

TECHNICAL DATA SHEET

GASIR[®] Infrared Lens

18.6 mm f/1.0

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	18.5 mm
Radiometric f-number	f/1.0
Waveband	8 – 12 μm
Maximum field of view	51° × 38°
Image circle	19.7 mm

Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format		
	640 × 480	1024 × 768	1280 × 1024
12 μm	24° × 17.9°	39° × 29°	50° × 39°
17 μm	34° × 26°	58° × 42°	—

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

LENS VARIANTS

Mechanical variant	Fixed Focus 
Mechanical interface	Standard M34
Coating option	HEAR
Part number	21048_100

COATING OPTIONS

	Transmission*	Lens coatings	Comments
HEAR	> 91%	HEAR on all surfaces	Maximum transmission performance.

HEAR: High Efficiency Anti-Reflection

Additional specifications are provided in the coatings Technical Data Sheets available on our website.

*average transmission over waveband

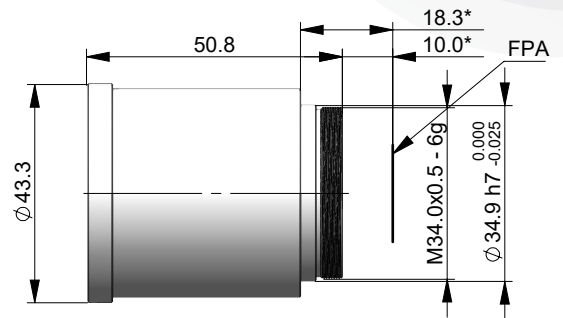


GASIR® Infrared Lens – 18.6 mm f/1.0

Fixed Focus

Part Number HEAR 21048_100

Focus range	4 m to ∞ with 0.06 mm refocus
Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Sealing	IP67
Weight	111 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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