

# Thermal Imaging Lens Assemblies

- Optimized for LWIR Thermal Imaging over 8  $\mu\text{m}$  – 14  $\mu\text{m}$
- Molded lenses using Black Diamond™ chalcogenide glass
- Reduced focal shift with temperature due to inherent glass properties
- Molded lenses for repeatable, cost effective manufacturing
- Designed for uncooled IR sensors



LightPath's Infrared Lens Assemblies are specifically designed to be a lower cost replacement for standard IR optical assemblies. These lens assemblies integrate our Black Diamond molded lenses into a complete ready-to-use package. Molded IR lenses are a lower cost substitute for traditional high volume diamond-turned optics.

## Part Number 7100108: Black Diamond™ Lens Assembly

Drawing	Optical Properties	
	Focal Length	10.65 mm
	f/#	1.0
	Back Focal Distance	8.53 mm to Housing / 8.82 mm to Lens
	Diagonal FOV	52°
	Diagonal Image Size	10 mm
	Pixel Pitch	25 microns
	Transmission	~ 90% (average)
	Wavelength Range	8 $\mu\text{m}$ – 14 $\mu\text{m}$
	Glass Material	BD-2
	Focus	Fixed Focus
	Athermalized	No
	<b>Mechanical Properties</b>	
	Weight	10.9 g
	Lens Mount	M20 x 1.0 - 6g
<b>Environmental Properties</b>		
Operating Temperature	25°C to 75°C	