

TECHNICAL DATA SHEET

GASIR[®] Infrared Lens 100 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 comes with several available coating options and mechanical variants. The **manual focus telephoto lens** offers superior performance from 8 m out to infinity. Its **lightweight and intuitive 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	100 mm
Radiometric f-number	f/1.0
Waveband	8 – 12 μm
Maximum field of view	6.4° × 4.8°
Image circle	14.0 mm

Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format	
	320 × 240	640 × 480
12 μm	2.2° × 1.7°	4.4° × 3.3°
17 μm	3.1° × 2.3°	6.2° × 4.7°

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

LENS VARIANTS

Mechanical variant	Manual Focus 
Mechanical interface	Standard M34
Coating option	HDAR
Part number	18074_100

COATING OPTIONS

	Transmission*	Lens coatings	Comments
HDAR	> 92%	HDAR on front surface HEAR on all other surfaces	High transmission performance with excellent durability for unprotected use.

HEAR: High Efficiency Anti-Reflection; HDAR: High-Durability Anti-Reflection
Additional specifications are provided in the coatings Technical Data Sheets available on our website.

*average transmission over waveband



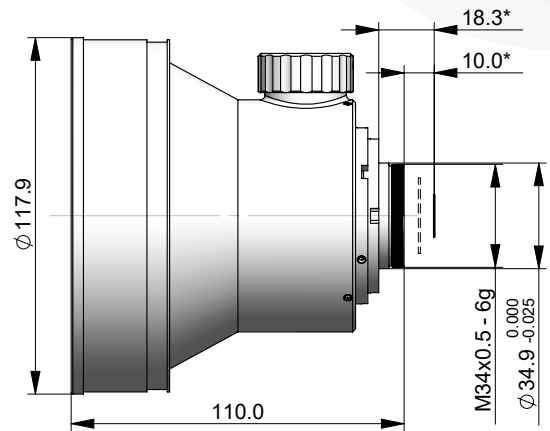
GASIR[®] Infrared Lens – 100 mm f/1.0

Manual Focus

Part Number HDAR 18074_100

Manual focus range	8 m to ∞ with 270° ring rotation
Lateral magnification	1:79 at 8 m
Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Weight	627 g
Housing material	Black anodized aluminium

*dimensions valid with 0.67 mm Si detector window



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

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