

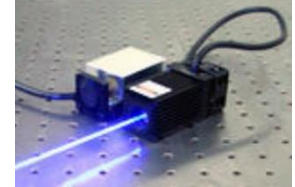


CMVH Series 445nm-1064nm Laser Modules

With Rectangular Package, 90-264V AC, Output Power up to 1600mW, and Modulation up to 30kHz

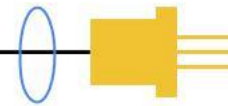
Overview

The CMVH series laser module is available in the wavelength spectral range from 445nm to 1064nm and with compact dimensions and output power levels up to 1600mW. The high-power laser module is constructed with features of ultra-compact design with rectangular package, good beam properties, long operating lifetime, 90-264VAC, and TTL/Analog modulation up to 30kHz. 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.



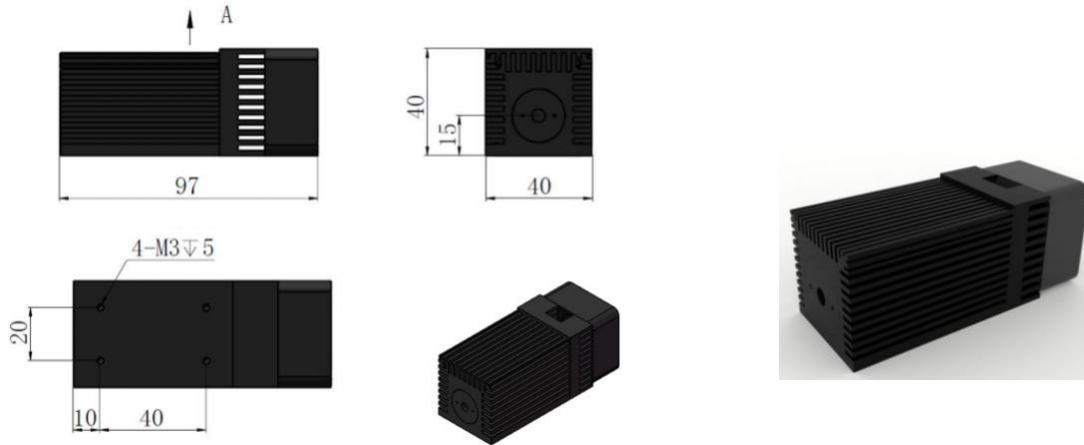
Specifications

Model Number	CMVH445- XFVQ	CMVH447- XFVQ	CMVH450- XFVQ	CMVH532- XFVQ	CMVH635- XFVQ	CMVH655- XFVQ	CMVH1064- XFVQ
Wavelength (nm)	445	447	450	532	635	655	1064
Tolerance (nm)	±5	±10	±5	±1	±5	±10	±1
Output power (mW)	~500 (X=500), ~1000 (X=1W)	~1200 (X=1200), ~1600 (X=1600)	~500 (X=500), ~1000 (X=1W)	~300 (X=300)	~700 (X=700)	~1000 (X=1W)	~1000 (X=1W)
Transverse mode	Multimode	Multimode	Multimode	TEM ₀₀	Multimode	Multimode	TEM ₀₀
Operating mode	CW	CW	CW	CW	CW	CW	CW
Power stability (rms, over 4 hours)	<5%	<5%	<5%	<20%	<5%	<5%	<20%
Beam diameter at aperture (1/e ² , mm)	~2.0x4.0	~2.0x4.0	~2.0x4.0	~1.5	~4.0x6.0	~4.0x6.0	~1.5
Beam divergence, full angle (mrad)	<3.0x0.5	<3.0x0.5	<3.0x0.5	<1.2	<4.0	<4.0	<1.2
Beam height from base plate (mm)	15	15	15	15	15	15	15
Warm-up time (minutes)	<10	<10	<10	<10	<10	<10	<10
Pointing stability after warm-up (mrad)	<0.05	<0.05	<0.05		<0.05	<0.05	
Operating temperature (°C)	10-35	10-35	10-35	10-35	10-35	10-35	10-35
PCB driver	90-264V AC	90-264V AC	90-264V AC	90-264V AC	90-264V AC	90-264V AC	90-264V AC
Modulation option	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	If modulation option is available, please choose from the following: None (Q=blank) TTL: 1Hz-1kHz (Q=T1), TTL 1kHz-10kHz (Q=T2), TTL 10kHz-30kHz (Q=T3) Analog: 1Hz-1kHz (Q=A1), 1kHz-10kHz (Q=A2), 10kHz-30kHz (Q=A3)						
Expected lifetime (hours)	10000	10000	10000	10000	10000	10000	5000
Dimensions of laser head (mm)	97(L) x 40(W) x 40(H)	97(L) x 40(W) x 40(H)	97(L) x 40(W) x 40(H)	97(L) x 40(W) x 40(H)	87(L) x 40(W) x 40(H)	87(L) x 40(W) x 40(H)	97(L) x 40(W) x 40(H)
Weight of laser head (kg)	0.2						
Dimensions of driver (mm)	105(L) x 47(W) x 38(H)						
Weight of driver (kg)	0.2						
Warranty	10 months						

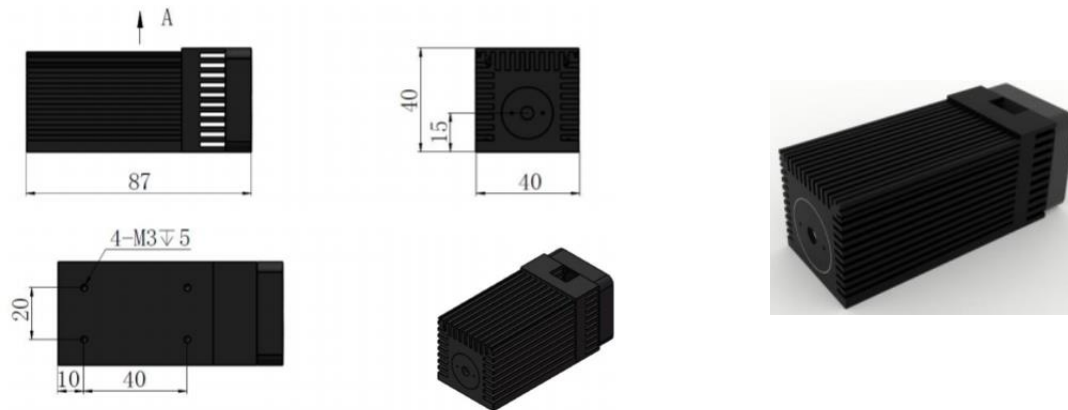


Outline Dimensions (unit: mm)

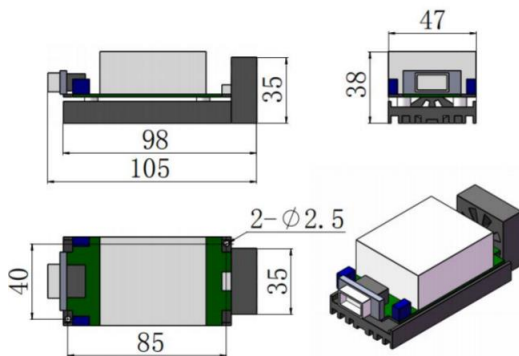
Laser Head for 445nm / 447nm / 450nm / 532nm / 1064nm:



Laser Head for 635nm / 637nm:



PCB Driver (90-264VAC)



Additional Notes

- The CMVH 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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