



**GASIR® Infrared Lens  
FL 25 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** fits the latest **17 μm VGA** and **25 μm qVGA+** uncooled detectors as well as **12 μm XGA detectors** or smaller. Its **low distortion** makes it ideally suited for use in thermal imaging applications.

**Optical Specifications**

Focal length	25.0 mm
Aperture-based f-number	f/1.20
Waveband	8-12 μm
Transmission	> 94% average over waveband
Focus range	1.0 m to infinity with 0.64 mm refocus
Assembly weight	40 g

**Field of view**

1024 x 768	12 μm	XGA	27.1° (H) x 20.7° (V) - 33.3° (diagonal)
640 x 512	17 μm		24.2° (H) x 19.6° (V) - 30.5° (diagonal)
640 x 480	17 μm	VGA	24.2° (H) x 18.4° (V) - 29.8° (diagonal)
384 x 288	25 μm	qVGA+	21.5° (H) x 16.3° (V) - 26.6° (diagonal)
320 x 240	25 μm	qVGA	18.0° (H) x 13.6° (V) - 22.4° (diagonal)
640 x 480	12 μm	VGA	17.3° (H) x 13.1° (V) - 21.5° (diagonal)
384 x 288	17 μm	qVGA+	14.8° (H) x 11.1° (V) - 18.4° (diagonal)
320 x 240	17 μm	qVGA	12.4° (H) x 9.3° (V) - 15.4° (diagonal)

**Environmental Specifications**

Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Vibration	MIL-STD-810E Method 514.4 Proc I Cat 8
Mechanical shock	MIL-E-5400T
Solar radiation	MIL-STD-810G Method 505.5
Sealing	IP67

## Coating

All surfaces

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

## Assembly & Interface Specifications

Black anodized aluminium

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

