

DPNU589 Series 589nm Narrow Linewidth Low Noise DPSS Laser System up to 200mW

Overview

The DPNU589 series diode pumped solid-state (DPSS) laser is ideal for applications that require a wavelength of 589nm and output power levels up to 200mW. The laser features narrow spectral linewidth, low noise, high stability, ultra-compact design, long operating lifetime, and FDA-compliant system with driver. The laser is widely used in scientific experiment, medical measurement, instrument, spectrum analysis, and many other applications.



Specifications

Model Number	DPNU589-XYZLA		
Wavelength (nm)	589±1		
Output power (mW)	>30 (X=30), >50 (X=50), >100 (X=100)	>150 (X=150), >200 (X=200)	
Transverse mode	TEM ₀₀		
Operating mode	CW		
Power stability (rms, over 4 hours)	<5% (Z=A), <3% (Z=E), <1% (Z=D)	<5% (Z=A), <3% (Z=E)	
Spectral linewidth (nm)	<0.003 (L=J)		
Noise of amplitude (rms, 1Hz-20MHz)	<0.5% (A=L), <1% (A=1)		
M ² factor	<1.2		
Beam diameter at aperture (1/e ² , mm)	0.70±0.05		
Beam divergence, full angle (mrad)	<1.5		
Polarization ratio	>100:1		
Warm-up time (minutes)	<10		
Pointing stability after warm-up (mrad)	<0.05		
Beam height from base plate (mm)	27.4		
Laser head consumption (W)	15 (typical), <25 (40°C)		
Max laser head base plate temperature (°C)	50		
Operating temperature (°C)	10-40		
Dimensions of laser head (mm)	142.5(L)×60(W) ×50(H) mm ³		
Weight of laser head (kg)	1.0 kg		
Power supply			
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	
Expected lifetime (hours)	10,000		
Warranty period	10 months		
FDA Compliance	FDA CDRH Title 21 CFR 1040.10/11 Class IIIb		

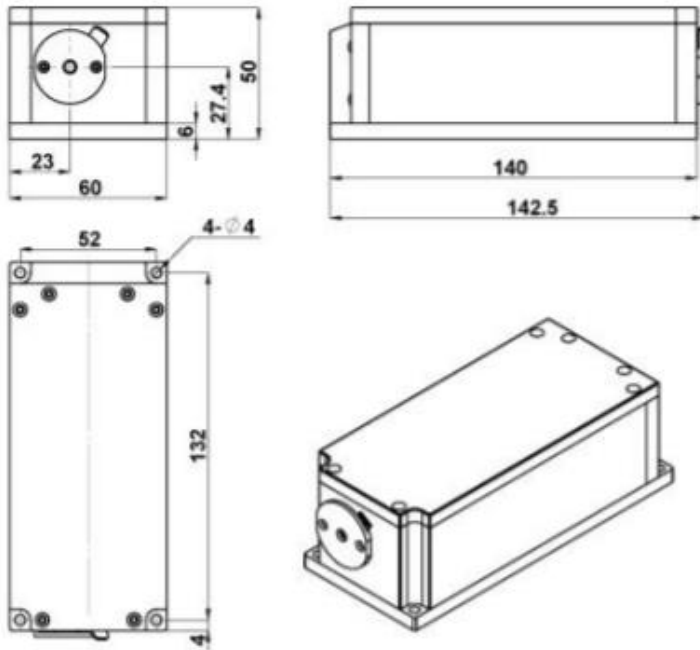
Remarks:

- The laser head needs to be used on a heat sink with good heat dissipation.
- 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.

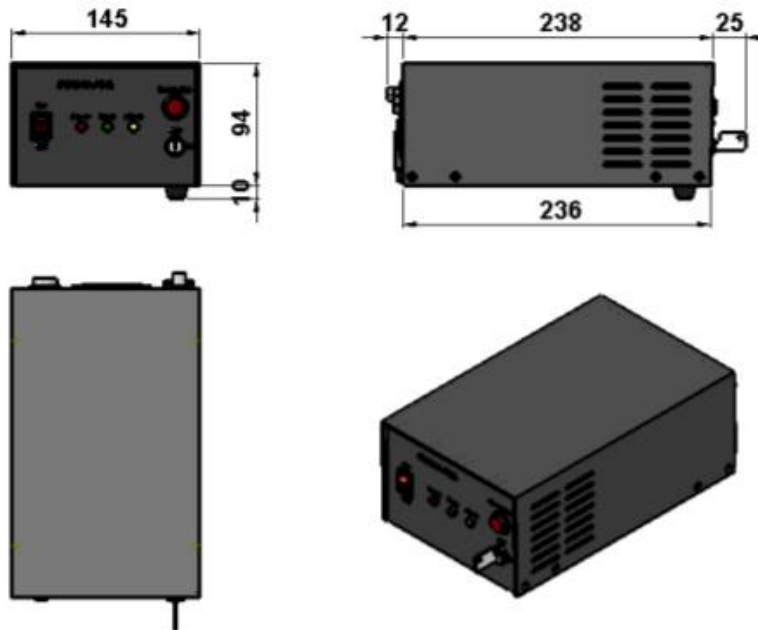


Outline Dimensions (unit: mm)

Laser Head



Power Supply



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