

High Power CW Laser Diode Drivers

The LDD series is ideally designed for demanding OEM high power Laser diode applications. The compact size is possible due to the low-loss Zero Voltage Switching inverter with the incorporation of planar magnetics. The power factor is greater than 0.99. Conducted emissions meet stringent European regulations and no additional line filter is required to meet EN 55011 emission requirements. The LDD family has been designed to protect an expensive high power Laser diode by strictly controlling high voltage transients.



The highest power model LDD-6000 is added to the family.

1. High Power CW Laser Diode Drivers

MODEL	Pout(max) (W)	Iout (max) (A)	Input Voltage (VAC)	Size L x W x H (mm)
LDD50-xx-yy	50	Up to 15	90-264	171 x 92 x 826
LDD100-xx-yy	100	5–50		190 x 147 x 66
LDD150-xx-yy	150	10–60		251 x 185 x 66
LDD250-xx-yy	250	10–80		
LDD600-xx-yy	600	10–100		
LDD1000-xx-yy	1000			
LDD1500-xx-yy	1500	Up to 150	180-264	432 x 422 x 86
LDD3000-xx-yy	3000		180-264 (3-Phase)	432 x 422 x 88 (TBD)
NEW ! LDD6000-xx-yy	6000	Up to 300		
Auxiliary Output +5V/+15V/-15V@0.5A (no auxiliary output available for the LDD-50)				
XX : Max output current (A) YY : Max compliance voltage (V) XX x YY cannot exceed Pout(max)				
RS232 option available, Other output available upon request				

Regulatory

LDD150/250: UL 60950 (Medical)

LDD600/1000/1500: UL 60950 (Industrial) UL 60601-1 (Medical)

FCC 47 CFR Class A Emissions EN55011 :1998 Group 1 Class A Emissions

EN61000-3-2 EN61000-3-3 EN60601-1-2:2001

LDD600/1000/1500 LDY600/1000/1500 : CSA compliance for use in Medical Equipment

RoHS compliance

2. NEW ! LDDHC High Currency Laser Diode Drivers

The LDDHC series is a new family of OEM Laser diode drivers designed for the emerging high power Laser diode industry. With output currents to 200 amps the LDDHC series is available in 3 power levels with a wide range of compliance voltages. The features of LDDHC include safe turn-on/turn-off, power factor correction (greater than 0.99), compact design, Low conducted emissions and leakage, and is fully RoHS compliant.

The LDDHC series is a new family with output currents to 200 amps for OEM.

Model	Pout (max) (W)	I out (max)(A)	Input Voltage (VAC50/60Hz)	Size L x W x H (mm)
LDDHC600-xx-yy	600	Up to200	100-264	259 x 203 x 66
LDDHC1000-xx-yy	1000	Up to 200	100-264	
LDDHC1500-xx-yy	1500	Up to 200	200-264	

XX : Max output currencty (A) YY : Max compliance voltage (V) XX x YY cannot exceed Pout (max)
Auxiliary Output +5V/+15V/-15V

Regulatory :

UL 60950 (Industrial)

UL 60950 (Industrial) UL 60601-1 (Medical)

FCC 47 CFR Class A Emissions EN55011 :1998

Group 1 Class A Emissions

EN61000-3-2 EN61000-3-3 EN60601-1-2:2001

CSA compliance for use in Medical Equipment

RoHS compliance



3. LDD Local Controller

The LDD local Controller can program and monitor an LDD power supply. This unit is a convenient way to operate LDD Laser diode drivers in a laboratory for R & D environment. The controller can perform all the interface functions required by the LDD interface and connect directly to the LDD laser diode driver with no external power source required.



For more details, contact sales@newsourcetechnology.com.

4. LDPC Laser Diode Drivers

The LDPC series Laser diode drivers are specifically designed for low cost high volume applications. These compact and reliable DC input modules are available with output power to 300 watts and current output 70 amps. All models require 12, 15 or 24 volts DC and feature a simple analog interface. Output current and voltage can be specified to meet any requirements. An optional case and required fan are also available.

Model	Pout (W)	Max Compliance Voltage (V)	Input Voltage (V)	I out (max) (A)
LDPC-xx-yy-12	100	10	12	50
LDPC-xx-yy-15	100	10	15	50
LDPC-xx-yy-24	300	16	24	70

XX: max output current
 YY: max compliance Voltage
 XX x YY cannot exceed max rated power
 RoHS compliance
 Size: 700x152x53/68 mm



(NOTE)

Proper cooling is required for reliable operation. Contact sales@newsourcetechnology.com for correct fan placement and other cooling recommendations.

Recommended Fan:

<50Amps: 10cfm, 40mmx40mm, Delta: #EFB0412VHD(12V) or EFB024VHD(24V) or equiv.
 50 to 70Amps: 37cfm, 60mmx60mm Sanyo Denki: #109R0624J402 or equiv.

- **The difference between the LDD and the LDPC**

LDD	LDPC
Input Voltage : VAC 90-264	Input Voltage: 12, 15, or 24 VDC
UL, FCC, EN RoHS compliance	RoHS compliance(CE marked AC/DC is required)
15 pin DSUB Interface	6 pins
Auxiliary output +5,+15V,-15V	No auxiliary output
LDD Controller available	LDD Controller not available
Fan is integrated	Cooling fan is required
Chassis	Chassis is option

For more details, contact sales@newsourcetechnology.com.

LDQCW Quasi-CW Diode Laser Drivers

The LDQCW laser diode drivers are designed for pulsing diode lasers in Quasi-CW applications and can be configured for compliance voltage requirements up to 100V. The pulsed output current is up to 200A. Leakage current is less than 250uA, power factor is greater than 0.99 and less than 25 us rise and fall times available. Conducted emissions meet stringent European regulations. No additional line filter is required to meet EN55011 emission requirements.

Model	Pout Average (w)	I out (A)	Input Voltage (VAC50/60Hz)	Size: L x W x H (mm)
LDQCW-50-xx-yy-zz	50	Up to 120	90-264	252 x 186 x 66
LDQCW-250-xx-yy-zz	250	Up to 200	90-264	272 x 185 x 122
LDQCW-600-xx-yy-zz	600	Up to 200	90-264	

XX : Max pulsed output current
YY : Required compliance voltage (Unit will drive a load of 75% - 100% of this voltage)
ZZ: Max pulse width @ Max pulsed current-specified by customer
Average power must not exceed Pout average (w)
Output current and voltage compliance can be configured for individual requirements.
Auxiliary Output of LDQCW 250/600 : +/-15V @ 0.5A
Auxiliary Output of LDQCW 50 : +12V @ 50mA



EN55011 compliance
RoHS compliance

LDQPC Quasi-Pulsed Laser Diode Drivers

The LDQPC Quasi-Pulsed Laser Diode Drivers are specifically designed for low cost high volume applications. These DC input modules are available with average output power to 100 watts and current output to 200 amps. With a rise/fall time of <10us, they are ideally suited for compact short pulse laser applications. All configurations require 15V DC and feature a simple analog interface. Output current and voltage can be specified to meet your requirement.

Model	Pout Average (W)	I pulse max (A)	I average max (A)	V compliance max (V)
LDQCW-xx-yy-zz	100	200	80	Up to 6

Interface Connector: 10pin D sub Female
Pulse Width Range: 20 usec to 2 msec
Rise/Fall Time: 10 usec



RoHS compliance

For more details, contact sales@newsourcetechnology.com.