TECHNICAL DATA SHEET

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Electro-Optic Materials

GASIR® Infrared Lens 5 mm f/1.2

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 may be offered with other coating variants upon request. Its **lightweight and cost-effective 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	5.0 mm
Radiometric f-number	f/1.2
Waveband	8 – 12 µm
Maximum field of view	62° × 46°
Image circle	6.8 mm

Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format		
	80 × 80	160 × 120	320 × 240
12 µm	10.7° × 10.7°	22° × 16.1°	43° × 32°
17 µm	15.2° × 15.2°	31° × 23°	62° × 46°

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

LENS VARIANTS

Mechanical variant	Fixed Focus 	
Mechanical interface	Standard M12	
Coating option	HEAR	iDLC™
Part number	15077_100	15090_100

COATING OPTIONS

	Transmission*	Lens coatings	Comments
HEAR	> 97%	HEAR on all surfaces	Maximum transmission performance.
iDLC™	> 90%	iDLC™ on front surface HEAR on all other surfaces	Durable coating for unprotected exterior use. Salt fog rated.

HEAR: High Efficiency Anti-Reflection; DLC: Diamond-Like Carbon
Additional specifications are provided in the coatings Technical Data Sheets available on our website.

*average transmission over waveband

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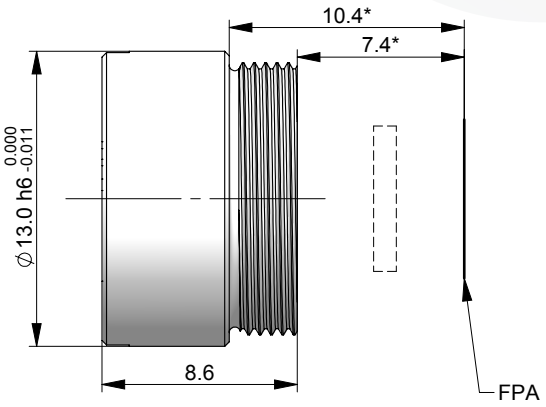
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Fixed Focus

Part Number	HEAR 15077_100	iDLC™ 15090_100

Focus range	0.09 m to ∞ with 0.25 mm refocus
Operating temperature	–40 °C to +80 °C
Storage temperature	–57 °C to +105 °C
Weight	3.1 g
Housing material	Black anodized aluminium

*dimensions valid with 1.0 mm Ge 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