

TECHNICAL DATA SHEET

GASIR[®] Infrared Lens 35 mm f/1.1

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 **high performance and cost-effective design** makes it a prime choice for your application.

This lens is compatible with 12 μm SXGA detectors and smaller.



OPTICAL SPECIFICATIONS

Effective focal length	35 mm
Radiometric f-number	f/1.1
Waveband	8 – 12 μm
Maximum field of view	25° × 18.9°
Image circle	19.7 mm

Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format		
	640 × 480	1024 × 768	1280 × 1024
12 μm	12.5° × 9.4°	19.7° × 14.9°	24° × 19.7°
17 μm	17.5° × 13.2°	—	—

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

LENS VARIANTS

Mechanical variant	Fixed Focus 	
Mechanical interface	Standard M26	
Coating option	HEAR	iDLC [™]
Part number	20083_100	22041_100

COATING OPTIONS

	Transmission*	Lens coatings	Comments
HEAR	> 91%	HEAR on all surfaces	Maximum transmission performance.
iDLC [™]	> 84%	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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Electro-Optic Materials

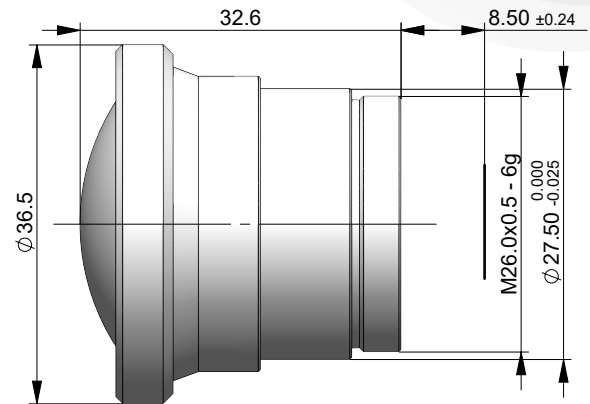
GASIR® Infrared Lens – 35 mm f/1.1

Fixed Focus

Part Number **HEAR 20083_100** **iDLC™ 22041_100**

Focus range	1.9 m to ∞ with 0.61 mm refocus
Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Sealing	IP67
Weight	38 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

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