

MSL-FN 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

Wavelength (nm)	320±1	335±1	349±1	355±1	360±1	457±1	473±1	515±1	522±1	523.5±1	526.5±1
Output power (mW)	1-30	1-10	1-10	1-10	1-80	1-350	1-300	1-50	1-150		
Power stability (rms, over 4 hours)	<2%			<10%, <5%	<3%, <2%, <1%	<5%, <3%, <2%		<3%, <2%, <1%			
Transverse mode	TEM ₀₀										
Longitudinal mode	Single										
Operating mode	CW										
Spectral line width (nm)	<0.00001										
Coherent length (m)	>50										
Noise of amplitude (rms, 20Hz~20MHz)	<1%, <0.5%										
M ² factor	<1.5					<1.2		<1.2	<1.5	<1.2	
Beam diameter at the aperture (1/e ² , mm)	<1.2					<2.0		~2.0	~2.0	<1.5	
Beam divergence, full angle (mrad)	<1.5				<1.0		<1.2				
Polarization Ratio	>50:1, Horizontal (Vertical Optional)			>50:1, Vertical (Horizontal Optional)	>50:1, Horizontal (Vertical Optional)	>100:1, Vertical (Horizontal Optional)					
Warm-up time (minutes)	<10					<5		<10		<5	
Pointing stability after warm-up (mrad)	<0.05										
Frequency shift over 8 hours (MHz) (Optional)	<±200										
Frequency shift with Temp (MHz/°C) (Optional)	<200										
Beam height from base plate (mm)	27.4										
Laser head consumption(W)	15 (typical) , <25 (40℃)										
Max. Laser Head Base plate Temp (°C)	50										
Operating Temperature (°C)	10-35										
Power supply (90-264VAC)	PSU-H-FDA										
Expected lifetime (hours)	/					10000					
Warranty	1 year										

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



SPECIFICATIONS

Wavelength (nm)	543±1	550±1	552±1	556±1	561±1	577±2	588±2	589±1	607±1	639±1	
Output power (mW)	1-100	1-200	1-100	1-150	1-150	1-300	1-200	1-200	1-200	1-650	
Power stability (rms, over 4 hours)	<3%, <2%, <1%	<2%,<1%	<3%, <2%	<3%, <2%, <1%		<3%, <2%			<3%, <2%, <1%		
Transverse mode	TEM ₀₀										
Longitudinal mode	Single										
Operating mode	CW										
Spectral line width (nm)	<0.00001										
Coherent length (m)	>50										
Noise of amplitude (rms, 20Hz~20MHz)	<1%, <0.5%										
M ² factor	<1.2		<1.2, <1.1		<1.2					<1.2, <1.1	
Beam diameter at the aperture (1/e ² , mm)	<1.5			<2.0		<~2.0	<2.5		<1.5		
Beam divergence, full angle (mrad)	<1.2					<1.5	<1.2			<1.5	
Polarization Ratio	>100:1, Vertical (Horizontal Optional)					>100:1, Horizontal (Vertical Optional)					
Warm-up time (minutes)	<5								<10		
Pointing stability after warm-up (mrad)	<0.05										
Frequency shift over 8 hours (MHz) (Optional)	<±200										
Frequency shift with Temp (MHz/°C) (Optional)	<200										
Beam height from base plate (mm)	27.4										
Laser head consumption(W)	15 (typical) , <25 (40℃)										
Max. Laser Head Base plate Temp (°C)	50										
Operating Temperature (°C)	10-35										
Power supply (90-264VAC)	PSU-H-FDA										
Expected lifetime (hours)	10000										
Warranty	1 year										

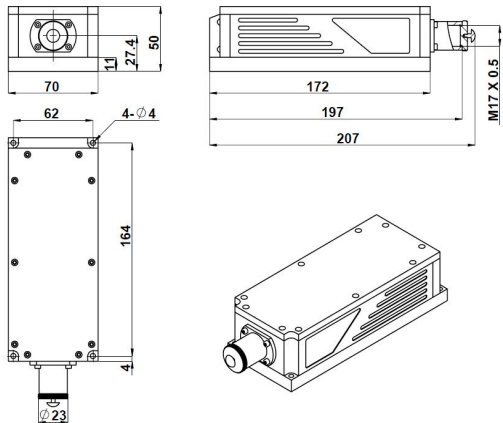
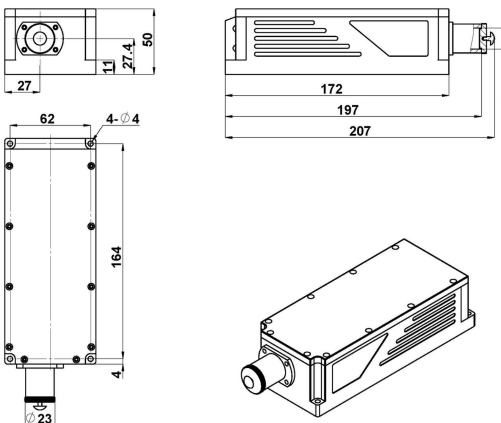
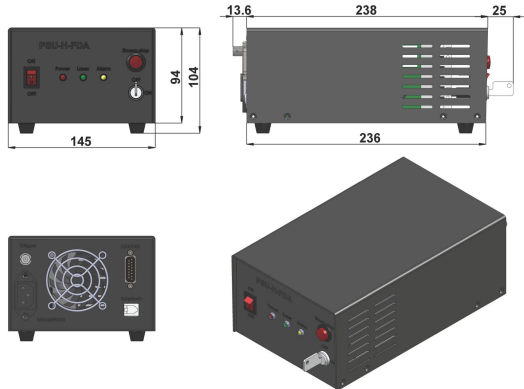
Note: The laser head needs to be used on a heat sink with good heat dissipation.



SPECIFICATIONS

Wavelength (nm)	656.5±1	660±1	671±1	698±1	721±1
Output power (mW)	1-100	1-100	1-500	1-300	1-300
Power stability (rms, over 4 hours)	<5%, <3%, <1%	<5%, <3%	<3%, <2%	<3%, <2%, <1%	<5%, <3%, <2%
Transverse mode	TEM ₀₀				
Longitudinal mode	Single				
Operating mode	CW				
Spectral line width (nm)	<0.00001				
Coherent length (m)	>50				
Noise of amplitude (rms, 20Hz~20MHz)	<1%, <0.5%				
M ² factor	<1.2			<1.2, <1.1	<1.2
Beam diameter at the aperture (1/e ² , mm)	<2.0		<2.0, <1.5	<1.5	
Beam divergence, full angle (mrad)	<1.2			<1.5	<1.2
Polarization Ratio	>100:1, Vertical (Horizontal Optional)				
Warm-up time (minutes)	<5			<10	
Pointing stability after warm-up (mrad)	<0.05				
Frequency shift over 8 hours (MHz) (Optional)	<±200				
Frequency shift with Temp (MHz/°C) (Optional)	<200				
Beam height from base plate (mm)	27.4				
Laser head consumption(W)	15 (typical) , <25 (40°C)				
Max. Laser Head Base plate Temp (°C)	50				
Operating Temperature (°C)	10-35				
Power supply (90-264VAC)	PSU-H-FDA				
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	LASER HEAD (MSL-FN-320/ 335/ 349/ 360)	POWER SUPPLY
 197(L)×70(W)×50(H) mm³, 1.5 kg	 197(L)×70(W)×50(H) mm³, 1.5 kg	 276.6(L) ×145(W) ×103.6(H) mm³, 2.3 kg