Specification Sheet

Ultralasers, Inc

MSL-FN-457/1~350mW



SINGLE LONGITUDINAL MODE BLUE LASER AT 457nm

All 457nm solid state single longitudinal mode lasers feature compact designs, long lifetimes, and user-friendly operation. This model is most widely used in DNA sequencing, flow cytometry, cell sorting, optical instrumentation, spectrum analysis, interference, measurement, holography, physics experiments, etc.



Wavelength (nm)	457±1		
Operating mode	CW	CW	
Output power (mW)	>1, 5, 10, 20, , 150	>150, 160, , 350	
Power stability (rms, over 4 hours)	<1%, <3%	<1%, <3%, <5%	
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%		
M ² factor	<1.2		
Beam diameter at the aperture (1/e ² , mm)	<2.0		
Beam divergence, full angle (mrad)	<1.2		
Polarization ratio	>100:1, Vertical±5 degree (Horizontal Optional)		
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		
Power supply (90-264VAC)	PSU-H-FDA		
Expected lifetime (hours)	10000		
Warranty	1 year		





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

