

Diode Lasers

# LML Series

LUXMASTER® COMPACT RAMAN BOX®



### Key Performance Features

- VBG® Wavelength Stabilized
- Compact Single Box Design
- Low Power Consumption
- Several Wavelengths Available
- Digital & Analog Control Functions
- Free-space or Fibered Outputs

### Applications

- Raman Excitation Source
- Particle Sizing & Counting
- Flow Cytometry
- Real-time Process Control
- Metrology
- LIDAR

Center  
Wavelength  
(+/- 0.5 nm)

**647nm**

**785nm**

**830nm**

**1064nm**

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	Units	Value
<b>Operating Specifications</b>		
Output Power*	mW	100-600
Spectral linewidth (typical)	cm <sup>-1</sup>	1.3
Wavelength stability (max)	pm	+/- 5
ASE suppression (typical)	dB	40
Optical power stability (typical)	% pk-pk	<1
Noise (10Hz-10MHz)	% rms	<0.25
Modulation-analog (typical)	NA	
Modulation-digital (typical)	NA	
Power adjustability	%	5-100

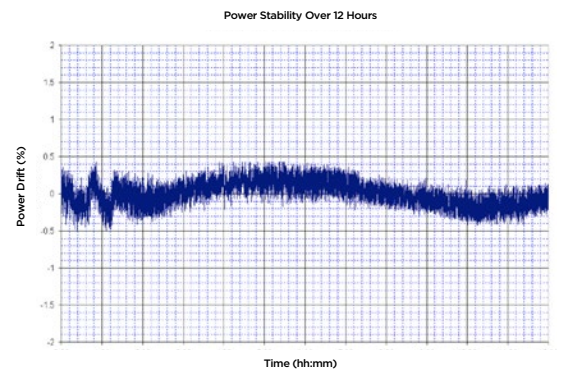
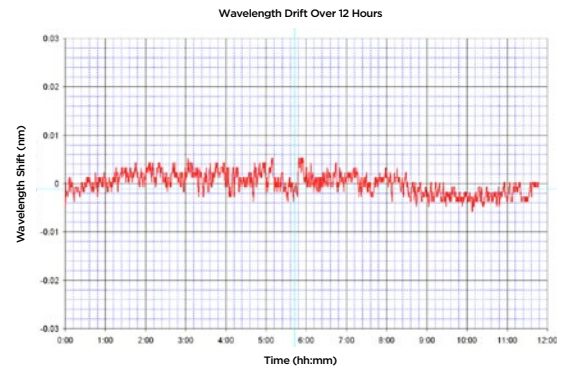
\* See Ordering information for Options.

	Units	Value
<b>Free Space Optical Specifications</b>		
Beam quality (m <sup>2</sup> typical) vertical		1.2
Beam quality (m <sup>2</sup> typical) horizontal		NA
Beam diameter vertical	mm	1
Beam diameter horizontal	mm	5
Beam divergence—vertical	deg	1
Beam divergence—horizontal	deg	5
Polarization ratio	linear	100:1

	Units	Value
<b>Electrical Specifications</b>		
DC input (max)		2A @ 5V
Warm-up time (typical)	sec	5/10
Power consumption (typical/max)	W	6/9
Interface—USB & 10-pin I/O connectors		

	Units	Value
<b>Environmental Specifications</b>		
Case temperature*	°C	-20-+50
Humidity (non-condensing)	&	5-95

\* Must be operated on a heat sink.

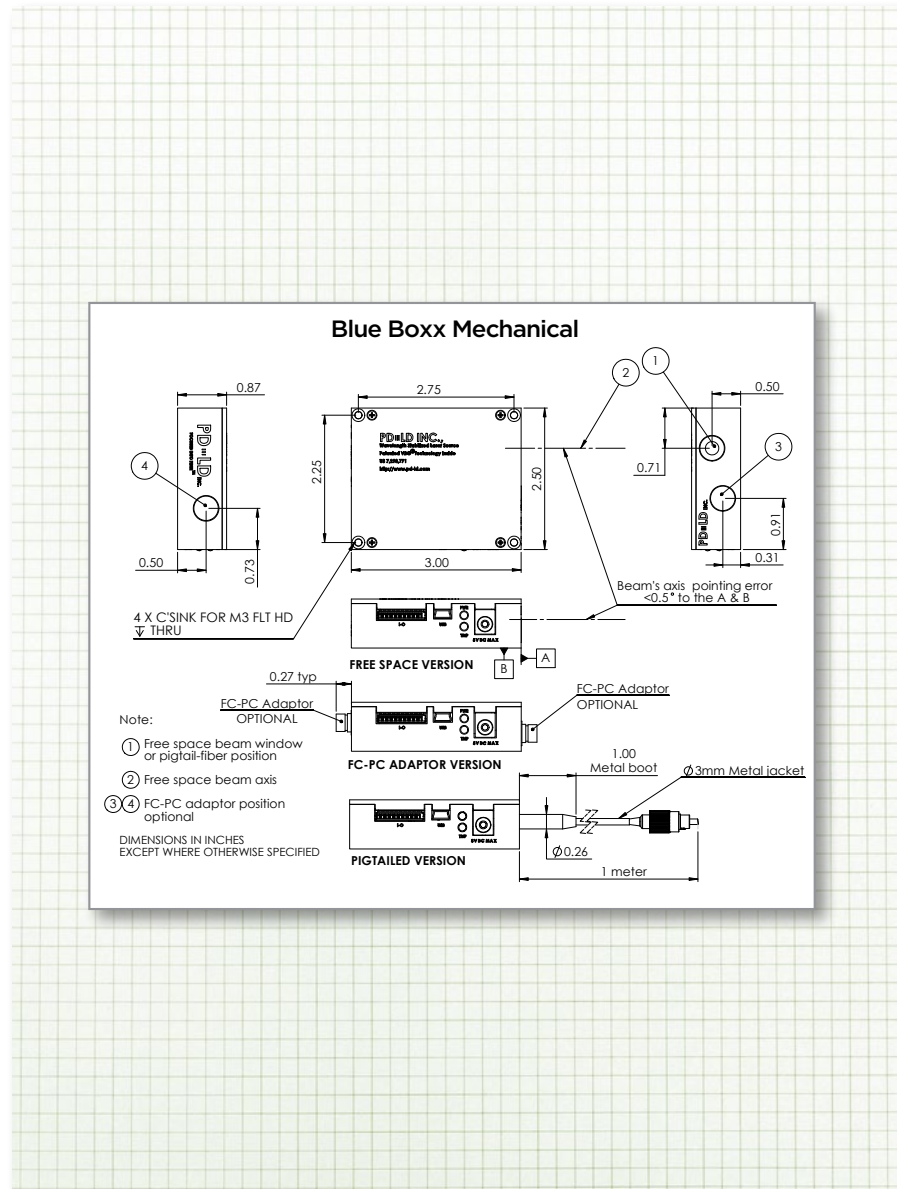


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Weight = 134 grams    Dimensions = 86cm<sup>3</sup> (5.25 in<sup>3</sup>)



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Ordering Information

Part Number	Fiber Type*	Output Power mW	Connector
LML-647.0CB-01	A	200	SMA905
LML-647.0CB-02	A	200	FC/APC
LML-647.0CB-03	A	200	FC/APC
LML-647.0CB-04	A	200	FC/PC
LML-647.0CB-05	A	200	FC/APC
LML-647.0CB-06	C	200	FC/APC
LML-647.0CB-FS	—	300	—
LML-785.0CB-01	A	500	SMA905
LML-785.0CB-02	A	500	FC/APC
LML-785.0CB-03	A	500	FC/APC
LML-785.0CB-04	A	500	FC/PC
LML-785.0CB-05	A	500	FC/APC
LML-785.0CB-06	C	500	FC/APC
LML-785.0CB-FS	—	600	—
LML-830.0CB-01	A	500	SMA905
LML-830.0CB-02	A	500	FC/APC
LML-830.0CB-03	A	500	FC/APC
LML-830.0CB-04	A	500	FC/PC
LML-830.0CB-05	A	500	FC/APC
LML-830.0CB-06	C	500	FC/APC
LML-830.0CB-FS	—	600	—

Part Number System: LML - XXX.XCB - XX

Specific Wavelength      Fiber Type

\*Fiber Types:

- A. 105/125/250 0.22NA with 900µm loose buffer
- B. 50/125/900 0.20NA
- C. 62.5/125/900 0.29NA



Specifications subject to change. 03/14