

457 nm Single Longitudinal Mode Blue Laser with Stabilized Frequency

Model #: MSL-FN-457-S

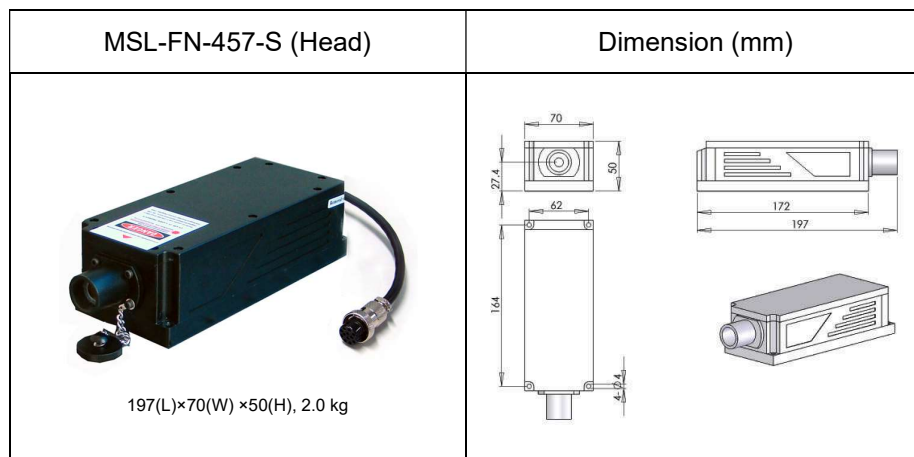
Description: 457 nm Single Longitudinal Mode Blue Laser with stabilized frequency. All solid state single longitudinal mode blue laser at 457 nm features ultra compact, long lifetime and easy operating.


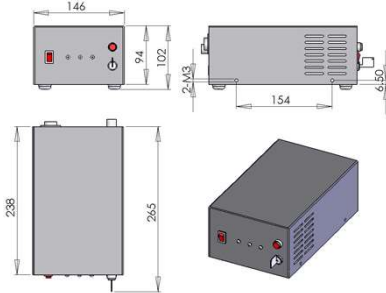
Application: Optical frequency standard, gravitational wave detection, tests of fundamental physics, atomic clocks, high resolution spectrum, laser radar, precision measurement.

Specifications

Wavelength (nm)	457±1	
Output Power (mW)	>1, 10, ... , 150	> 150, 350
Transverse Mode	TEM ₀₀	Near TEM ₀₀
Operating Mode	CW	
Power Stability (rms, over 4 hours)	<1%, 2%, 3%	2%, 3%, <5%
M ² Factor	<1.2	
Longitudinal Mode	Single	
Spectral Linewidth (nm)	<0.00001	
Coherent Length (m)	>50	
Frequency Shift over 8 Hours (MHz)	<±200	
Beam Diameter at the aperture (1/e ² , mm)	<2.0	
Beam Divergence, full angle (mrad)	<1.2	
Polarization Ratio	>100:1, vertical ± 5° (horizontal optional)	
Warm up Time (min.)	<10	
Pointing Stability after Warm Up (mrad)	<0.05	
Beam Height from Base Plate (mm)	27.4	
Operating Temperature (C°)	15~35	
Power Supply (90-264VAC or 5V DC)	PSU-H-FDA	
Expected Lifetime (hours)	10000	
Warranty Period	1 year	

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



PSU-H-FDA (Driver)	Dimension (mm)
 <p data-bbox="428 537 727 562">238 (L) × 146(W) × 102 (H) mm³, 2.3 kg</p>	

Ordering Information: MSL-FN-457-S-A-B

A: maximum output power	B: power stability
30 – 30 mW	1 – 1%
50 – 50 mW	3 – 3%
100 – 100 mW	5 – 5%
200 – 200 mW	
300 – 300 mW	

