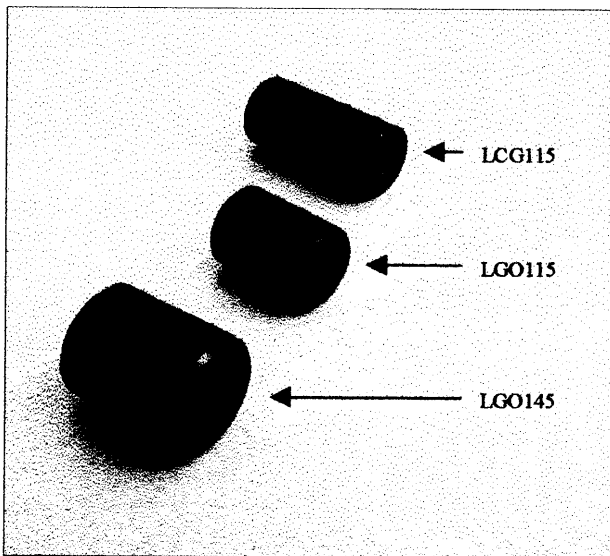


Laser Line and Cross Generators

LGO115, LGO145 and LCG115



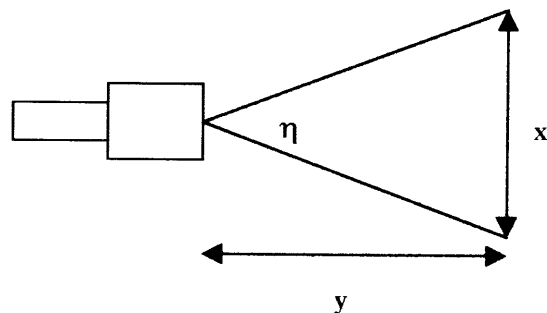
The LGO115 and LGO145 series of Line Generator Optics are specifically designed for use with the Miniature (LDM115) and Compact (LDM145) range of Imatronic Laser Diode Modules respectively.

The Line Generators simply slip over the end of the appropriate Laser Diode Module and are secured in place by tightening a small locking screw. The focus position of the line is adjusted by rotating the lens on the Laser Diode Module prior to the installation of the Line Generator Optic to give a highly defined thin line of laser light.

The LCG115 is also a plug-on accessory which, when fitted to the front of a pre-focussed Miniature (LDM115) Laser Diode Module emits a highly defined cross of laser light. The LCG is installed and secured in the same way as the LGOs.

Applications

- Alignment and Positioning
- Edge Detection
- Pattern Recognition
- Medical Alignment Systems
- Light Barriers
- Robotic Control
- Process Control
- Seam Tracking



$$\text{Line Length } x = 2y \tan(\eta/2)$$

η = fan angle
 y = distance from lens

Laser Line Generator Specifications	LGO115	LGO145
Fan Angle (degrees)	15, 28, 40, 60 and 120	15, 28, 40, 60 and 120
Operational Wavelength (nm)	630 to 830	630 to 830
Typical Line Width at 1 metre (mm)	0.75	0.75
Length (mm)	24	26
Diameter (mm)	17	22
Mass (mm)	10	16.5
Length with Relevant LDM (mm)	51	60
Diameter with Relevant LDM (g)	17	22
Mass with Relevant LDM (mm)	19.5	38.5

Laser Cross Generator Specifications	LCG115
Cross Length (mm) x Line Length (mm) @ 0.5 metres	50 x 1
Cross Length (mm) x Line Length (mm) @ 2 metres	160 x 1.5
Cross Length (mm) x Line Length (mm) @ 5 metres	380 x 2
Operational Wavelength Range (nm)	630 to 830
Length (mm)	35
Diameter (mm)	17
Mass (g)	15
Length with LDM115 (mm)	60
Diameter with LDM115 (mm)	17
Mass with LDM115 (g)	46

Typical values quoted unless otherwise stated. Imatronic reserves the right to modify specifications without notice.

	LGO115 or LCG115 can be used with	LGO145 can be used with	
	Miniature	Compact	Modulatable Compact
MaxiBrite	LDM115P or G/633/x	LDM145P or G/633/x	LDM146P or G/633/x
HiBrite	LDM115P or G/650/x	LDM145P or G/650/x	LDM146P or G/650/x
MediBrite	LDM115P or G/670/x	LDM145P or G/670/x	LDM146P or G/670/x
VisiLite	LDM115P or G/780/x	LDM145P or G/780/x	LDM146P or G/780/x
DarkLite	LDM115P or G/830/x	LDM145P or G/830/x	LDM146P or G/830/x

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

Other Products & Services

- Laser Diode Modules
- 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. Alternatively, contact us on: -

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