

**GASIR® Infrared Lens
FL 6.8 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 wide-angle infrared lens** fits the latest 17 µm **qVGA** and 25 µm **qqVGA** un-cooled detectors and smaller.

Optical Specifications

Focal length	6.75 mm
Aperture-based f-number	f/1.41
Waveband	8-12 µm
Transmission	> 97% average over waveband
Focus range	0.2 m to infinity with 0.22 mm refocus
Assembly weight	20.8 g

Field of view

320 x 240	17 µm	qVGA	46.7° (H) x 34.8° (V) - 58.8° (diagonal)
160 x 120	25 µm	qqVGA	34.1° (H) x 25.5° (V) - 42.8° (diagonal)
80 x 80	34 µm		23.1° (H) x 23.1° (V) - 32.8° (diagonal)
160 x 120	17 µm	qqVGA	23.1° (H) x 17.3° (V) - 28.9° (diagonal)

Environmental Specifications

Operating temperature	-40 °C to +60 °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 μm

Assembly & Interface Specifications

Black anodized aluminium

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

