



FL-SLM Series (507-560nm)

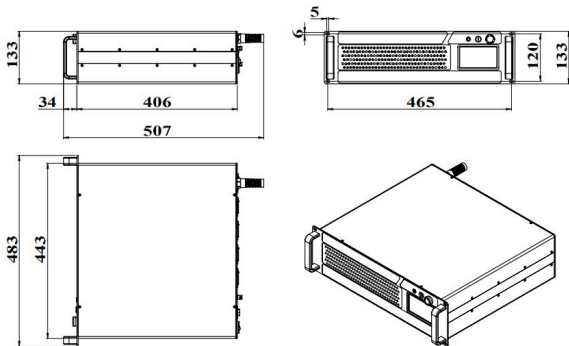
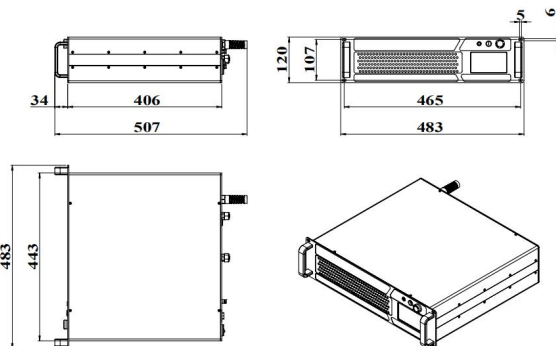
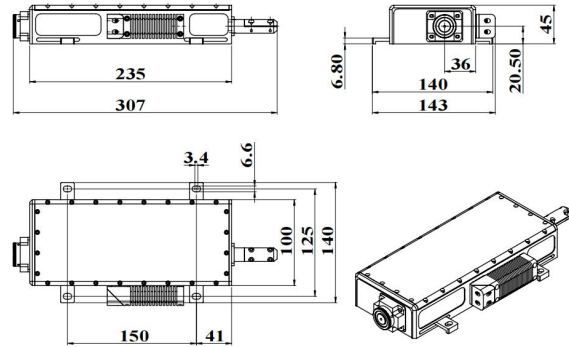
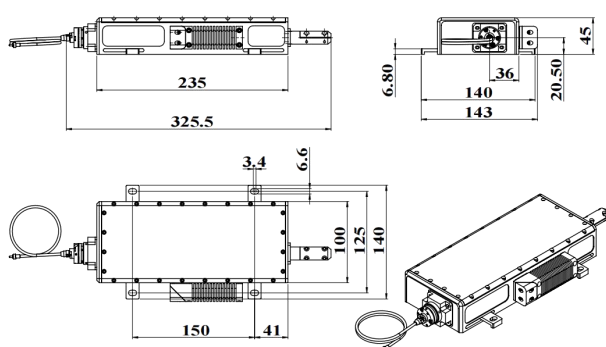
SINGLE LONGITUDINAL MODE FIBER LASER

The high-power, single-longitudinal-mode, PM fiber laser comprises a seed laser and an amplifier. It is optimized for narrow linewidth operation and applications that require higher optical power, which has been designed for operation in laser cooling, trapping, optical lattice, pump laser for OPO etc.



SPECIFICATIONS

Wavelength (nm)	507±1	509±1	513±1	515±1	520±1	525±1	532±1	540±1	550±1	560±1
Operating mode	CW									
Free space output power (mW) ¹	1-500	1-2000	1-1000	1-2000	1-2000	1-2000	1-3000	1-2000	1-500	1-100
Fiber coupled output power (mW)	1-250	1-500	1-500	1-500	1-500	1-500	1-500	1-500	1-250	1-50
Power stability (rms, 4 hours ±3°C)	<2%, <1%						<2%, <1%, <0.75%	<2%, <1%		
Transverse mode	TEM ₀₀									
Longitudinal mode	SLM									
Current adjustment range	1-100%									
Spectral linewidth (kHz)	<20								<40	<200
Temperature tuning range(nm)	>0.2									
PZT Tuning range (GHz)	>5									
PZT Tuning bandwidth (kHz)	>5									
Relative intensity noise (rms, 10Hz-3MHz)	<0.3%, <0.1%, (<0.05% optional)									
Frequency shift (MHz) (over ±2°C and 8hours)	<±200									
M ²	<1.1									
Numerical aperture	0.12NA									
Fiber connector ²	FC/APC									
Fiber length(m) ³	1									
Fiber jacket	PVC, Metal optional									
Beam diameter (mm)	~1@free space output									
Pointing stability (urad)	<15					<50				
Polarization ratio (dB)	>15 Horizontal (Vertical optional)									
Warm-up time (minutes)	<30									
Cooled method	Air cooled or Water cooled									
Operating temperature (°C)	15-30									
Operating voltage (VAC)	110/220V									
Expected lifetime (hours)	>10000									

DIMENSION	
Fundamental Frequency ⁴	Fundamental Frequency ⁵
 507(L)×483(W) ×133(H) mm³, 16kg	 507(L)×483(W) ×120(H) mm³, 19kg
Second harmonic (Free space)	Second harmonic (Fiber coupled)
 307(L)×143(W) ×45(H) mm³, 1.9kg	 325.5(L)×143(W) ×45(H) mm³, 2kg

1 Any power level can be selected in this range.

2 Other output mode can be customized.

3 Other lengths are available on request.

4 Air cooled.

5 Water cooled.