



MLL-S series (561-1100nm)



LD PUMPED ALL-SOLID-STATE LOW NOISE LASER

The all-solid-state laser features an ultra-compact design, a wide operating temperature range, excellent sealing, long lifetime, cost-effectiveness, and easy operation. It can operate at a low pressure of 0.02 kPa and is widely used in DNA sequencing, flow cytometry, cell sorting, optical instrumentation, spectral analysis, interferometry, measurement, holography, laser printing, chip inspection, physics experiments, and more.



SPECIFICATIONS

Model	MLL-S-561	MLL-S-1064		MLL-S-1064-A (Harsh condition)	
Wavelength (nm)	561±1	1064±1			
Operating mode	CW				
Output power (mW) ¹	1-80	1-400	400-1500	1-400	400-1500
Power stability (rms, 4 hours ±3°C)	<2%, <1%, <0.5%		<3%, <2%, <1%		
Spectral line width (nm)	<0.1				
Transverse mode	TEM ₀₀				
Noise of amplitude (rms, 20Hz-20MHz)	<1% , (<0.5% , ≤0.25% optional)		<1% , (<0.5% optional)		
M ²	<1.2				
Beam diameter at the aperture (1/e ² , mm)	<1.0				
Beam divergence (mrad)	<1.5				
Polarization ratio	>100:1, Horizontal (Vertical optional)				
Warm-up time (minutes)	<5				
Pointing stability (μrad) (over 2 hours after warm-up and ±3°C)	<50				
Pointing stability over temperature (μrad/°C)	<8				
Beam height from base plate (mm)	19				
Power consumption (W)	<40				
Shock tolerance (6ms)	7g laterally, 15g vertically				
Max. heat dissipation of head (W)	/	4W@25°C		10W@50°C	
IP rating	/	IP65		IP67	
Operating temperature (°C)	10-35	10-35		0-60	
Power supply (100-240VAC)	PSU-A-F			PSU-H-FDA	
Power supply (VDC)	PSU-A-F-OEM (5V/5A)			PSU-SR-OEM (12V/25A)	
Expected lifetime (hours)	>10000				

LASER HEAD (MLL-S-561) ²	LASER HEAD (MLL-S-1064) ²	LASER HEAD (MLL-S-1064-A) ²	HEATSINK (optional TC-04-FS)
<p style="text-align: center;">120(L) × 40(W) × 40(H) mm³, 0.37kg</p>	<p style="text-align: center;">100 (L) × 40 (W) × 40(H) mm³, 0.36kg</p>	<p style="text-align: center;">245.5(L) × 88(W) × 74(H) mm³, 2.0kg</p>	<p style="text-align: center;">188(L) × 76.2(W) × 43(H) mm³, 0.65kg</p>
POWER SUPPLY (PSU-H-FDA) ³	POWER SUPPLY (PSU-A-F) ³	DRIVER (PSU-SR-OEM) ⁴	DRIVER (PSU-A-F-OEM) ⁴
<p style="text-align: center;">276.6(L) × 145(W) × 103.6(H) mm³, 2.3kg</p>	<p style="text-align: center;">198(L) × 144(W) × 58(H) mm³, 0.5kg</p>	<p style="text-align: center;">150(L) × 111(W) × 41.3(H) mm³, 0.8kg</p>	<p style="text-align: center;">115(L) × 86(W) × 47.1(H) mm³, 0.5kg</p>

1. Any power level can be selected in this range.
2. The laser head needs to be used on a heat sink with good heat dissipation.
3. Fixed output power.