply.

The PLDD-2500 is based on our patent pending approach of achieving an ultra-fast rise-time with a flat top current pulse. The unit features a simple user interface where only a TTL level trigger (positive transition) is required. The peak current and pulse width are adjusted with front panel controls.

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Last Revision: 1/23/2009
RMS



PLDD-2500

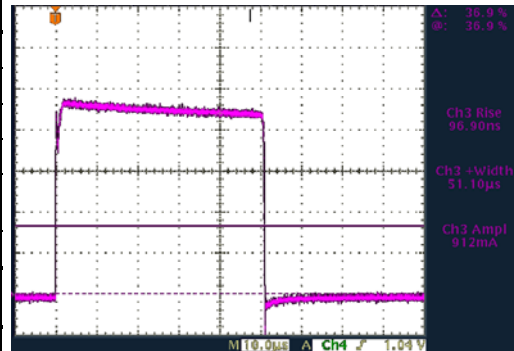
Pulsed Laser Diode Driver

Specifications	
Parameter	Value
Pulse Output Current (Load = 20 mOhm/ 3.2 nH)	
Amplitude Range	0 – 1.0 kA
Means of Adjustment	Front Panel Dial
Pulse Rise Time	<100 ns
Pulse Width	1-50 μ s (front panel dial)
Pulse Recurrence Frequency Range	Up to 10 PPS at max current (50 μ S pulse)
Output Connector	Stripline
Trigger Requirements	
Type	TTL/CMOS 0-5 volts into 50 Ω or optical
Pulse Width	200 ns (minimum)
Outputs	
Current Monitor	1 V/kA /50 Ω or 2 V/kA/1 M Ω
General	
Input Power	28 volts, 40 mA (no load) 28 volts, 120 mA (1 μ S/1 kA/10 PPS) 28 volts, 140 mA (5 μ S/1 kA/10 PPS) 28 volts, 650 mA (50 μ S/1 kA/10 PPS)
Dimensions (H X W X D) inches	3.95" X 4.61" X 9.83"

Specifications are subject to change without notice

Current Monitor Output

1.0 kA 50 μ S 1 PPS <100 ns RiseTime



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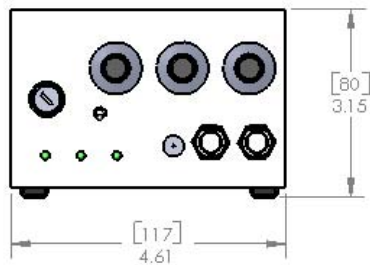
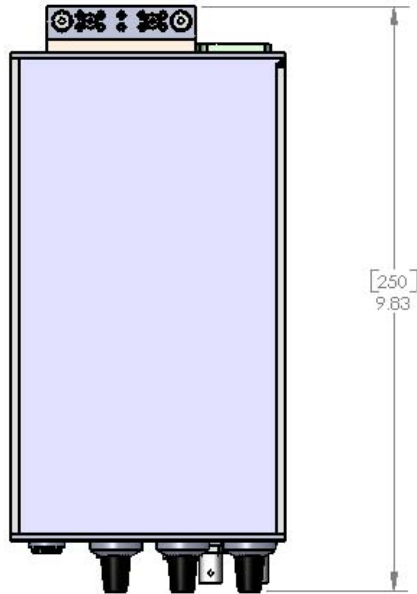
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Physical Dimensions*



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