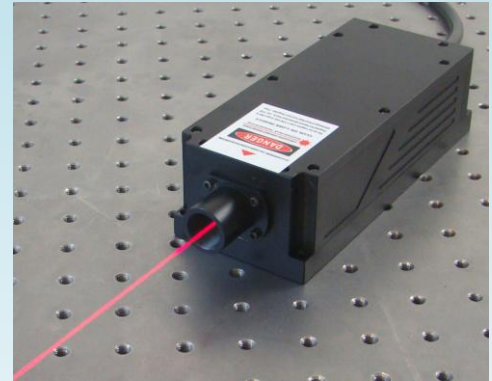


Single Frequency Laser/Single Longitudinal Mode Laser

MSL series lasers with the characteristics of ultra compact, long lifetime, low cost and easy operating, which are used in DNA sequencing, flow cytometry, cell sorting, optical instrument, spectrum analysis, interference, measurement, holography, physics experiment, laser printing, chip inspection, physics experiment, optical frequency standards, gravitational wave detection, tests of fundamental physics, atomic clocks, high resolution spectrum, Laser Radar, precision measurement and other applications.



◆ Bule laser

System Specification			
Wavelength (nm)	457		473
Model	FN	W	FN
Output power (mW)	1-400	500-2000	1-100
Transverse mode	TEM00	Near TEM00	TEM00
Power stability (rms, over 4 hours)	<1%, <3%, <5%		<1%, <3%, <5%
Spectral linewidth (nm)	<0.00001		<0.00001
Coherent length (m)	>50		>50
Noise of amplitude (rms, 1Hz~20MHz)	<1%, <0.5%		<1%, <0.5%
M 2 factor	<1.2		<1.2
Beam diameter at the aperture (1/e ² , mm)	<2.0		<2.5
Beam divergence, full angle (mrad)	<1.2		<1.2
Polarization ratio	>100:1		>100:1
Pointing stability after warm-up (mrad)	<0.05		<0.05
Beam height from base plate (mm)	27.4		27.4
Operating temperature (°C)	15-35		15-35
Power supply (90-264VAC)	H-FDA		H-FDA

CNI LASER: Complete solution for laser Technology!



Founded in 1996, CNI (CHANGCHUN NEW INDUSTRIES), is the leading supplier of lasers, spectrometers, power meters and optical systems in China. CNI products are ISO-9001, CE, RoHS and JQA certified. CNI offers a diverse of products for a broad range of commercial and scientific applications.



◆ Green Laser

System Specification					
Wavelength (nm)	532				
Model	III	S	FN	F	R
Output power (mW)	1-50	1-50	50-400	500-1000	1000-5000
Transverse mode	TEM00				
Power stability (rms, over 4 hours)	<1%,<3%,<5%				
Spectral linewidth (nm)	<0.00001				
Coherent length (m)	>50				
Polarization ratio	>100:1				
Pointing stability after warm-up (mrad)	<0.05				
Noise of amplitude (rms, 1Hz~20MHz)	<0.5%	<0.5%	<0.5%	<1%	<1%
M 2 factor	<1.2	<1.2	<1.2	<1.5	1.2
Beam diameter at the aperture (1/e ² , mm)	<1.5	0.7±0.05	<1.5	<2.5	<1.5
Beam divergence, full angle (mrad)	<1.2	<1.5	<1.2	<1.2	1.5
Beam height from base plate (mm)	24.8	19	27.4	45	58
Operating temperature (°C)	15-35	0-60	15-35	15-35	20-30
Power supply (90-264VAC)	III-FDA	H-FDA	H-FDA	H-FDA	W-FDA
Water Chiller	-	-	-	-	YES

◆ Yellow Laser

System Specification	
Wavelength (nm)	589 nm
Model	F
Output power (mW)	1-200
Transverse mode	Near TEM00
Power stability (rms, over 4 hours)	<3%,<5%,<10%,
Spectral linewidth (nm)	<0.00001
Coherent length (m)	>50
Polarization ratio	>100:1
Pointing stability after warm-up (mrad)	<0.05
Noise of amplitude (rms, 1Hz~20MHz)	<0.5%,<1%
M 2 factor	<1.2
Beam diameter at the aperture (1/e ² , mm)	<2.5
Beam divergence, full angle (mrad)	<1.2
Beam height from base plate (mm)	45
Operating temperature (°C)	15-35
Power supply (90-264VAC)	H-FDA



◆ Red Laser

System Specification				
Wavelength (nm)	639	671		
Model	FN	FN	R	W
Output power (mW)	1-400	1-500	500-800	800-2500
Transverse mode	TEM00	TEM00		
Spectral linewidth (nm)	<0.0003	<0.00001		
Coherent length (m)	>10	>50		
Polarization ratio	>100:1	>100:1		
Pointing stability after warm-up (mrad)	<0.05	<0.05		
M 2 factor	<1.2	<1.2		
Power stability (rms, over 4 hours)	<1%,<3%,<5%	<1%,<3%,<5%	<3%,<5%	
Noise of amplitude (rms, 1Hz~20MHz)	<0.5%,<1%	<0.5%,<1%	<1%	
Beam diameter at the aperture (1/e2 , mm)	<1.5	<2.0	<1.5	<2.0
Beam divergence, full angle (mrad)	<1.5	<1.2	<1.5	1.2
Beam height from base plate (mm)	27.4	27.4	58	56
Operating temperature (°C)	15-35	15-35	15-35	20-30
Power supply (90-264VAC)	H-FDA	H-FDA	W-FDA	W-FDA
Chiller	-	-	-	YES

◆ IR Laser

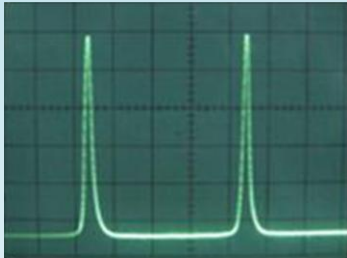
System Specification				
Wavelength (nm)	1313	1064		
Model	FN	S	III	R
Output power (mW)	1-500	1-200	250-1000	1000-10000
Transverse mode	TEM00	TEM00		
Spectral linewidth (nm)	<0.00001	<0.00001		
Coherent length (m)	>50	>50		
Pointing stability after warm-up (mrad)	<0.05	<0.05		
Power stability (rms, over 4 hours)	<3%,<5%	<1%,<3%,<5%		
Noise of amplitude (rms, 1Hz~20MHz)	<0.5%,<1%	<0.5%,<1%		
M 2 factor	<2.0	<1.5		1.2
Beam diameter at the aperture (1/e2 , mm)	<2.0	1.00±0.05	<2.0	1.5
Beam divergence, full angle (mrad)	<1.5	<1.7	<1.5	<1.5
Beam height from base plate (mm)	27.4	19	24.8	56
Operating temperature (°C)	15-35	0-60	15-35	20-30
Power supply (90-264VAC)	H-FDA	H-FDA	III-FDA	W-FDA
Chiller	-	-	-	YES



中科院长春光机所 长春新产业光电技术有限公司

Changchun New Industries Optoelectronics Tech. Co., Ltd

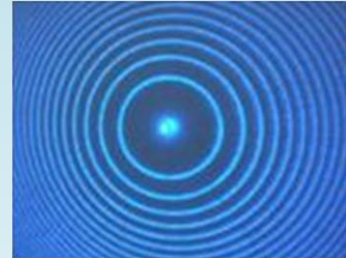
◆ Features of MSL series laser



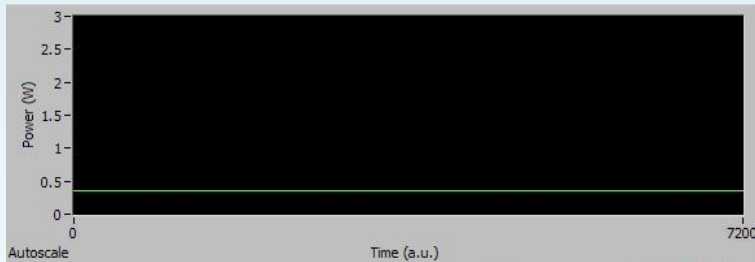
Longitudinal mode testing



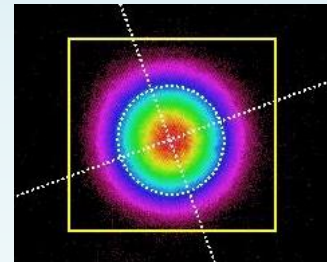
Coherent fringes



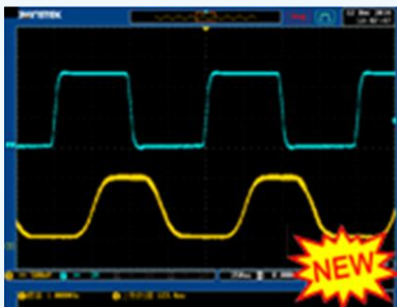
F-P etalon interference ring



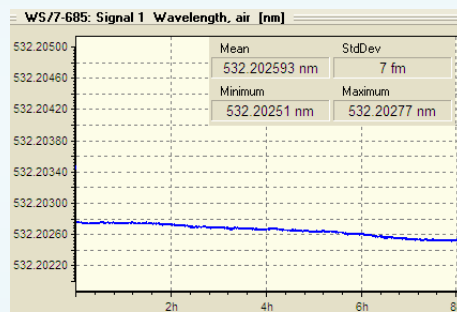
Long term output power stability



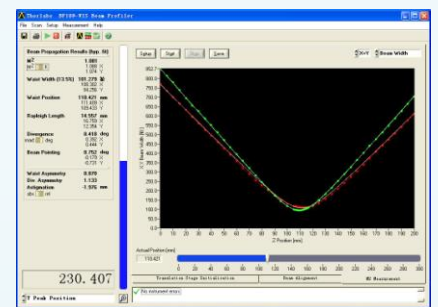
Beam profile(TEM₀₀)



Modulation rate: Max>1MHz



Frequency shift with Temperature: <200MHz/°C



M² measurement <1.2

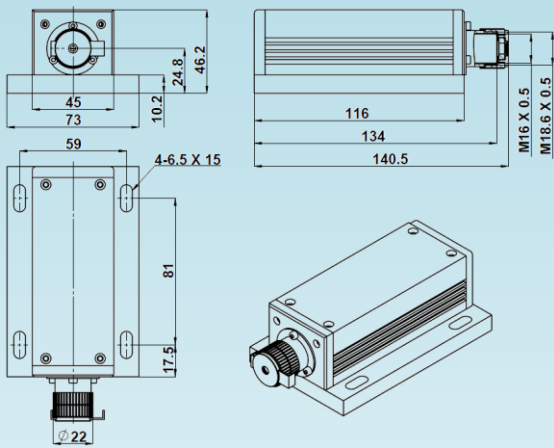
◆ Customized solutions:

- Fiber coupling
- External AOM
- Isolator
- Mechanical shutter
- Line generator
- Frequency Stabilized SLM

Other customized design is also available on request

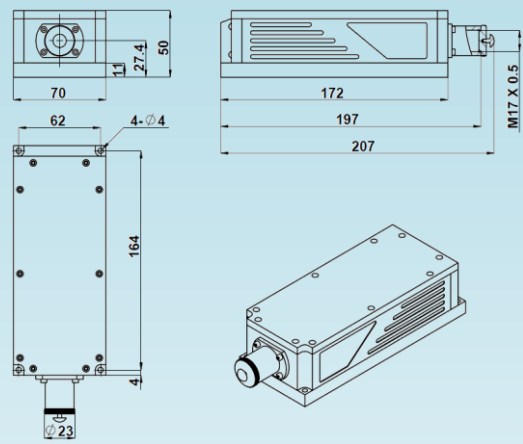


◆ Dimensions of laser head :



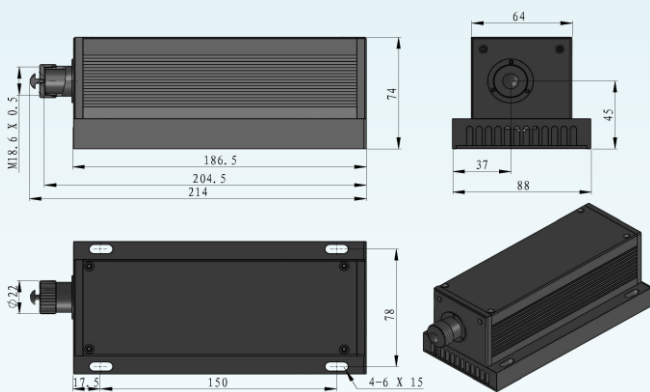
140.5 (L) x 73 (W) x 46.2 (H) mm³ , 0.6kg

III Model



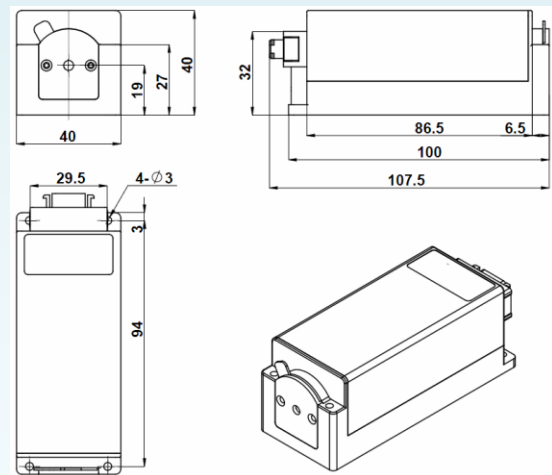
197(L)x70(W)x50(H) mm³ , 2.0 kg

FN Model



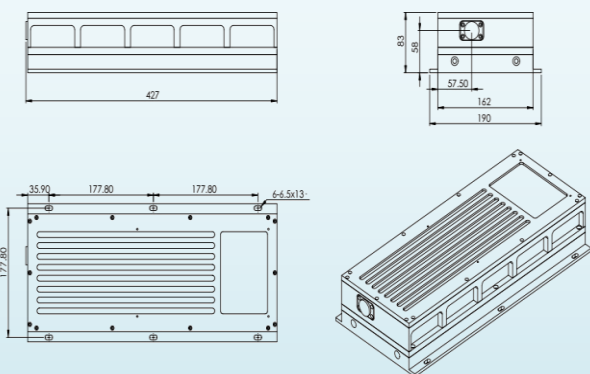
214(L)x88(W) x74(H) mm³, 1.6 kg

F Model



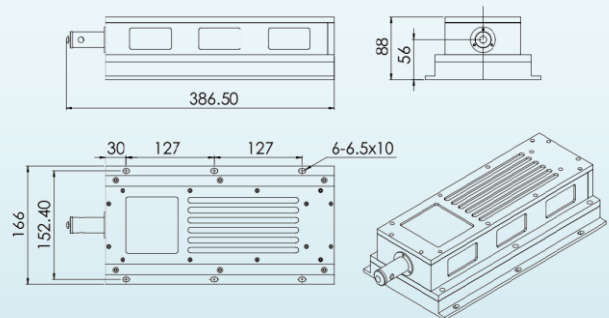
100 (L) x 40 (W) x 40(H) mm³, 0.36kg

S Model



427(L) x 190(W) x 83(H) mm³, 11kg

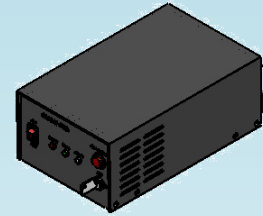
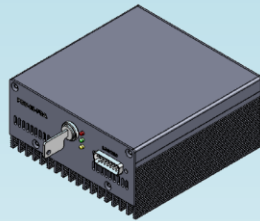
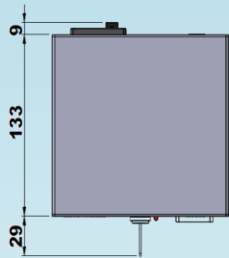
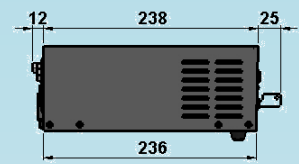
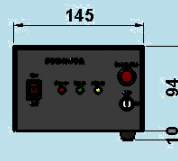
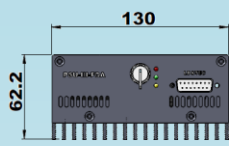
R Model



386(L) x 166(W) x 88(H) mm³, 5.7kg

W Model

◆ Dimensions of power supply and chiller:

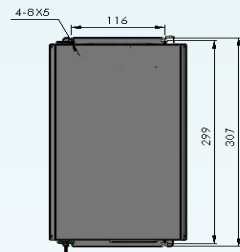
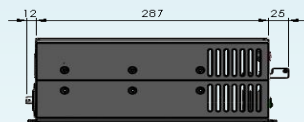


133 (L) × 130(W) × 62.2 (H) mm³, 1.2kg

236(L) × 145(W) × 104(H) mm³, 2.3 kg

PSU-III-FDA

PSU-H-FDA



307(L) × 168(W) × 123(H) mm³, 4.5 kg

280(L) × 230(W) × 380(H) mm³, 18 kg

PSU-W-FDA

Chiller

Complete Solution for Laser Technology!

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