



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 **athermalized lens** offers superior performance from -40 °C to +80 °C. Its **lightweight and compact design** make it a prime choice for your application. This lens is compatible with **12 µm VGA** detectors and smaller.

Optical Specifications

Focal length	6.2 mm
Aperture-based f-number	f/1.0
Waveband	8-12 µm
Transmission	> 86% average over waveband
Focus range	0.28 m to infinity with 0.12 mm refocus
Assembly weight	25.6 g

Field of view

640 x 512	12 µm		75.0° (H) x 58.7° (V) - 100.1° (diagonal)
640 x 480	12 µm	VGA	75.0° (H) x 54.8° (V) - 97.2° (diagonal)
384 x 288	17 µm	qVGA+	62.7° (H) x 46.1° (V) - 80.3° (diagonal)
320 x 240	17 µm	qVGA	51.5° (H) x 38.2° (V) - 65.5° (diagonal)
320 x 240	12 µm	qVGA	35.9° (H) x 26.7° (V) - 45.2° (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

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)

