

TECHNICAL DATA SHEET

# GASIR® Infrared Lens

## 8.8 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 **lightweight and compact design** makes it a prime choice for your application.

This lens is compatible with **12 µm VGA** detectors and smaller.



### OPTICAL SPECIFICATIONS


Effective focal length	8.8 mm
Radiometric f-number	f/1.0
Waveband	8 – 12 µm
Maximum field of view	53° × 39°
Image circle	10.0 mm

### Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format		
	160 × 120	320 × 240	640 × 480
12 µm	12.5° × 9.3°	25° × 18.7°	50° × 38°
17 µm	17.7° × 13.2°	35° × 27°	—

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	iDLC™-LWP
Part number	19004_100

### COATING OPTIONS

	Transmission*	Lens coatings	Comments
iDLC™-LWP	> 80%	iDLC™ on front surface LWP on one internal surface HEAR on all other surfaces	Durable coating, salt fog rated, together with a sunlight filter coating for unprotected exterior use.

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

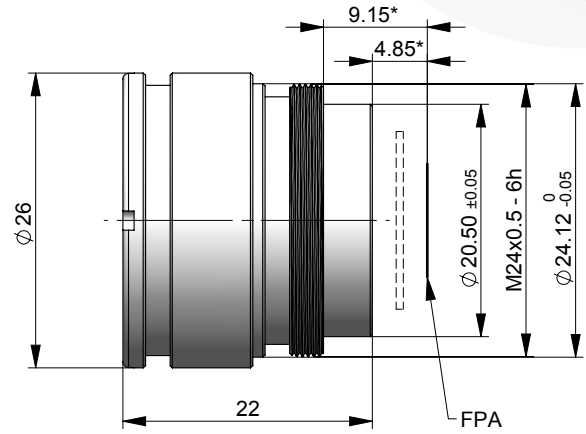


# GASIR® Infrared Lens – 8.8 mm f/1.0

## Fixed Focus

Part Number **iDLC™-LWP 19004\_100**

Focus range	0.5 m to ∞ with 0.13 mm refocus
Operating temperature	-40 °C to +80 °C
Storage temperature	-57 °C to +105 °C
Solar radiation	MIL STD 810H Method 505.7 Procedure I-A1
Vibration	MIL STD 810H Method 514.8 / Procedure-I Cat. 20
Sealing	IP67
Weight	27 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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