



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 **ultralight, wide-angle, passively athermalized infrared lens** offers superior performance and is suitable for use with **17 µm qVGA detectors** as well as the newer generation **12 µm** detectors.

Optical Specifications

Focal length	5.0 mm
Aperture-based f-number	f/1.20
Waveband	8-12 µm
Transmission	> 90% average over waveband
Focus range	5 m to infinity with 0.05 mm refocus
Assembly weight	3.1 g

Field of view

336 x 256	17 µm		65.3° (H) x 49.1° (V) - 84.0° (diagonal)
320 x 240	17 µm	qVGA	62.0° (H) x 45.9° (V) - 79.0° (diagonal)
160 x 120	25 µm	qqVGA	45.2° (H) x 33.7° (V) - 57.0° (diagonal)
160 x 120	12 µm	qqVGA	21.5° (H) x 16.1° (V) - 26.9° (diagonal)

Environmental Specifications

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

Front surface
Internal surfaces

iDLC @ 8-12 μm
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)

