



457nm-1064nm High Power Laser Modules, 212x70x52.6 mm³

OMN Series



Overview

The Lasermate OMN series laser module is available in the wavelength spectral range from 457nm to 1064nm and with compact dimensions of 212x70x52.6 mm³ and can deliver high output power up to 5000mW. 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, 577nm, and 671nm)
- High output power up to 5000mW
- Rectangular package
- Ultra-compact design
- Easy integration
- Optional TTL or Analog modulation up to 30kHz

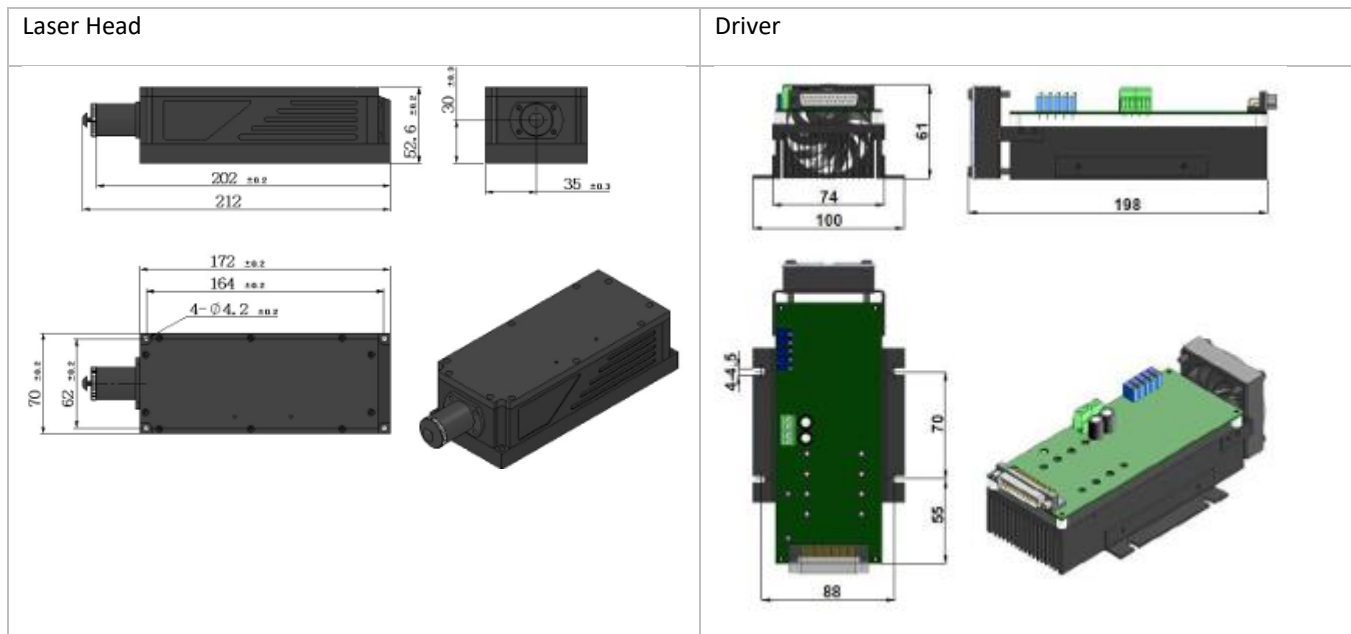
Applications

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

Specifications

Wavelength (nm)	457	532	577	671	1064
Wavelength tolerance (nm)	±1	±1	±2	±1	±1
Operating mode	CW				
Output power (mW)	For 457nm: >100, ..., >400 For 532nm: >1500, ..., >5000 For 577nm: >100, ..., >1200 For 671nm: >1300, ..., >3000 For 1064nm: >1500, ..., >5000				
M ² factor	<3.0; <2.0 (1064nm)				
Beam diameter at aperture (1/e ² , mm)	For 457/532nm: ~3.0 For 577/671/1064nm: ~3.5				
Beam divergence, full angle (mrad)	For 457/532nm: <1.0 For 577/671/1064nm: <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	212(L) x70(W) x52.6(H) mm ³				
Weight of laser head	1.4kg				
Dimensions of PCB driver	198(L) x100(W) x61(H) mm ³				
Weight of PCB driver	0.7kg				
Expected lifetime (hours)	10000				

Outline Dimensions (unit: mm)



Ordering Information

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

Additional Notes

- The OMN 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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