长春新产业光电技术有限公司
Changchun New Industries Optoelectronics Tech. Co.,Ltd.
DATA SHEET

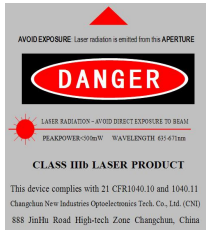
MSL-FN-639-S/1-300mW

FREQUENCY STABILIZED SLM LASER

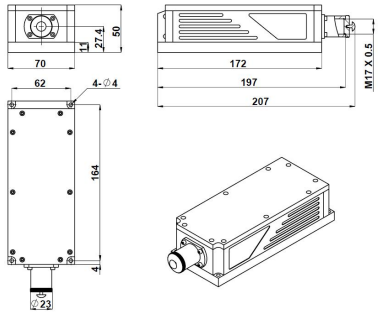
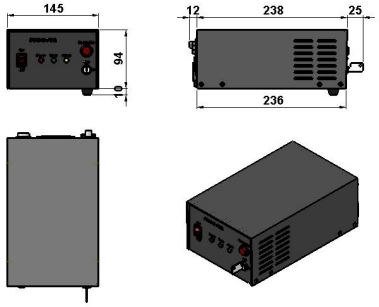
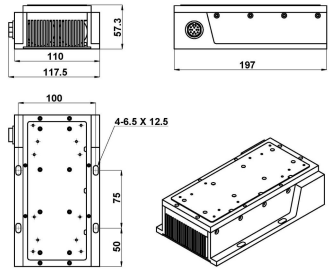
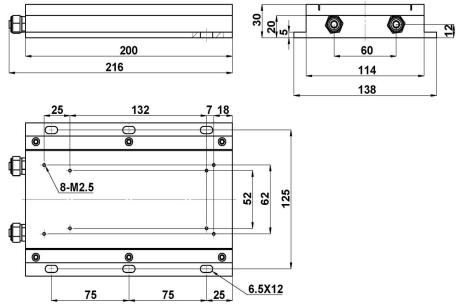
Single longitudinal mode, frequency stabilized laser is made features of stable frequency and internal SLM calibration, which is used in optical frequency standards, gravitational wave detection, tests of fundamental physics, atomic clocks, high resolution spectrum, Laser Radar, brillouin scattering, precision measurement, etc.

SPECIFICATIONS

Central wavelength (nm)	639±1
Operating mode	CW
Output power (mW)	>1, 5, 10, 20, … , 300
Power stability (rms, over 4 hours)	<1%, <2%, <3%
Transverse mode	TEM_{00}
Longitudinal mode	Single
Spectral linewidth (nm)	<0.00001
Coherent length (m)	>40
Frequency shift over 8 hours	<±100 MHz (±0.15pm)
Frequency shift over Temp 15～40℃	<40 MHz/℃ (0.05pm/℃)
Noise of amplitude (rms, 1Hz~20MHz)	<1%, typical<0.5%
M^2 factor	<1.2(<1.1 optional)
Beam diameter at the aperture ($1/e^2$, mm)	<1.5
Beam divergence, full angle (mrad)	<1.5
Polarization ratio	>100:1, Horizontal±5 degree (Vertical Optional)
Warm-up time (minutes)	<45
Pointing stability after warm-up (μ mrad/℃)	6
Laser head consumption(W)	20 (typical) , <30 (40℃) (TC-01/Water cooling Optional)
Beam height from base plate (mm)	27.4
Operating temperature (℃)	15~35
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.

MSL-FN-639	PSU-H-FDA	TC-01(Without driver)	Water cooling Optional
			
197(L)×70(W)×50(H) mm³, 1.5 kg	275(L) ×145(W) ×104(H) mm³, 2.3 kg	197(L)×117.5(W) ×57.3(H) mm³, 1.6 kg	216(L)×138(W) ×30(H) mm³, 1.2kg

Website: http://www.cnilaser.com E-mail: sales@cnilaser.com Tel: +86-431-85603799 Fax: +86-431-87020258