



Diode Lasers

PLM Series

COMPACT POWER STABILIZED
SINGLE-MODE SERIES—Blue & Green Wavelengths



Key Performance Features	Applications
<ul style="list-style-type: none">• Ultra-Stable Power Output• Compact Single Box Design• Low Power Consumption• Several Wavelengths Available• Free-space or Fibered Outputs	<ul style="list-style-type: none">• Raman Excitation Source• Flow Cytometry• Semiconductor Processing• Real-time Process Control• Metrology

Center Wavelength (35 nm)	405 nm	488 nm	515 nm	520 nm
---------------------------	--------	--------	--------	--------

PLM Series

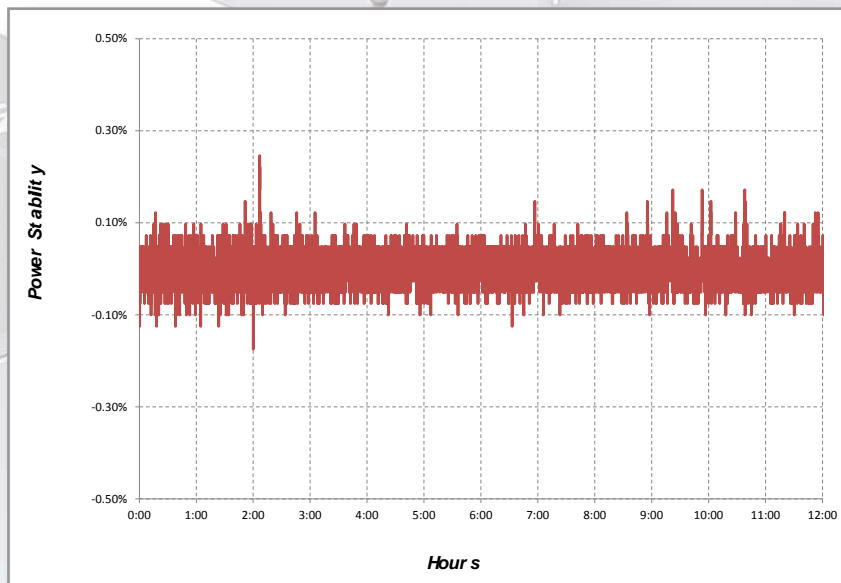


COMPACT POWER STABILIZED
SINGLE-MODE SERIES—Blue & Green Wavelengths

Units	405 nm	405 nm	488 nm	515 nm	520 nm
-------	--------	--------	--------	--------	--------

Operating Specifications						
Free-Space Output Power	mW	10	150	50	25	45
Fibered Output Power*	mW	—	—	—	8	15
Spectral linewidth (typical)	nm	1-2				
Wavelength stability (over 8 hours)	nm	±1				
Optical power stability (over 8 hours)**	% pk-pk	<0.4				
Noise (10Hz-100MHz)	% rms	0.2				
Adjustable Output Power		10-90%				

*See ordering information for options. Power value given for SMF version.
**APC mode



Units	405 nm	405 nm	488 nm	514 nm	520 nm
-------	--------	--------	--------	--------	--------

Operating Specifications						
Beam quality (m ² typical) vertical		1.2				
Beam quality (m ² typical) horizontal		1.1				
Beam size vertical	mm	1.2	1.2	1.8	1.8	1.8
Beam size horizontal	mm	0.6	0.6	0.6	0.6	0.6
Beam aspect ratio		2	2	3	3	3
Beam divergence—vertical	mrad	0.8				
Beam divergence—horizontal	mrad	1.3				
Beam pointing stability (over 8 hours)	μrad	<50				
Beam pointing accuracy	degrees	1				
Polarization ratio	linear	100:1				



Diode Lasers

PLM Series

COMPACT POWER STABILIZED
SINGLE-MODE SERIES—Blue & Green Wavelengths

	Units	Value
Electrical Specifications		
DC input 1		0.5A @ 9V
DC input 2		2A @ 3.3V
Warm-up time (typical)	sec	10
Power consumption (typical/max)	W	< 12
Interface—USB & 10-pin I/O connectors		

	Units	Value
Environmental Specifications		
Case temperature*	°C	10-40
Humidity (non-condensing)	%	5-95

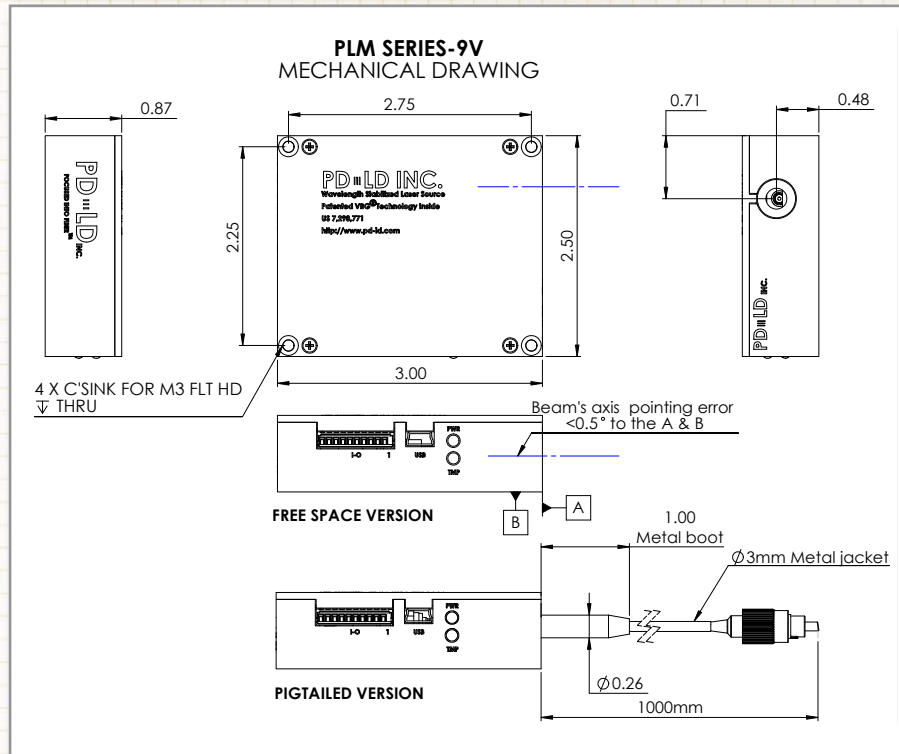
*Must be operated on a heat sink

PLM Series



COMPACT POWER STABILIZED
SINGLE-MODE SERIES—Blue & Green Wavelengths

Weight = 134 grams Size = 86 cm³ (5.2 in³)



Ordering Information

Part Number	Fiber Type	Wavelengths Available
PLM-XXX.X-SMF	3.5 μ m MFD	514, 520 nm
PLM-XXX.X-PMF	3.5 μ m MFD PANDA	514, 520 nm
PLM-XXX.X-MMF	50, 62.5 & 105 μ m MMF	All
PLM-XXX.X-FS	(Free-space)	All

Part Number System: **PLM - XXX.X - XXX**

Specific Wavelength Fiber Type or Free-space