



MSL-DU-639-W/1-350mW



**FREQUENCY STABILIZED SLM  
LASER AT 639nm**

Single longitudinal mode, frequency stabilized laser is made features of stable frequency and internal SLM calibration, 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

Central wavelength (nm)	639±1
Operating mode	CW
Output power (mW)	>1, 5, 10, 20, ... , 350
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)	>40
Frequency shift over 8 hours	≤±100 MHz (±0.15pm)
Noise of amplitude (rms, 1Hz~20MHz)	<0.5%, <1%
M <sup>2</sup> factor	<1.2(<1.1 optional)
Beam diameter at the aperture (1/e <sup>2</sup> , mm)	<1.5
Beam divergence, full angle (mrad)	<1.5
Polarization ratio	>100:1, Horizontal±5 degree (Vertical Optional)
Pointing stability after warm-up ( μ mrad/°C)	<6
Warm-up time (minutes)	<30
Beam height from base plate (mm)	47.4
Cooled method	Water Cooled
Operating temperature (°C)	15~35
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-DU-639-W	PSU-H-FDA
<p>223.5(L)×115(W)×75(H) mm<sup>3</sup>, 2.1kg</p>	<p>275(L)×145(W)×104(H) mm<sup>3</sup>, 2.3 kg</p>