

## High Power Fiber Coupled Laser

Princeton Lightwave's high power laser module features an advanced MQW chip design, innovative opto-mechanical packaging and high brightness. High optical power output is delivered in multiple fiber options. This product offering is ideal for medical and defense applications.

### Features & Options

- High Power, High Brightness
- 14XX , 15XX, 19XX nm Wavelength Options
- Detachable Fiber, 100  $\mu\text{m}$  – 400  $\mu\text{m}$ , 0.22NA
- Blast Shield
- 635 nm Red Pilot Laser (Standard), Green Laser Option
- Fiber Sensor
- Dual Optical Power Monitors
- Built in thermistor for chip temperature control
- Spectral stabilization option



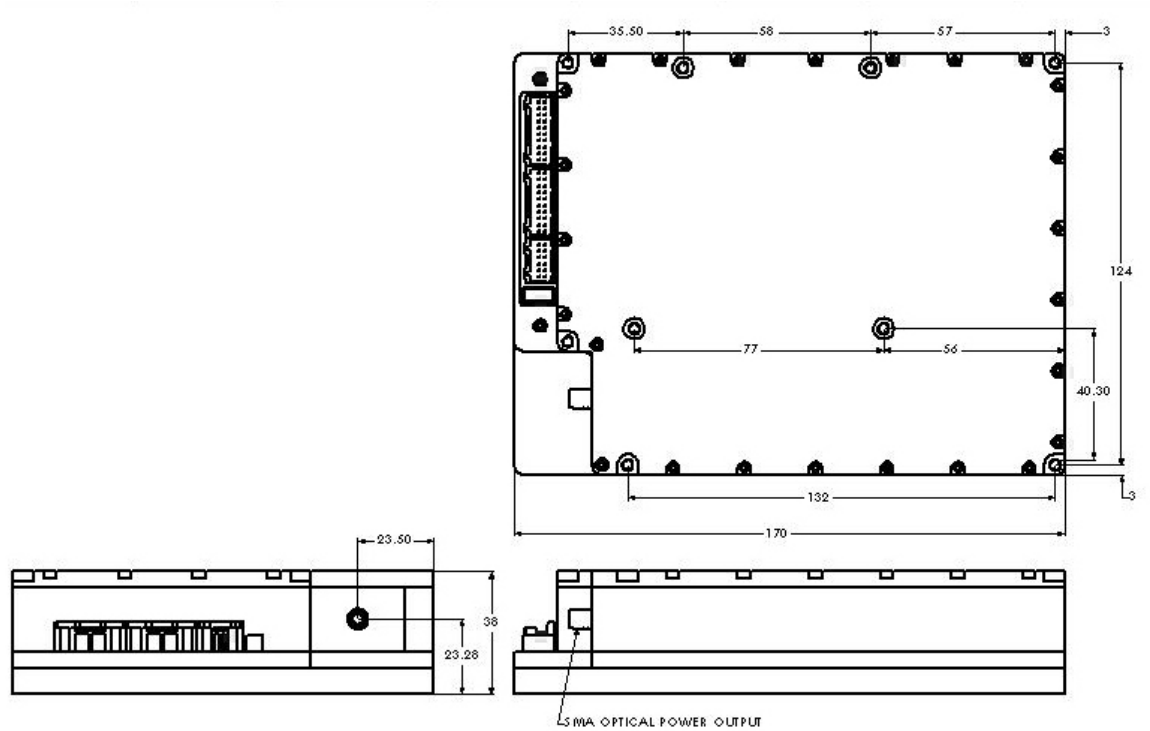
### ELECTRO-OPTICAL SPECIFICATIONS

(at thermistor operating temperature,  $T_{op} = 20^{\circ}\text{C}$ , without spectral stabilization)

**NOTE:** Maximum ratings for short term operation is 20A max (14XX, 15XX nm) and 9A max (19XX nm) for operating current, and  $30^{\circ}\text{C}$  max. for thermistor temperature.

Center Wavelength (nm)	Spectral Width (nm)	Operating Power (W)	Peak Wall Plug Efficiency (typ., %)	Forward Operating Current (A)	Forward Operating Voltage (V)	Fiber Type
1470 +/- 15 1530 +/- 15	16 (typ) 20 (max)	50 60	28 28	14 - 20 14 - 20	18 18	200 $\mu\text{m}$ , 0.22 NA 400 $\mu\text{m}$ , 0.22 NA
1905 +/- 15	20 (typ) 25 (max)	10 14	11 11	6 - 9 6 - 9	19 19	100 $\mu\text{m}$ , 0.22 NA 200 $\mu\text{m}$ , 0.22 NA

## MECHANICAL SPECIFICATIONS



## ORDERING INFORMATION

### **PML-6ww-xx-yy-zz**

**ww** 47 = 1470nm wavelength  
53 = 1530nm wavelength  
85 = 1850nm wavelength  
90 = 1905nm wavelength

### **xx-yy**

**For 1470nm and 1530nm lasers:**  
50-20 = 50W, 200  $\mu$ m, 0.22 NA fiber  
60-40 = 60W, 400  $\mu$ m, 0.22 NA fiber

**For 1905nm lasers:**  
11-20 = 20W, 200  $\mu$ m, 0.22 NA fiber  
11-10 = 30W, 100  $\mu$ m, 0.22 NA fiber

**zz** options per customer requirement