

Product number:

18073_100

**Athermalized
Fixed focus**

GASIR® Infrared Lens FL 25 mm f/1.0

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** fits the latest **12 µm VGA** uncooled detectors or smaller. Its **low distortion** and extreme sharpness makes it ideally suited for use in thermal imaging applications.

Optical Specifications

Focal length	25.0 mm
Aperture-based f-number	f/1.0
Waveband	8-12 µm
Transmission	> 94% average over waveband
Focus range	0.5 m to infinity with 1.2 mm refocus
Assembly weight	60.9 g

Field of view

640 x 512	12 µm		17.6° (H) x 14.1° (V) - 22.5° (diagonal)
640 x 480	12 µm	VGA	17.6° (H) x 13.2° (V) - 22.0° (diagonal)
400 x 300	17 µm		15.6° (H) x 11.7° (V) - 19.5° (diagonal)
384 x 288	17 µm	qVGA+	15.0° (H) x 11.2° (V) - 18.7° (diagonal)
320 x 240	17 µm	qVGA	12.5° (H) x 9.4° (V) - 15.6° (diagonal)
320 x 240	12 µm	qVGA	8.8° (H) x 6.6° (V) - 11.0° (diagonal)

Environmental Specifications

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

Coating

All surfaces

High efficiency anti-reflective coating @ 8-12 μm

Assembly & Interface Specifications

Black anodized aluminium

Image plane-related dimensions valid with 1 mm Ge detector window (not included)

