Electro-Optic Materials

TECHNICAL DATA SHEET

GASIR[®] Infrared Lens 1.9 mm f/1.3

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 lens is manufactured using our TessellaTM wafer molding technology and is very cost-effective. Its **lightweight and extremely compact design** makes it a prime choice for your application.

This lens is compatible with $34 \mu m 80 \times 80$ detectors and smaller.



OPTICAL SPECIFICATIONS

Effective focal length	1.9 mm
Radiometric f-number	f/1.2
Waveband	8 – 12 µm
Maximum field of view	$105^{\circ} imes 75^{\circ}$
Image circle	3.8 mm

Fields of view (HFOV \times VFOV)

Detector		Detector format	
pixel pitch	80×80	120 × 90	160 × 120
12 µm	$30^\circ \times 30^\circ$	$46^{\circ} \times 34^{\circ}$	$61^{\circ} \times 46^{\circ}$
17 µm	$43^{\circ} \times 43^{\circ}$	$66^{\circ} \times 48^{\circ}$	$90^{\circ} \times 66^{\circ}$
34 µm	90° × 90°	_	

Other detectors may be possible. Please contact us for more information.

LENS VARIANTS

Mechanical variant	Fixed Focus
Mechanical interface	Standard M10
Coating option	HDAR
Part number	15097_130

COATING OPTIONS

	Transmission*	Lens coatings	Comments
HDAR	> 95%	HDAR on front surface HEAR on all other surfaces	High transmission performance with excellent durability for unprotected use.

HEAR: High Efficiency Anti-Reflection; HDAR: High-Durability Anti-Reflection

Additional specifications are provided in the coatings Technical Data Sheets available on our website.

*average transmission over waveband



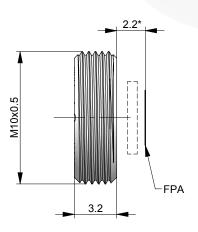
GASIR[®] Infrared Lens – 1.9 mm f/1.3

Fixed Focus

Part Number HDAR 15097_130

Focus range	0.02 m to ∞ with 0.13 mm refocus
Operating temperature	-40 °C to +80 °C
Storage temperature	–57 °C to +105 °C
Weight	0.58 g
Housing material	Black anodized aluminium

*dimensions valid with 0.725 mm Si detector window



Electro-Optic Materials is ISO certified: ISO 9001 & ISO 14001

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