



Water Cooled Single Frequency Laser System

SLMW Series

Data Sheet

Overview

The SLMW series is comprised of CW single longitudinal mode laser at wavelengths of 588nm, 589nm and 671nm that deliver up to 2500mW output power. The series laser features narrow spectral linewidth, long coherent length, ultra-compact design, long lifetime, easy operating, and FDA-compliant system with driver. The laser is widely used in DNA sequencing, flow cytometry, cell sorting, optical instrument, spectrum analysis, interference, measurement, holography, physics experiment, and many other applications.

Features

- Available wavelengths: 588nm, 589nm, and 671nm
- CW operating mode
- Optical output power 200mW to 2500mW
- Single longitudinal mode / Single frequency
- Water-cooled
- FDA compliant

Applications

- DNA sequencing
- Flow cytometry
- Cell sorting
- Optical instrument
- Spectrum analysis
- Interference
- Measurement
- Holography
- Physics experiment

588-671 nm Specifications

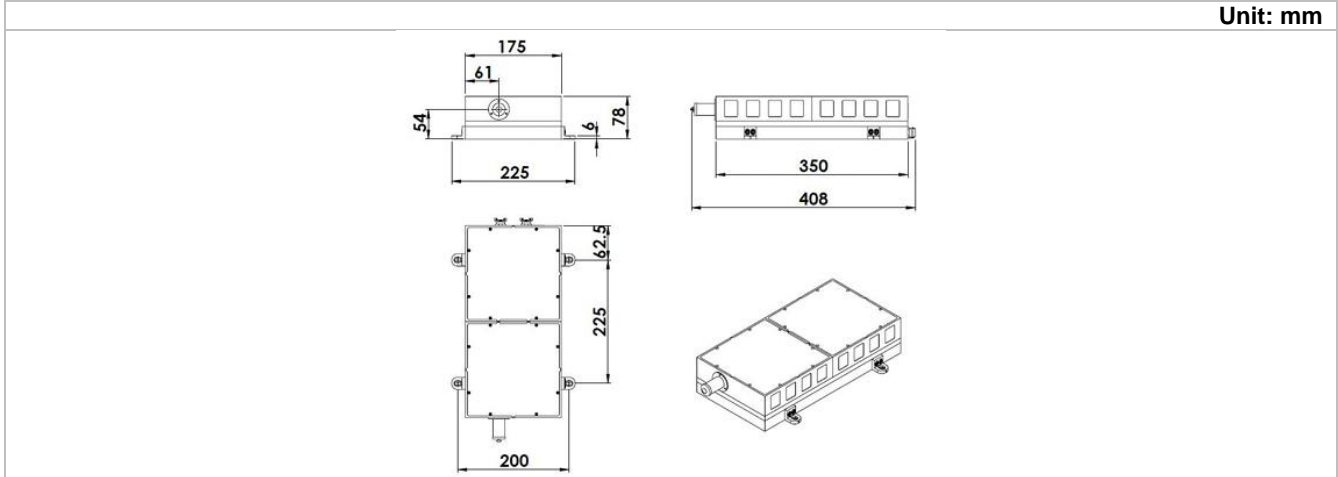
Parameter	SLMW588	SLMW589	SLMW671
Wavelength	588±1 nm	589±1 nm	671±1 nm
Operating mode	CW		
Output power	>200 mW, >300 mW, >400 mW, >500 mW	>300 mW, >400 mW, >500 mW	>600 mW, >800 mW, >1000 mW, >1500 mW, >2000 mW, >2500 mW
Power stability (rms, over 4 hours)	<5%, <3%		
Transverse mode	TEM ₀₀		
Longitudinal mode	Single		
Spectral linewidth	<0.00001 nm		
Coherent length	>50 m		
Noise of amplitude (rms, 20Hz-20MHz)	<1%		
Beam diameter at aperture (1/e ²)	<3.0 mm		
Beam divergence, full angle	<1.5 mrad		
M ² factor	<1.5		
Polarization ratio	>100:1		
Warm-up time	<20 min		
Pointing stability after warm-up	<0.05 mrad		
Operating temperature	20-25°C		
Cooling method	Water cooled		
Expected lifetime	10,000 hours		
Warranty period	10 months		

Remarks:

- Specifications of the CW laser is based on the laser performance at full power output after the specified warmup period. The stability of output power may change when output power is adjusted at a different power level.
- Specifications are subject to change without notice.

SLMW Series Laser Head Dimensions

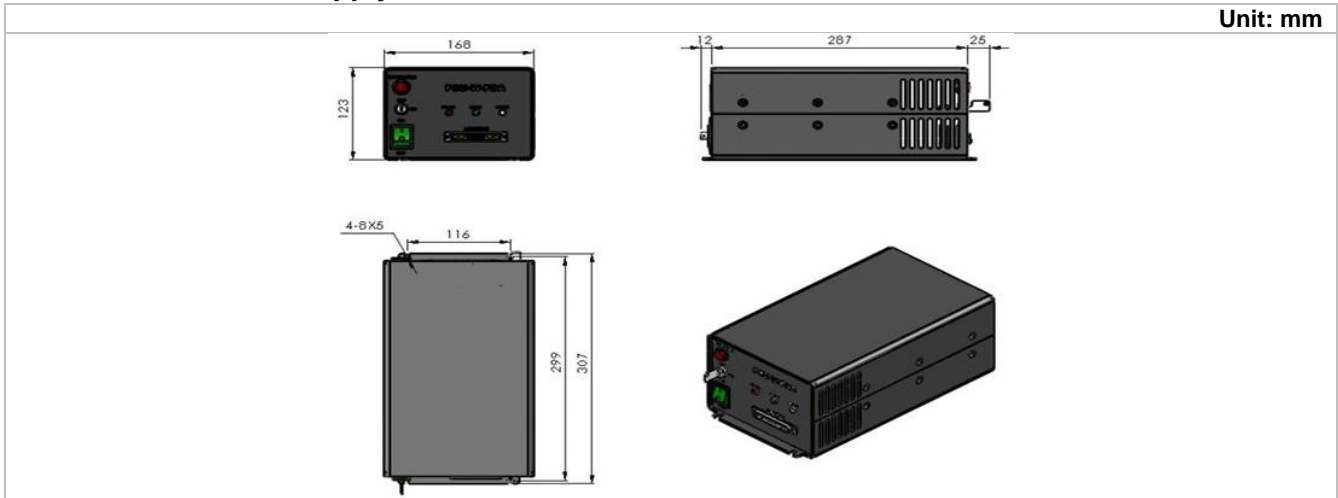
Unit: mm



Parameter	SLMW Series
Dimensions	408(L) x225(W) x78(H) mm ³
Weight	5.7 kg
Beam height from base plate	58 mm
Beam exit (from side)	61 mm

SLMW Series Power Supply Dimensions

Unit: mm



Parameter	High Power W Version Elite Power Supply
Dimensions	307(L) x168(W) x123(H) mm ³
Weight	4.5 kg
Input voltage	90-264VAC

SLMW Series Chiller Dimensions

Unit: mm



Parameter	Chiller
Dimensions	253.2(L)×363.8(W) ×240.6(H) mm ³
Weight	11 kg

Ordering Information

For more information, please contact Lasermate directly at sales@lasermate.com.

Part Number Configuration SLMW[1][2][3][4][5]					
SLMW = Laser Model Series	[1] = Wavelength	[2] = Output Power	[3] = Power Supply	[4] = Power Stability	[5] = Water Chiller Included
	588= 588nm 589= 589nm 671= 671nm	200= >200mW 300= >300mW ... 1W= >1000mW 1H= >1500mW 2W= >2000mW 2H= >2500mW	W= High Power W Version Elite Power Supply	A= <5% E= <3%	Blank = No C= Yes

Note: The above specifications are subject to change without notice.