



#### Data Sheet



- **Output Current up to 75 A**
- **Up to 300  $\mu$ s pulse width**
- **Rise-time of <4  $\mu$ 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 for driving up to 9 stacked 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.

#### **OptiSwitch Technology Corporation**

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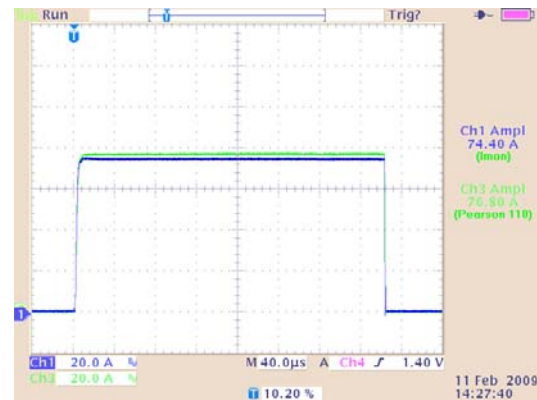
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<b>Specifications*</b>	
<b>Parameter</b>	<b>Value</b>
<b>Pulse Output Current (Load = 9 bar stack)</b>	
Amplitude Range	0-75 amps
Means of Adjustment	Internal adjustment with potentiometer or user supplied DC voltage (0.75 volts=75 amps)
Pulse Rise Time	<4 $\mu$ s
Pulse Width	0-300 $\mu$ 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
<b>Trigger Requirements</b>	
Type	3.3/5 volt CMOS
<b>Outputs</b>	
Current Monitor	1.0 volt/ 100 amps into >10 kOhm 0.50 volt/100 amps into 50 Ohm
<b>General</b>	
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  $\mu$ S pulse**



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

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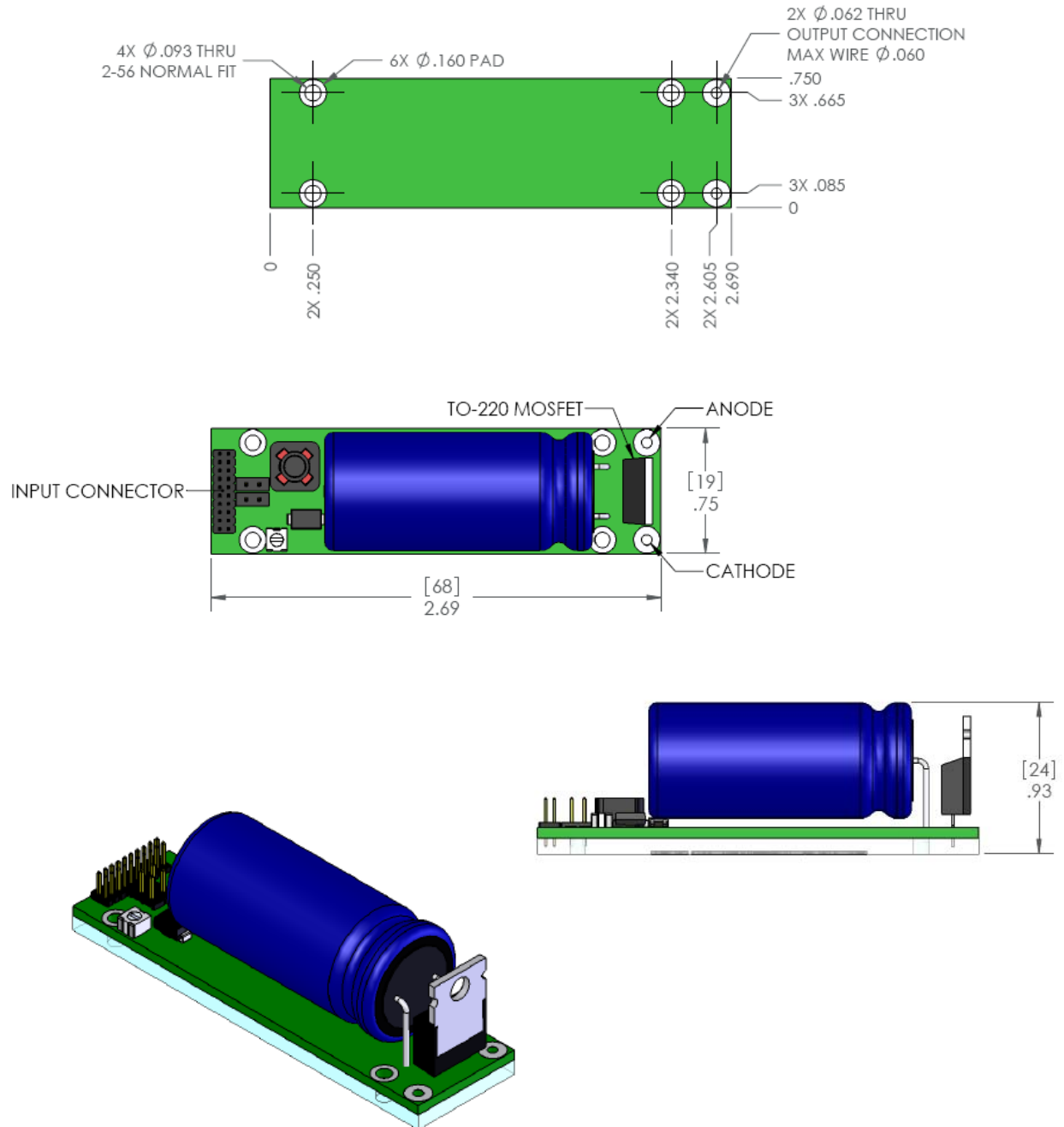
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Physical Dimensions\*



\*Dimensions are subject to change without notice.

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