



## **405nm-845nm Compact Laser Modules, Dia. 19mm, with USB, Controllable by PC**

### **CMF Series**



### **Overview**

The Lasermate CMF series laser module is available in the wavelength spectral range from 405nm to 845nm with 19mm diameter size and output power levels up to 80mW. The portable laser module is constructed with features of small size, high stability, long operating lifetime, controllable by PC, and changeable lens. With its compact design and easy operation, the laser module is the ideal choice for being designed and integrated into OEM instruments and systems, and for end user applications in scientific research, medical treatment, and industrial development.

### **Features**

- Wide range of wavelengths from 405nm to 845nm (including 405nm, 445nm, 450nm, 520nm, 635nm, 637nm, 685nm, 845nm)
- Wide range of output power up to 80mW
- Diameter:  $\varnothing$ 19mm
- Compact design and easy operation
- Controllable by PC
- With USB

### **Applications**

- Medical treatment
- Scientific research
- Industrial development

**Specifications**

Wavelength (nm)	405	445	450	520	635	637	685	845
Tolerance (nm)	±5	±5	±5	±5	±5	±5	±10	±10
Output power (mW)	1-80	1-50	1-80	1-50	1-20	1-50	1-50	1-50
Operating mode	CW / PC Control							
Noise of amplitude (rms, 20Hz-20MHz)	<1%							
Modulation frequency (kHz)	0.1-50							
Pointing stability after warm-up (mrad/°C)	<0.05							
Warm-up time (minutes)	<5							
Operating temperature (°C)	10-35							
USB power supply	USB 5V±0.5V 1A							
Expected lifetime (hours)	5000							
Dimensions of laser module (mm)	Dia. 19mm x 90mm							
Weight of laser module (kg)	0.2kg							
Warranty	5 months							

**Ordering Information**

CMF[wavelength]-[output power]F5

**Additional Notes**

- The CMF series laser modules are designated solely as OEM components for incorporation into the customer's end products. Therefore, it is the customer’s responsibility to comply with the appropriate requirements of FDA 21CFR, section 1040.10 and 1040.11 for complete laser products. For the code of FDA regulations, please refer to [FDA Performance Standards for Light-Emitting Products](#) for detailed information.
- Additional heat sink may be needed if the laser module is operated continuously for a long period of time.
- Specifications are subject to change without notice.



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