

DarkLite Miniature Series

LDM115/830



* Images are for illustration only

The DarkLite Miniature laser is a self-contained OEM laser diode module emitting an infrared wavelength of 830nm. It is invisible to the human eye. It is general used where the beam is invisible under all conditions.

It is designed for industrial applications and offers superior ruggedness and miniature size (11mm diameter). Internal connection of the laser diode to the module housing ensures good heatsinking and longer laser lifetimes.

The DarkLite Miniature Series is available with a choice of two lenses. The LDM115G/830 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 LDM115P/830 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
- 11mm Diameter
- User Adjustable Focussing Lens
- Low Voltage DC Operation
- Reverse Polarity Protection
- Integral Emission Indicator

Applications

- Dimensional Scanning
- Metrology
- Event Detection
- Robot Control
- Target Designation
- Edge Detection
- Analysis
- Security
- Covert Applications

DarkLite Miniature Series Specifications	Glass Lens			Plastic Lens		
	LDM115G/___			LDM115P/___		
Optical	830/1	830/3	830/5	830/1	830/3	830/5
Output Power (mW +/- 10%)	0.9	3	4.5	0.9	3	4.5
Laser Classification	3a	3b	3b	3a	3b	3b
Power Stability (%)	< 5			< 5		
Wavelength (nm)	825 +/- 15			825 +/- 15		
Wavelength vsTemp (nm/°C)	0.2			0.2		
Focus Range (mm)	35 to ∞			150 to ∞		
Beam Size at Aperture (mm)	4 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						
Supply Voltage – Red Lead (V)	0			0		
Supply Voltage – Black Lead (V)	-4 to -6			-4 to -6		
Operating Current (mA)	55	60	65	57	65	75
Length (mm)	37			47		
Diameter (mm)	11			11		
Mass (g)	9.5			10.5		
Supply Lead Length (mm)	200			200		
Environmental						
Operating Temperature (°C)	-10 to +50			-10 to +50		
Storage Temperature (°C)	-40 to +80			-40 to +80		
Operating Humidity (%rh)	90			90		
MTTF at 25 °C (x 1,000 hours)	> 50	> 50	> 50	> 50	> 50	> 50
<i>Typical values quoted unless otherwise stated. Imatronic reserves the right to modify specifications without notice.</i>						

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

For pricing or further information please contact your local distributor.

Otherwise contact Global Laser directly on:

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Distributor