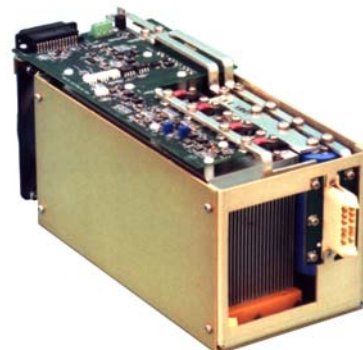




HIGH POWER OEM LASER DIODE DRIVER

- OUTPUT CURRENT TO 300 AMPS PULSED OR 50 AMPS CW
- IDEAL FOR HIGH POWER LASER DIODES
- DIODE LOAD VOLTAGES UP TO 280VDC
- WIDE PULSEWIDTH TO 10ms
- INTERNAL HEATSINK AND FAN
- FLOATING OUTPUT



DESCRIPTION:

The **Model 7701A** Laser Diode Driver is designed to power high current laser diodes and arrays for applications such as illumination and diode-pumped solid-state (DPSS) lasers. High power FET technology is employed and a DB-25 interface connector provides for external control of functions such as enable and pulse input, current control and monitor, CW or pulsed mode select and others. The **Model 7701A** provides a floating output, which is capable of driving grounded anode or grounded cathode emitters. The rugged, compact chassis and internal fan and heatsink make the **Model 7701A** an excellent OEM choice for driving high power DPSS lasers.

SPECIFICATIONS:

Input			Internal Controls	
Voltage	DC Voltage for Laser Drive (300V Max.), plus 115VAC±10%, 1φ, 50 to 60Hz (Add -C to part number.)		Peak Current Limit	10 to 100A (-1), 200A (-2), or 300A (-3) min., trimpot adj.
	198 to 253VAC, 1φ, 50 to 60Hz (Add -D to part number.)		CW Current Limit	5 to 50 Amps min., trimpot adj.
Output			External Controls	
Current	5 to 50A CW or 10 to 100A pulsed (-1)		Current Control	0 to 10V = 0 to max. current
	5 to 50A CW or 10 to 200A pulsed (-2)		Current Monitor	0 to 10V = 0 to max. current
	5 to 50A CW or 10 to 300A pulsed (-3)		Enable/Pulse I/P	Opto-Isolated input 5V at 10mA
Risetime	≤10μs at peak output current		Mode Select	
Falltime	≤10μs at peak output current		Crow Bar Activate	+5V to +15V
Pulse Flatness	±2% of peak output current		Input	
Pulse Overshoot	≤5% of peak output current		Pulsewidth	100μs to 10ms typical.; external caps required for high current & wide PW
Diode Load Voltage	2.5V to 280VDC, depending on laser drive supply voltage.		PRF	1Hz to 1kHz
Current Monitor	Max output current = 10VDC into ≥10kΩ		Connections	
Load Volt. Mon.	30V/V Scale		Ext. Controls	25 Pin D-connector
Diff. Volt. Mon.	10V = 20V across driver; zero droop; 100μs PW		Output	Low inductance connector with 1 meter flat conductor output cable
Protection	Fast reverse polarity diode / Adj. current limit for CW and pulsed mode / PRF & PW limit / Thermal shutdown / Crowbar circuit/ Open circuit		AC Power	Terminal Block
			DC Power	via #8 Buss bar holes
Temperature	0° to 40° C		Size	11.67"L x 5.18"W x 5.94"H
			Weight	4.53kg

Specifications subject to change without notice.



APPLICATIONS:

CW and Pulsed High Power Laser Diode Current Source

