

Product number:

17048_100

**Athermalized
Fixed focus**

**GASIR® Infrared Lens
FL 8.9 mm f/1.4**



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** is suited for **17 µm VGA** uncooled detectors and smaller. Its **athermalized** design ensures performance over a very wide temperature range.

Optical Specifications

Focal length	8.9 mm
Aperture-based f-number	f/1.4
Waveband	8-12 µm
Transmission	> 94% average over waveband
Focus range	0.8 m to infinity with 0.9 mm refocus
Assembly weight	22 g

Field of view

640 x 512	17 µm		69.0° (H) x 55.3° (V) - 88.3° (diagonal)
640 x 480	17 µm	VGA	69.0° (H) x 51.9° (V) - 86.2° (diagonal)
336 x 256	25 µm		53.5° (H) x 40.9° (V) - 67.2° (diagonal)
320 x 240	25 µm	qVGA	51.0° (H) x 38.3° (V) - 63.6° (diagonal)
336 x 256	17 µm		36.5° (H) x 27.9° (V) - 45.8° (diagonal)
320 x 240	17 µm	qVGA	34.8° (H) x 26.1° (V) - 43.4° (diagonal)

Environmental Specifications

Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Vibration	MIL-STD-810G Method 514.6C-II / Cat. 4
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 μm

Assembly & Interface Specifications

Black anodized aluminium

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

