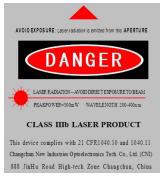
MSL-S-D series (400-1100nm)

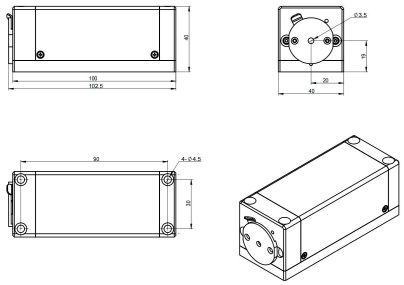
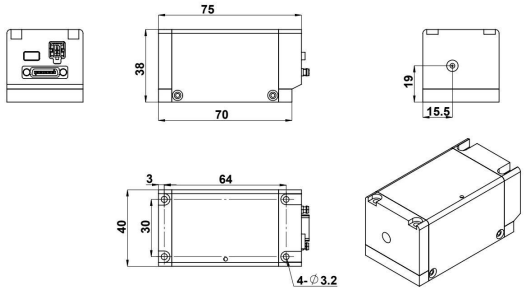
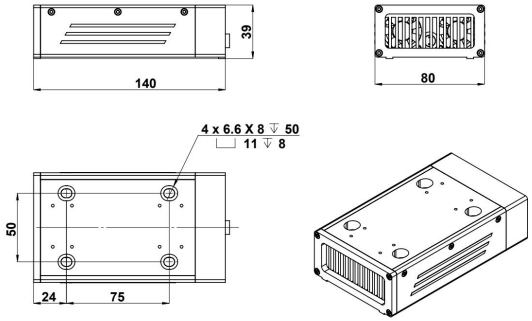
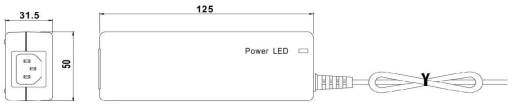
SINGLE LONGITUDINAL MODE LASER

All-solid-state, single-longitudinal-mode laser features an ultra-compact design, long lifetime, and easy operation, It is used in DNA sequencing, flow cytometry, cell sorting, optical instructments, spectrum analysis, interference, measurement, holography, and physics experiments, etc.



SPECIFICATIONS

Model	MSL-S-473-D	MSL-S-532-D	MSL-S-561-D	MSL-S-671-D	MSL-S-1064-D
Wavelength (nm)	473.0±0.3	532.1±0.3	561.2±0.3	671.0±0.3	1064.2±0.5
Output power (mW)[1]	1-30	1-150	1-100	1-50	1-300
Power stability (rms, 4 hours ±3°C)	<1%	<1%,(＜0.5%optional@1-50)	<1%		
Operating mode	CW				
Transverse mode	TEM_{00}				
Longitudinal mode	Single				
Spectral line width	<1MHz				
Noise of amplitude (rms, 20Hz-20MHz)	<0.2%		<0.25%	<0.2%	
Noise of amplitude (peak to peak, 20Hz-20MHz)	<1%		<1.5%	<1%	
Coherent length (m)	>50				
M^2	<1.2	<1.1	<1.2		
Beam Asymmetry	≤1:1.1				
Beam diameter at the aperture ($1/e^2$, mm)	<1.0				1.00±0.05
Beam divergence, full angle (mrad)	<1.5				<1.7
Polarization ratio	>100:1 Horizontal (Vertical Optional)		>100:1 Vertical (Horizontal Optional)	>100:1 Horizontal (Vertical Optional)	
Warm-up time (minutes)	<5				
Pointing Stability (μrad) (over 2 hours after warm-up and ±3°C)	<30				
Pointing stability over temperature (μrad/°C)	<5				
Frequency shift over 8 hours (MHz) (optional)	<±200				
Frequency shift with temp (MHz/°C) (optional)	<200				
Beam height from base plate (mm)	19				
Power consumption (W)	<12				
Fiber	Multi mode/ Single Mode		/	Multi mode/ Single Mode	
Shock tolerance (6ms)	7g laterally,15g vertically				
Operating temperature (°C)	10-35 -10-50@Storage temperature (°C)				
Operating voltage (VAC)	12VDC (Photoelectric integrated)				
Expected lifetime (hours)	>10000				

LASER HEAD (MSL-S-473/532/671/1064-D)[2]	LASER HEAD (MSL-S-561-D)[3]
 102.5(L)×40(W) ×40(H) mm³, 0.26 kg	 75(L)×40(W)×38(H) mm³, 0.18 kg
HEATSINK (optional TC-05-FS)	POWER SUPPLY(100-240VAC) optional
 140(L)×80(W)×39(H) mm³, 0.7 kg	 125(L) × 50(W) ×31.5(H) mm³, 0.5kg

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;RS232 control optional.