

TECHNICAL DATA SHEET

# GASIR<sup>®</sup> Infrared Lens 60 mm f/1.25

Umicore's GASIR<sup>®</sup> 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 infrared lens is suitable for use with detectors up to 17 μm XGA or 12 μm SXGA detectors. Its high reliability, low distortion and medium-narrow field of view makes it well-suited for thermal imaging applications.



## OPTICAL SPECIFICATIONS


Effective focal length	60 mm
Radiometric f-number	f/1.24
Waveband	8 – 12 μm
Maximum field of view	15.0° × 11.3°
Image circle	20.0 mm

## Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format		
	320 × 240	640 × 480	1280 × 1024
12 μm	3.7° × 2.7°	7.3° × 5.5°	14.4° × 10.9°
17 μm	5.2° × 3.9°	10.3° × 7.7°	—
25 μm	7.6° × 5.7°	15.0° × 11.3°	—

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

## LENS VARIANTS

Mechanical variant	Fixed Focus 	
Mechanical interface	Standard M34	
Coating option	HEAR	iDLC <sup>™</sup>
Part number	10073_100	10122_100

## COATING OPTIONS

	Transmission*	Lens coatings	Comments
HEAR	> 94%	HEAR on all surfaces	Maximum transmission performance.
iDLC <sup>™</sup>	> 87%	iDLC <sup>™</sup> 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

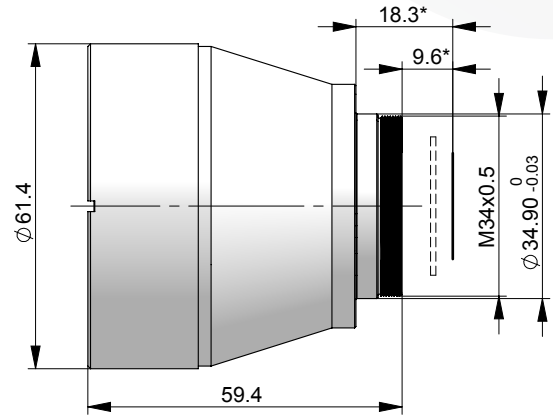


# GASIR® Infrared Lens – 60 mm f/1.25

## Fixed Focus

Part Number HEAR 10073\_100 iDLC™ 10122\_100

Focus range	2.5 m to ∞ with 1.46 mm refocus
Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Solar radiation	MIL STD 810H Method 505.7 Procedure I-A1
Vibration	MIL STD 810H Method 514.8 / Procedure-I Cat. 20
Sealing	IP67
Weight	211 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](mailto:optics@umicore.com)

Umicore Marketing Services  
No. 1800 west Zhongshan Rd  
200000 Shanghai  
China

Tel: +86 21 2411 6972  
Fax: +86 21 2411 6988  
[optics.cn@umicore.com](mailto:optics.cn@umicore.com)

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

Tel: +1 918-673-1650  
Fax: +1 918-673-2121  
[optics.na@umicore.com](mailto:optics.na@umicore.com)