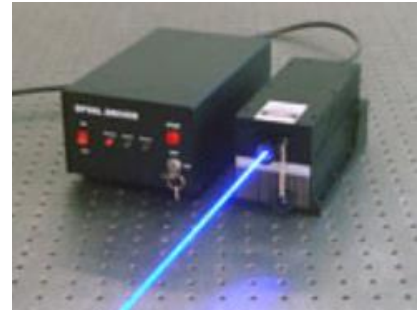




DPLW457 Series 457nm Low Noise DPSS Laser System up to 10W

Overview

The DPLW457 series diode pumped solid state (DPSS) laser is ideal for applications that require a wavelength of 457nm and output power levels up to 10000mW. The laser features a compact design, low noise, long lifetime, easy operation, and FDA-compliant system with driver. The laser is widely used in fluorescence sensors, Raman spectrum, laser printing, holography, chip inspection, physics experiment, and many other applications.



Specifications

Model Number	DPW457-XYZAQ		
Wavelength (nm)	457±1		
Output power (mW)	>3000 (X=3W), >4000 (X=4W), >5000 (X=5W), >8000 (X=8W), >10000 (X=10W)		
Transverse mode	Near TEM ₀₁		
Operating mode	CW		
Power stability (rms, over 4 hours)	<10% (Z=B), <5% (Z=A), <3% (Z=E)		
Noise of amplitude (rms, 1-20MHz)	<3% (A=3)		
M ² factor	3-6		
Beam diameter at aperture (1/e ² , mm)	~4.0		
Beam divergence, full angle (mrad)	<2.0		
Polarization ratio	>100:1		
Warm-up time (minutes)	<10		
Beam height from base plate (mm)	93.5		
Operating temperature (°C)	10-35		
Dimensions of laser head (mm)	344.5(L)x140(W) x124.3(H) mm ³		
Weight of laser head (kg)	5.7 kg		
Power supply options			
High Power W Version Elite Power Supply (Y=W)	Input voltage	90-264VAC	
	Dimensions	307(L) x168(W) x123(H) mm ³	
	Weight	4.5 kg	
	Notes	Fixed output power	
High Power W Version Laboratory Power Supply (Y=N)	Input voltage	90-264VAC	
	Dimensions	336(L) x168(W) x133(H) mm ³	
	Weight	4.6 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 IV		

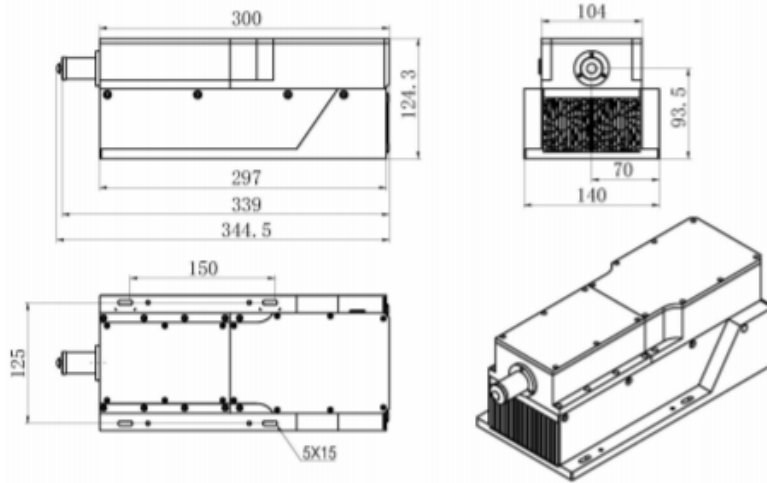
Remarks:

- 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.



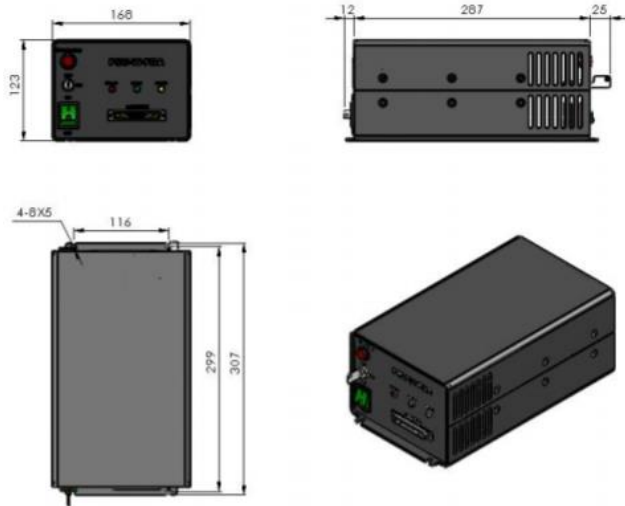
Outline Dimensions (unit: mm)

Laser Head

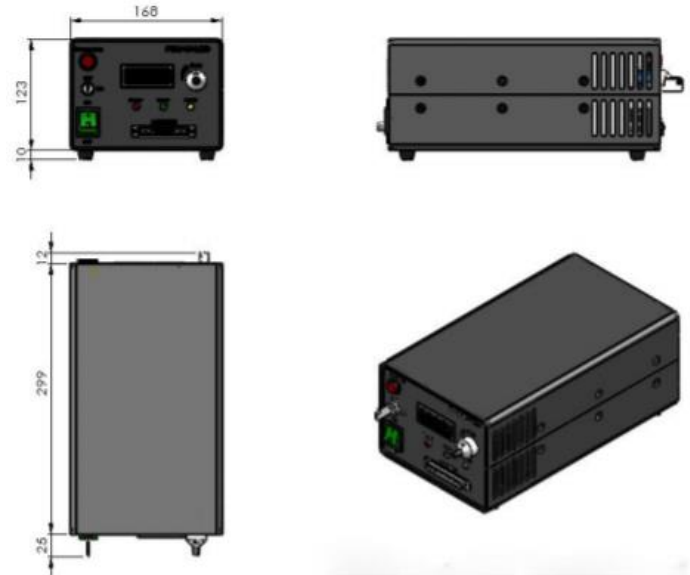


Power Supply Options

High Power W Version Elite Power Supply (Y=W)



High Power W Version Laboratory Power Supply (Y=N)



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