

TECHNICAL DATA SHEET

# GASIR<sup>®</sup> Infrared Lens

## 4.9 mm f/1.1

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 12 μm VGA detectors. Its wide field of view makes it well-suited for thermal imaging applications.



### OPTICAL SPECIFICATIONS


Effective focal length	4.9 mm
Radiometric f-number	f/1.1
Waveband	8 – 12 μm
Maximum field of view	97° × 71°
Image circle	9.8 mm

### Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format	
	320 × 240	640 × 480
12 μm	46° × 34°	95° × 70°
17 μm	65° × 49°	—

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

### LENS VARIANTS

Mechanical variant	Fixed Focus 	
Mechanical interface	12 μm mount M24	
Coating option	LWP	iDLC <sup>™</sup>
Part number	21019_100	21025_100

### COATING OPTIONS

	Transmission*	Lens coatings	Comments
LWP	> 94%	LWP on one internal surface HEAR on all other surfaces	Sunlight filter coating for use with uncoated detectors.
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; LWP: Long Wave Pass  
Additional specifications are provided in the coatings Technical Data Sheets available on our website.

\*average transmission over waveband



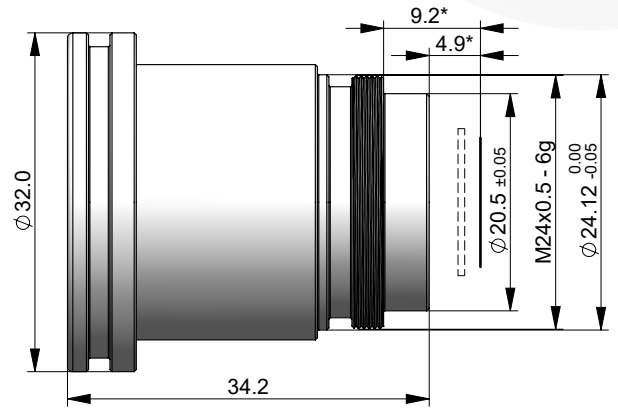
# GASIR<sup>®</sup> Infrared Lens – 4.9 mm f/1.1

## Fixed Focus

Part Number **LWP 21019\_100** **iDLC™ 21025\_100**

Focus range	0.15 m to ∞ with 0.11 mm refocus
Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Sealing	IP67
Weight	44 g
Housing material	Black anodized aluminium

\*dimensions valid with 0.63 mm Si detector window



Electro-Optic Materials is ISO certified: ISO 9001 & ISO 14001

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