



FL-540-LN-L/1mW-2W

LOW-NOISE
FIBER LASER AT 540nm

The 540nm 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 and scientific research , etc.



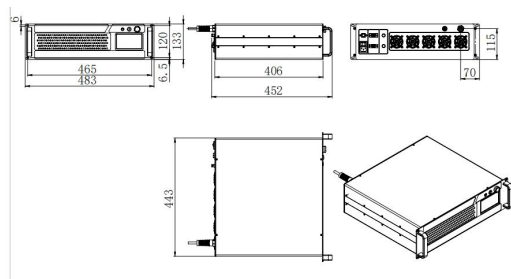
SPECIFICATIONS

Wavelength (nm)	540±1			
Operating mode	CW			
Free space output power (mW)	1-100mW	100-500mW	500mW-1W	1-2W
Fiber coupled output power (mW)	1-250		250-500	
Power stability (rms, 4 hours ±3℃)	<2%, <1%			
Longitudinal mode	Single			
Current adjustment range	1-100%			
Spectral linewidth (nm)	<0.002			
Relative intensity noise (DC-3MHz)	<0.1%, <0.05%			
Frequency shift (MHz)(over ±2℃and 8hours)	<±200			
M ²	TEM ₀₀ , <1.1			
Fiber core diameter	0.14NA			
Fiber connector ¹	FC/APC			
Fiber length(m) ²	1			
Fiber Jacket	PVC, Metal optional			
Beam diameter (mm)	~1 @free space output			
Pointing stability over temperature (urad/℃)	<50			
Polarization ratio(dB)	>15 Horizontal (Vertical optional)			
Warm-up time (minutes)	<30			
Cooled method	Air cooled/Water cooled (optional)			
Operating temperature (℃)	15-30			
Operating voltage (VAC)	110/220V			
Expected lifetime (hours)	>10000			



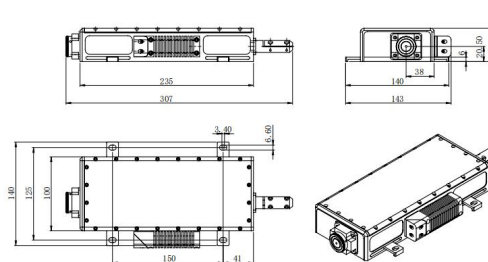
LASER HEAD (Driver integrated)³

Fundamental Frequency



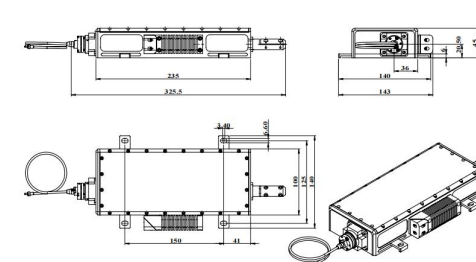
452(L)×483(W) ×133(H) mm³, 10kg

Second harmonic (Free space)

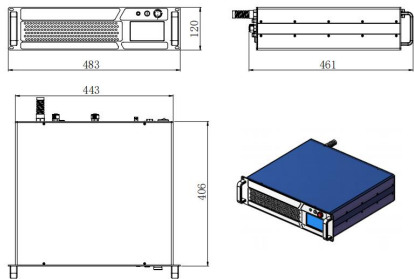
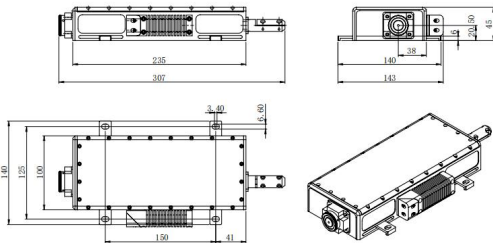
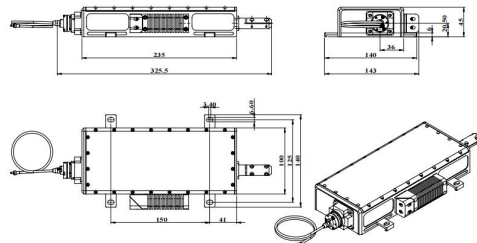


307(L)×143(W) ×45(H) mm³, 1.3kg

Second harmonic (Fiber coupled)



325.5(L)×143(W) ×45(H) mm³, 1.4kg

LASER HEAD (Driver integrated) ⁴		
Fundamental Frequency	Second harmonic (Free space)	Second harmonic (Fiber coupled)
 483(L)×461(W)×120(H) mm³, 11kg	 307(L)×143(W)×45(H) mm³, 1.3kg	 325.5(L)×143(W)×45(H) mm³, 1.4kg

1 Other output mode can be customized.

2 Other lengths are available on request.

3 Air cooled.

4 Water cooled.