

MaxiBrite Compact Series

LDM145/633



The MaxiBrite Compact laser is a self-contained OEM laser diode module emitting a wavelength of close to 633nm. It has the highest visibility of any of the red laser diodes and can be seen in most daylight conditions.

As a direct replacement for helium neon lasers in many applications, it offers additional benefits of superior ruggedness, compact size (16mm diameter) and greater efficiency. Internal connection of the laser diode to the module housing ensures good heatsinking and longer laser lifetimes.

The MaxiBrite Compact Series is available with a choice of two lenses. The LDM145**G**/633 laser uses a glass lens for greatest optical throughput. The output beam is elliptical and offers the smallest output beam diameter and focussed spot size. The LDM145**P**/633 uses a plastic lens that yields a circular spot and offers a lower cost unit at the lower powers.

Features

- Compliant with European and U.S. Legislation
- Rugged Construction
- 16mm Diameter
- User Adjustable Focussing Lens
- Low Voltage DC Operation
- Reverse Polarity Protection
- Integral Emission Indicator

Applications

- Alignment and Positioning
- Bar Code Readers
- Dimensional Scanning
- Metrology
- Event Detection
- Robot Control
- Target Designation
- Edge Detection
- Analysis
- Security
- Optical Fibre Testing
- Entertainment (Laser Gaming)

MaxiBrite Compact Series Specifications	Glass Lens LDM145G/____			Plastic Lens LDM145P/____		
Optical	633/1	633/3	633/5	633/1	633/3	633/5
Output Power (mW +/- 10%)	0.9	3	4.5	0.9	3	4.5
Laser Classification	2	3a	3a	2	3a	3a
Power Stability (%)	< 5			< 5		
Wavelength (nm)	635 +/- 5			635 +/- 5		
Wavelength vsTemp (nm/°C)	0.2			0.2		
Focus Range (mm)	20 to ∞			150 to ∞		
Beam Size at Aperture (mm)	5 x 2			5 x 5		
Beam Size at Nearest Focus (µm)	< 50			< 100		
Beam Divergence (mrad)	< 0.5			< 0.5		
Astigmatism (µm)	< 10			< 10		
Beam Position (mrad)	< 25			< 25		
Pointing Stability (mrad)	< 0.1			< 0.1		
Electrical/Mechanical (LDM145P or G____)						
Supply Voltage – Red Lead (V)	0			0		
Supply Voltage – Black Lead (V)	-4 to -6			-4 to -6		
Operating Current (mA)	30	60	75	35	70	70
Length (mm)	49			49		
Diameter (mm)	16			16		
Mass (g)	22			22		
Supply Lead Length (mm)	200			200		
Environmental						
Operating Temperature (°C)	-10 to +50			-10 to +50		
Storage Temperature (°C)	-40 to +85			-40 to +85		
Operating Humidity (%rh)	90			90		
MTTF at 25 °C (x 1,000 hours)	> 40	> 40	> 20	> 40	> 40	> 20
Typical values quoted unless otherwise stated. Imatronic reserves the right to modify specifications without						

Options

- Other Wavelengths
- Wavelength Selection
- Higher Output Powers
- Customer Specific Power Settings
- Customer Specific Packaging

Related Products

- Line Generators
- Cross Generators
- Customer Specific Pattern Generators

Other Products & Services

- Laser Target Designators
- Distance Measurement
- Velocity Measurement
- Applications Consultancy
- Product and Technical Development
- Lenses and Mirrors
- Bespoke Scanning Systems

Laser Diode Module Product Matrix

	Ultrasmall	Miniature	Compact	Modulatable Compact	Laboratory
MaxiBrite	LDM122P/633/x	LDM115P or G/633/x	LDM145P or G/633/x	LDM146P or G/633/x	LDL175/633/x
HiBrite	LDM122P/650/x	LDM115P or G/650/x	LDM145P or G/650/x	LDM146P or G/650/x	LDL175/650/x
MediBrite	LDM122P/670/x	LDM115P or G/670/x	LDM145P or G/670/x	LDM146P or G/670/x	LDL175/670/x
VisiLite	LDM122P/780/x	LDM115P or G/780/x	LDM145P or G/780/x	LDM146P or G/780/x	LDL175/780/x
DarkLite	LDM122P/830/x	LDM115P or G/830/x	LDM145P or G/830/x	LDM146P or G/830/x	LDL175/830/x

Standard output powers x = 1, 3 or 5mW. Higher powers available upon request.

For pricing or further information please contact your local distributor.

Otherwise contact Imatronic directly on:

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Distributor

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DIRECTLY**

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