

## DDPC LOW COST DIODE DRIVER



The DDPC 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. An optional protective case and required fan are also available



### 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

# DDPC LOW COST DIODE DRIVER

## Models

Model	Output Power	Max. V out.	Input Voltage	Output Current
DDPC-XX-YY-12	100 watts	10 Volts	+12 Volts	≤50 Amps Max.
DDPC-XX-YY-15	100 watts	10 Volts	+15 Volts	≤50 Amps Max.
DDPC-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

\* Higher output voltages on request

## Specifications



Chassis/Fan Option

**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: 150usec. typical (faster rise/fall time available)

### 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

100watts or less : 2.75 inches X 6.0 inches (board height 1.5")  
 100 to 300 watts: 2.75 inches X 6.0 inches (board height 2.625")  
 Operating Temp: 0 to 40°C Note2  
 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 Schulz customer service for DDPC Application Notes.