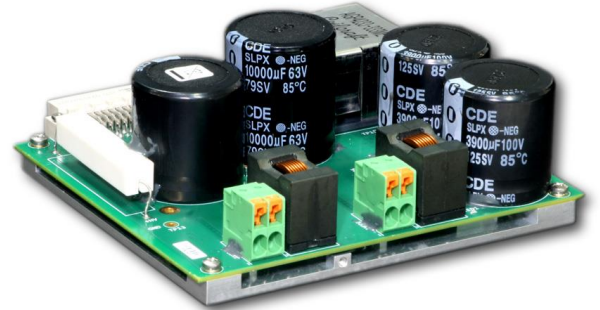




OEM DUAL CHANNEL CW & PULSED LASER DIODE DRIVER

- Dual Channel Output up to 17.5 Amps Each
- Parallel Output up to 35 Amps
- Output Pulse Width $\leq 40 \mu\text{s}$ to CW
- Compliance Voltage up to 75 V
- High Efficiency of 90%
- RoHS Compliant



DESCRIPTION:

AMI's Model 788 Dual Channel OEM CW and Pulsed Laser Diode Driver incorporates a boost converter, capacitor bank, and a current regulated buck converter to provide a programmable current to a laser emitter diode load. Various protections are built in including 48 V soft start, voltage monitoring, temperature monitoring and hysteretic shut down, 48 V and 5 V brown-out protection, start/restart delay, bank dump, current monitoring, and a shorted load until actively released. The PCB is mounted on an aluminum plate that acts to spread and sink heat. Because of the exceptionally high efficiency, cooling arrangements required are minimal. The output current capability is up to 35 Amps pulsed at various duty cycles. Load compliance is up to 75 Volts. Higher CW output currents are possible under certain operating conditions. Contact AMI today to discuss your application requirements.

SPECIFICATIONS:

PARAMETER	Model 788			Units
	Min.	Typical	Max.	
INPUT				
Power	+46	+48	+49	VDC
Current	-	-	15	A
Current Control (Scaling = 7A/V)	0	-	2.5	V
OUTPUT				
Current Pulsed (Per Channel)	3.5	-	17.5	A
Current CW (Per Channel)	-	-	6	A
Compliance Voltage	5.0	-	75	V
Pulse width	40	-	CW	μs
Duty Cycle (550W Average Power Limit)	0	-	100	%
Repetition Rate	-	-	13	kHz
Rise time at 17.5A (10% to 90%)	-	17	-	μs
Fall time at 17.5A (10% to 90%)	-	20	-	μs
Operating Temperature	0	-	+50	$^{\circ}\text{C}$
Storage Temperature	-20	-	+70	$^{\circ}\text{C}$

Specifications are subject to change without notice.

APPLICATIONS:

Direct Illumination Applications, Pump Driver for Fiber Lasers.



Protection:	Soft Start, Voltage Monitoring, Temperature Monitoring, 48 V & 5V Brown-out Protection, Shorted Load until Actively Released
Connections:	Output – Terminal Block (Phoenix Contact P/N 1017503) Power/Control/Interface – 48-Pin (Harting P/N 09231486921)
Cooling:	PCB mounted on aluminum plate to mount to external heatsink. Forced air required at higher power loads to keep magnetics cool.
Size:	5.43" x 5.02" x 1.96"
Weight:	23.5 oz.

MECHANICAL OUTLINE DRAWING

