



FL-618-LN-L/1-50mW

LOW-NOISE FIBER LASER AT 618nm

The 618nm low-noise laser has the characteristics of ultra-stable output power, narrow line width, excellent beam quality and extremely low relative intensity noise(RIN), which is widely used in optical lattices, atomic cooling, quantum simulation and scientific research , etc.



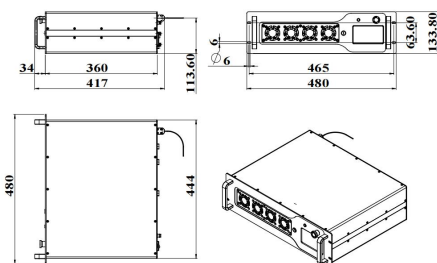
SPECIFICATIONS

Wavelength (nm)	618±1
Operating mode	CW
Free space output power (mW) ¹	1-50
Fiber coupled output power (mW)	1-25
Power stability (rms, 4 hours ±3°C)	<2%, <1%
Transverse mode	TEM ₀₀
Longitudinal mode	SLM
Current adjustment range	1-100%
Spectral linewidth (nm)	<0.002
Relative intensity noise (rms,10Hz-3MHz)	<0.1%, <0.07%
Frequency shift (MHz) (over ±2°C and 8 hours)	<±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 over temperature (urad/°C)	<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



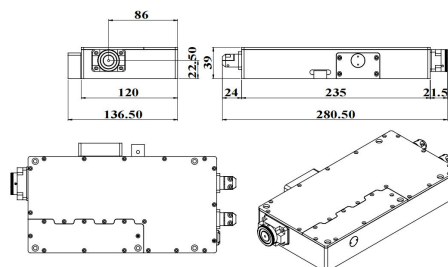
DIMENSION⁴

Fundamental Frequency (Free space)



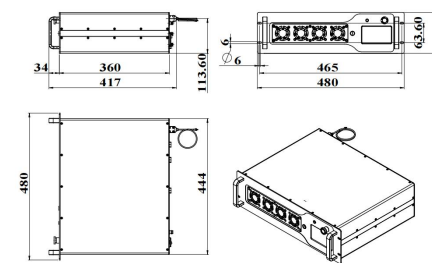
417(L)×480(W) ×134(H) mm³, 10kg

SFG Module (Free space)

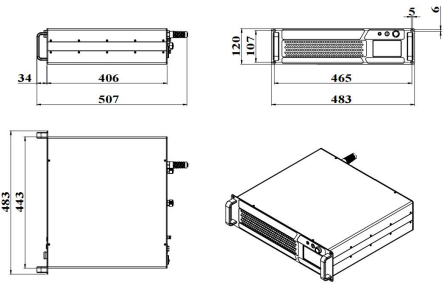
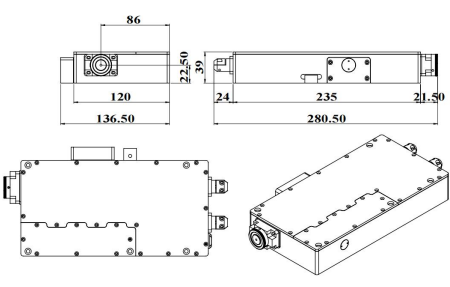
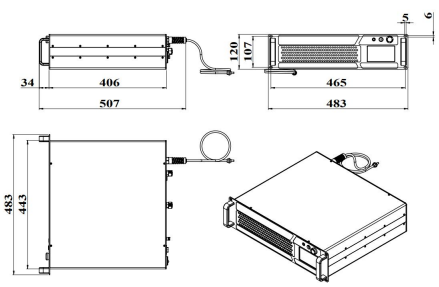


280.5(L)×136.5(W) ×39(H) mm³, 3kg

Fiber coupled



417(L)×480(W) ×134(H) mm³, 13kg

DIMENSION ⁵		
Fundamental Frequency (Free space)	SFG Module (Free space)	Fiber coupled
 461(L)×483(W) ×120(H) mm³, 13kg	 280.5(L)×136.5(W) ×39(H) mm³, 3kg	 507(L)×483(W) ×120(H) mm³, 16kg

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.