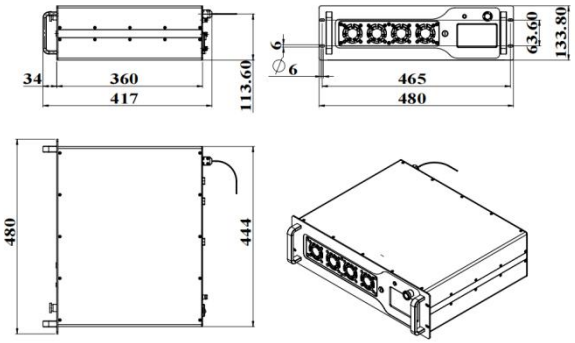
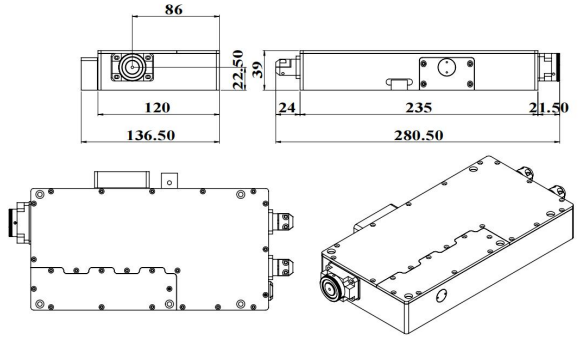
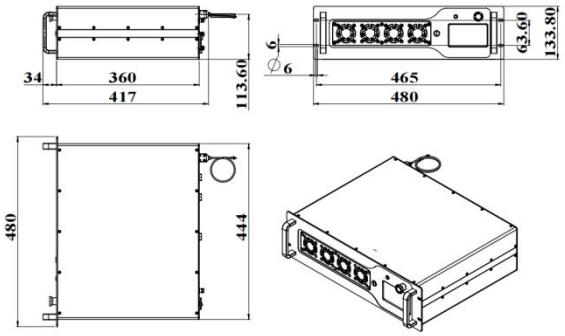
FL-LN-L Series (618-633nm)

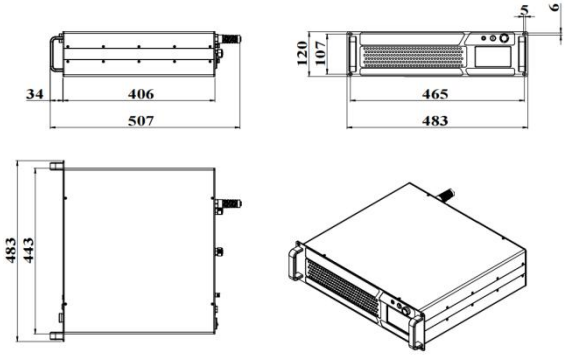
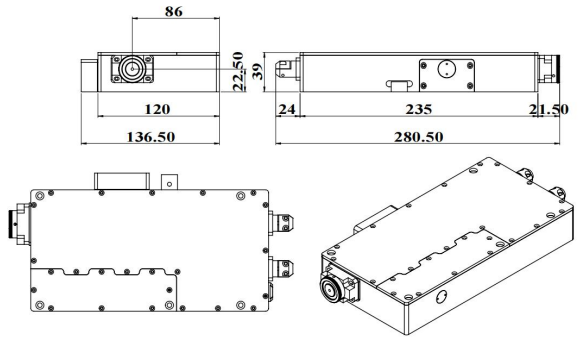
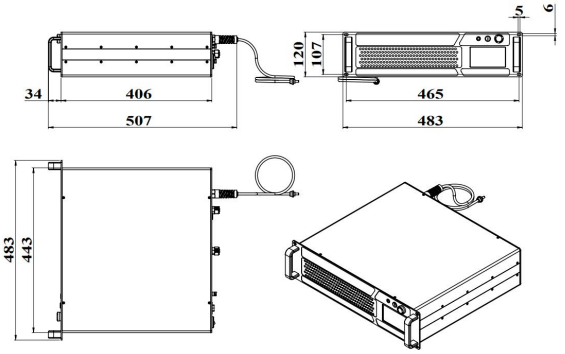
LOW-NOISE FIBER LASER

The 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	631±1	633±1
Operating mode	CW		
Free space output power (mW)[1]	1-50	1mW-1.5W	1mW-1.5W
Fiber coupled output power (mW)	1-25	1-500	1-500
Power stability (rms, 4 hours ±3℃)	<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%, <0.05%		
Frequency shift (MHz)(over ±2℃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 (℃)	15-30		
Operating voltage (VAC)	110/220V		
Expected lifetime (hours)	>10000		

DIMENSION[4]		
Fundamental Frequency (Free space)	SFG Module (Free space)	Fiber coupled
		
417(L)×480(W) ×134(H) mm³, 10kg	280.5(L)×136.5(W) ×39(H) mm³, 3kg	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.