

## DPL1047 Series 1047nm Low Noise CW DPSS Laser System up to 500mW

### Overview

The DPL1047 series diode pumped solid state (DPSS) laser is ideal for applications that require a wavelength of 1047nm and output power levels up to 500mW. The laser features low noise, compact design, long lifetime, easy operation, and FDA-compliant system with driver. The laser is widely used in scientific experiment, measurement, optical sensor, measurement, spectrum analysis, optical instrument, and many other applications.

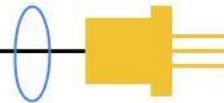


### Specifications

<b>Model Number</b>	<b>DPL1047-XYZA</b>		
Wavelength (nm)	1047±1		
Output power (mW)	>100 (X=100), >200 (X=200)	>300 (X=300), >500 (X=500)	
Transverse mode	Near TEM <sub>00</sub>		
Operating mode	CW		
Power stability (rms, over 4 hours)	<5% (Z=A), <3% (Z=E), <2% (Z=2)	<5% (Z=A), <3% (Z=E)	
Noise of amplitude (rms, 20Hz-20MHz)	<1% (A=1)		
M <sup>2</sup> factor	<1.5		
Beam diameter at aperture (1/e <sup>2</sup> , mm)	~1.5		
Beam divergence, full angle (mrad)	<1.5		
Warm-up time (minutes)	<10		
Beam height from base plate (mm)	24.8		
Polarization ratio	>100:1 Horizontal ±5 degree		
Pointing stability after warm-up (mrad)	<0.05		
Operating temperature (°C)	10-35		
Dimensions of laser head (mm)	140.5(L)×73(W) ×46.2(H) mm <sup>3</sup>		
Weight of laser head (kg)	0.6 kg		
Power supply options			
Elite Power Supply (Y=E)	Input voltage	90-264VAC	
	Dimensions	133(L) ×130(W) ×62.2(H) mm <sup>3</sup>	
	Weight	1.2 kg	
	Notes	Fixed output power	
Laboratory Power Supply (Y=L)	Input voltage	90-264VAC	
	Dimensions	153(L) ×155(W) ×92(H) mm <sup>3</sup>	
	Weight	1.5 kg	
	Notes	Adjustable output power	
Expected lifetime (hours)	10,000		
Warranty period	10 months		
FDA Compliance	FDA CDRH Title 21 CFR 1040.10/11 Class IIIb		

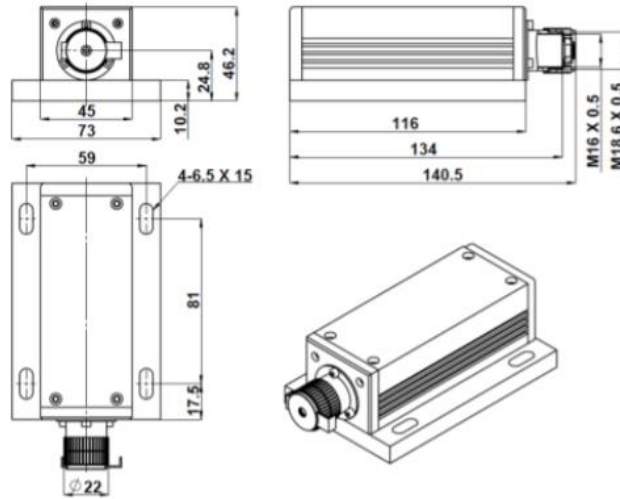
### Remarks:

- Specifications of the CW laser is based on the laser performance at full power output after the specified warmup period. The stability of output power may change when output power is adjusted at a different power level.



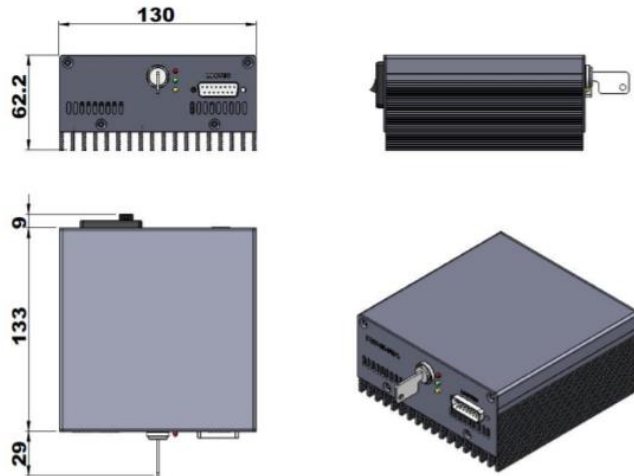
**Outline Dimensions (unit: mm)**

**Laser Head**

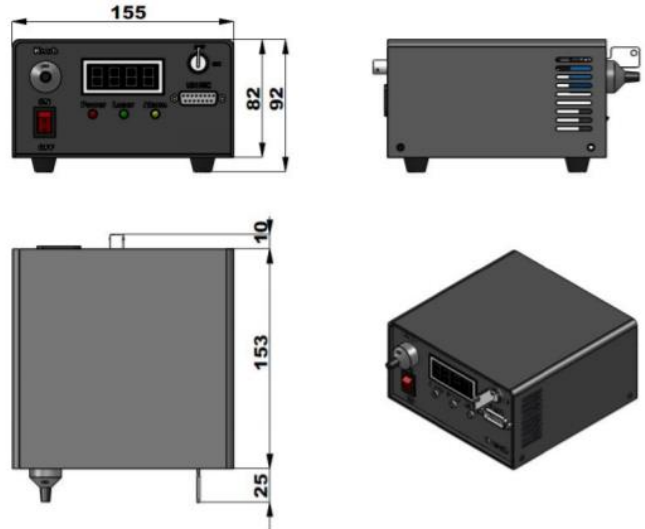


**Power Supply Options**

**Elite Power Supply (Y=E)**



**Laboratory Power Supply (Y=L)**



Note: The above specifications are subject to change without notice.