

# Diode Pumped Infrared 1047 nm CrystaLaser®

High reliability High stability Single longitudinal mode Ultra-compact

## SPECIFICATIONS

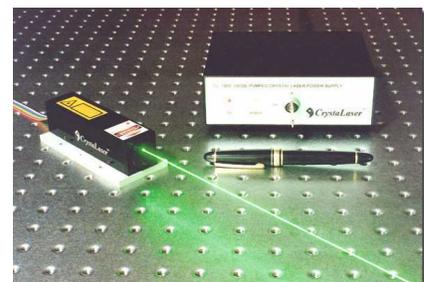
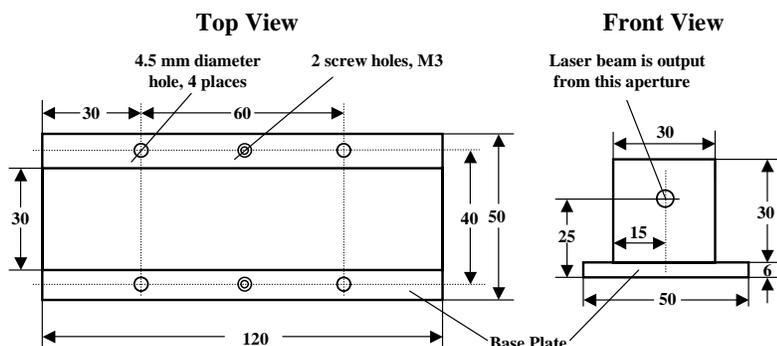
Wavelength	1047 nm			
Laser crystal	Nd:YLF			
Laser version	Standard version		SLM version	
Model No. and output power	CL1047-2W5	2.5 W	CL1047-300-S	300 mW
	CL1047-2W0	2 W	CL1047-150-S	150 mW
	CL1047-1W5	1.5 W		
	CL1047-1W0	1 W		
	CL1047-800	800 mW		
	CL1047-500	500 mW		
	CL1047-300	300 mW		
	CL1047-150	150 mW		
Longitudinal mode spectrum	Multiple			
Coherence length	1 - 5 mm		> 300 meters	
Linewidth	0.3 nm, nominal		< 10 <sup>-5</sup> nm	
Modulation options	TTL 1kHz, 3 kHz, 10 kHz, 50kHz Analog control, Analog modulation		TTL on/off option	
Output stability (rms)	< 1% over 24 hours; ultra-stable option: 0.25% over 24 hours			
Transverse mode	Single mode, TEM <sub>00</sub> , M <sup>2</sup> = 1.0 - 1.2			
Beam diameter (1/e <sup>2</sup> )	0.4 mm	Option: 2X - 5X laser beam expanders are available to change beam size and divergence		
Beam divergence	4 mrad	e.g. 0.8 mm beam with 2 mrad divergence; or 2 mm beam with 0.8 mrad divergence		
Beam pointing stability	< 0.005 mrad/°C			
Polarization ratio	100:1; Horizontal linear polarization			
Operation temperature	10 °C to 35 °C			
Warm-up time	< 1 minute			
Operation voltage	90-250 VAC or 12VDC OEM version 11-16VDC; Typical power consumption: 10 W			
Dimensions and weight of laser head	3x3x12 cm <sup>3</sup> (1.2x1.2x4.7 in <sup>3</sup> ) with a fixed 6 mm thick plate, 0.3kg (0.6 lb) 7x3.6x18.5 cm <sup>3</sup> (2.8x1.4x7.3 in <sup>3</sup> ), 0.6 kg (1.3 lb) for lasers ≥ 2 W, type 2 size			
Dimensions and weight of power supply	AC: 5x14x15 cm <sup>3</sup> (2x5.5x6 in <sup>3</sup> ), 0.5 kg (1 lb) DC: 8.5x3.5x12.7 cm <sup>3</sup> (3.3x1.4x5 in <sup>3</sup> ), 0.2 kg (0.5 lb); option CL-2005 power display AC: 5 x 16 x 15 cm <sup>3</sup>			

Fiber coupling option: Single mode and multi-mode fiber delivery.  
 CL-2005 power supply option: Power adjustable and power digital display.

Made in the USA



### Laser Head All dimensions in mm



Mechanical dimensions of the laser head and power supply of infrared laser are the same as the green laser.