

## **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  $\mu$ m XGA detectors or 12  $\mu$ m SXGA. 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 $\times$ VFOV)

Detector	Detector format		
pixel pitch	320 × 240	640  imes 480	1280 × 960
12 µm	$3.7^{\circ} \times 2.7^{\circ}$	$7.3^\circ  imes 5.5^\circ$	$14.4^{\circ} \times 10.9^{\circ}$
17 µm	$5.2^{\circ} \times 3.9^{\circ}$	$10.3^{\circ} \times 7.7^{\circ}$	
25 µm	$7.6^{\circ} \times 5.7^{\circ}$	$15.0^\circ  imes 11.3^\circ$	

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™
Part number	10073_100	10122_100

# **COATING OPTIONS**

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

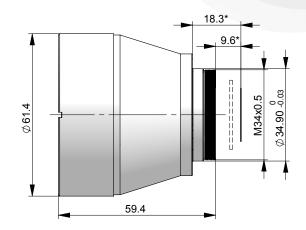


# GASIR<sup>®</sup> Infrared Lens – 60 mm f/1.25

# **Fixed Focus**

Par	t Number   HEAR 10073_100   iDLC <sup>TM</sup> 10122_100	
Focus range	2.5 m to $\infty$ with 1.46 mm refocus	
Operating temperature	-40 °C to +80 °C	
Storage temperature	-57 °C to +105 °C	
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

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