

LDPC LOW COST DIODE DRIVER



**Now Available with 2us.
rise time!**

The LDPC series laser diode drivers are specifically designed for low cost high volume applications. These DC input modules are available with output power to 300 watts and current output to 70 amps. Built around the same topology that has made Lumina Power laser diode drivers the standard of the industry, these board level products offer the reliability and diode protection of the LDD series in a compact easy to integrate package.

All models require 12, 15 or 24 volts DC and feature a simple analog interface. Output current and voltage can be specified to meet your requirements.

FEATURES

- Output Power to 300 watts
- Output Current to 70 amps
- Input Voltage: 12, 15 or 24VDC
- Compact Reliable Design
- RoHS Compliant
- Analog Interface

APPLICATIONS

- Medical Laser Systems
- Mobile Lasers
- CW or Pulsed Applications

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Models

Model	Output Power	Max. V out.	Input Voltage	Output Current
LDPC-XX-YY-12	100 watts	10 Volts	+12 Volts	≤50 Amps Max.
LDPC-XX-YY-15	100 watts	10 Volts	+15 Volts	≤50 Amps Max.
LDPC-XX-YY-24	300 Watts	16 Volts	+24 Volts	≤70 Amps Max.

XX= Current, YY = Compliance Voltage, Current x voltage cannot exceed max. rated power

Specifications

Go to www.luminapower.com or contact customer service for the latest Application Notes on this product.

Maximum Output Current: (see table above)

Performance

Current Ripple: 0.25% at maximum output current
 Regulation: 0.5% at Maximum output current
 Current Overshoot: < 1% of Maximum output current
 Power Limit: Limited to Maximum power with Fold Back Circuit
 Rise/Fall Time: 2 to 10usec. (Depending upon output voltage and current)

Interface

Inhibit/Enable: 5V to 15V to enable output
 Current Program: 0 to 10V = 0 to full current
 Current Monitor: 0 to 10V = 0 to full current
 Voltage Monitor: 0 to 10V = 0 to full voltage Note:1

Protection:

Power supply Protection: Reverse Input voltage, input overvoltage, over temp,
 Laser Diode Protections Strict control of rise/fall times, no overshoot

Dimensions

LDPC <110 watts 2.75 inches X 6.0 inches (board height 1.5")
 LDPC >110 watts 2.75 inches X 6.0 inches (board height 2.625")
 Operating Temp: 0 to 40°C (Consult factory for cooling requirements)
 Cooling: Note:2 50 amps output or less requires 10CFM
 50 to 70 amps output requires 37CFM

Note 1: If maximum compliance voltage is less than 10V, Vout Monitor will read output voltage directly. If maximum compliance voltage is greater than 10V, then Vout Monitor will be scaled such that 0-10V = 0-Voutmax.

Note 2: Proper cooling is required for reliable operation. Contact Customer service for correct fan placement and other cooling recommendations.