

TECHNICAL DATA SHEET

GASIR[®] Infrared Lens

1.5 mm f/1.25

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 Tessella[™] 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 **17 μm QVGA** detectors and smaller.



OPTICAL SPECIFICATIONS


Effective focal length	1.5 mm
Radiometric f-number	f/1.3
Waveband	8 – 12 μm
Maximum field of view	106° × 76°
Image circle	3.4 mm

Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format		
	80 × 80	120 × 90	160 × 120
12 μm	35° × 35°	53° × 39°	71° × 53°
17 μm	49° × 49°	76° × 56°	106° × 76°

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	14094_110

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



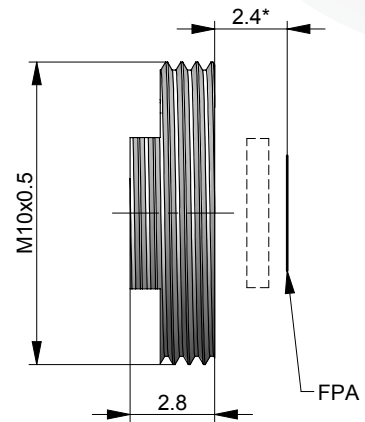
GASIR® Infrared Lens – 1.5 mm f/1.25

Fixed Focus

Part Number **HDAR 14094_110**

Focus range	0.02 m to ∞ with 0.07 mm refocus
Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Weight	0.46 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

Umicore IR Glass
Z.A. du Boulais
35690 Acigné
FRANCE

Tel: +33 2 99 04 32 26
Fax: +33 2 99 04 32 29
optics@umicore.com

Tel: +1 918-673-1650
Fax: +1 918-673-2121
optics.na@umicore.com

Umicore Optical Materials Inc.
PO Box 737
Quapaw, OK 74363
USA