

## MediBrite Laboratory Diode Laser LDL175/670

The MediBrite Laboratory Diode Laser is a stand-alone compact laser system emitting a wavelength of 670nm. It is of medium visibility and can be seen in moderately bright background lighting conditions.



LDL175

It can be considered as an alternative to helium neon lasers in many applications and offers the additional benefits of superior ruggedness, compact size (25mm diameter) which is compatible with standard 1" optical mounts and greater efficiency. Internal connection of the laser diode to the module housing ensures good heatsinking and longer laser lifetimes.

The MediBrite Laboratory Diode Laser Series is designed for operation with standard (4.5 VDC) regulated mains power adaptors typically used with desktop calculators. The LDL175/670 laser uses an A/R coated glass lens for greatest optical throughput. The output beam is elliptical and offers the smallest output beam diameter and focussed spot size.

### Features

- Compliant with European and U.S. Legislation
- Integral Power Switch
- Mechanical Manually Operated Shutter
- Integral Emission Indicator
- Rugged Construction
- Compatible with Standard 1" Optical Mounts
- User Adjustable Focussing Lens
- Low Voltage DC Operation
- Reverse Polarity Protection

### Applications

- Laboratory Experimentation
- Educational Demonstration
- Alignment and Positioning
- Dimensional Scanning
- Metrology
- Event Detection
- Robot Control
- Edge Detection
- Analysis
- Security
- Optical Fibre Testing

<b>MediBrite Laboratory Series Specifications</b>	<b>LDL175/___</b>		
<b>Optical</b>	670/1	670/3	670/5
Output Power (mW +/- 10%)	0.9	3	4.5
Laser Classification	2	3a	3a
Power Stability (%)	< 5		
Wavelength (nm)	670 +/- 10		
Wavelength vs Temp (nm/°C)	0.2		
Focus Range (mm)	20 to ∞		
Beam Size at Aperture (mm)	5 x 2		
Beam Size at Nearest Focus (µm)	< 50		
Beam Divergence (mrad)	< 0.5		
Astigmatism (µm)	< 10		
Beam Position (mrad)	< 30		
Pointing Stability (mrad)	< 0.1		
<b>Electrical/Mechanical</b>			
Electrical Connections	2.5mm socket, positive centre pin		
Supply Voltage (V)	4 to 6		
Operating Current (mA)	35	40	55
Length (mm)	58		
Diameter (mm)	25		
Mass (g)	55		
Supply Lead Length (mm)	200		
<b>Environmental</b>			
Operating Temperature (°C)	-10 to +50		
Storage Temperature (°C)	-40 to +85		
Operating Humidity (%rh)	90		
MTTF at 25 °C (x 1,000 hours)	> 25	> 25	> 40
<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

- Regulated Mains Power Adaptors - European or U.S. voltages

#### 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