



**GASIR® Infrared Lens  
FL 1.5 mm f/1.2**



**Introduction**



Umicore's GASIR® infrared lenses have been developed for an easy fit with a wide range of camera cores. Our catalog lenses provide a cost-effective solution for high-resolution thermal imaging and sensing applications.

This **passively athermalized infrared lens** sports **extremely light weight** and is suitable for use with **34 μm 80x80** sensors, or smaller, higher-resolution detectors.

**Optical Specifications**

Focal length	1.51 mm
Aperture-based f-number	f/1.22
Waveband	8-12 μm
Transmission	> 95% average over waveband
Focus range	0.20 m to infinity with 0.13 mm refocus
Assembly weight	0.46 g

**Field of view**

80 x 80	34 μm		106.6° (H) x 106.6° (V) -	N/A° (diagonal)
160 x 120	17 μm	qqVGA	106.6° (H) x 76.2° (V) -	153.2° (diagonal)
60 x 60	40 μm		90.1° (H) x 90.1° (V) -	147.5° (diagonal)
206 x 156	12 μm		94.5° (H) x 69.2° (V) -	127.7° (diagonal)
160 x 120	12 μm	qqVGA	71.3° (H) x 52.6° (V) -	91.5° (diagonal)
80 x 60	17 μm		49.4° (H) x 36.8° (V) -	62.4° (diagonal)
80 x 60	12 μm		34.6° (H) x 25.8° (V) -	43.4° (diagonal)

**Environmental Specifications**

Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C

## Coating

Front surface  
Internal surfaces

High durability anti-reflective coating @ 8-12  $\mu\text{m}$   
High efficiency anti-reflective coating @ 8-12  $\mu\text{m}$

## Assembly & Interface Specifications

Black anodized aluminium

Image plane-related dimensions valid with 0.725 mm Si detector window (not included)

