



Diode Lasers

LML Series

LUXMASTER® COMPACT RAMAN BOXX®



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

	Units	Value
Operating Specifications		
Output Power*	mW	100–600
Spectral linewidth (typical)	cm ⁻¹	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

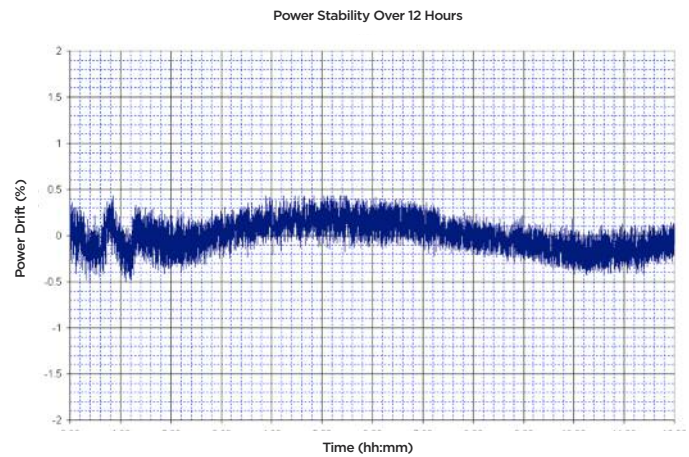
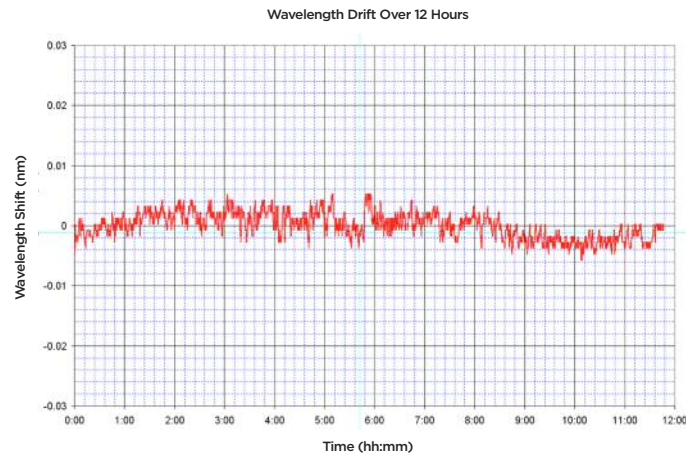
* See Ordering information for Options.

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

	Units	Value
Electrical Specifications		
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
Environmental Specifications		
Case temperature*	°C	-20–+50
Humidity (non-condensing)	&	5–95

* Must be operated on a heat sink.



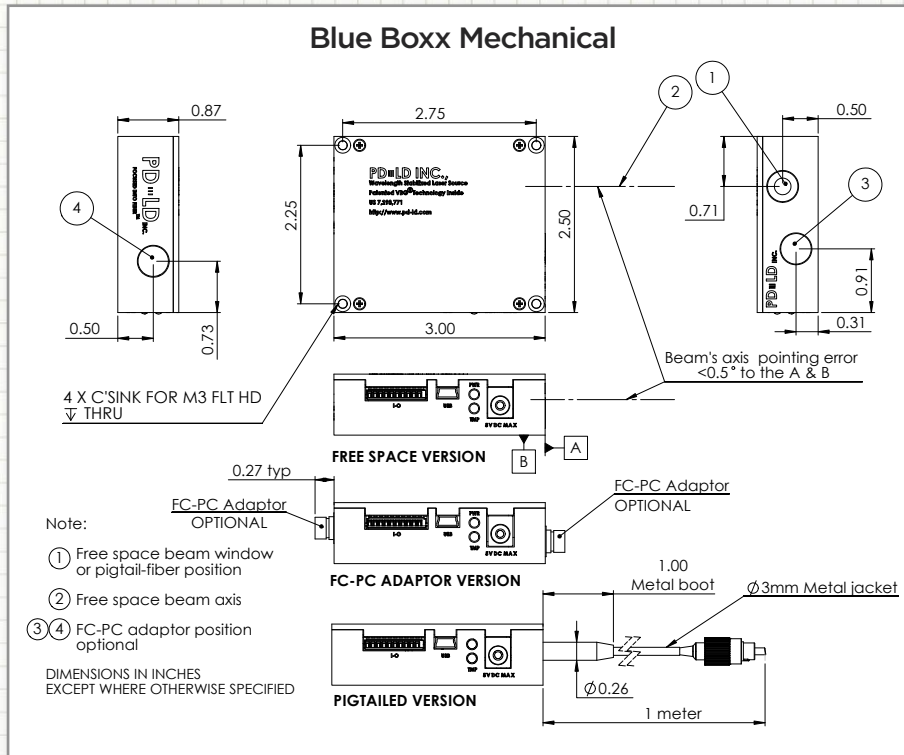


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Weight = 134 grams Dimensions = 86cm³ (5.25 in³)



Ordering Information

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

