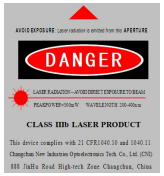
MSL-FN series

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	522±1	523.5±1	526.5±1
Output power (mW)	1-30	1-10	1-20	1-10	1-100	1-350	1-300	1-100	1-100	1-100
Power stability (rms, over 4 hours)	<2%	<2%	<2%	<10%, <5%	<3%, <2%, <1%	<5%, <3%, <2%	<5%, <3%, <2%	<3%, <2%, <1%	<3%, <2%, <1%	<3%, <2%, <1%
Transverse mode	TEM_{00}			Near TEM_{00}	TEM_{00}	Near TEM_{00}	TEM_{00}			
Longitudinal mode	Single									
Operating mode	CW									
Spectral line width (nm)	<0.00001									
Coherent length (m)	>50									
Noise of amplitude (rms, 1Hz~20MHz)	<1%, <0.5%									
M^2 factor	<1.5					<1.2		<1.5	<1.2	
Beam diameter at the aperture ($1/e^2$, mm)	<1.2					<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

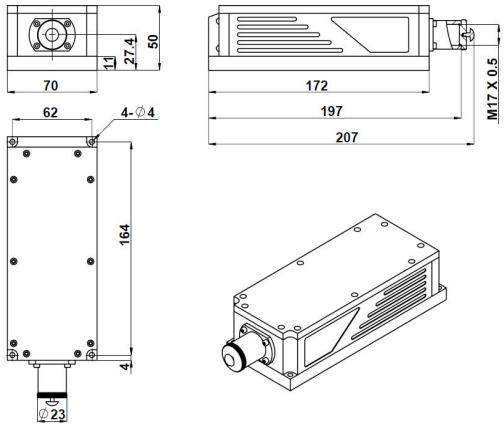
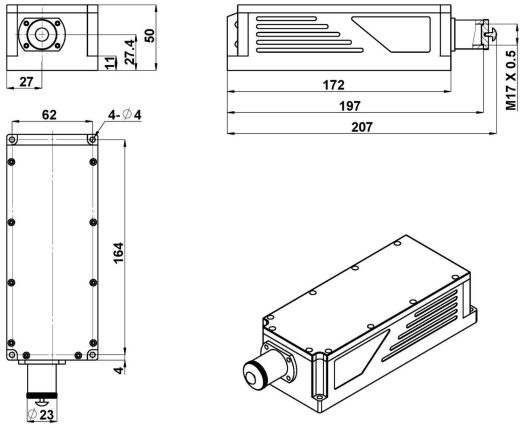
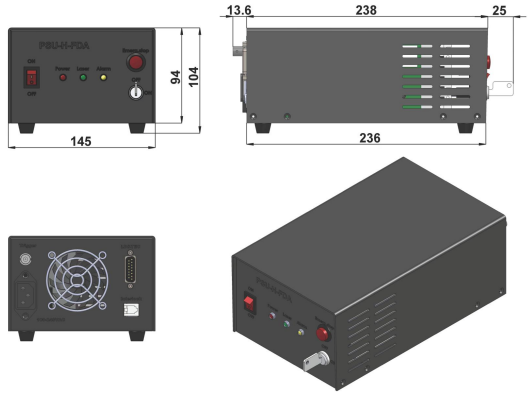
Wavelength (nm)	543±1	552±1	556±1	561±1	588±2	589±1	607±1	639±1
Output power (mW)	1-100	1-100	1-100	1-150	1-200	1-200	1-200	1-650
Power stability (rms, over 4 hours)	<3%, <2%, <1%	<3%, <2%	<3%, <2%, <1%	<3%, <2%, <1%	<3%, <2%	<3%, <2%	<3%, <2%, <1%	<3%, <2%, <1%
Transverse mode	TEM_{00}	Near TEM_{00}	TEM_{00}					
Longitudinal mode	Single							
Operating mode	CW							
Spectral line width (nm)	<0.00001							
Coherent length (m)	>50							
Noise of amplitude (rms, 1Hz~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		<2.5		<1.5	
Beam divergence, full angle (mrad)	<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)	1-50	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, 1Hz~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**