

Product number:

18060\_100

**Athermalized  
Fixed focus**

## **GASIR® Infrared Lens FL 55 mm f/1.1**

### 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 **athermalized infrared lens** offers superior performance and is suitable for use with **12 µm VGA** detectors or smaller. It is adapted to the latest FLIR Boson® interface. Its **low distortion** makes it ideally suited for use in thermal imaging applications.

### Optical Specifications

Focal length	55.0 mm
Aperture-based f-number	f/1.0
Waveband	8-12 µm
Transmission	> 89% average over waveband
Focus range	5.0 m to infinity with 0.57 mm refocus
Assembly weight	178.1 g

### Field of view

640 x 512	12 µm		8.0° (H) x 6.4° (V) - 10.2° (diagonal)
640 x 480	12 µm	VGA	8.0° (H) x 6.0° (V) - 9.9° (diagonal)
336 x 256	17 µm		6.0° (H) x 4.6° (V) - 7.5° (diagonal)
320 x 240	17 µm	qVGA	5.7° (H) x 4.3° (V) - 7.1° (diagonal)
320 x 240	12 µm	qVGA	4.0° (H) x 3.0° (V) - 5.0° (diagonal)
160 x 120	17 µm	qqVGA	2.9° (H) x 2.1° (V) - 3.6° (diagonal)

### Environmental Specifications

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

## Coating

Last internal surface  
All other surfaces

Long Wave Pass 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 0.63 mm Si detector window (not included)

