

TECHNICAL DATA SHEET

# GASIR<sup>®</sup> Infrared Lens

## 5 mm f/1.2

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 lens may be offered with other coating variants upon request. Its **lightweight and cost-effective design** makes it a prime choice for your application.

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



### OPTICAL SPECIFICATIONS


Effective focal length	5.0 mm
Radiometric f-number	f/1.2
Waveband	8 – 12 μm
Maximum field of view	62° × 46°
Image circle	6.8 mm

### Fields of view (HFOV × VFOV)

Detector pixel pitch	Detector format		
	80 × 80	160 × 120	320 × 240
12 μm	10.7° × 10.7°	22° × 16.1°	43° × 32°
17 μm	15.2° × 15.2°	31° × 23°	62° × 46°

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

### LENS VARIANTS

Mechanical variant	Fixed Focus 	
Mechanical interface	Standard M12	
Coating option	HEAR	iDLC <sup>™</sup>
Part number	15077_100	15090_100

### COATING OPTIONS

	Transmission*	Lens coatings	Comments
HEAR	> 97%	HEAR on all surfaces	Maximum transmission performance.
iDLC <sup>™</sup>	> 90%	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

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

\*average transmission over waveband

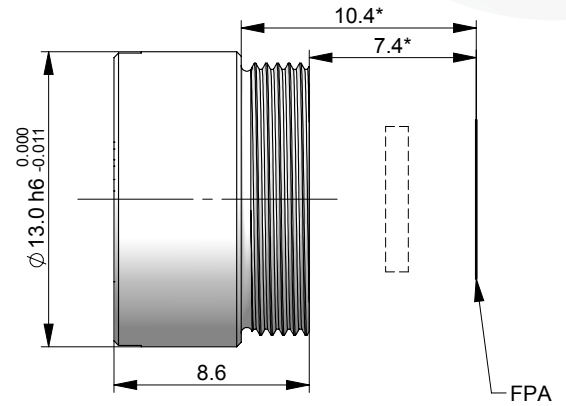


# GASIR® Infrared Lens – 5 mm f/1.2

## Fixed Focus

Part Number **HEAR 15077\_100** **iDLC™ 15090\_100**

Focus range	0.09 m to ∞ with 0.25 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	3.1 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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