120Amp Pulsed Laser Diode Driver

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

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 (1.2V=120A)	0	-	1.2	A
Pulse Risetime	-	<10	-	µs
Pulse Width	0	-	300	µs
Compliance Voltage	-	3	-	V
CMOS Trigger	3.3	-	5	V
Current Monitor Into >1kΩ (1V/100A)	0	-	1.2	V
Into 50Ω (0.5V/100A)	0	-	0.51	V
Input Power (consult factory for battery operation)	-	5	-	V at 700mA
Operating Temperature Range		Consult Factory		°C

Specifications are subject to change without notice.

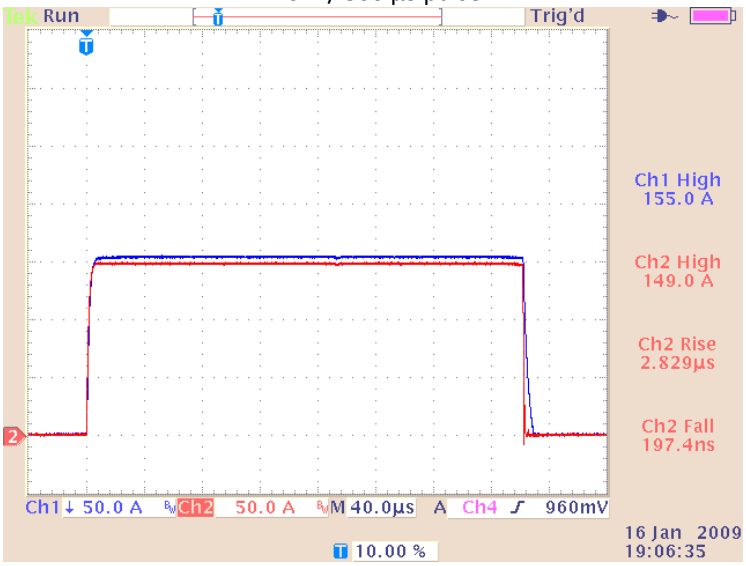
APPLICATIONS: Rangefinding, remote sensing, research and other defense and security applications

"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."

126 BAYWOOD AVENUE ♦ LONGWOOD, FLORIDA 32750-3426 ♦ USA
(407) 339-4355 ♦ FAX (407) 834-3806 ♦ E-mail: ami@analogmodules.com
www.analogmodules.com

Current Monitor Output

120 A / 300 µS pulse



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

PHYSICAL DIMENSIONS*