

# LDM-4 Standard Module



## Features

- Compact size (11mm dia. x 25mm long)
- Slow start, reverse polarity and over voltage protection
- Small focal spots down to 10 microns
- Available with range of line generators both Gaussian and Uniform Intensity
- Cost effective

Available Wavelengths & Powers	Wavelength (nm)		Power (mW)	
	635nm		0.5 - 25mW	
	650nm		0.5 - 40mW	
	670nm		0.5 - 8mW	
	780nm		1 - 50mW	
	808nm		1 – 400mW (requires external driver)	
	830nm		5 - 40mW	
	840nm		0.5 - 8mW	
	850nm		0.5 – 8mW	
	905nm		10 – 25mW	
Beam Size at output	Apertured		3mm x 2mm	
	Non-aperture – Glass		6mm x 2mm	
	Non-apertured - Plastic		5mm x 2mm	
Typical Achievable focal spot sizes (1/e <sup>2</sup> ) (spot circularity of measurements (0.95 typical))	Focus Distance (mm)		Spot Size (μm) Apertured / Non-apertured	
	25		15 / 18	
	50		27 / 34	
	75		42 / 58	
	150		85 / 115	
	200		117 / 135	
Typical Achievable Line Thicknesses (1/e <sup>2</sup> ) (when used with one of our line generators)	Focus Distance (mm)		Line Thickness (μm)	
	25		12	
	50		25	
	75		40	
	150		80	
	200		110	
Beam Divergence	0.75 mrad			
Mechanical / Optical Alignment	Standard Fixed Focus	< +/- 10mm @ 3m		
	Special Fixed Focus	< +/- 5mm @ 3m		

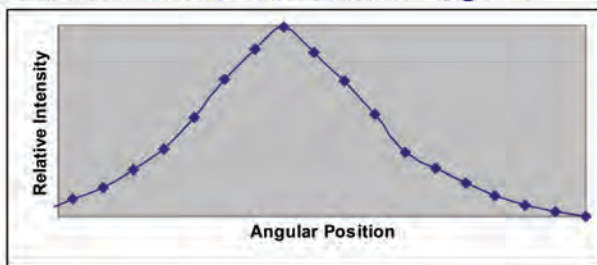
This product is registered with the FDA in accordance with 21 CFR 1040.10(a)(3)(i) and is compliant with European, and Australia/New Zealand laser safety standards 73/23/EEC - 98/37/EG, 89/336/EEC, EN 50081-1, EN-31252, EN-31252, EN 55022, EN 60825-1 and AS/NZS 2211:1997. The complete laser product manufacturer must supply adequate instructions for installation and servicing of this product. This is not a removable laser system. This product is designed solely as a component in an electronic product and therefore does not comply with the requirements of 21 CFR 1040.10 and 1040.11 for complete laser products. Avoid direct eye exposure to the beam.

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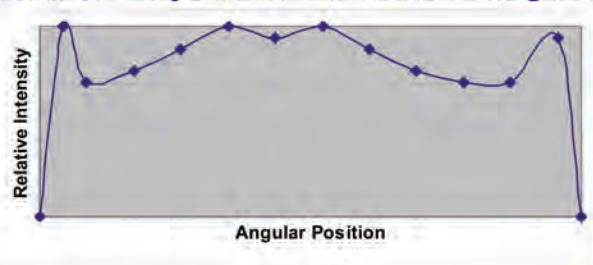


<b>Physical Dimensions</b>	11mm diameter x 25.4mm	
<b>Operating Voltage</b>	3 – 6 VDC	
<b>Typical Operating Current</b>	<b>Laser Power (mW)</b>	<b>Current (mA)</b>
	1-4	<45
	5-8	<80
	15-50	<120mA
<b>Power Stability (25deg C)</b>	2hr, <1%	
<b>Beam Pointing Stability</b>	<50urad	
<b>Spectral Linewidth</b>	<0.5nm typical	
<b>External TTL Modulation</b>	<b>Standard LDM-4</b>	<b>With Pulsing Option</b>
	1kHz	500kHz

Gaussian Line Generator Profile 60 degrees



Uniform Intensity Line Generator Profile 60 degrees



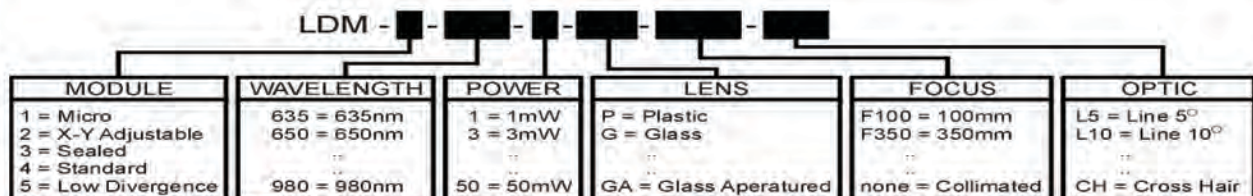
Standard Gaussian Line Generator Options

Part Number	Line Generator Fan Angle
L5	5 degrees
L8	8 degrees
L15	15 degrees
L40	40 degrees
L45	45 degrees
L60	60 degrees
L70	70 degrees
L90	90 degrees

Standard Uniform Intensity Line Generators

Part Number	Line Generator Fan Angle
UL60	60 degrees
UL90	90 degrees

Determining Laser Specifications from part number



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