



性能
合作
价值

Compact

Power Factor Correction

Auxiliary +15V/-15V/+5V

Safety-compliant

Reliable

RoHS-Compliant

LDD

大功率连续激光 二极管驱动器



LDD OEM激光二极管驱动器系列专为新兴的高功率激光二极管行业而设计。LDD系列非常适合经济性高且性能不受影响的高功率应用。紧凑的尺寸是

归功于低损耗的零电压开关逆变器以及平面磁体的集成。LDD实际上是无线的。

功率因数大于0.99，并且传导排放符合严格的欧洲法规。无需额外的线路滤波器即可满足EN 55011排放要求。

在设计LDD系列时，考虑到高功率激光二极管是一种昂贵的设备。严格控制上升和下降时间，以减少可能损坏激光二极管的高压瞬变。

New Source Technology, LLC (NST) 是位于加利福尼亚的有限责任公司。NST专门从事关键激光组件的设计，制造，销售和/或分销，特别着重于光学谐振器，PFN组件，冷却组件，泵腔，激光棒，闪光灯，电容器充电电源，封装的二极管，光学和激光二极管驱动器。

**NEW SOURCE
TECHNOLOGY** LLC

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LDD High Power CW Diode Drivers

Model	P _{out} max	I _{out} max	Input Voltage	Size (L x W x H)	
LDD-50-XX-YY	50 Watts	15 amps	100-240VAC ± 10%	6.75" x 3.63" x 3.25" 17.1 x 9.2 x 8.26 cm	
LDD-100-XX-YY	100 Watts	50 amps		7.5" x 5.8" x 2.6" 19 x 14.7 x 6.6 cm	
LDD-150-XX-YY	150 Watts	60 amps			
LDD-250-XX-YY	250 Watts	80 amps		100 amps	
LDD-600-XX-YY	600 Watts	100 amps			9.9" x 7.3" x 2.6" 25.1 x 18.5 x 6.6 cm
LDD-1000-XX-YY	1000 Watts				
LDD-1500-XX-YY	1500 Watts	150 amps	200-240VAC ± 10%	13" x 8.5" x 3.4" 33.2 x 21.6 x 8.6 cm	
LDD-2500-XX-YY	2500 Watts			17" x 16.6" x 3.4" 43.2 x 42.2 x 8.6 cm	
LDD-3000-XX-YY	3000 Watts				200 amps
LDD-6000-XX-YY	6000 Watts	250 amps	200-440VAC ± 10% 3Ø	17.3" x 16.6" x 4.25" 43.9 x 42.2 x 10.8 cm	

NOTE: XX = maximum required output current, YY= maximum required compliance voltage

Specifications

INPUT

Voltage: See table above
Power Factor: >.98 (LDD-6000:~t80%)

INTERFACE

Connector: 15 Pin "D" Sub Fe nale
Current Program: 0-10V for 0-Max Current
Current Monitor: 0-10V for 0-Max Current
Voltage Monitor: 0-10V for 0-Max Voltage
(Optional RS232 interface available)

ENVIRONMENT

Operating Temp: 0 to 40°C
Storage: -20 to 85°C
Humidity: 0 to 90% non-condensing
Cooling: Forced air

PERFORMANCE

Rise/Fall Time: <1msec standard (faster rise times available)
Current Regulation: <0.5% of Maximum output current
Current Ripple: <0.5% of maximum output current
Current Overshoot: <1% of maximum output current
Power Limit: Limited to maximum power with power fold-back circuit

REGULATORY

Safety: LDD-150/250: UL60950
LDD-600/1000/1500/2500/3000: UL60950 (Industrial),
UL60601-1 (medical) Emissions/Immunity: FCC 47 CFR
Class A Emissions, EN55011:1998 Group 1 Class A Emis-
sions, EN61000-3-2, EN61000-3-3, EN60601-1-2:2001

AUXILIARY OUTPUTS

+5V @ 200mA
+15V @ 200mA
-15V @ 200mA

Note: No auxiliary outputs on LDD-50, No +5V output on LDD-100/150



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LDD-Interface

Connector Type: 15 pin D-Sub Female

Pin#	Pin Name	Functional Voltage Level	Description
1	Enable (input) (Note: 1)	High = RUN = +5V to +15V Low = OFF = 0V	The Enable function turns the output section of the power supply ON and OFF. When the power supply is enabled, current is delivered to load as programmed via I _{program} (+), Pin 7. Rise times resulting from Enable are approximately 25msec.
3	Interlock (Input)	Open = Off Connected to GND = RUN	The Interlock function can be connected to external interlock switches such as door or over Tempswitches.
4, 9, 15	GND		Interface Return
5	V _{out} Monitor (output)	0-10V = 0-V _{out} max (Note: 2)	The output voltage of the supply can be monitored by V _{out} Monitor. See note below.
6	I _{out} Monitor (output)	0-10V = 0-I _{out} max	The output current of the supply can be monitored by I _{out} Monitor.
7	I _{program} (input)	0-10V = 0-I _{out} max	The power supply output current is set by applying a 0-10V analog signal to I _{program} (+).
10, 11	+5V (output)		Auxiliary 200mA Not available on LDD-50/100/150
8	Pulse Control (input)	TTL High = On TTL Low = Off Default = On	The output of the LDDHC may be pulsed by applying a TTL signal to Pulse Control, pin 8. The amplitude of the output current pulse is determined by the current level programmed via Pin 7, I _{program} (+). Rise fall times of <1msec are typical. Contact Lumina Power for faster rise and fall times.
12	-15V (output)		Auxiliary 200mA Not available on LDD-50/100/150
13, 14	+15V (output)		Auxiliary 200mA Not available on LDD-50

1. Upon application of AC input voltage output current will be 0 regardless of Pin 1 setting. Enable (or toggle) pin 1 to output current.

2. Pin 5 If maximum compliance voltage is less than 10V, V_{out} Monitor will read output voltage directly. If maximum compliance voltage is greater than 10V, then V_{out} Monitor will be scaled such that 0-10V = 0-V_{out} max. Voltage readings greater than 10.5 volts will latch power supply. Output voltage will not exceed 105% of rating.



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