



DPLH1047 Series 1047nm Low Noise DPSS Laser System up to 1000mW

Overview

The DPLH1047 series diode pumped solid state (DPSS) laser is ideal for applications that require a wavelength of 1047nm and output power levels up to 1000mW. 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, optical instrument, optical sensor, measurement, communication, spectrum analysis, and many other applications.



Specifications

Model Number	DPLH1047-XYZA		
Wavelength (nm)	1047±1		
Output power (mW)	>800 (X=800), >1000 (X=1W)		
Transverse mode	Near TEM ₀₀		
Operating mode	CW		
Power stability (rms, over 4 hours)	<5% (Z=A), <3% (Z=E)		
Noise of amplitude (rms, 20Hz-20MHz)	<1% (A=1)		
M ² factor	<2.0		
Beam diameter at aperture (1/e ² , mm)	~3.0		
Beam divergence, full angle (mrad)	<2.0		
Polarization ratio	>100:1 Horizontal ±5 degree		
Warm-up time (minutes)	<10		
Pointing stability after warm-up (mrad)	<0.05		
Beam height from base plate (mm)	29		
Operating temperature (°C)	10-35		
Dimensions of laser head (mm)	154.5(L)×77(W) ×60(H) mm ³		
Weight of laser head (kg)	0.9 kg		
Power supply options			
High Power Elite Power Supply (Y=H)	Input voltage	90-264VAC	
	Dimensions	275(L) ×145(W) ×104(H) mm ³	
	Weight	2.3 kg	
	Notes	Fixed output power	
High Power Laboratory Power Supply (Y=M)	Input voltage	90-264VAC	
	Dimensions	277(L) ×145(W) ×106(H) mm ³	
	Weight	2.6 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		

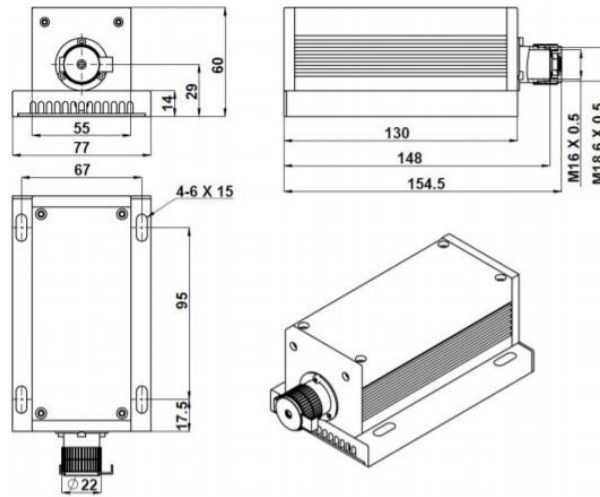
Remarks:

- 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.



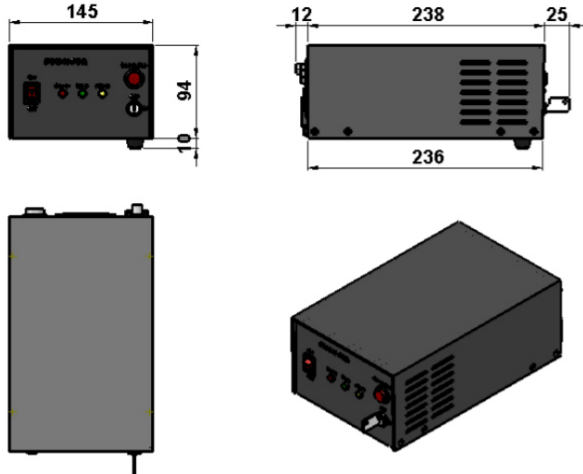
Outline Dimensions (unit: mm)

Laser Head



Power Supply Options

High Power Elite Power Supply (Y=H)



High Power Laboratory Power Supply (Y=M)



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