



**Model No. FCL-1870-P-XWD-YZ**

**1870nm HIGH POWER FIBER COUPLED INFRARED DIODE LASER SYSTEM UP TO ~6W**

The FCL-series 1870 nm high power fiber coupling infrared diode laser system has integrated laser diode, fiber coupling optics, laser power supply, LD current and temperature control in one box. Its compact dimension and convenient functions, including but not limited to the power adjustment, temperature control and LED display make it very suitable for pumping, scientific research, industrial and medical applications.

**SPECIFICATIONS**

<b>Model No.</b>	<b>FCL-1870-P-XWD-YZ</b>
<b>Wavelength (nm)</b>	1870±20
<b>Output power</b>	~6W (X=6)
<b>Fiber connector</b>	SMA905
<b>Fiber length (m)</b>	2.0
<b>Fiber core diameter (µm)</b>	400
<b>Fiber Numerical aperture</b>	0.22
<b>Output power control</b>	0-100%, adjustable by knob
<b>Power stability (rms, over 4 hours)</b>	<1%
<b>Operating mode</b>	For CW operating mode, <b>Y=C</b> . For CW with 1Hz-500Hz external TTL modulation, <b>Y=T</b> . For CW with 1Hz-500Hz external Analog modulation, <b>Y=A</b> . For Pulsed only with 1Hz-10kHz external TTL modulation, <b>Y=P</b> . For Pulsed only with 1Hz-10kHz external Analog modulation, <b>Y=Q</b> .
<b>LED display</b>	Laser diode current
<b>Red pilot light</b>	No ( <b>Z=0</b> ); Yes ( <b>Z=1</b> )
<b>LD Temperature control range (°C)</b>	15-30, adjustable by knob
<b>Operating temperature (°C)</b>	10~40
<b>Cooling way</b>	Cooled by air, no water needed
<b>Power supply</b>	Input voltage 90-240V AC, 50 to 60 Hz Dimensions 406(L) x370(W) x186(H) mm <sup>3</sup>
<b>Power consumption (kVA)</b>	<0.5
<b>Expected lifetime (hours)</b>	10,000
<b>Warranty</b>	10 months

**PACKAGE DIMENSIONS (unit: mm)**



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





## OPTIONAL ACCESSORIES

### FIBER COLLIMATOR

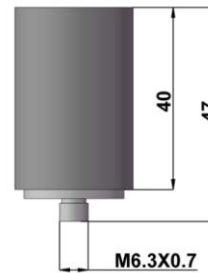
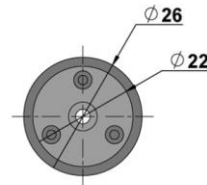
- COLLIMATOR WITH SPHERICAL LENS**

The collimator with spherical lens is designed to connect to the end of the FC/PC or SMA905 connector and contains an AR-coated spherical lens. The distance between the spherical lens and the tip of the FC-terminated fiber can be adjusted to compensate for focal length changes, or to re-collimate the beam at the specific wavelength and distance of interest.

**Model No. FC-SL-FC (for FC/PC connector)**

**Model No. FC-SL-SMA (for SMA905 connector)**

**Dimensions:**  $\phi 26\text{mm} \times 40\text{mm}$



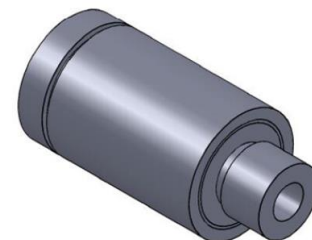
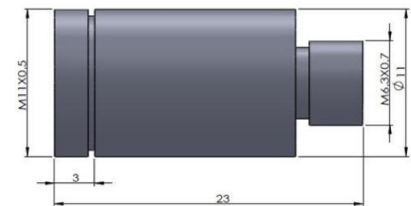
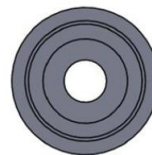
- COLLIMATOR WITH ASPHERICAL LENS**

The collimator with aspherical lens is designed to connect to the end of the FC/PC or SMA905 connector and contains an AR-coated spherical lens. It is constructed with ultra-compact size and excellent performance, which is used to collimate the beam out of the fiber.

**Model No. FC-AL-FC (for FC/PC connector)**

**Model No. FC-AL-SMA (for SMA905 connector)**

**Dimensions:**  $\phi 11\text{mm} \times 23\text{mm}$



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