



### OEM LASER DIODE POWER MODULE

- OUTPUT CURRENT TO 100 AMPS CW
- OUTPUT POWER UP TO 500W
- INTEGRATED FILTERING FOR LOW NOISE
- DIODE LOAD VOLTAGES UP TO 10VDC
- AUTORANGING AC INPUT 85-253VAC, 1 $\phi$
- INTERNAL POWER FACTOR CORRECTOR
- DESIGNED TO MEET EN60601-1 AND UL2601
- FOR GROUNDED CATHODE OR GROUNDED ANODE LASER DIODES



### DESCRIPTION:

The **Model 5706** laser diode power module is designed to power high current CW laser diodes and arrays for direct-coupled and diode-pumped solid-state (DPSS) laser applications. The AC input is auto-ranging and power factor corrected to meet the stringent safety and EMC requirements of UL2601 for medical equipment. A DB-25 interface connector provides for external control of functions such as inhibit, current control and monitor, and others. The 5706 Series Power Modules can also be operated in parallel to achieve even higher output currents. The rugged, compact design and high output current capability make the Model 5706 an excellent OEM choice for driving CW DPSS lasers.

### SPECIFICATIONS:

<b>Input</b>		<b>Internal Controls</b>	
Voltage	85-253VAC, 50-60Hz, 1 $\phi$	CW Current Limit	15 to 100 Amps min. trimpot
Power Factor	$\geq 0.95$	<b>External Controls</b>	
<b>Output</b>		Current Control	0 to 10V = 0 to max. current
Current	10 to 50A into 10V (-1) 10 to 100A into 5V (-2)	Inhibit	Opto-isolated; 5V @ approximately 10mA
Risetime	$\leq 400\mu s$ to maximum output current.	<b>Connections</b>	
Falltime	$\leq 400\mu s$ from maximum output current.	Ext. Controls	DB-25 connector
Regulation		Output	#10 PEM nuts
Line	0.1A; 85-253VAC	AC Power	Terminal Block
Load	0.1A; 10% to 100% output.	<b>Temperature</b>	
Efficiency	75% typical at full power.		0° to +40°C
Ripple Current	0.2A rms at 100A output	<b>Size</b>	
Diode Load Voltage	1.5V to 10VDC		14.00" L x 7.23" W x 3.36" H
Current Monitor	Max. output current=10VDC with 1k $\Omega$ source impedance.	<b>Weight</b>	
Load Volt. Mon.	0 to 10V = 0 to max. load voltage with 1k $\Omega$ source impedance.		7.0 lbs.
Protection	Fast reverse polarity diode / Adj. CW current limit / Thermal shutdown / Open circuit / Short circuit / Inhibit		



Specifications subject to change without notice.

Contact our applications staff for detailed information.

### APPLICATIONS:

*CW Laser Diode Current Source*

