

DPH1047 Series 1047nm CW DPSS Laser System up to 1000mW

Overview

The DPH1047 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 a 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.

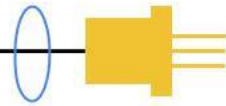


Specifications

Model Number	DPH1047-XYZQ	
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)	
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
Modulation option		None (Q=0)
	TTL	1Hz-1kHz (Q=T1), 1kHz-10kHz (Q=T2), 10kHz-30kHz (Q=T3)
	Analog	1Hz-1kHz (Q=A1), 1kHz-10kHz (Q=A2), 10kHz-30kHz (Q=A3)
Expected lifetime (hours)	10,000	
Warranty period	10 months	
FDA Compliance	FDA CDRH Title 21 CFR 1040.10/11 Class IIIb	

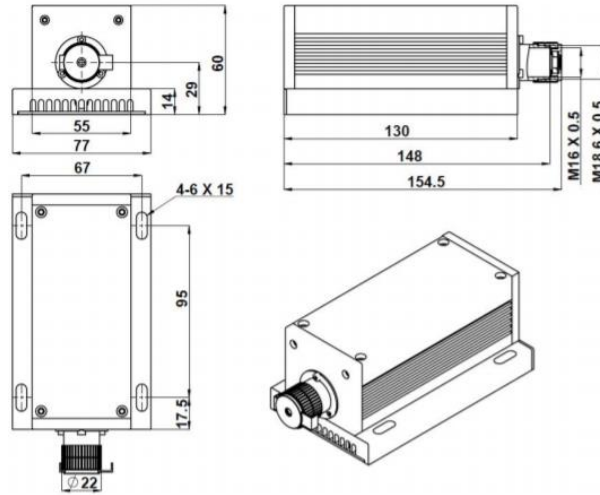
Remarks:

- 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.



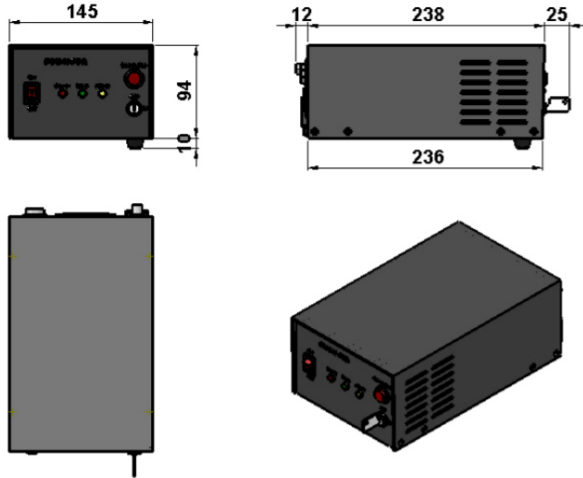
Outline Dimensions (unit: mm)

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.