



457nm-1064nm High Power Laser Modules, 340x80x58 mm³

OMW Series



Overview

The Lasermate OMW series laser module is available in the wavelength spectral range from 457nm to 1064nm and with compact dimensions of 340x80x58 mm³ and can deliver high output power up to 20000mW. The laser module features small size, high output power, and long operating lifetime. With its compact design, high compatibility and easy integration, the laser module is used in industrial, medical, and scientific fields. It is the ideal choice for design and integration into OEM instrumentation and system and can be used for end user's applications in research and development.

Features

- Wide range of wavelengths from 457nm to 1064nm (including 532nm and 671nm)
- High output power up to 20000mW
- Rectangular package
- Ultra-compact design
- Easy integration
- Optional TTL or Analog modulation up to 30kHz

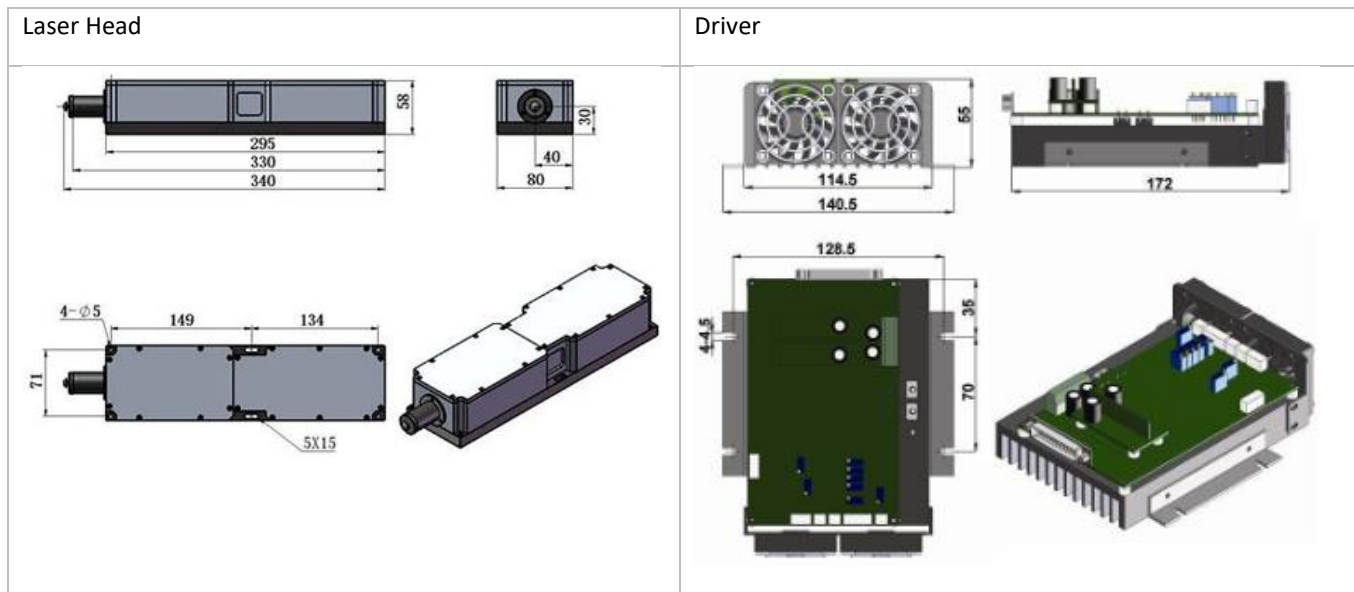
Applications

- Collimation
- Laser medical treatment
- Scientific experiment
- Optical instrument
- Laser display
- Laser lighting show

Specifications

Wavelength (nm)	457	532	671	1064
Wavelength tolerance (nm)	±1	±1	±1	±1
Operating mode	CW			
Output power (mW)	For 457nm: >3000, ..., >10000 For 532nm: >10000, ..., >17000 For 671nm: >3000, ..., >5000 For 1064nm: >6000, ..., >20000			
M ² factor	3.0-6.0			
Beam diameter at aperture (1/e ² , mm)	~4.0; ~3.5 (1064nm)			
Beam divergence, full angle (mrad)	<1.5			
Polarization ratio	>100:1			
Power stability (rms, over 4 hours) at 25°C	<5%			
Transverse mode	Near TEM ₀₀			
Warm-up time (minutes)	<10			
Beam height from base plate (mm)	30			
Operating temperature (°C)	22.5+/-2.5			
PCB driver	12VDC 25A			
Modulation option	TTL or Analog up to 30kHz (1Hz-1kHz, 1kHz-10kHz, 10kHz-30kHz)			
Dimensions of laser head	340(L) x80(W) x58(H) mm ³			
Weight of laser head	2.8kg			
Dimensions of PCB driver	172(L) x140.5(W) x55(H) mm ³			
Weight of PCB driver	0.8kg			
Expected lifetime (hours)	10000			

Outline Dimensions (unit: mm)



Ordering Information

OMW[wavelength]-[output power]F12-[optional modulation]

Additional Notes

- The OMW 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.



Lasermate Group, Inc.
 19608 Camino De Rosa
 Walnut, CA 91789 USA
 Tel: (909)718-0999
 Fax: (909)718-0998
sales@lasermate.com
www.lasermate.com