

# 1. Product Overview

The Interchangeable line lens consists of a Diffractive optical element (DOE) lens fitted with in an 11mm diameter lens holder with an M9 thread section for mounting. The lens produces a 4 x 4 grid pattern with typical full fan angle of 4.57 degree. the distance between the lines of the gird (interbeam angle) is 1.18 degrees. Diffractive optical elements (DOE) split a single gaussian input beam into projections consisting of many gaussian beams. Due to the large number of beams in the patterns the intensity is often uniform in the length at shorter working distances, however due to the effects of divergence the uniformity levels will decrease over longer working distance. The intensity distribution in the width is gaussian. An M9 threaded section allows the lens assembly to simply screw into any laser module with a M9 thread for lens assembly and a suitable focal length collimator.

The lens assembly will fit into the below lasers.

RS Part Number	Description
RS697-3513	Red Laser Alignment Kit (1951-01)
RS127-1572	LaserLyte-Flex 635nm 1mW Dot (3117-12)
RS697-3557	LaserLyte Flex 635nm 5mW Dot (3117-10)
RS127-1571	LaserLyte-Flex 635nm 10mW Dot (3117-11)
RS127-1568	Gated Cameo Laser Development Kit

# 2. Specification

Lens Material	Acrylic
Lens Type	DOE
Exit Aperture	5mm
A/R Coated	No
Typical Input Beam Size	5 by 1.5mm
Typical Fan Angle (650nm)	4.57°
Typical Interbeam Angle (650nm)	1.18°
Typical Transmission Loss (650nm)	≤25%



### Interchangeable Grid Optic 4.57° Fan Angle

# 3. Diagram

#### Interchangeable Grid Lens (4.57° Fan Angle)



Please note: Imatronic reserve the right to change descriptions and specifications without notice.



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