



120Amp, Nine Bar, Pulsed Laser Diode Driver

- OUTPUT CURRENT UP TO 120 AMPS
- UP TO 300 μ s PULSEWIDTH
- RISE TIME OF <10 μ 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 check current weight), 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.

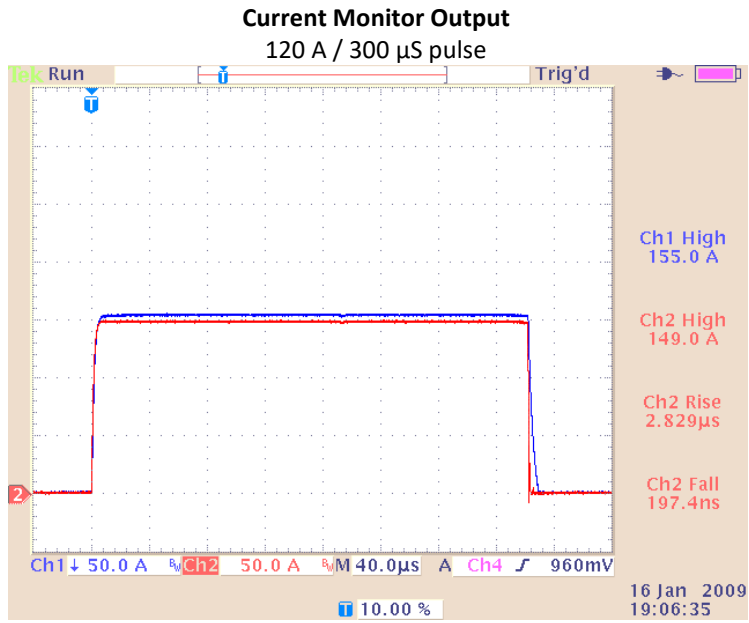
SPECIFICATION:

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

Specifications are subject to change without notice.

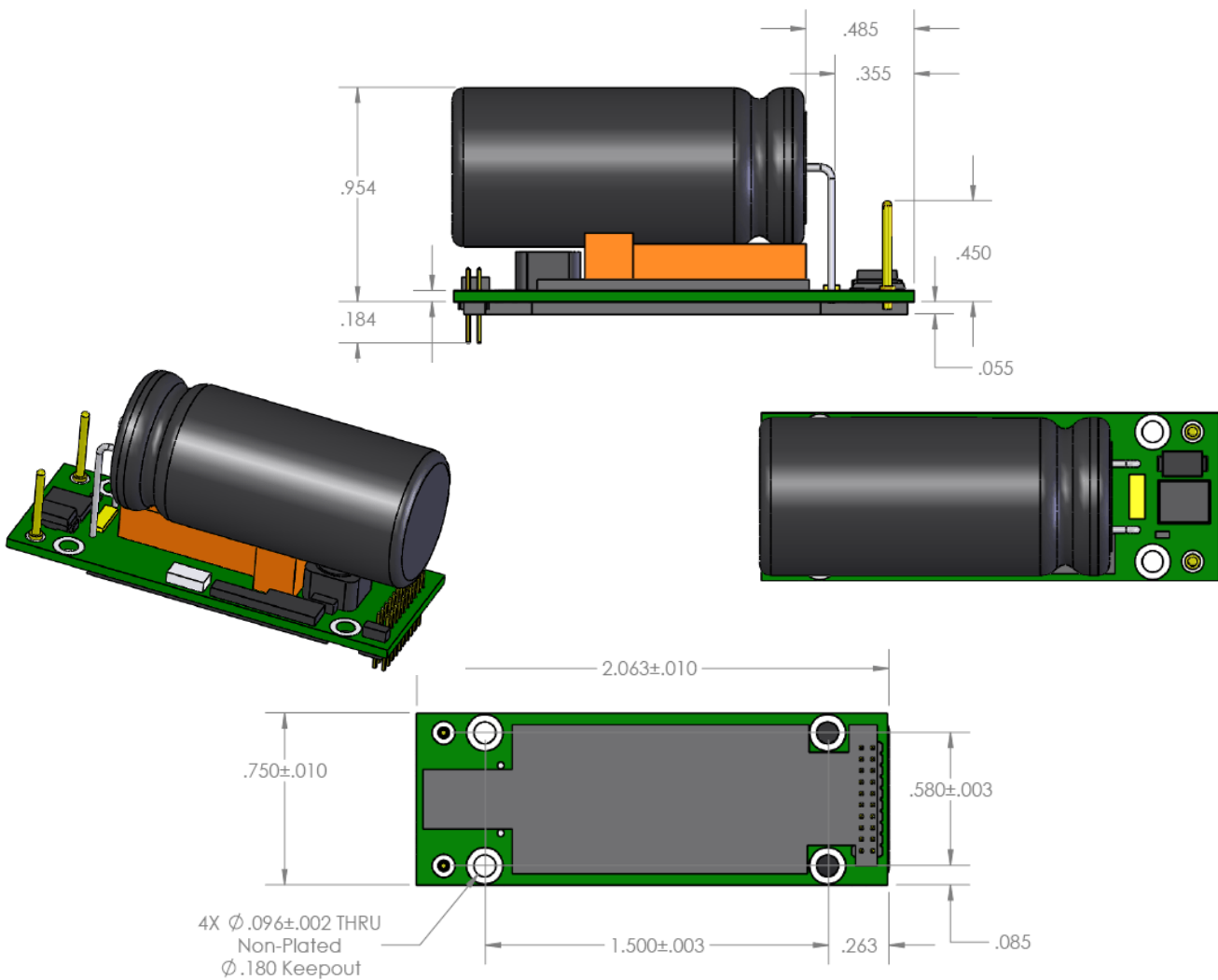
APPLICATIONS: Rangefinding, remote sensing, research and other defense and security applications

"In the event this commodity will be transferred to a "foreign person" as defined in 22 CFR 120.16, either outside or within the United States, a validated US State Department license is required."



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

PHYSICAL DIMENSIONS*



*Subject to change without notice.