

OTL



LWIR ZOOM LENSES

Motorized Focus | Long-Wave Infrared

Continuous Zoom Lens Series



25-225 mm

F/# 0.8-1.5 | 640 × 512



20-75 mm

F/# 1.2 | 640 × 512

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OTL | LWIR Motorized Zoom Lens Series



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OTL LWIR Zoom Lens Series

Motorized Focus | Continuous Zoom | 8–12 μm band (as shown for the first lens in source)

PRODUCT OVERVIEW

This datasheet brings together the two long-wave infrared (LWIR) continuous zoom lens entries supplied in the source PDF: a 25–225 mm motorized-focus lens and a 20–75 mm motorized-focus lens. The source lists focal-length tolerances, aperture, spectral-range/transmission data, field of view, focus range, detector compatibility, weight, operating/storage temperatures, and first-lens sealing.

Both entries list electric focusing, a 2.5 m to infinity focus range, detector compatibility based on 640 × 512 formats, average transmission above 84%, and IP67 protection for the first lens.

The source does not provide a complete photo of either lens; the cover uses illustrative marketing-style lens renderings. The original mechanical drawing available on page 1 and the full original pages are retained for reference.

SERIES COMPARISON

Parameter	25–225 mm Lens (Source Page 1)	20–75 mm Lens (Source Page 2)
Focal length	25–225 mm $\pm 5\%$	20–75 mm $\pm 5\%$
F-number	0.8–1.5	1.2
Spectral range	8–12 μm	8–12 mm (as printed; verify unit)
Average transmission	>84% over 8–12 μm	>84% over 8–12 μm
Field of view	34.2° × 27.6° to 3.9° × 3.1°	24.6° × 19.8° to 8.3° × 6.6°
Dimensions	$\Phi 190$ mm / L258.71m (source notation)	$\phi 107$ mm / L107m (source notation)
Focus range	2.5 m to infinity	2.5 m to infinity
Detector compatibility	640 × 512 (12 & 17 μm)	640 × 512 (17 μm)
Weight	3640 g $\pm 5\%$	2510 g $\pm 5\%$
Operating temperature	40°C to +60°C (as printed)	40°C to +60°C (as printed)
Storage temperature	–40°C to +80°C	–40°C to +80°C
Front lens sealing	IP67 (first lens)	IP67 (first lens)

SOURCE REVIEW REQUIRED: the original table appears to contain unit/notation issues for the second lens spectral range (8–12 mm), both lens lengths (printed with an “m” suffix), and the operating-temperature lower limit (shown as 40°C without a clear minus sign). These entries are reproduced as printed and should be confirmed before publication.

OTL- 25–225 mm LWIR Zoom Lens

Motorized Focus | Technical Specifications | Source Page 1

OPTICAL SPECIFICATIONS

Property (source wording)	Value from source	Editorial note
Focal length	25–225 mm ±5%	
F/#	0.8–1.5	
Spectral range (µm)	8–12 µm	
Average transmission (8–12 µm)	>84%	
FOV (°)	34.2° × 27.6° to 3.9° × 3.1°	
First coating	DLC	

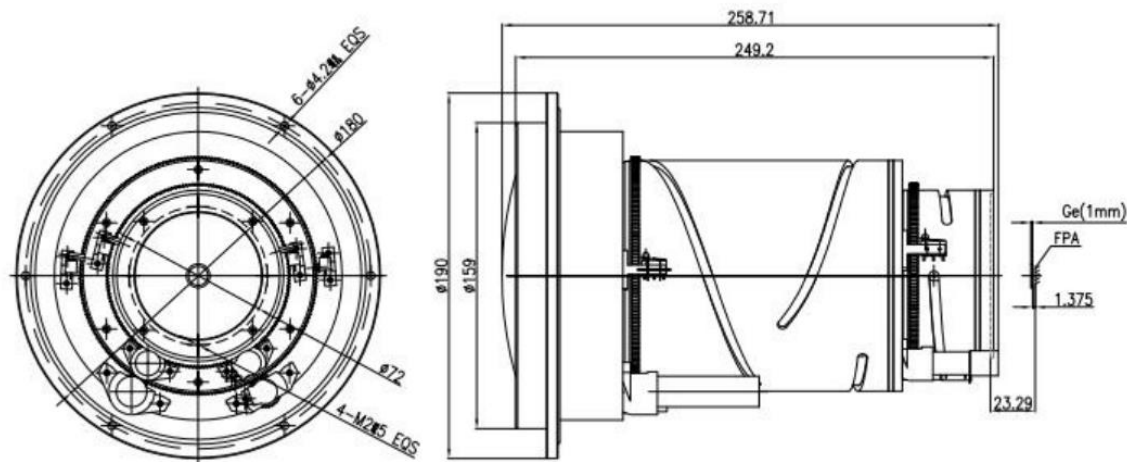
MECHANICAL SPECIFICATIONS

Property	Value from source	Editorial note
Dimensions	Φ190 mm / L258.71m	Length unit is unclear in source; verify whether the final length should be expressed in mm
Focus mechanism	Electric focusing (motorized focus)	
Focus range	2.5 m to infinity	
Detector type / size	640 × 512 (12 µm & 17 µm)	

ENVIRONMENTAL SPECIFICATIONS

Property	Value from source	Editorial note
Weight	3640 g ±5%	
Operating temperature	-40°C to +60°C (as printed)	The lower limit is shown without a clear minus sign; verify against the manufacturer
Storage temperature	-40°C to +80°C	
Front lens sealing	IP67 (first lens)	Applies to the first lens only, as stated in source.

The source page 1 drawing shows a circular front view and side view with overall-length callouts including 258.71 and 249.2, and diameter callouts including Φ190. Refer to the inserted drawing image for the exact geometry.



OTL- 20–75 mm LWIR Zoom Lens

Motorized Focus | Technical Specifications | Source Page 2

OPTICAL SPECIFICATIONS

Property (source wording)	Value from source	Editorial note
Focal length	20–75 mm ±5%	
F/#	1.2	
Spectral range (μm)	8–12 mm (as printed)	The table heading says μm, but value is printed as mm; confirm unit.
Average transmission (8–12 μm)	>84%	
FOV (°)	24.6° × 19.8° to 8.3° × 6.6°	

MECHANICAL SPECIFICATIONS

Property	Value from source	Editorial note
Dimensions	ø107 mm / L107m	Length unit is unclear in source; verify whether the final length should be expressed in mm.
Focus mechanism	Electric focusing	
Focus range	2.5 m to infinity	
Detector type / size	640 × 512 (17 μm)	

ENVIRONMENTAL SPECIFICATIONS

Property	Value from source	Editorial note
Weight	2510 g ±5%	
Operating temperature	-40°C to +60°C (as printed)	The lower limit is shown without a clear minus sign; verify against the manufacturer.
Storage temperature	-40°C to +80°C	
Front lens sealing	IP67 (first lens)	Applies to first lens only, as stated in source.

The second source page provides specifications for the 20–75 mm lens but no separate dimension drawing image; no mechanical drawing has been invented for that model.

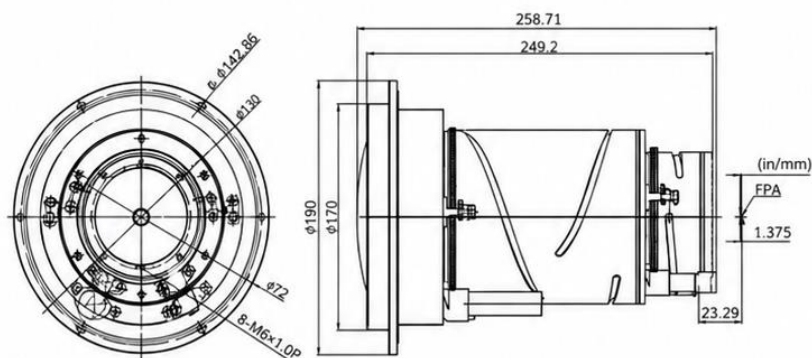
Original Source Reference — Page 1

25–225 mm lens: source drawing and specification table.

OTL

25–225 mm Zoom Lenses — Long-Wave Infrared Continuous Zoom Lens

Motorized Focus



Property	Value	Remarks
Optical		
Focal length	25-225mm $\pm$ 5%	
F/#	0.8-1.5	
Spectral Range (μ m)	8-12 μ m	
Average Transmission (8–12 μ m)	>84%	
FOV(°)	34.2°x27.6°~3.9°x3.1°	
First Coating	DLC	
Mechanical		
Dimensions	Φ 190 mm/L258.71m	
Focus Mechanism	Electric focusing	
Focus Range	2.5m- ∞	
Detector Type/Size (μ m)	640x512 (12&17 μ m)	
Environmental		
Weight	3640g $\pm$ 5%	
Operating Temperature	40°C~+60°C	
Storage Temperature	-40°C~+80°C	
Front Lens Sealing	IP67 (First Lens)	

Original Source Reference — Page 2

20–75 mm lens: enlarged crop of the specification table on source page 2.

Property	Value	Remarks
Optical		
Focal length	20-75mm $\pm$ 5%	
F/#	1.2	
Spectral Range (μ m)	8-12mm	
Average Transmission (8–12 μ m)	>84%	
FOV (°)	24.6°×19.8°~8.3°×6.6°	
Mechanical		
Dimensions	Φ107 mm/L107m	
Focus Mechanism	Electric focusing	
Focus Range	2.5m-∞	
Detector Type/Size (μ m)	640x512 (17 μ m)	
Environmental		
Weight	2510g $\pm$ 5%	
Operating Temperature	40°C~+60°C	
Storage Temperature	-40°C~+80°C	
Front Lens Sealing	IP67 (First lens)	

