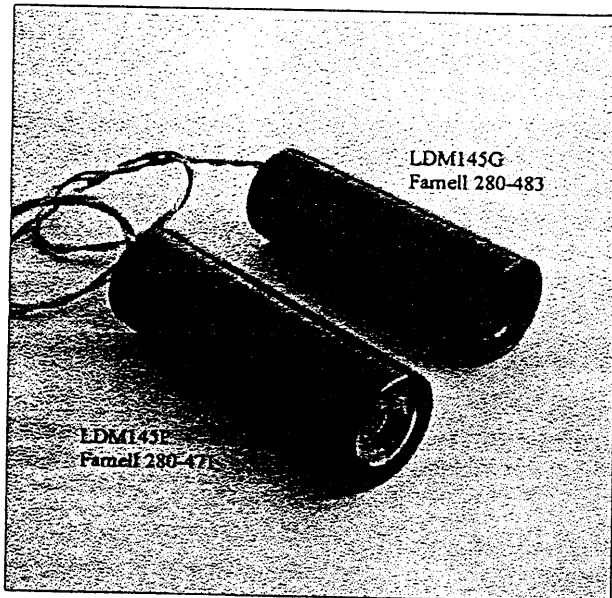


## MediBrite Compact Series

LDM145/670 (Farnell 280-471 & 280-483)



The MediBrite Miniature laser is a self-contained OEM laser diode module emitting a wavelength of 670nm. It is of medium visibility and can be seen in moderately bright background lighting conditions.

It can be considered as an alternative to helium neon lasers in many applications and offers the 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 MediBrite Compact Series is available with a choice of two lenses. The LDM145G/670 (Farnell 280-483) 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 LDM145P/670 (Farnell 280-471) 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)

<b>MediBrite Compact Series Specifications</b>	<b>Farnell 280-483</b>	<b>Farnell 280-471</b>
<b>Optical</b>	670/3	670/1
Output Power (mW +/- 10%)	3	0.9
Laser Classification	3a	2
Power Stability (%)	< 5	< 5
Wavelength (nm)	670 +/- 10	670 +/- 10
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
<b>Electrical/Mechanical (LDM145P or G)</b>		
Supply Voltage – Red Lead (V)	0	0
Supply Voltage – Black Lead (V)	-4 to -6	-4 to -6
Operating Current (mA)	40	35
Length (mm)	49	49
Diameter (mm)	16	16
Mass (g)	22	22
Supply Lead Length (mm)	200	200
<b>Environmental</b>		
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)	> 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

### Laser Diode Module Product Matrix

	<b>Ultrasmall</b>	<b>Miniature</b>	<b>Compact</b>	<b>Modulatable Compact</b>	<b>Laboratory</b>
<b>MaxiBrite</b>	LDM122P/633/x	LDM115P or G/633/x	LDM145P or G/633/x	LDM146P or G/633/x	LDL175/633/x
<b>HiBrite</b>	LDM122P/650/x	LDM115P or G/650/x	LDM145P or G/650/x	LDM146P or G/650/x	LDL175/650/x
<b>MediBrite</b>	LDM122P/670/x	LDM115P or G/670/x	LDM145P or G/670/x	LDM146P or G/670/x	LDL175/670/x
<b>VisiLite</b>	LDM122P/780/x	LDM115P or G/780/x	LDM145P or G/780/x	LDM146P or G/780/x	LDL175/780/x
<b>DarkLite</b>	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. Alternatively, contact us on: -

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