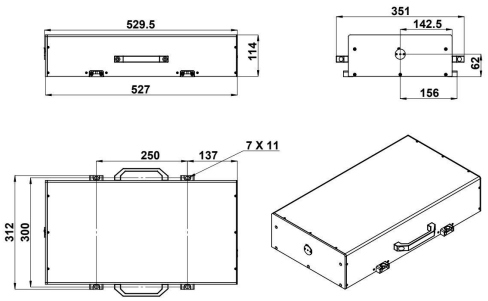
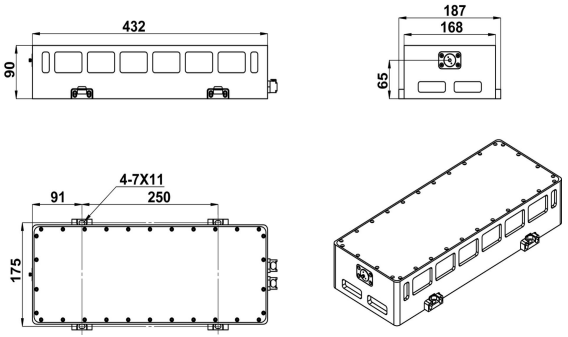
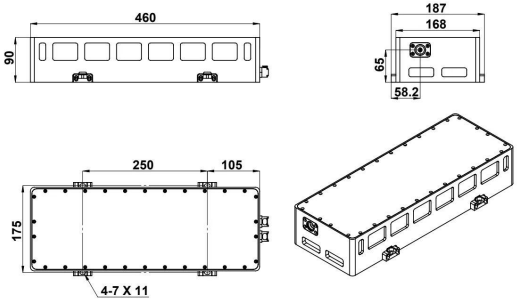
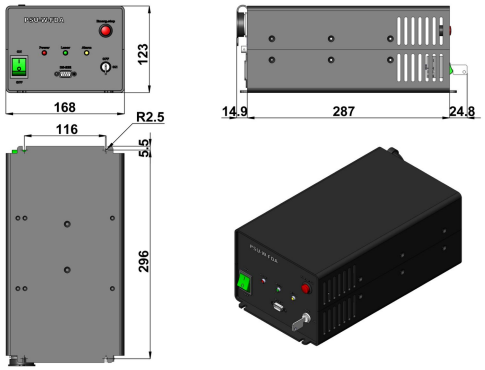
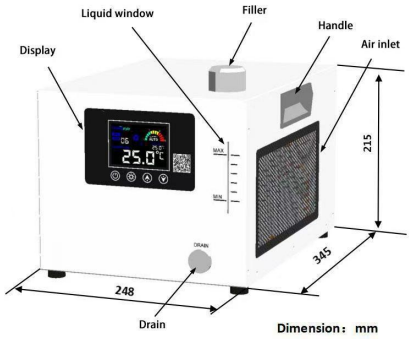
MSL-R series (401-700nm)

SINGLE LONGITUDINAL MODE LASER

All-solid-state-single-longitudinal mode laser features ultra-compact design, easy operation, high power and stability, which is perfect for flow cytometry, spectrum analysis, microscopy, semiconductor inspection, cell sorting, optical instruments, and physics experiments, etc.

SPECIFICATIONS

Wavelength (nm)	457±1	522±1	532±1	607±1	639±1	698±1
Output power (mW)[1]	350mW-3.5W	150-500	2W-15W	200mW-1W	1W-3W	300mW-1W
Power stability (rms, 4 hours ±3°C)	<3%, <2%, <1%		<1%, (<0.5%optional@1W-5W)	<3%, <2%, <1%		
Transverse mode	TEM_{00}					
Longitudinal mode	Single					
Operating mode	CW					
Noise of amplitude (rms, 20Hz-20MHz)	<1%, <0.5%		<1%, <0.5%, (<0.1 optional@1W-5W)	<0.5%		
M^2	<1.2	<1.3	<1.2	<1.3		
Beam diameter at the aperture ($1/e^2$, mm)	<1.5	~1.5	<2.2	~1.5		
Beam divergence, full angle (mrad)	<0.5	<1.5	<0.5	<1.5		
Polarization ratio	>100:1, Horizontal (Vertical optional)	>100:1, Vertical (Horizontal optional)	>100:1, Horizontal (Vertical optional)	>100:1, Vertical (Horizontal optional)		
Spectral line width (nm)	<5MHz					
Pointing stability(μrad) (over 2 hours after warm-up and ±3°C)	<50					
Pointing stability over temperature (μrad/°C)	<8					
Beam height from base plate (mm)	62	65				
Coherent length (m)	>50					
Warm-up time (minutes)	<15					
Cooled method (water cooled)	WCH-580					
Operating temperature (°C)	20-30					
Power supply (100-240VAC)	PSU-W-FDA					
Expected lifetime (hours)	>10000					

LASER HEAD (MSL-R-457)	LASER HEAD (MSL-R-532)	LASER HEAD (MSL-R-522/ 607/ 639/ 698)
		
529.5(L) ×351(W) ×114(H) mm³, 29.35 kg	**432(L) ×187(W) ×90(H) mm³, 11.5 kg**	**460(L) ×187(W) ×90(H) mm³, 12 kg**
POWER SUPPLY[2]	Water Chiller (WCH-580)	
		
326.7 (L) ×168(W) ×123(H) mm³, 4.0 kg	**345 (L) ×248 (W) ×215(H) mm³, 10.5 kg**	

1 Any power level can be selected in this range.

2 Fixed output power.