

SLMFN457 Series 457nm Single Longitudinal Mode Laser System up to 300mW

Overview

The SLMFN457 series single longitudinal mode laser is ideal for applications that require a wavelength of 457nm and output power levels up to 300mW. The laser features narrow spectral linewidth, long coherent length, ultra-compact design, long lifetime, easy operating, and FDA-compliant system with driver. The laser is widely used in DNA sequencing, flow cytometry, cell sorting, optical instrument, spectrum analysis, interference, measurement, holography, physics experiment and many other applications.

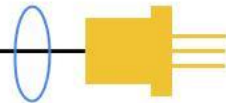


Specifications

Model Number	SLMFN457-XYP		
Wavelength (nm)	457±1		
Operating mode	CW		
Output power (mW)	>30 (X=30), >50 (X=50), >100 (X=100)	>150 (X=150), >200 (X=200), >300 (X=300)	
Power stability (rms, over 4 hours)	<5% (P=A), <3% (P=E), <1% (P=D)	<5% (P=A), <3% (P=E)	
Transverse mode	TEM ₀₀	Near TEM ₀₀	
Longitudinal mode	Single		
Spectral linewidth (nm)	<0.00001		
Coherent length (m)	>50		
Noise of amplitude (rms, 1Hz~20MHz)	<1% (typical <0.5%)		
Beam diameter at aperture (1/e ² , mm)	<2.0		
Beam divergence, full angle (mrad)	<1.2		
M ² factor	<1.2		
Polarization ratio	>100:1, Vertical ±5 degree		
Warm-up time (minutes)	<10		
Pointing stability after warm-up (mrad)	<0.05		
Beam height from base plate (mm)	27.4		
Operating temperature (°C)	15-35		
Dimensions of laser head (mm)	197(L)×70(W) ×50(H) mm ³		
Weight of laser head (kg)	2.0 kg		
Power supply			
High Power Elite Power Supply (Y=H)	Input voltage	90-264VAC	
	Dimensions	236(L) ×145(W) ×104(H) mm ³	
	Weight	2.3 kg	
	Notes	CW mode with complete FDA compliant features, such as the turnkey switch and interlock, and easy to operate	
Expected lifetime (hours)	10,000		
Warranty period	10 months		
FDA Compliance	FDA CDRH Title 21 CFR 1040.10/11 Class IIIb		

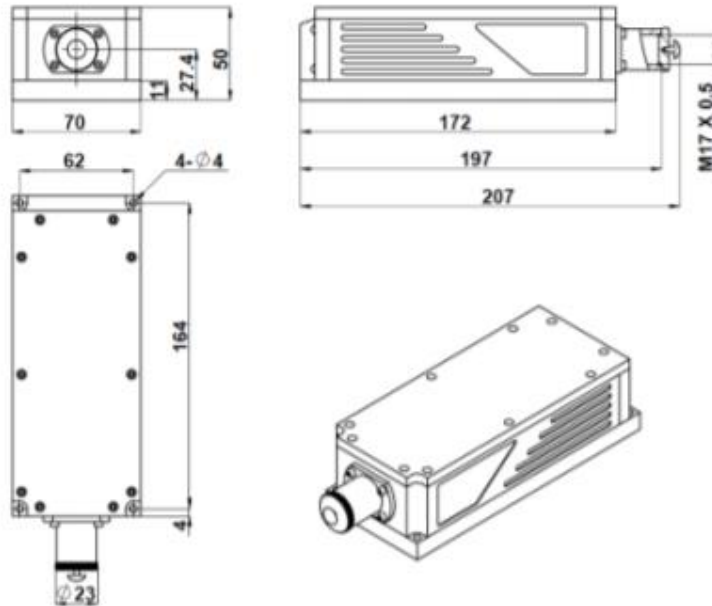
Remarks:

- 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.

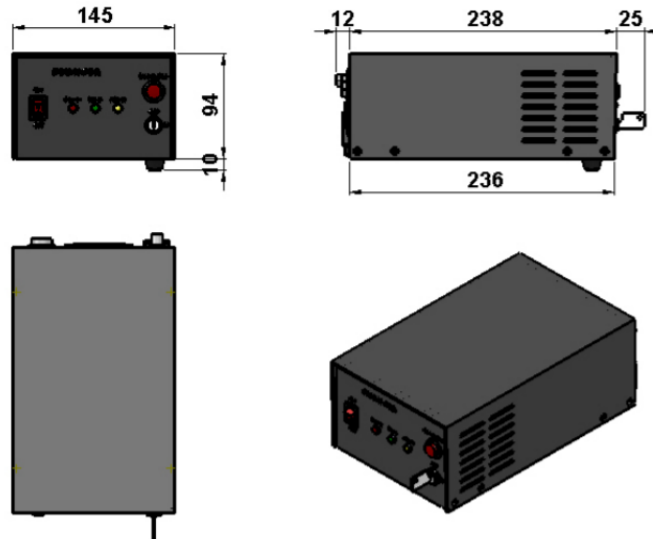


Outline Dimensions (unit: mm)

Laser Head



Power Supply



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