

DATA SHEET



- **Output Current up to 75 A**
- **Up to 300 μ s pulse width**
- **Rise-time of <4 μ s**
- **1 PPS**
- **Current monitor output 1 volt/100 amps**
- **Optimized for driving up to nine laser diode bars in series**
- **Only 22 grams**

The PLDD-75-9-1 is an ultra-miniature, battery operated, laser diode driver optimized for driving 9 stacked diode bars to 75 amps of peak current. Due to the compact size and weight (only 22 grams), this unit is well suited for man-portable and airborne applications.

The magnitude of the output current is controlled either by an on-board potentiometer or a user supplied DC voltage. The input trigger signal controls the pulse width.

The optional Universal Interface Board, (UIB-01) allows the user 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.

The PLDD-75-9-1 can be powered by a +5 volt supply. Consult the factory for battery operation.

OMNIPULSE TECHNOLOGY

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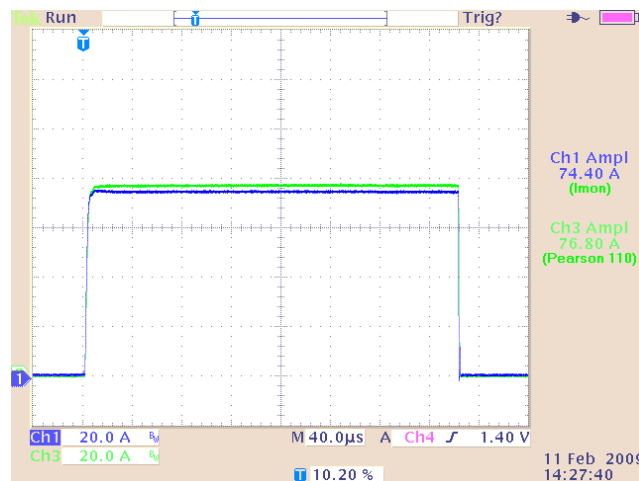
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SPECIFICATIONS*	
Parameter	Value
Pulse Output Current (Load = 9 bar stack)	
Amplitude Range	0-75 amps
Means of Adjustment	Internal adjustment with potentiometer or user supplied DC voltage (0.75 volts=75 amps)
Pulse Rise Time	<4 μ s
Pulse Width	0-300 μ s (set by user supplied input trigger)
Pulse Recurrence Frequency Range	1 PPS
Compliance Voltage	18 volts (9 bar stack)
Output Connection	Twister pair AWG 16, 6" length
Trigger Requirements	
Type	3.3/5 volt CMOS
Outputs	
Current Monitor	1.0 volt/ 100 amps into >10 kOhm 0.50 volt/100 amps into 50 Ohm
General	
Input Power	+5 volt 350 mA Consult factory for battery operation.
Dimensions (H X W X D) inches	0.93" X 0.75 X 2.69" (Approximate)

*Specifications are subject to change without notice

Current Monitor Output

75 A / 300 μ S pulse



Comparison of the I-mon output (lower trace) and a Pearson current monitor (upper trace).

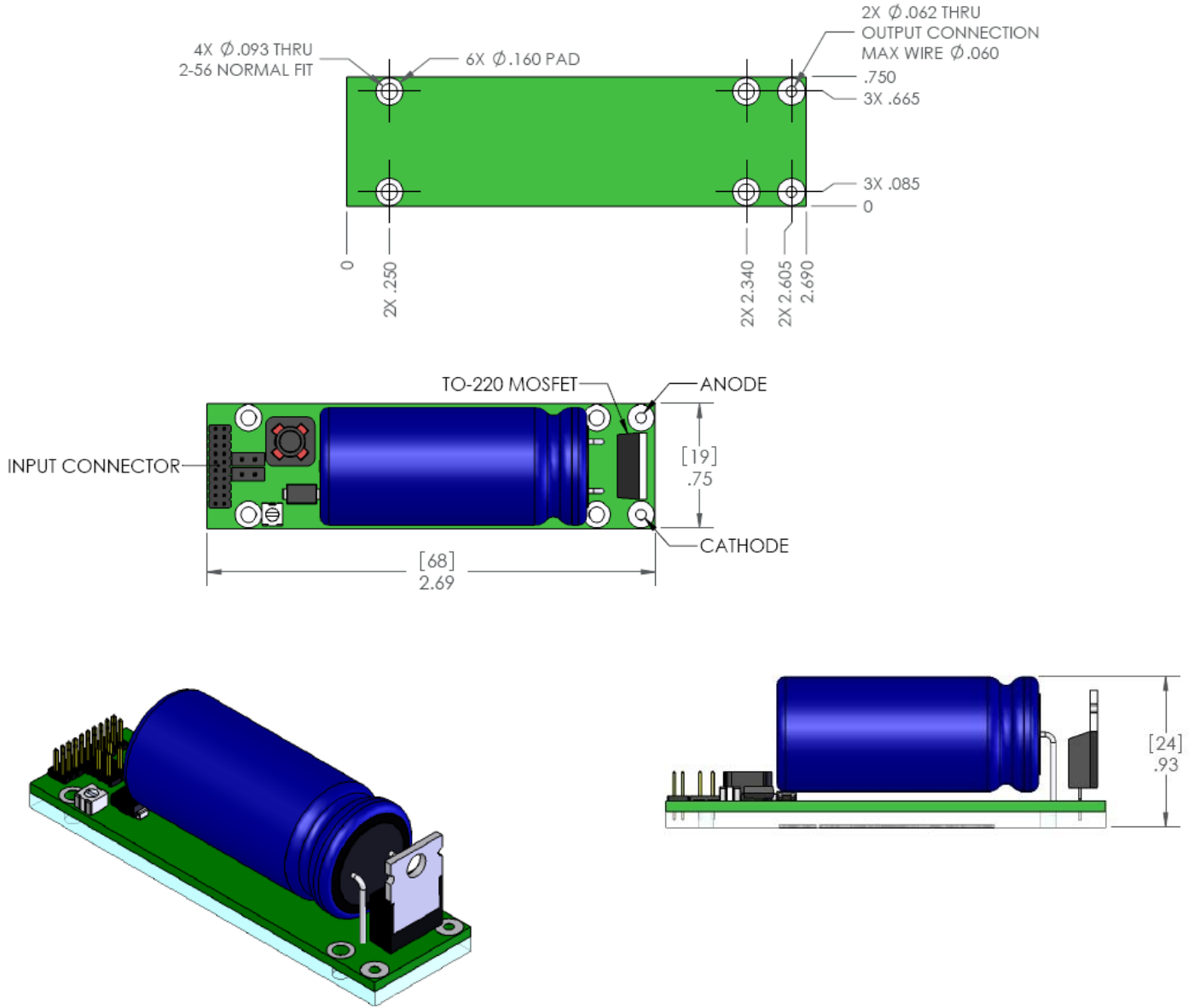
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PHYSICAL DIMENSIONS*



**Dimension are subject to change without notice.*

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