

Lightpath 7100410 | 4mm FL, f/1.2, Thermal Imaging Lens Assembly

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1

+

£62⁴⁰

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Volume Pricing	
Qty 1+	£62.40 each
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Product Downloads

General	
Thickness: 0.70mm Material: Si	Compatible Window:
7100410	Lightpath Lens Code:

Physical & Mechanical Properties	
3.50	Clear Aperture CA (mm):

	Construction:
Matte Black Anodized Aluminum Housing	
	Length (mm):
6.50	
	Front Diameter (mm):
9.93	

Optical Properties	
	Effective Focal Length EFL (mm):
4.00	
	Substrate: ☐
Black Diamond™ BD-6	
	f/#:
1.2	
	Coating:
BBAR (8000-12000nm)	
	Wavelength Range (nm):
8000 - 12000	
	Coating Specification:
R _{avg} <0.75% @ 8000 - 12,000nm	
	Index of Refraction (n _d) @ 10μm:
2.7816	
	Index of Refraction (n _d) @ 14μm:
2.7683	
	Index of Refraction (n _d) @ 4μm:
2.7978	
	Working Distance (mm):
5.33	

Sensor	
	Recommended Detector Format (H x V/Pixel Size):
320 x 240 / 12μm	

Threading & Mounting	
	Mounting Threads:
M10 x 0.5	
	Thread Length (mm):
6.50	

Material Properties	
	Coefficient of Thermal Expansion CTE (10 ⁻⁶ /°C):
22.5	
	Thermo-optic coefficient dn/dT:
30.5 x 10 ⁻⁶ @ 10μm	

Regulatory Compliance	
	RoHS 2015:
Compliant	
	Certificate of Conformance:
View	
	Reach 233:
Compliant	

Product Details

- Precision Molded Chalcogenide Lenses
- Compact Designs for Thermal Imaging Cameras
- Focal Lengths from 2.7 to 24mm

Lightpath® Thermal Imaging Assemblies are a cost-effective alternative to diamond turned infrared lenses for applications in the mid-wave infrared (MMIR) or long-wave infrared (LWIR). These lenses are molded from BD6™, a chalcogenide glass that offers high transmission from 1 to 15μm and is also optically athermalized from -40 to +85°C. These lenses feature a broadband antireflection coating from 8 to 12μm and are mounted in compact black anodized aluminum housings that are threaded to allow for adjustable focus. Lightpath Thermal Imaging Assemblies are ideal for medical diagnostics, gas sensing, thermography, thermal imaging, security, and manufacturing process control applications. Lenses with focal lengths from 2.7 to 24mm are available, covering detector sizes from 80 x 80 to 640 x 480 pixels.