

## HiBrite Miniature Series

### LDM115/650



\* images are for illustration

The HiBrite Miniature laser is a self-contained OEM laser diode module emitting a wavelength of 650nm. It has good visibility and, as it can be seen in most daylight conditions, represents a good compromise between brightness and cost.

It can be considered as an alternative to helium neon lasers in many applications and offers the additional benefits of superior ruggedness, miniature size (11mm diameter) and greater efficiency. Internal connection of the laser diode to the module housing ensures good heatsinking and longer laser lifetimes.

The HiBrite Miniature Series is available with a choice of two lenses. The LDM115G/650 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/650 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

- 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)

<b>HiBrite Miniature Series Specifications</b>	<b>Glass Lens LDM115G/___</b>			<b>Plastic Lens LDM115P/___</b>		
	650/1	650/3	650/5	650/1	650/3	650/5
<b>Optical</b>	650/1	650/3	650/5	650/1	650/3	650/5
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)	655 +/- 10			655 +/- 10		
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		
<b>Electrical/Mechanical</b>						
Supply Voltage – Red Lead (V)	0			0		
Supply Voltage – Black Lead (V)	-4 to -6			-4 to -6		
Operating Current (mA)	35	45	60	40	60	65
Length (mm)	37			47		
Diameter (mm)	11			11		
Mass (g)	9.5			10.5		
Supply Lead Length (mm)	200			200		
<b>Environmental</b>						
Operating Temperature (°C)	-10 to +40			-10 to +40		
Storage Temperature (°C)	-20 to +85			-20 to +85		
Operating Humidity (%rh)	90			90		
MTTF at 25 °C (x 1,000 hours)	> 25	> 25	> 25	> 25	> 25	> 25
<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:**

Telephone +44 (0)1495 212213  
 Fax: +44 (0)1495 214004  
 Email: sales@globallasertech.com

<p><u>Distributor</u></p>          
---