



Diode Lasers

# SLM Series

SINGLE LONGITUDINAL MODE LASER SERIES



## Key Performance Features

- High Power Single Mode Performance
- VBG Wavelength Stability
- Ultra Stable Output Power
- Fully Integrated OEM Solution
- Very Low Power Consumption
- Collimated or Fiber Coupled Output
- User Selectable Control Options
- Compact, One Box Design

## Applications

- HeNe Replacement
- Flow Cytometry
- Confocal Microscopy
- Metrology
- Fluorescence Excitation
- Interferometry
- Microlithography
- Raman Spectroscopy

Center Wavelength  
(+/- 0.5 nm)

**632.8 nm**

# SLM Series

SINGLE LONGITUDINAL MODE LASER SERIES



	Units	Value
<b>Operating Specifications</b>		
Output power*	mW	20-50
Spectral linewidth (typical)	KHz	<1
Wavelength stability (over 8 hours)	pm	+/- 2
ASE suppression (typical)**	dB	40
Optical power stability (over 8 hours)***	% rms	+/-1
Noise (10Hz-100MHz)	% rms	0.2

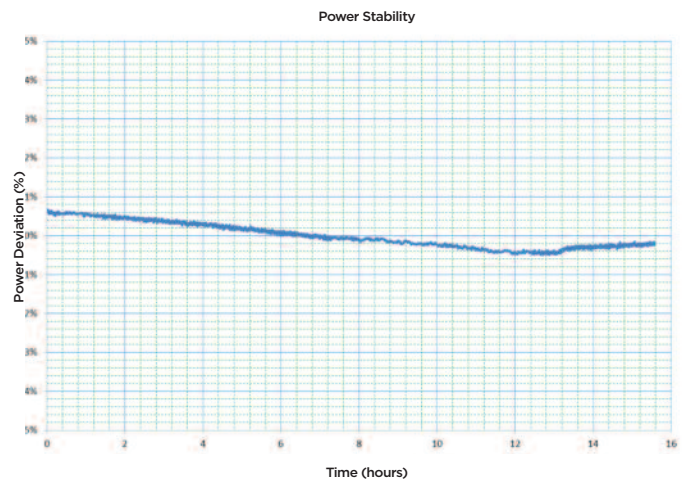
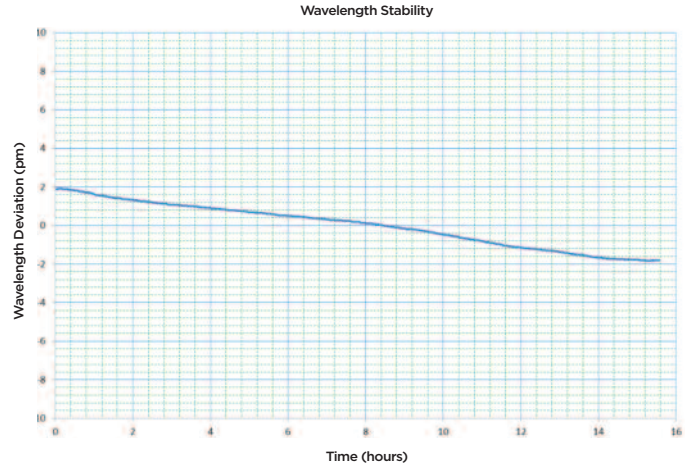
\* Factory set to user specified power output (See Ordering Information Table for options)  
 \*\*High suppression to 100dB available  
 \*\*\*A+ +/- 3° C

	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		1.1
Beam diameter vertical	mm	1.6
Beam diameter horizontal	mm	0.8
Beam aspect ratio		1.5-2
Beam divergence—vertical	mrad	0.8
Beam divergence—horizontal	mrad	1.3
Beam pointing stability (over 8 hours)	μrad	<50
Polarization ratio	linear	100:1

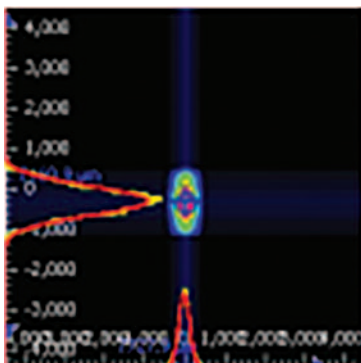
	Units	Value
<b>Electrical Specifications</b>		
DC input (max)		2A @ 3.3V
Warm-up time (typical)	min	2
Power consumption (typical/max)	W	5
Interface—USB & 10-pin I/O connectors		

	Units	Value
<b>Electrical Specifications</b>		
Case temperature*	°C	15-40
Humidity (non-condensing)	%	5-95

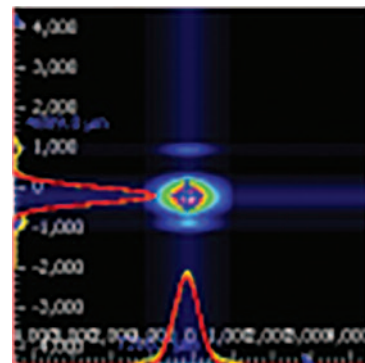
\*Must be operated on a heat sink



Free Space Beam Near Field



Free Space Beam Far Field



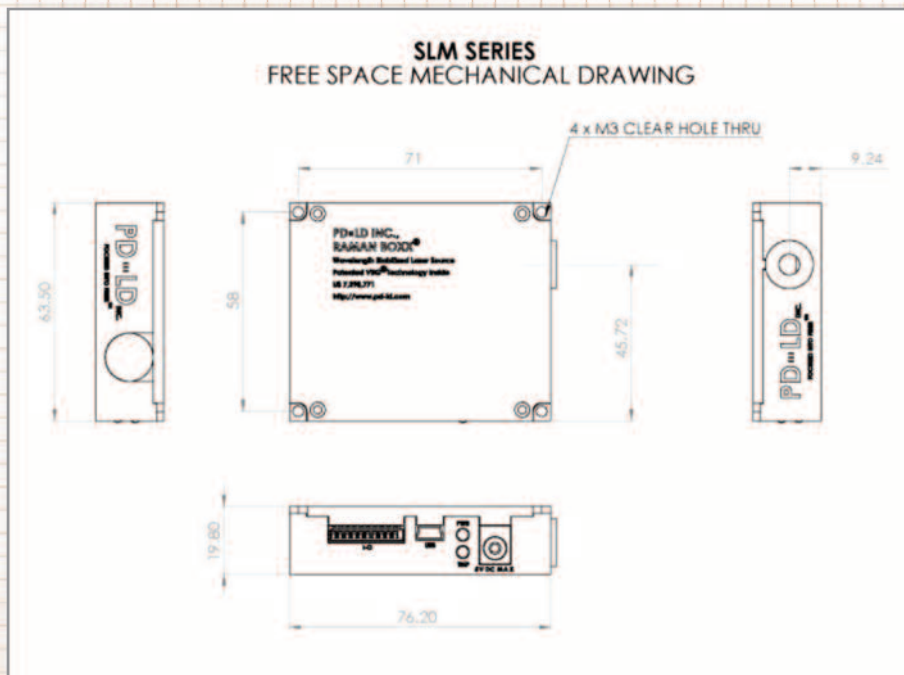
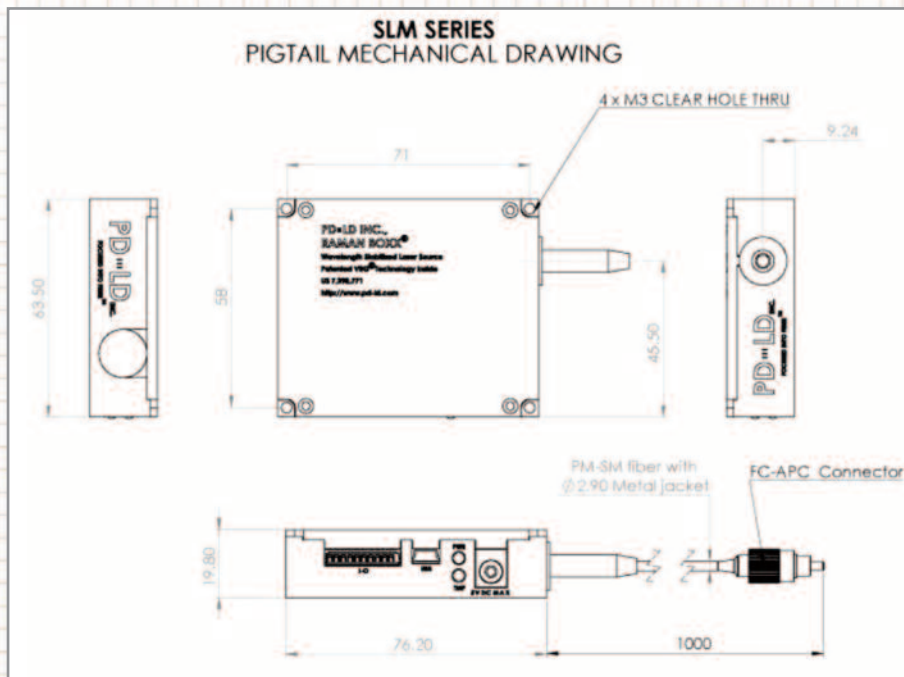


Diode Lasers

# SLM Series

SINGLE LONGITUDINAL MODE LASER SERIES

Weight = 135 grams    Dimensions = 86cm<sup>3</sup> (5.25 in<sup>3</sup>)



Diode Lasers

# SLM Series

SINGLE LONGITUDINAL MODE LASER SERIES



## Ordering Information

Part Number	Fiber Type	Typical Output Power mW
SLM-632.8-SMF	4.3 um MFD	> 20
SLM-632.8-PMF	4.3 um MFD PANDA	> 20
SLM-632.8-FS	(Free-space)	> 50

