

## ***FC-785 High Power Fiber Coupled Laser System***



### ***High Power Fiber Coupled Laser System***

The High Power Fiber Coupled Laser System integrates laser, fiber coupled optics, laser power supply and temperature control into housing. It is coupled with a line generator at the fiber end.

It has features of high power, perfect line uniformity and continuously adjustable line width. Line generator can be customized on request.

High Power Fiber Coupled Laser System with its stable performance, high reliability works professionally in line-scanning Raman spectroscopy system.

### ***FEATURES***

- Output power up to 50W
- Wavelength tolerance is  $785 \pm 0.5\text{nm}$
- Spectral linewidth less than 0.2nm
- Lens angle of line generator is optional

### ***APPLICATIONS***

- Raman detection
- Industrial



## SYSTEM SPECIFICATION\*

Wavelength	nm	<b>785</b>
Wavelength tolerance	nm (typical)	<b>±0.5</b>
Output power	W	<b>10~50</b>
Power stability (rms, over 4hours)		<0.5%, <1%, <2%
Laser operation mode		CW
Spectral linewidth (FWHM)	nm	0.2 (0.1, optional)
Fiber core diameter	µm	400/ 200/ 100 (Other fiber core diameter are available on request)
Fiber NA		0.22
Fiber connector		SMA905/ FC
Fiber length	m	1 (Other lengths are available on request)
Expected lifetime	hours	10,000

## ELECTRICAL SPECIFICATIONS

Input voltage	VAC	100-240
Modulation		TTL modulation Analog modulation
Modulation frequency	kHz	TTL up to 30 Analog up to 30
Remote control		RS232/ Network port

## ENVIRONMENTAL CONDITIONS

Operating temperature	°C	10°C to 35°C
Storage temperature	°C	-20 °C to +80 °C
Humidity	%	< 90 %, non-condensing

## LINE GENERATOR

Line angle		30°, 45°, 60°, 90°
Luminance uniformity		80%
Straightness error		Less than 0.5%
85% peak power proportion in corss-section		95%
Temperature & power stability		Less than 0.5%

## KEYNOTES

\*All testing data under the conditions of temperature 25°C.



Line generator can be used to display a uniform straight line as a reference line or to scan the sample. Lenses of line generator are available in fan angles of 30°, 45°, 60° and 90° for custom applications.

## MECHANICAL SPECIFICATIONS

Optional dimensions of laser system

(Depending on the output power)

330 x 291 x 156mm

341 x 366 x 161mm

Material

Aluminum

