

### 120 Amp, Nine Bar, Pulsed Laser Diode Driver

- OUTPUT CURRENT UP TO 120 AMPS
- UP TO 300  $\mu$ s PULSEWIDTH
- RISETIME OF <10  $\mu$ s
- 1 PPS
- OPTIMIZED FOR DRIVING NINE BAR STACKS
- ONLY 24 grams



### DESCRIPTION:

The PLDD-120-9-1 is an ultra-miniature, battery operated, laser diode driver for driving a nine bar laser diode stack to 120 amps of peak current. Due to the compact size and weight (only 24 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-120-9-1 can be powered by a +5 volt supply. Contact factory for battery operation.

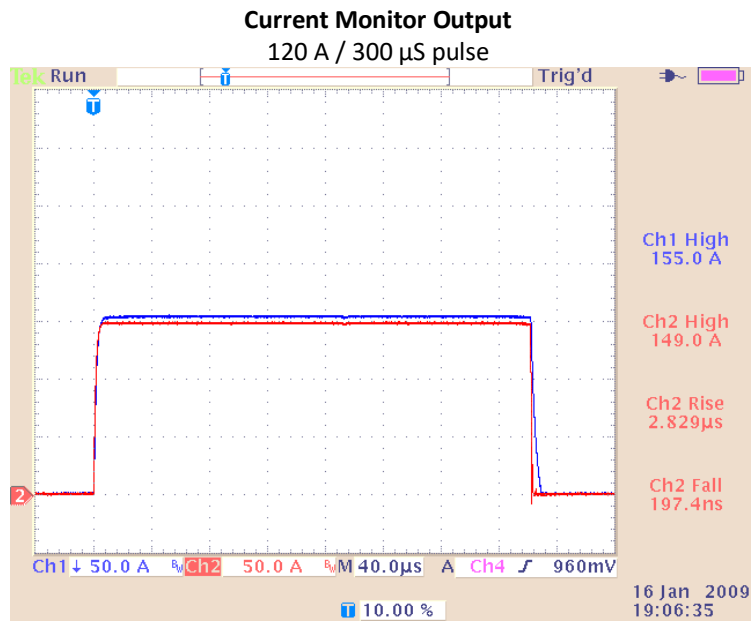
### SPECIFICATION:

PARAMETER	Min.	Typical	Max.	Units
<b>Pulse Output Current (Load=Nine Laser Diode Bar Stack)</b>				
Amplitude Range	0	-	120	A
User supplied DC control voltage (1.2 V = 120 A)	0	-	1.2	V
Pulse Risetime	-	<10	-	$\mu$ s
Pulse Width	0	-	300	$\mu$ s
Compliance Voltage	-	18	-	V
CMOS Trigger	3.3	-	5	V
Current Monitor Into >10 k $\Omega$ (1 V/100 A)	0	-	1.2	V
Into 50 $\Omega$ (0.5 V/100 A)	0	-	0.51	V
Input Power (consult factory for battery operation)	-	5	-	V at 500 mA
Operating Temperature Range	-40	-	+65	$^{\circ}$ C

*Specifications are subject to change without notice.*

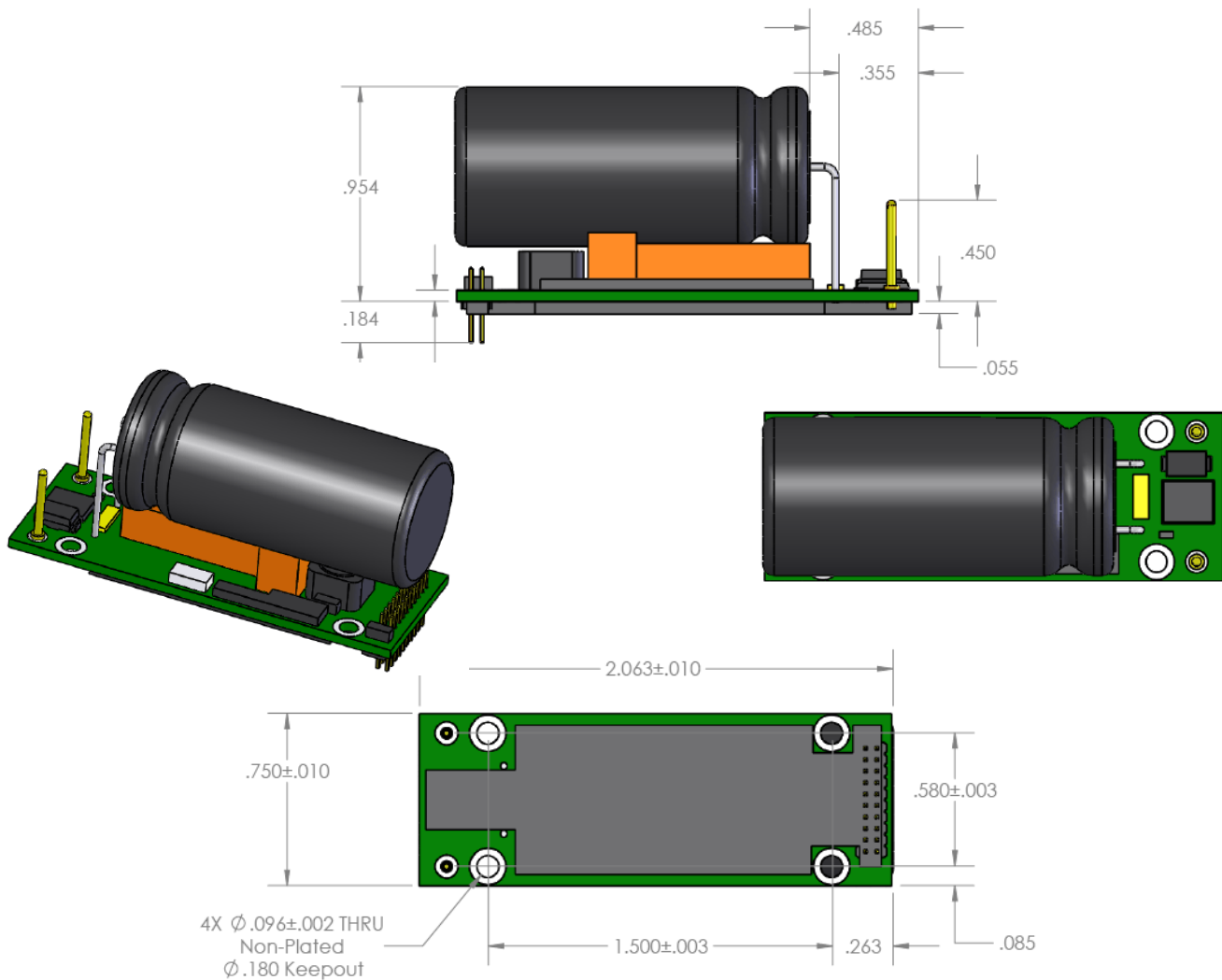
### APPLICATIONS:

Rangefinding, 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.