

#### **Data Sheet**

Rev 00.2023

# 473nm-1319nm High Power DPSS Laser Modules, 128x80x40 mm<sup>3</sup>

**OMI Series** 



#### Overview

The Lasermate OMI series laser module is available in the wavelength spectral range from 473nm to 1319nm and with compact dimensions of 128mm x80mm x40mm 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 473nm to 1319nm (including 532nm, 561nm, 589nm, 594nm, and 671nm)
- High output power up to 5000mW
- Rectangular package
- Ultra-compact design
- Easy integration
- Optional TTL or Analog modulation up to 30kHz

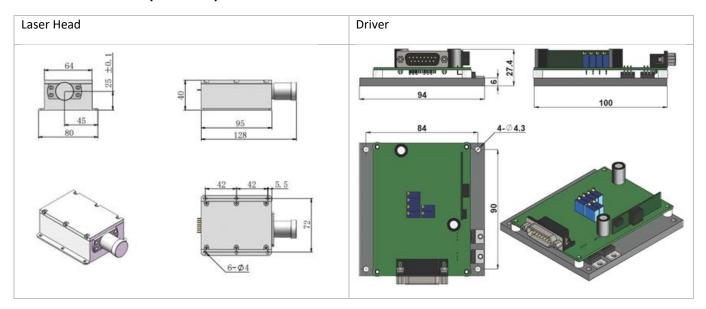
## **Applications**

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

## Specifications

Wavelength (nm)	473	532	561	589	594	1319
Wavelength tolerance (nm)	±1	±1	±1	±2	±1	±1
Operating mode	CW					
Output power (mW)	For 473nm: >100,, >800					
	For 532nm: >100,, >5000					
	For 561nm: >100,, >300					
	For 589nm: >100,, >700					
	For 594nm: >200,, >300					
	For 1319nm: >100,, >1000					
Beam diameter at aperture (1/e², mm)		3nm: ~2.0				
	For 532nm: ~3.0					
	For 561nm: ~4.0					
	For 589nm: ~2.5					
	For 594nm: ~3.0					
	For 1319nm: ~3.0					
Beam divergence, full angle (mrad)	For 473nm: ~1.2					
	For 532nm: ~1.0					
	For 561nm: ~1.5					
	For 589nm: ~2.5 For 594nm: <2.0					
	For 1319nm: ~3.0					
Devices at a hilitary (see a second A harrisa) at 2500		.9nm: ~3.0				
Power stability (rms, over 4 hours) at 25°C  Transverse mode	<pre>&lt;5% Near TEM<sub>00</sub></pre>					
Warm-up time (minutes)	<10					
· · · · · ·	25					
Beam height from base plate (mm) PCB driver	12VDC 25A					
Modulation option	TTL or Analog up to 30kHz (1Hz-1kHz, 1kHz-10kHz, 10kHz-30kHz)					
Dimensions of laser head	128(L) x80(W) x40(H) mm <sup>3</sup>					
Weight of laser head	0.7kg					
Dimensions of PCB driver	100(L) x94(W) x27.4(H) mm <sup>3</sup>					
Weight of PCB driver Expected lifetime (hours)	0.3kg 10000					
Remarks	The laser needs to be used on a heat sink with good heat					
	dissipation.					

## **Outline Dimensions (unit: mm)**



#### **Ordering Information**

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

#### **Additional Notes**

- The OMI 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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