



120 Amp Pulsed Laser Diode Driver

- **OUTPUT CURRENT UP TO 120 AMPS**
- **UP TO 300 μ s PULSEWIDTH**
- **RISETIME OF <10 μ s**
- **1 PPS**
- **OPTIMIZED FOR DRIVING SINGLE LASER BAR**
- **ONLY 17 g**



DESCRIPTION:

The PLDD-120-1-1 is an ultra-miniature, battery operated, laser diode driver for driving a single laser diode bar to 120 amps of peak current. Due to the compact size and weight (only 17 grams), this unit is well suited for man-portable and airborne applications.

The magnitude of the output current is controlled by a user supplied DC voltage (1 V/100 A). The input trigger signal controls the pulsewidth. The user needs to supply a +3.3 to +5 V signal to enable the capacitor charger.

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-120-1-1 can be powered by a +5 volt supply. Contact factory for battery operation.

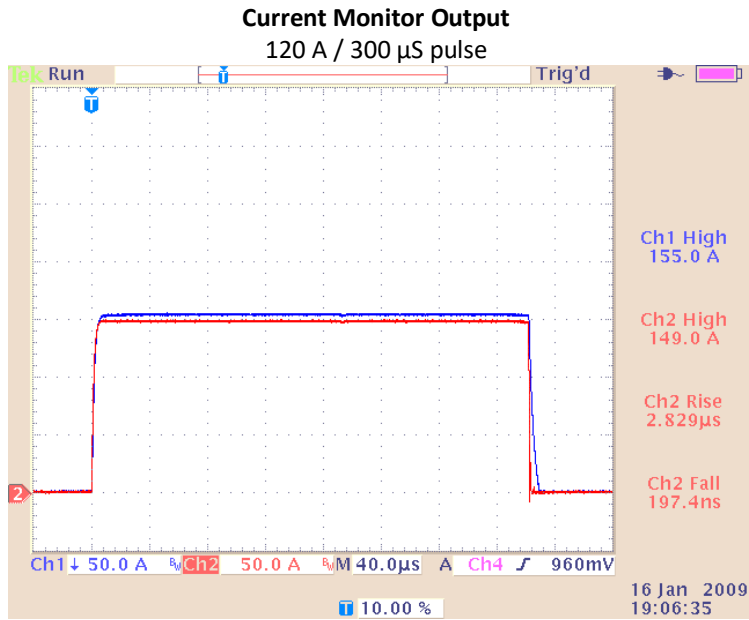
SPECIFICATION:

PARAMETER	Min.	Typical	Max.	Units	
Pulse Output Current (Load=Single Laser Diode Bar)					
Amplitude Range	0	-	120	A	
User supplied DC control voltage (1.2 V = 120 A)	0	-	1.2	V	
Pulse Risetime	-	<10	-	μ s	
Pulse Width	0	-	300	μ s	
Compliance Voltage	-	3	-	V	
CMOS Trigger	3.3	-	5	V	
Current Monitor	Into >10 k Ω (1 V/100 A)	0	-	1.2	V
	Into 50 Ω (0.5 V/100 A)	0	-	0.51	V
Input Power (consult factory for battery operation)	-	5	-	V at 700 mA	
Operating Temperature Range	-40	-	+65	$^{\circ}$ C	

Specifications are subject to change without notice.

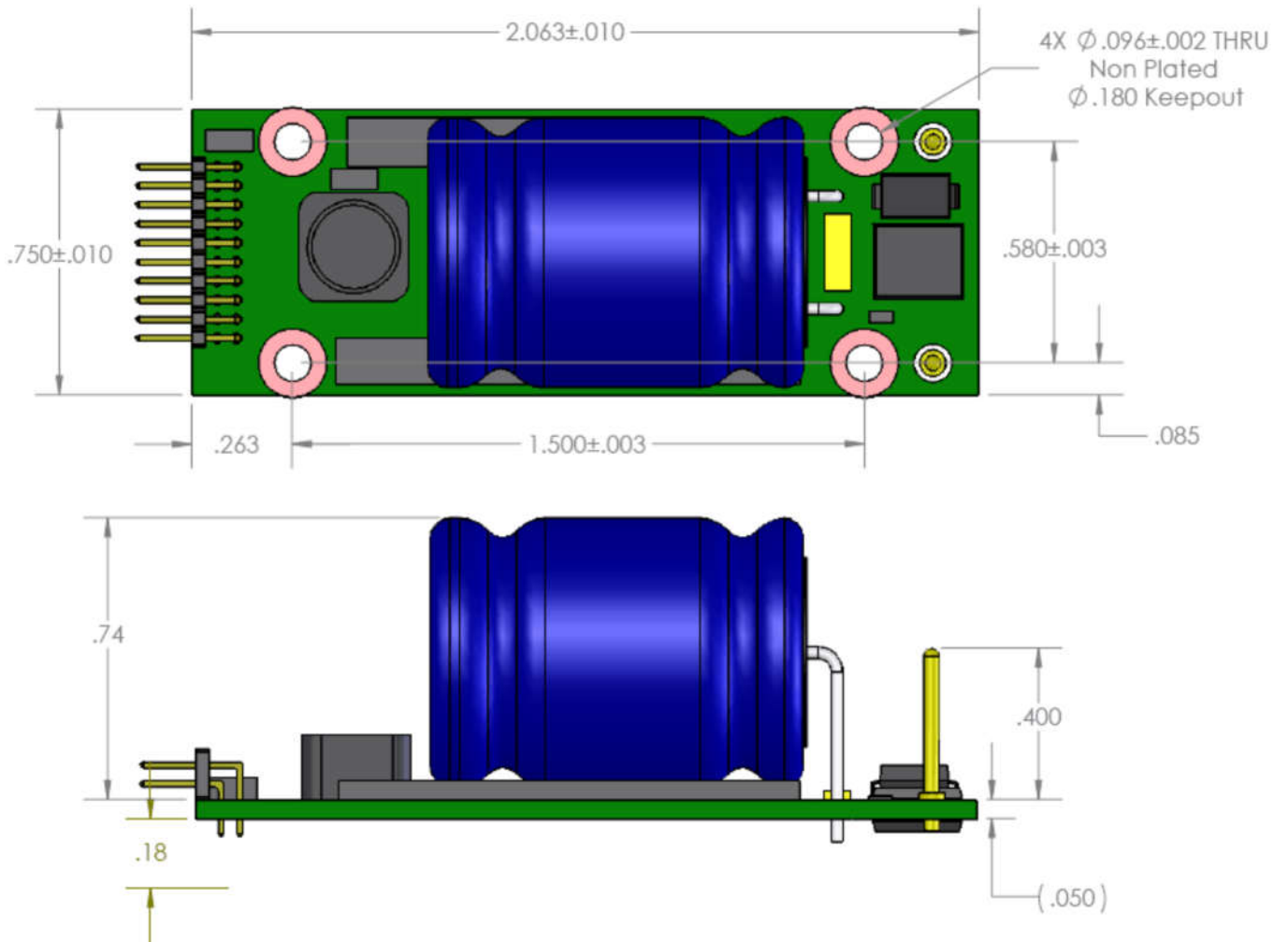
APPLICATIONS:

Range-finding, remote sensing, research, defense and security applications



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

PHYSICAL DIMENSIONS*



*Subject to change without notice.