

**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 |

## 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)

