

## FCL940 Series 940nm High Power Fiber Coupled Diode Laser System up to 100W

### Overview

The FCL940 series fiber coupled diode laser is ideal for applications that require a wavelength of 940nm 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	FCL940-XPQZ-A	FCL940-XPQZ-AV
Wavelength (nm)	940±10	940±3
Operating mode	CW	
Output power after fiber (W)	~30 ( <b>X=30W</b> )	~60 ( <b>X=60W</b> ), ~100 ( <b>X=100W</b> )
Power stability (rms, over 4 hours)	<1% ( <b>P=D</b> )	<1% ( <b>P=D</b> )
Fiber core diameter	400um	400um
Fiber numerical aperture	0.22 NA	0.22 NA
Fiber connector	SMA905	SMA905
Fiber length (m)	2	2
LED display	Diode current	Diode current, temperature, frequency, and pulse
LD temperature control range (°C)	-	18-45, adjustable by knob
Output power control	0-100%, adjustable by knob	0-100%, adjustable by knob
Operating temperature	10-40°C	10-30°C
Temperature stability (°C)	-	±0.1
Red pilot light option	No ( <b>Z=N</b> ), Yes ( <b>Z=R</b> )	No ( <b>Z=N</b> ), Yes ( <b>Z=R</b> )
Dimensions of laser (mm)	292(L)×326(W) ×156(H)	406(L)×370(W) ×186(H)
Weight of laser (kg)	6.3 kg	<15 kg
Power consumption (KVA)	-	<0.5
Input power	90-264VAC, 50 to 60Hz	110VAC ( <b>V=1</b> ), 200-240VAC ( <b>V=2</b> )
Cooling method	Air cooled	
Modulation option	None ( <b>Q=0</b> )	
	TTL	1Hz-1kHz ( <b>Q=T1</b> ), 1kHz-10kHz ( <b>Q=T2</b> ), 10kHz-30kHz ( <b>Q=T3</b> )
	Analog	1Hz-1kHz ( <b>Q=A1</b> ), 1kHz-10kHz ( <b>Q=A2</b> ), 10kHz-30kHz ( <b>Q=A3</b> )
Optional accessories	<a href="#">Fiber Collimator</a>	
Expected lifetime (hours)	10,000	
Warranty period	10 months	

#### Remarks:

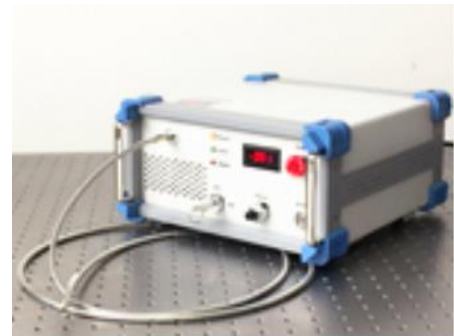
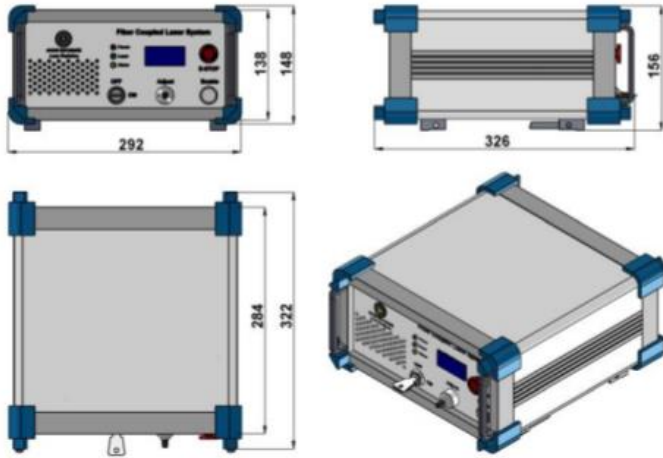
- The laser can be run from 0-30kHz. However, the laser will be adjusted such that the waveform and performance is good at the requested specified range.
- Specifications of the CW laser is based on the laser performance at full power output after the specified warmup period. The stability of output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



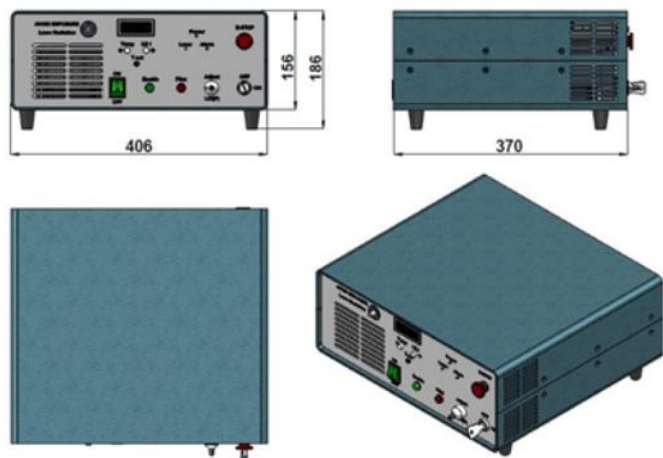
**Outline Dimensions (unit: mm)**

**Laser**

For Output Power 30W



For Output Power 60-100W



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