

DATASHEET

LUXXMASTER® WAVELENGTH STABILIZED COMPACT RAMAN SOURCE

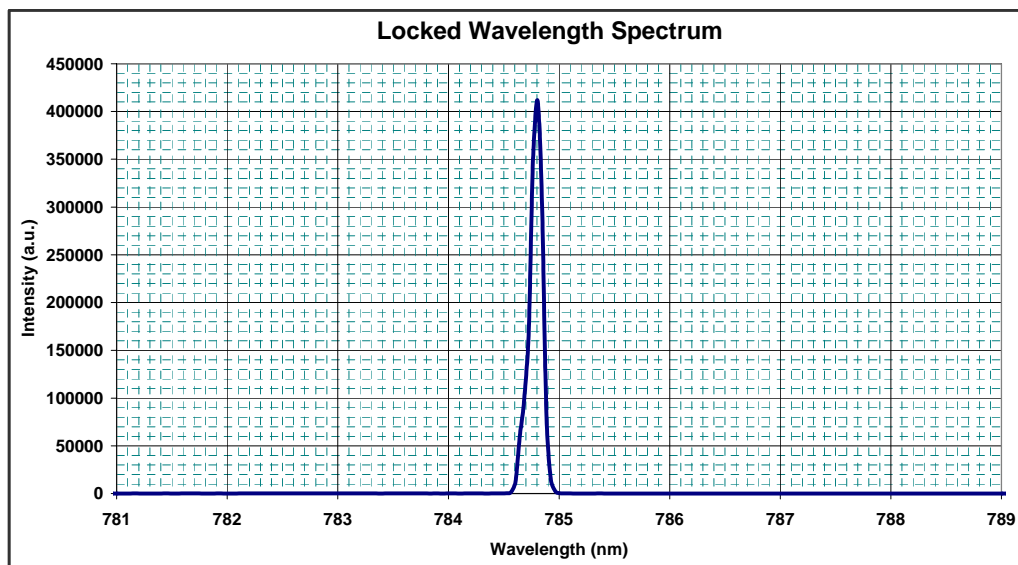
The LuxxMaster® LML series Raman Boxx™ packages PD-LD's award winning LuxxMaster® Volume Bragg Grating® (VBG™) in a rugged box ideally suited for Raman spectroscopy and other narrow linewidth applications. Its small size and simple interface makes the Raman Boxx™ ideal for industrial, military and security applications.



Major Features:

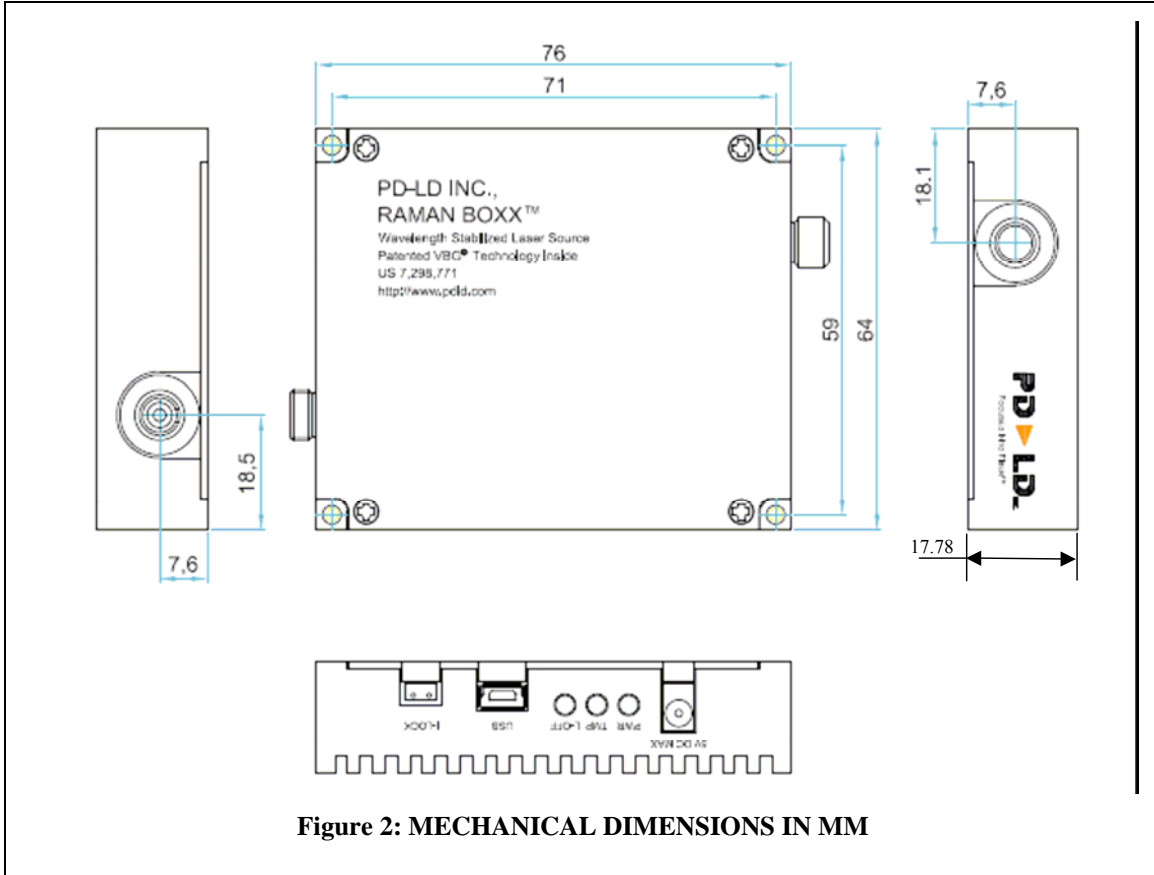
- Performance:
 - Custom Wavelengths [785 nm is standard]
 - $\Delta\lambda_c = \pm 0.5$ nm
 - Line Width - 3 cm^{-1}
 - Thermo Electric Cooler
 - Monitor Photodiode
 - High Power
- Mechanical
 - Simple & Compact
- Cost
 - Economical

Figure 1: LUXXMASTER® COMPACT RAMAN BOXX™

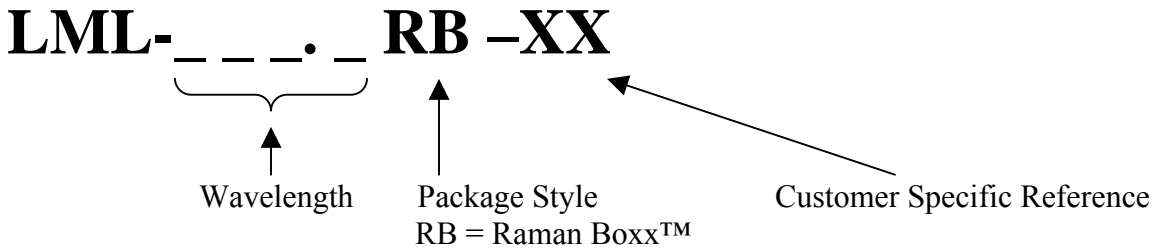


RAMAN BOXX™ SPECIFICATIONS

	Other	Min.	Typical	Max.	Units
Electrical Specifications					
DC Input				2A @ 5V	
Warm up Time (from cold start)				10	Seconds
Optical Specifications					
Output Power ^A			500	600	mW
Center Wavelength		784.50	785.00	785.50	nm
Light Mode	Multimode				
Spectral Line Width			0.08	0.10	nm
			1.30	1.70	cm ⁻¹
Wavelength Stability ^B			± 5		pm
Wavelength Stability ^C			± 5		pm
ASE Suppression (Optical SNR)			40		dB
Optical Power Variations ^D			<1		%pk-pk
Noise			<0.25		%rms
Expected Lifetime			>10000		hrs
<i>Note A</i>	<i>Connector Port Power</i>				
<i>Note B</i>	<i>Over 24 hours with properly stabilized laser</i>				
<i>Note C</i>	<i>Maximum drift due to temperature range and over device lifetime</i>				
<i>Note D</i>	<i>8 hours of continuous operation</i>				
Mechanical Specifications					
Physical Dimensions (L X W X H)	3 x 2.5 x 0.7				inch
Thermal Management	Laser TEC controlled				
Fiber Core Diameter			105		um
Fiber NA			0.22		
Connector Type	FC/APC				
Weight			100		grams
Environmental Specifications					
Ambient Temperature		0		50	°C
Humidity (non-condensing)		5		95	%



Part Number System



Example: LML-785.0RB-XX

This is a LuxxMaster® Raman Boxx™ with a center wavelength of 785nm.

**For enquiries/quote contact PDL D Inc.,
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