



FCL808 Series 808nm High Power Fiber Coupled Diode Laser System up to 100W

Overview

The FCL808 series fiber coupled diode laser is ideal for applications that require a wavelength of 808nm and output power levels up to 100W. The laser features an integrated laser diode, fiber coupling optics, laser power supply, LD current and temperature control in one box. Its compact dimensions and convenient functions, including but not limited to power adjustment, temperature control, and LED display make the laser suitable for pumping, scientific research, industrial and medical applications.

Specifications

Model Number	FCL808-XPQZ-A		FCL808-XPQZ-AV	FCL808H-XPQZ-AV
Wavelength (nm)	808±3	808±3	808±3	808±10
Operating mode	CW			
Output power after fiber (W)	~10 (X=10W), ~20 (X=20W)	~30 (X=30W), ~40 (X=40W)	~60 (X=60W), ~100 (X=100W)	
Power stability (rms, over 4 hours)	<1% (P=D)			
Fiber core diameter	400um			
Fiber numerical aperture	0.22 NA			
Fiber connector	SMA905			
Fiber length (m)	2			
Power control	RS232	-	-	
LED display	-	Diode current	Diode current, temperature, frequency, and pulse	
LD temperature control range (°C)	-	15-30, adjustable by knob	18-45, adjustable by knob	
Operating temperature	10-40°C		10-30°C	
Temperature stability (°C)	-	-	±0.1	
Red pilot light option	No (Z=N), Yes (Z=R)			
Dimensions of laser (mm)	200(L)×100(W) ×160(H)	292(L)×326(W) ×156(H)	406(L)×370(W) ×186(H)	
Weight of laser (kg)	2.1 kg	6.3 kg		
Power consumption (KVA)	-	-	<0.5	
Input power	100-240VAC, 50 to 60Hz	100-240VAC, 50 to 60Hz	110VAC (V=1), 200-240VAC (V=2)	
Cooling method	Air cooled			
Modulation option	None (Q=0)			
	TTL	1Hz-1kHz (Q=T1), 1kHz-10kHz (Q=T2), 10kHz-30kHz (Q=T3)		
	Analog	1Hz-1kHz (Q=A1), 1kHz-10kHz (Q=A2), 10kHz-30kHz (Q=A3)		
Optional accessories	Fiber Collimator			
Expected lifetime (hours)	10,000			
Warranty period	10 months			
FDA Compliance	FDA CDRH Title 21 CFR 1040.10/11 Class IV			

Remarks:

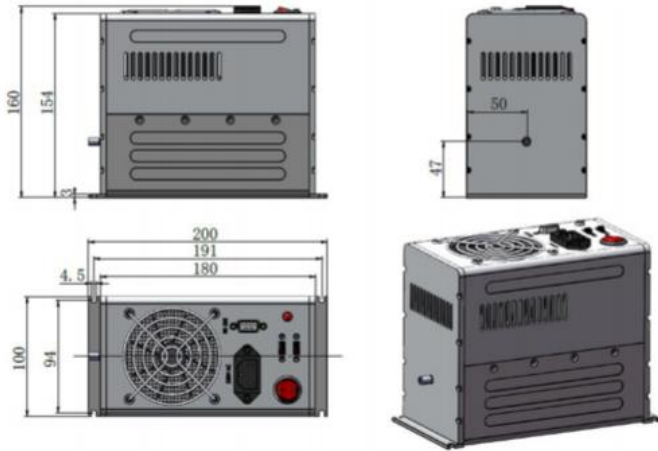
- The laser can be run from 0-30kHz. However, the laser will be adjusted such that the waveform and performance is good at the requested specified range.
- Specifications of the CW laser is based on the laser performance at full power output after the specified warmup period. The stability of output power may change when output power is adjusted at a different power level.



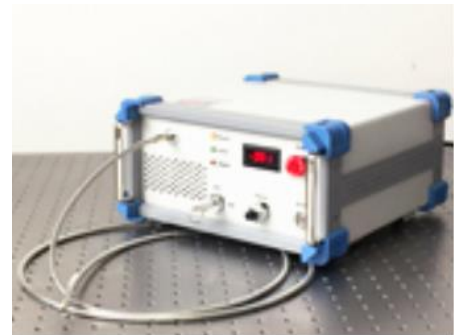
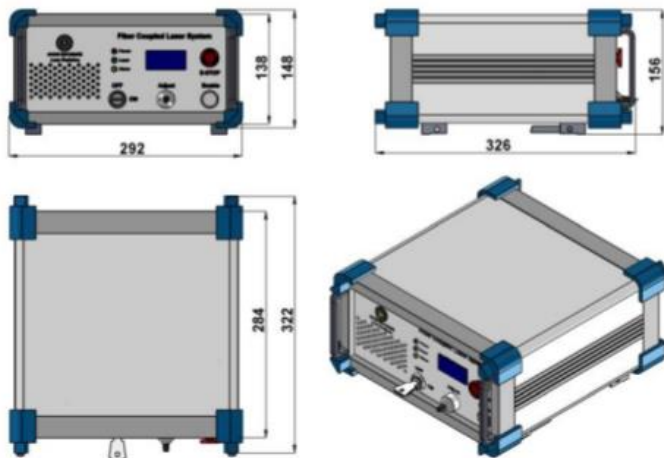
Outline Dimensions (unit: mm)

Laser

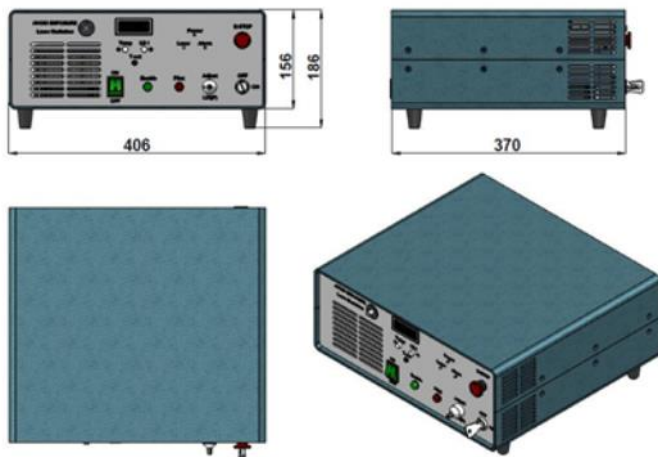
For Output Power 10-20W



For Output Power 30-40W



For Output Power 60-100W



Note: The above specifications are subject to change without notice.

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