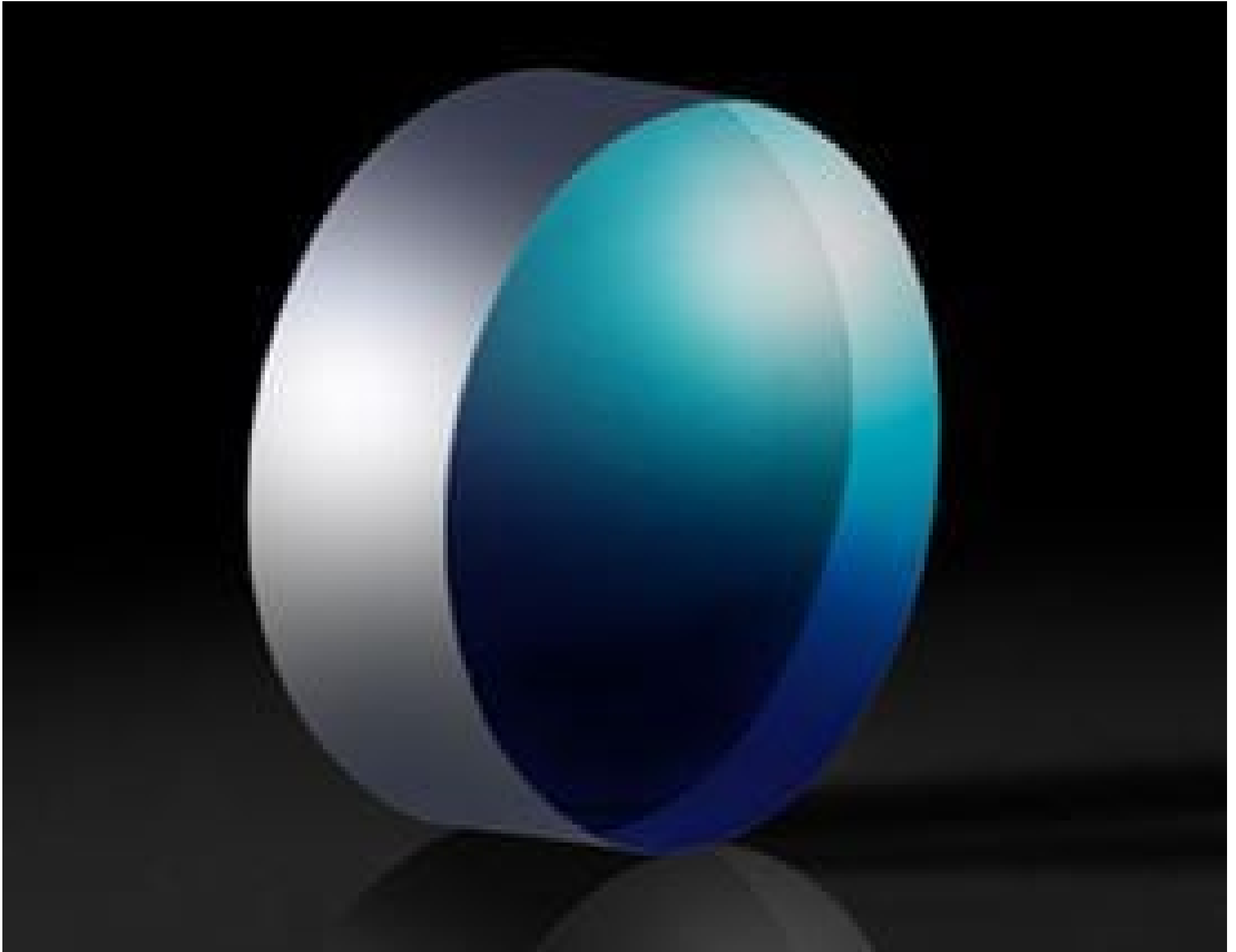


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## 5mm Dia., 15mm FL, 3D Printed GRIN Lens



3D Printed Gradient Index (GRIN) Lenses

Stock #13-557 **20+ In Stock**

1  C\$110<sup>00</sup>

**ADD TO CART**

### Volume Pricing

Qty 1+	C\$110.60 each
Need More?	<a href="#">Request Quote</a>

### Product Downloads

### General

Gradient Index Lens **Type:**

### Physical & Mechanical Properties

5.00 **Diameter (mm):**

3.00 **Length (mm):**

### Optical Properties

Effective Focal Length EFL (mm):  
15.57

Substrate:   
Polymer Containing Nanoparticles

f#:  
3.1

Coating:  
Uncoated

Back Focal Length BFL (mm):  
15

Index of Refraction ( $n_d$ ):  
Polymer 1: 1.538  
Polymer 2: 1.491

## Regulatory Compliance

Certificate of Conformance:  
[View](#)

## Product Details

- Additively Manufactured through 3D Printing
- Highly Customizable Technology Enables Complex Lens Designs
- Variable Index by Alternating Polymer Material

3D Printed Gradient Index (GRIN) Lenses are additively manufactured through 3D inkjet-printing. These gradient optics are printed from two polymer inks containing nanoparticles and then cured to hold shape. By changing the nanoparticle concentration during the manufacturing process, a gradient refractive index is created in the optic which can be designed to vary in any axis. The 3D inkjet-printing process is capable of altering the refractive index contrast, refractive index gradient, and chromatic dispersion of the produced lenses, enabling highly complex or freeform optical functions. 3D Printed Gradient Index (GRIN) Lenses are used in defense applications, including night vision systems and imaging systems for unmanned aerial vehicles, to create smaller, lighter optical systems.

This product is a demonstration of the capabilities possible with customizable 3D printed lens technology; please [contact us](#) to discuss how it can be used with your application.