

TECHNICAL DATA SHEET

GASIR[®] Infrared Lens

25 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 **robust and low distortion design** makes it a prime choice for your application.

This lens is compatible with **17 μm VGA** detectors and smaller.



OPTICAL SPECIFICATIONS


Effective focal length	25 mm
Radiometric f-number	f/1.2
Waveband	8 – 12 μm
Maximum field of view	25° × 18.9°
Image circle	14.0 mm

Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format	
	320 × 240	640 × 480
12 μm	8.8° × 6.6°	17.3° × 13.1°
17 μm	12.4° × 9.3°	24° × 18.4°
25 μm	18.0° × 13.6°	—

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

LENS VARIANTS

Mechanical variant	Fixed Focus 	
Mechanical interface	Standard M25	
Coating option	HEAR	iDLC [™]
Part number	12025_100	12026_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

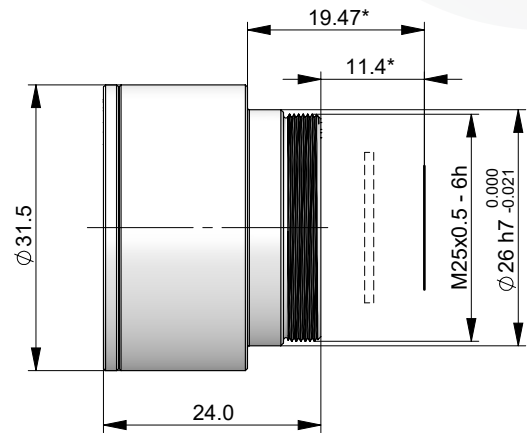


GASIR® Infrared Lens – 25 mm f/1.2

Fixed Focus

Part Number HEAR 12025_100 iDLC™ 12026_100

Focus range	1.0 m to ∞ with 0.64 mm refocus
Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Solar radiation	MIL-STD-810G Method 505.5
Vibration	MIL-STD-810E Method 514.4 / procedure I, Cat. 8
Mechanical shock	MIL-E-5400T
Sealing	IP67
Weight	40 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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