

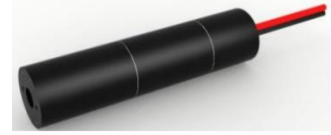


CMV Series 450nm-1064nm Laser Modules

With Adjustable Focus and Divergence, Output Power up to 400mW

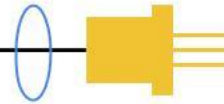
Overview

The CMV series laser module is available in the wavelength spectral range from 450nm to 1064nm and with compact dimensions and output power levels up to 400mW. The portable laser module with adjustable focus and divergence is constructed with features of small size, high output power, long operating lifetime and special safety design to ensure security. With its compact design, low cost 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.



Specifications

Model Number	CMV45 0-XA6	CMV47 3-XA3	CMV53 2- XA3Q	CMV56 1- XA3Q	CMV58 9- XA3Q	CMV63 5-XA3	CMV63 7-XA3	CMV64 0-XA3	CMV65 5-XA3	CMV80 8-XA3	CMV98 0-XA3	CMV106 4-XAYQ
Wavelength (nm)	450	473	532	561	589	635	637	640	655	808	980	1064
Tolerance (nm)	±5	±1	±1	±1	±2	±5	±5	±5	±10	±5	±10	±1
Output power (mW)	~50 (X=50)	~30 (X=30)	~80 (X=80)	~5 (X=5)	~30 (X=30)	~100 (X=100)	~100 (X=100)	~100 (X=100)	~100 (X=100)	~200 (X=200) , ~400 (X=400)	~400 (X=400)	~300 (X=300)
Transverse mode	Near TEM ₀₀ for 450nm / 473nm / 635nm / 637nm / 640nm / 655nm TEM ₀₀ for 532nm / 561nm / 590nm / 1064nm Multimode for 808nm / 980nm											
Operating mode	CW											
Beam diameter at aperture (1/e ² , mm)	~3.5	~1.5	~1.5	~1.5	~1.5	~3.5	~3.5	~3.5	~3.5	~2x4	~6.0	~1.5
Beam divergence, full angle (mrad)	<1.0	<1.5	<1.5	<1.5	<1.5	<1.0	<1.0	<1.0	<1.0	<5.0	<15.0	<1.5
Operating temperature (°C)	15-30											
PCB driver (VDC)	6	3	3	3	3	3	3	3	3	3	3	3 (Y=3) or 5 (Y=5)
TTL modulation option	No	Yes	Yes	Yes	Yes	No	No	No	No	No	No	Yes
	If TTL modulation option is available, please choose from the following: None (Q=blank); 1Hz-1kHz (Q=T1), 1kHz-10kHz (Q=T2)											
Expected lifetime (hours)	10000											
Diameter Ø (mm)	12	20	15	20	20	12	12	12	12	15	12	20
Length (mm)	50	100	90	100	100	50	50	50	50	90	50	100
Weight (kg)		0.1	0.1	0.1	0.1					0.1	0.013	0.1
Warranty	5 months											
Remarks	For 450nm / 635nm / 637nm / 640nm / 655nm: The housing of laser module has non-polarity. For 473nm / 561nm / 589nm / 808nm / 980nm / 1064nm: The housing of laser module is positive electrodes.											



Outline Dimensions (unit: mm)

For 450nm, 635nm, 637nm, 640nm, 655nm, 980nm:



For 473nm, 561nm, 589nm, 1064nm:



For 808nm:



Additional Notes

- The CMV 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.