



Fiber Coupled Multi-Line Laser

ML Series

Data Sheet



Overview

The ML series is a series of fiber coupled multi-line lasers that can combine up to 4 wavelengths into one fiber output. The wavelengths can be controlled separately. The flexible design enables integration of optional AOM modulators that allow fast modulation of DPSS lasers. The robust design provides excellent long-term stability and outstanding flexibility for many applications.

Features

- 2-4 wavelengths combined into one fiber output
- Wavelengths from 400nm to 671nm
- Standard fiber connectors or collimated beam output
- Single mode or polarization maintaining fibers
- Optical AOM modulators, modulation up to 1MHz
- Customized configurations may be available

Applications

- Fluorescence microscopy
- Flow cytometry
- Confocal microscopy
- Optogenetics
- Live-cell imaging
- Light sheet microscopy

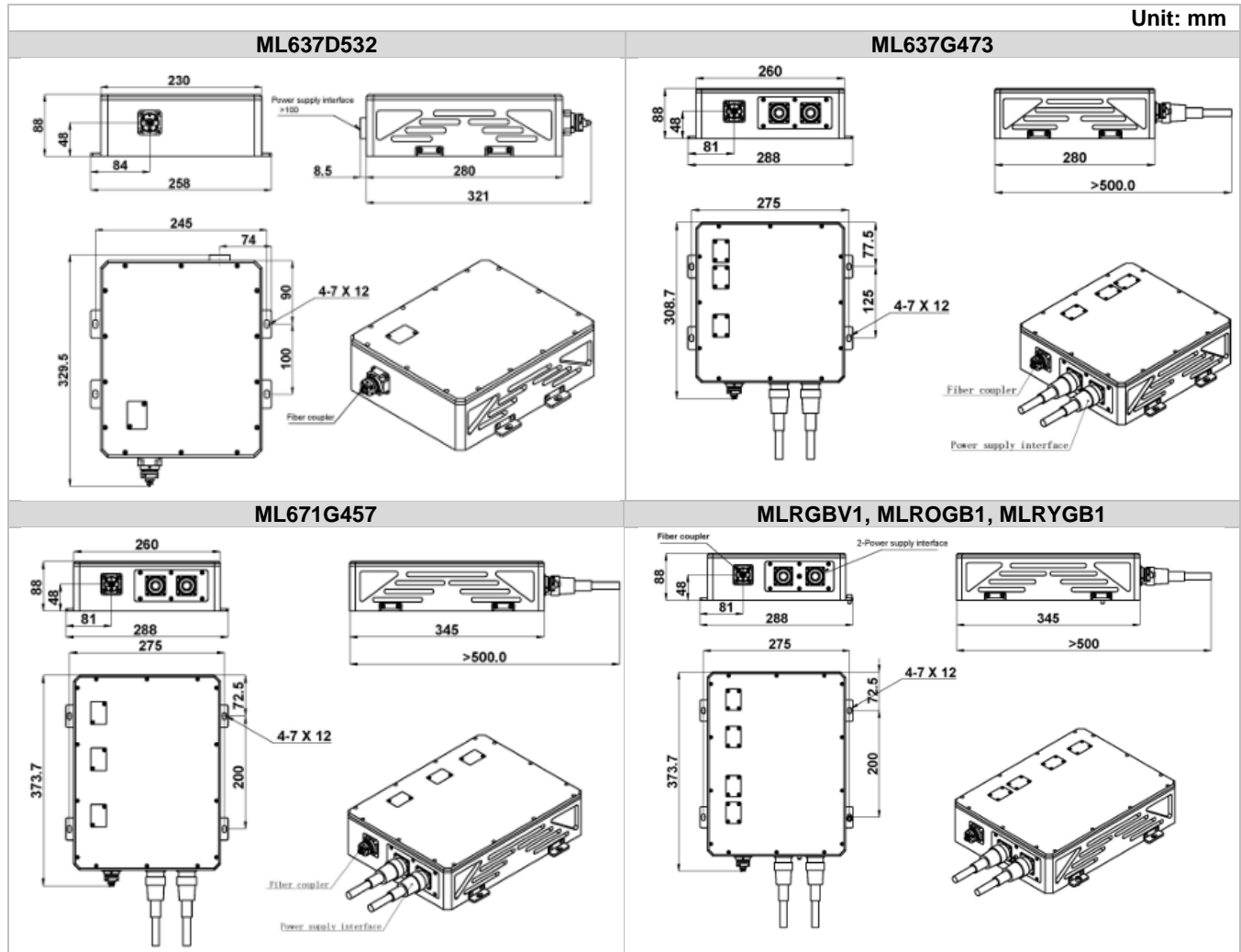
ML Series Specifications

Parameter	ML637D532	ML637G473	ML671G457	MLRGBV1	MLROGB1	MLRYGB1
Wavelength	Red at 637nm, Green at 532nm	Red at 637nm, Green at 532nm, Blue at 473nm	Red at 671nm, Green at 532nm, Blue at 457nm	Red at 640nm, Yellow Green at 561nm, Blue at 488nm, Violet at 405nm	Red at 640nm, Orange at 593.5nm, Green at 532nm, Blue at 488nm	Red at 642nm, Yellow at 589nm, Green at 532nm, Blue at 473nm
Total output power after fiber	>10mW, >20mW, >50mW, >80mW, >100mW	>10mW, >20mW, >50mW, >100mW, >200mW	>10mW, >20mW, >50mW, >75mW	>10mW, >20mW, >50mW, >100mW, >160mW	>10mW, >20mW, >50mW, >80mW	>10mW, >20mW, >60mW
Operating mode	CW					
Power stability (rms, over 4 hours)	<5%, <3%, ,2%					
Fiber core diameter	4 um Single Mode					
Fiber connector	FC/PC					
Fiber length	1 m					
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:

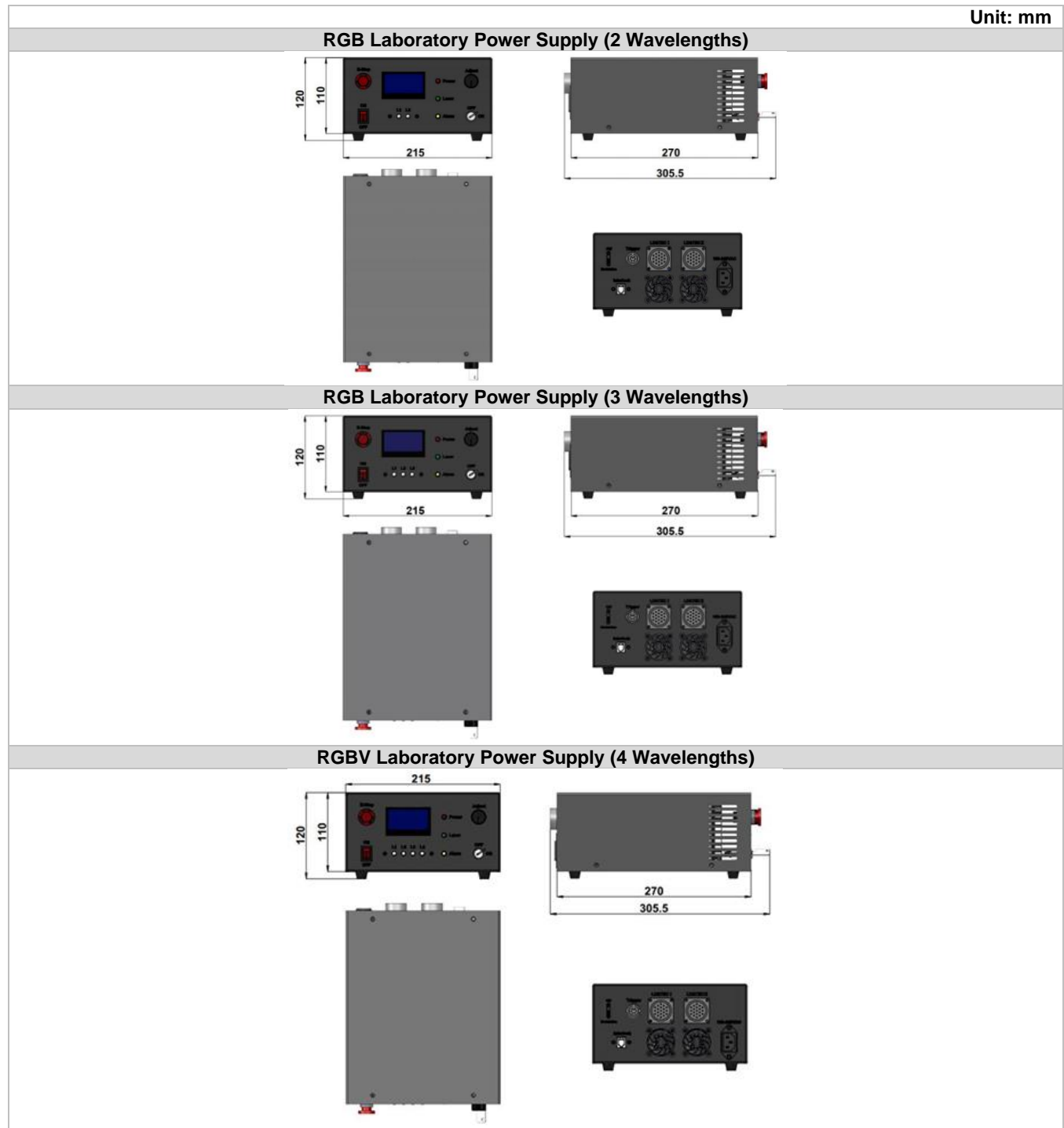
- Specifications of the CW laser is based on the laser performance at full power output after the specified warmup period. The stability of output power may change when output power is adjusted at a different power level.
- Customized sizes are available to different wavelength combinations and output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

ML Series Laser Head Dimensions



Parameter	ML637D532	ML637G473	ML671G457	MLRGBV1, MLROGB1, MLRYGB1
Dimensions	329.5(L)×258(W)×88(H) mm ³	308.7(L)×288(W)×88(H) mm ³	373.7(L)×288(W)×88(H) mm ³	373.7(L)×288(W)×88(H) mm ³
Weight	10.0 kg	12.0 kg	12.0 kg	14.0 kg

ML Series Power Supply Dimensions



Parameter	RGB Laboratory Power Supply (2-3 Wavelengths)	RGBV Laboratory Power Supply (4 Wavelengths)
Dimensions	305.5(L) x215(W) x120(H) mm ³	305.5(L) x215(W) x120(H) mm ³
Weight	5.0 kg	5.0 kg
Input voltage	100-240VAC	100-240VAC

Ordering Information

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

Part Number Configuration ML[1][2][3][4][5][6]						
ML = Laser Model Series	[1] = Wavelength	[2] = Output Power	[3] = Power Supply	[4] = Power Stability	[5] = Modulation	[6] = Fiber
	637D532= 637nm/532nm 637G473= 637nm/532nm/473nm 671G457= 671nm/532nm/457nm RGBV1= 640nm/561nm/488nm/ 405nm ROGB1= 640nm/593.5nm/532n m/488nm RYGB1= 642nm/589nm/532nm/ 473nm	10= >10mW 20= >20mW 50= >50mW ... 160= >160mW 200= >200mW	R2= RGB Laboratory Power Supply – 2 Wavelengths R3= RGB Laboratory Power Supply – 3 Wavelengths R4= RGBV 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	L= 4um SM fiber, FC connector

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