



MSL-U-457-S /1-400mW

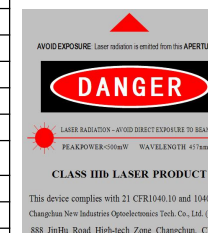
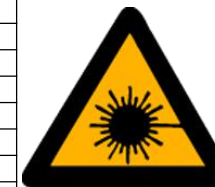
**SINGLE LONGITUDINAL MODE  
BLUE LASER AT 457nm**

All solid state single longitudinal mode blue laser at 457nm is made features of ultra compact, long lifetime, low cost and easy operating, which is used in scientific experiment, medical measurement, instrument, brillouin scattering, spectrum analysis, etc.



**SPECIFICATIONS**

Central wavelength (nm)	457±1
Operating mode	CW
Output power (mW)	>1, 5, 10, ... , 400
Power stability (rms, over 4 hours)	<1%, <2%, <3%
Transverse mode	TEM <sub>00</sub>
Longitudinal mode	Single
Spectral linewidth (nm)	<0.00001
Coherent length (m)	>50
Frequency shift over 24 hours	<±350MHz(±0.25pm)
Frequency shift over water cooling temp.	~0.2pm/0.1℃
Noise of amplitude (rms, 1Hz~20MHz)	<0.5%, <1%
M <sup>2</sup> factor	<1.5
Beam diameter at the aperture (1/e <sup>2</sup> , mm)	0.70±0.05
Beam divergence (mrad)	<1.5
Polarization Ratio	>100:1, Vertical±5 degree
Pointing stability after warm-up ( μ rad/℃)	<6
Warm-up time (minutes)	<20
Beam height from base plate (mm)	47.4
Cooled method	Water Cooled
Laser head consumption(W)	15 (typical) , <25 (40℃)
Operating Temperature (℃)	20-30
Power supply (90-264VAC)	PSU-H-FDA
Expected lifetime (hours)	10000
Warranty	1 year



Note: The laser head must be used on a water cooling system

MSL-U-457-S	Water Cooling Plate	PSU-H-FDA	WCH-150 (Optional)
<p>142.5 (L)×60(W)×50(H) mm<sup>3</sup></p>	<p>142.5 (L)×60(W)×50(H) mm<sup>3</sup></p>	<p>275(L)×145(W)×104(H) mm<sup>3</sup>, 2.3 kg</p>	<p>275(L)×230(W)×330(H) mm<sup>3</sup>, 18 kg</p>