Dual Wavelength Laser System
MW Series

Data Sheet

Overview

The MW series free space output multi-wavelength lasers are ideal for applications that require two wavelengths. The laser emits up to two wavelengths from one aperture and with separate power monitors for each wavelength. The MW violet and blue laser series is widely used in life sciences, fluorescence, spectral analysis and optogenetics. The MW red and green laser series is widely used for scientific research, medical treatment, OEM field and multimedia entertainment.

Features

- Two wavelengths
- CW operating mode
- Optical output power 10mW to 200mW
- Ultra-compact design

Applications

- Life sciences
- Fluorescence
- Spectral analysis
- Optogenetics
- Scientific research
- Medical treatment
- OEM field
- Multimedia entertainment

MW Series Specifications

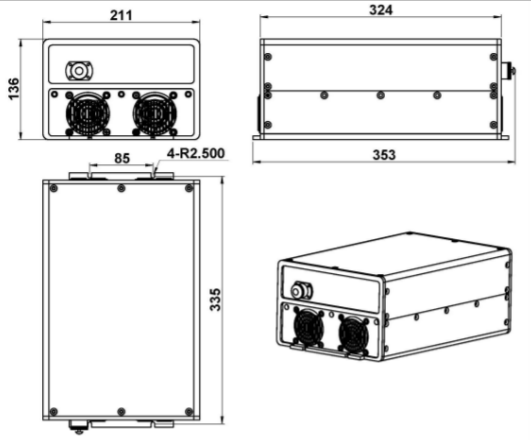
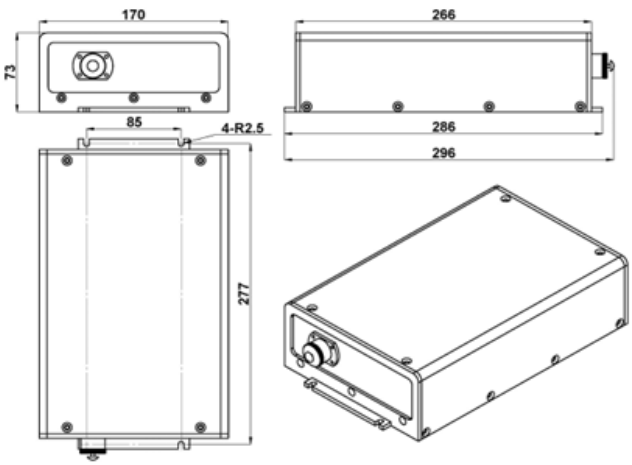
Parameter	MW405D561	MW405D589	MW405D593	MW473D589	MW473D593	MW635D532	MW655D532
Wavelength	Violet at 405nm, Yellow Green at 561nm	Violet at 405nm, Yellow at 589nm	Violet at 405nm, Orange at 593.5nm	Blue at 473nm, Yellow at 589nm	Blue at 473nm, Orange at 593.5nm	Red at 635nm, Green at 532nm	Red at 635nm, Green at 532nm
Total output power	>20mW, >50mW, >100mW, >200mW	>10mW, >50mW, >100mW	>10mW, >50mW, >100mW	>10mW, >50mW, >100mW	>10mW, >50mW, >100mW	>20mW, >50mW, >100mW, >200mW	>100mW, >200mW, >500mW
Transverse mode	Near TEM_{00}/TEM_{00}	Near TEM_{00}/TEM_{00}	Near TEM_{00}/TEM_{00}	TEM_{00}/TEM_{00}	TEM_{00}/TEM_{00}	Near TEM_{00}/TEM_{00}	Multimode/TEM_{00}
Operating mode	CW						
Power stability (rms, over 4 hours)	<5%, <3%, ,2%	<5%, <3%, ,2%	<5%, <3%, ,2%	<5%, <3%, ,2%	<5%, <3%, ,2%	<5%, <3%, ,2%	<5%, <3%, ,2%
Beam diameter at aperture ($1/e^2$)	~2.5 mm	~2.5 mm	~2.5 mm	~3.0 mm	~2.0 mm	~3.0 mm	<5x8 mm
Beam divergence, full angle	<1.5 mrad	<1.5 mrad	<1.5 mrad	<1.5 mrad	<1.5 mrad	<1.5 mrad	<3.0 mrad
Warm-up time	<10 min						
Operating temperature	10-35°C						
Modulation option	TTL/Analog: 1Hz-1kHz, 1kHz-10kHz, 10kHz-30kHz						
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.
- The combination of Red & Green laser can generate red, orange/yellow, green colors.

MW Series Laser Head Dimensions

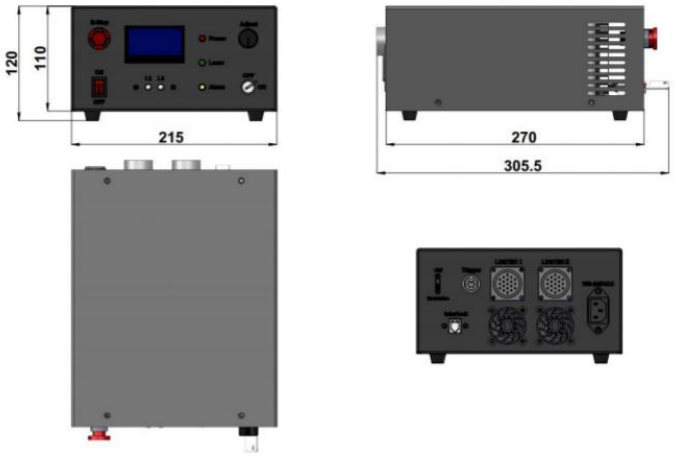
Unit: mm

MW405D561, MW405D589, MW405D593, MW473D589, MW473D593	MW635D532, MW655D532
	

Parameter	MW405D561, MW405D589, MW405D593, MW473D589, MW473D593	MW635D532, MW655D532
Dimensions	353(L)×211(W) ×136(H) mm^3	296(L)×170(W) ×73(H) mm^3
Weight	13.0 kg	4.2 kg

MW Series Power Supply Dimensions

Unit: mm



Parameter	RGB Laboratory Power Supply
Dimensions	305.5(L) ×215(W) ×120(H) mm^3
Weight	5.0 kg
Input voltage	100-240VAC

Ordering Information

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

Part Number Configuration **MW[1][2][3][4][5]**					
MW = Laser Model Series	**[1] = Wavelength**	**[2] = Output Power**	**[3] = Power Supply**	**[4] = Power Stability**	**[5] = Modulation**
		10= >10mW 20= >20mW 50= >50mW 100= >100mW 200= >200mW	R2= RGB Laboratory Power Supply	A= <5% E= <3% 2= <2%	0=None T1=TTL 1Hz-1kHz T2=TTL 1kHz-10kHz T3=TTL 10kHz-30kHz A1=Analog 1Hz-1kHz A2=Analog 1kHz-10kHz A3=Analog 10kHz-30kHz

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