



MSL-S series



SINGLE LONGITUDINAL MODE LASER

All solid state single longitudinal mode laser is made features of ultra compact, long lifetime, low cost and easy operating, which is used in DNA sequencing, flow cytometry, cell sorting, optical instrument, spectrum analysis, interference, measurement, holography, physics experiment, etc.



SPECIFICATIONS

Model	MSL-S-532-A (Harsh condition)	MSL-S-532-B (Normal condition)	MSL-S-532-C (Limiting condition)	MSL-S-532-D	MSL-S-1064-A (Harsh condition)	MSL-S-1064-B (Normal condition)
Wavelength (nm)	532±1			532.1±0.3	1064±1	
Output power (mW)	1-100			1-150	1-500	500-700
Power stability (rms, over 4 hours)	<3%, <2%, <1%			<1%	<3%, <2%, <1%	<3%, <2%
Operating mode	CW					
Transverse mode	TEM <sub>00</sub>					
Longitudinal mode	Single					
Spectral line width	<1MHz					
Noise of amplitude (rms, 20Hz~20MHz)	<0.5%		<0.25%	<0.2%		<0.5%
Coherent length (m)	>50					
M <sup>2</sup> factor	<1.2			<1.1	<1.2	
Beam diameter at the aperture (1/e <sup>2</sup> , mm)	<1.0			<0.8	1.00±0.05	
Beam divergence, full angle (mrad)	<1.5				<1.7	
Polarization Ratio	>100:1 Horizontal (Vertical Optional)				/	
Warm-up time (minutes)	<5		<3		<5	
Pointing stability Over Temp. (μrad/°C)	<8		/	<6		<8
Pointing stability after warm-up (mrad)	<0.05					
Frequency shift over 8 hours (MHz) (Optional)	<±200		/			<±200
Frequency shift with Temp (MHz/°C) (Optional)	<200		/			<200
Beam height from base plate (mm)	19		29		19	
Power Consumption(W)	<30			<6	<40	
Fiber	/	Multimode/ Single Mode			/	Multimode/ Single Mode
Shock Tolerance(6ms)	7g laterally, 15g vertically					
IP Rating	IP67	IP65		/	IP67	IP65
Max. Heat Dissipation of Head(W)	10W@50°C	4W@25°C		/	10W@50°C	4W@25°C
Operating Temperature (°C)	0-60	10-35	-40~60	10-35 5-50@Storage temperature (°C)	0-60	10-35
Power supply (90-264VAC)	PSU-H-FDA	PSU-A-F	PSU-S-OEM-C	12V DC (Photoelectric integrated)	PSU-H-FDA	PSU-A-F
Modulation	Modulation isn't available.					
Expected lifetime (hours)	10000					
Warranty	1 year					

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

LASER HEAD (Harsh condition)	LASER HEAD (Normal condition)	LASER HEAD (Limiting condition)
<p><b>110(L)×50(W) ×38(H) mm<sup>3</sup>, 0.6 kg</b></p>	<p><b>100 (L) ×40 (W) ×40(H) mm<sup>3</sup>, 0.36kg</b></p>	<p><b>110 (L) ×52 (W) ×52(H) mm<sup>3</sup>, 0.82kg</b></p>
<p><b>LASER HEAD (MSL-S-532-D)</b></p> <p><b>102.5(L)×40(W) ×40(H) mm<sup>3</sup>, 0.26 kg</b></p>		

POWER SUPPLY (PSU-H-FDA)	POWER SUPPLY (PSU-A-F)	POWER SUPPLY (PSU-S-OEM-C)
<p style="text-align: center; margin-top: 20px;"><b>276.6(L) × 145(W) × 103.6(H) mm<sup>3</sup>, 2.3 kg</b></p>	<p style="text-align: center; margin-top: 20px;"><b>162(L) × 144(W) × 55(H) mm<sup>3</sup>, 0.5kg</b></p>	<p style="text-align: center; margin-top: 20px;"><b>188(L) × 76.2(W) × 62.3 (H) mm<sup>3</sup>, 0.76kg</b></p>