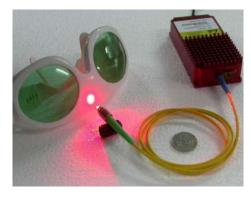


# Fiber Coupled Laser Module



### **Key Features**

- Plug & Play
- High power stability
- LD Current Full Protection
- LD Temperature Stabilized
- High Speed Modulation
- Low noise
- Excellent beam profile

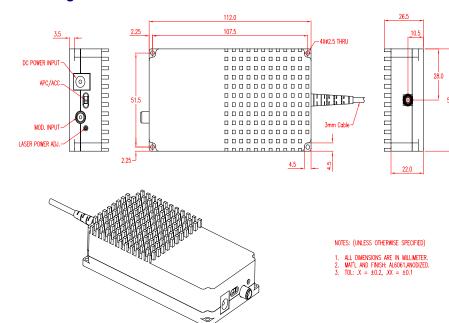
#### **Applications**

- Confocal Microscopy
- Biomedicine Research
- Inspection & Metrology
- Analytical Instruments
- Optics storage
- Basic R&D

The Fiber Output Laser Module is a temperature stabilized semiconductor laser coupled with SM or PM fiber. It integrated thermoelectric cooler, modulation, protection electronics in a compact package.

Module features very low  $M^2$  value Gauss beam output with excellent beam pointing stability at a wide temperature dynamic range. The special designed electrical driver enable this optical engine has the lowest power consumptions compare to the similar product in the industry.

This component does not comply with the Federal Regulations (21 CFR Subchapter1) as administered by the Center for Devices and Radiological health. Purchaser acknowledges that his/her products must comply with these regulations before they can be sold to a customer. The output light from this product is harmful to a human body even if it is invisible. Avoid looking at the output of this product directly, or through a lens during operation. Observance of operation should be through a TV camera or related equipment. Refer to IEC 825-1 and 21 CFR 1040.10-1040.11 as a radiation safety standard for laser products.



#### **Dimensions Diagram**



## **Specifications**

|                               | Condition              | Min                          | Тур     | Мах | Unit |
|-------------------------------|------------------------|------------------------------|---------|-----|------|
| Optical Performance           |                        |                              |         |     |      |
| Wavelength                    |                        | 375~2200                     |         |     | nm   |
| Output Power                  | T=25 °C, CW            | 5~500                        |         |     | mW   |
| Noise(RMS)                    | 10 ~ 20MHz             |                              | 0.1     | 0.3 | %    |
| Power stability               | @25 °C, 8Hrs           |                              | 1       |     | %    |
| Polarization Extinction Ratio | PM fiber coupled       | 15                           |         |     | dB   |
| Collimated Beam Parameters    |                        |                              |         |     |      |
| M2                            |                        |                              |         | 1.1 |      |
| Beam diameter                 | 1/e2, SM               | 1.0, 2.0, 3.0, 4.0, 6.0      |         |     | mm   |
| Beam divergence               | Full angle, SM         |                              |         | 1   | mrad |
| Pointing Stability            | 4hrs,T=25 °C,SM        |                              |         | 5   | urad |
| Fiber Information             |                        |                              |         |     |      |
| Length                        |                        |                              | 1, 2, 3 |     | m    |
| Fiber type                    | PM / SM / MM           |                              |         |     |      |
| Mode field diameter           |                        | 3.0(SM, PM) / 62.5~600(MM)   |         |     | um   |
| NA                            |                        | 0.12(SM, PM) / 0.15~0.48(MM) |         |     |      |
| Cable Diameter                |                        |                              | 3       |     | mm   |
| Connector                     |                        | FC-PC / SMA(MM)              |         |     |      |
| Electrical Parameters         |                        |                              |         |     |      |
| Power supply                  |                        |                              | 9       |     | V    |
| Power Consumption             |                        |                              | 3       | 10  | W    |
| Current(TEC)                  |                        |                              |         | 2   | А    |
| Current(LD)                   |                        |                              |         | 200 | mA   |
| Temperature Stability         |                        |                              | 0.2     |     | °C   |
| Control                       | ACC                    |                              |         |     |      |
| Power setting                 | 0% ~ 100% output power |                              |         |     |      |
| Environmental Conditions      |                        |                              |         |     |      |
| Storage Temperature           |                        | 0                            |         | 50  | °C   |
| Operation Temperature         |                        | 10                           |         | 40  | °C   |
| Operation Humidity            | Non condensing         |                              |         |     |      |
| Dimensions                    | 112mmX56mmX26.5mm      |                              |         |     |      |

\*The mechanical tolerance should be +/-0.2mm on all package dimensions unless otherwise custom specified

#### **Ordering Information**

For more information on this product or other product, please contact your local account manager or Fiblaser directly at +86-21-59167946 or via E-mail at sales@fiblaser.com

