

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 $8-12 \mu m$ Maximum field of view $105^{\circ} \times 75^{\circ}$ 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° × 30°	$46^{\circ} \times 34^{\circ}$	$61^{\circ} \times 46^{\circ}$
17 µm	43° × 43°	$66^{\circ} \times 48^{\circ}$	90° × 66°
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	High transmission performance with excellent durability for
		HEAR on all other surfaces	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

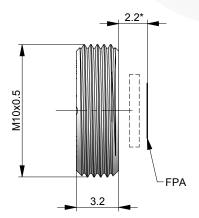


GASIR® Infrared Lens – 1.9 mm f/1.3

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



China

USA