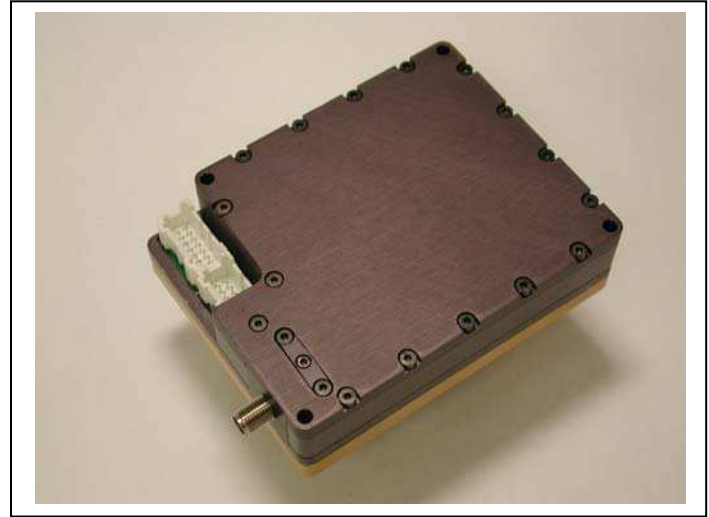


High Power Fiber Coupled Laser

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 μm – 400 μm , 0.15NA, 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

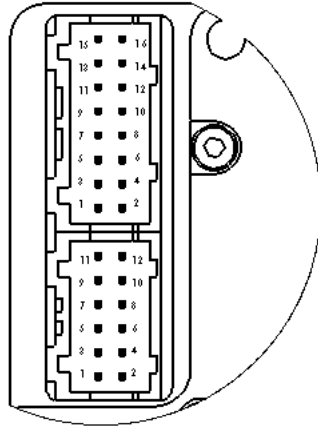
(at thermistor operating temperature, $T_{op} = 20^{\circ}\text{C}$, without spectral stabilization)

NOTE: Maximum ratings for short term operation is 20A max (14XX, 15XX nm) and 9A max (19XX nm) for operating current, and 30°C max. for thermistor temperature.

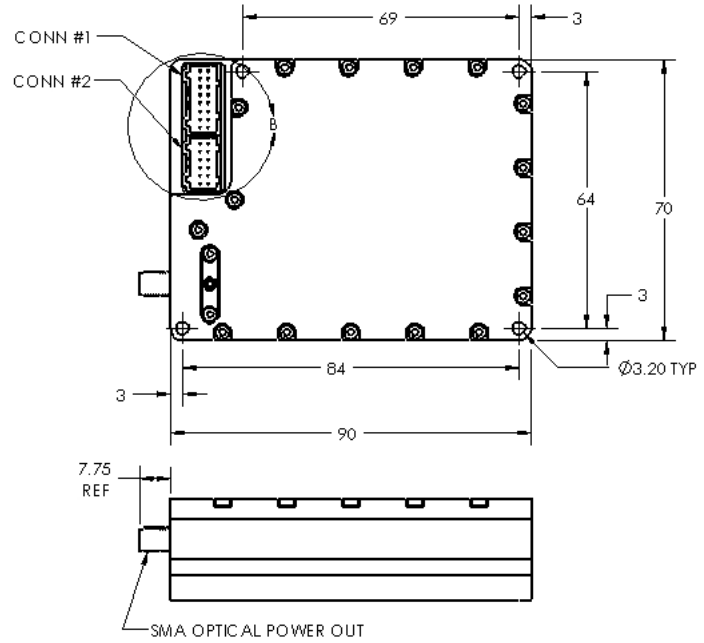
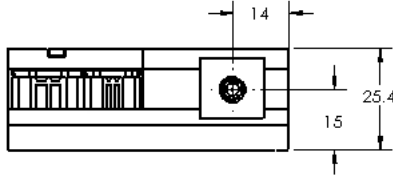
Center Wavelength (nm)	Spectral Width (nm)	Operating Power (W)	Peak Wall Plug Efficiency (typ., %)	Forward Operating Current (A)	Forward Operating Voltage (V)	Fiber Type
1470 +/- 15 1530 +/- 15	16 (typ) 20 (max)	20	28	14 - 20	6	200 μm , 0.22 NA
		35*	28	17 - 20	8.7	400 μm , 0.22 NA
		30	30	17 - 20	7.5	400 μm , 0.22 NA
		20	30	13 - 20	6	400 μm , 0.22 NA
		15	30	13 - 20	4.5	400 μm , 0.22 NA
1905 +/- 15	20 (typ) 25 (max)	5	11	7 - 9	7.5	200 μm , 0.22 NA
		5	11	6 - 9	8.5	100 μm , 0.22 NA

* may not be available with pointing laser and monitor options

MECHANICAL SPECIFICATIONS



DETAIL B
SCALE 3:1



CONNECTOR #1 Laser Diode		CONNECTOR #2	
1	Cathode (-)	1	Fiber detector VCC (+) (optional)
2	Cathode (-)	2	Monitor Photodiode 2 Anode (optional)
3	Cathode (-)	3	Fiber detector Output (optional)
4	Cathode (-)	4	Monitor Photodiode common cathode (optional)
5	Cathode (-)	5	Fiber Detector Common (-) (optional)
6	Cathode (-)	6	Pilot Laser Sensor Anode (optional)
7	Cathode (-)	7	NC
8	Cathode (-)	8	Pilot Laser Common (+) (optional)
9	Anode (+)	9	Thermistor
10	Anode (+)	10	Pilot Laser Cathode (-) (optional)
11	Anode (+)	11	Thermistor
12	Anode (+)	12	Monitor Photodiode 1 Anode (optional)
13	Anode (+)		
14	Anode (+)		
15	Anode (+)		
16	Anode (+)		

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:

20-20 = 20W, 200 μ m, 0.22 NA fiber
35-40 = 35W, 400 μ m, 0.22 NA fiber
30-40 = 30W, 400 μ m, 0.22 NA fiber
20-40 = 20W, 400 μ m, 0.22 NA fiber
15-40 = 15W, 400 μ m, 0.22 NA fiber

For 1905nm lasers:

05-20 = 5W, 200 μ m, 0.22 NA fiber
05-10 = 5W, 100 μ m, 0.22 NA fiber

zz options per customer requirement