

MSL-FN-457-S/1~350mW



**FREQUENCY STABILIZED
SLM LASER AT 457nm**

Single longitudinal mode, frequency stabilized laser is made features of stable frequency and low frequency noise, which is used in optical frequency standards, gravitational wave detection, tests of fundamental physics, atomic clocks, high resolution spectrum, Laser Radar, precision measurement, etc.

SPECIFICATIONS

Wavelength (nm)	457±1	
Operating mode	CW	
Output power (mW)	1 - 150	150 - 350
Power stability (rms, over 4 hours)	<1%, <2%, <3%	<2%, <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)	
Frequency shift over 8 hours (MHz)	<±200	
Frequency shift with Temp (MHz/°C)	<200	
Warm-up time (minutes)	<10	
Pointing stability after warm-up (mrad)	<0.05	
Beam height from base plate at TC-01 (mm)	84.7	
Extra heat sink	TC-01	
Operating temperature (°C)	10~35	
Laser head consumption(W)	20 (typical), <30 (40°C) (TC-01/Water cooling Optional)	
Power supply (90-264VAC)	PSU-H-FDA	
Expected lifetime (hours)	10000	
Warranty	1 year	



MSL-FN-457-S	PSU-H-FDA	TC-01 HEAT SINK	TC-01 HEAT SINK POWER SUPPLY
<p>197(L)×70(W)×50(H) mm³, 1.5 kg</p>	<p>275(L)×145(W)×104(H) mm³, 2.3 kg</p>	<p>197(L)×117.5(W)×57.3(H) mm³, 1.6 kg</p>	<p>277(L)×145(W)×106(H) mm³, 2.6 kg</p>