

FLIR SC-SERIES CLOSE-UP AND MICROSCOPY LENSES



A unique range of magnification lenses for R&D and Science applications.



Lenses compatible with the FLIR SC3X5 Series



Lenses compatible with the FLIR SC6X0 Series

Close-up 4x (100 µm) incl. case for FLIR SC3X5	
Part number	T197215
Spatial resolution (IFOV)	100 µm
Field of view (FOV)	32 × 24 mm
Working distance	79 mm
Depth of field	±2.0 mm
Focal length	73 mm
F-number	1.3
Number of lenses	2 (2 asph)
MTF @ 70% of FOV	Normal requirements (52%)
Distortion	3%
Weight	110 g
Size (L × D)	35.2 × 55 mm



Close-up IR lens 0.5X, (fits 24° IR lens) for FLIR SC6X0 Series	
Part number	T1196683
Spatial resolution (IFOV)	50 µm
Field of view (FOV)	32 × 24 mm
Minimum focus distance	60.3 mm
Focal length	76.3 mm
F-number	1.1
Weight	131 g
Size (L × D)	28.6 × 81.0 mm
This close-up optic attaches to the standard 24° lens and provides resolution of very small targets.	



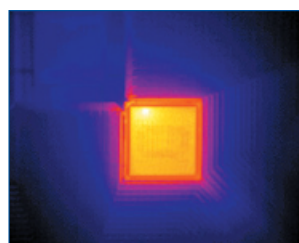
Close-up 2x (50 µm) incl. case for FLIR SC3X5 Series	
Part number	T197214
Spatial resolution (IFOV)	50 µm
Field of view (FOV)	16 × 12 mm
Working distance	33 mm
Depth of field	±0.4 mm
Focal length	37 mm
F-number	1.3
Number of lenses	2 (2 asph)
MTF @ 70% of FOV	Normal requirements (52%)
Distortion	3%
Weight	110 g
Size (L × D)	35.2 × 55 mm



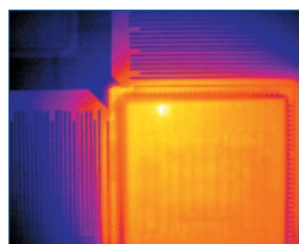
Macro lens 1x (25 µm) with case for FLIR SC6X0	
Part number	T197341
Spatial resolution (IFOV)	25 µm
Field of view (FOV)	16 × 12 mm
Working distance	18 mm
Depth of field	±0.13 mm
F-number	1.1
Focus	Fixed



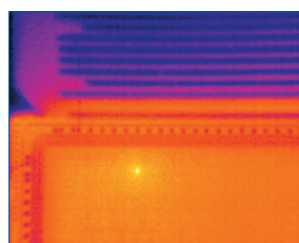
Close-up 1x (25 µm) incl. case and support for FLIR SC3X5	
Part number	T197415
Spatial resolution (IFOV)	25 µm
Field of view (FOV)	8 × 6 mm
Working distance	20 mm
Depth of field	±0.15 mm
Focal length	18.2 mm
F-number	1.3
Number of lenses	3 (3 asph)
MTF @ 70% of FOV	Normal requirements (52%)
Distortion	3%
Weight	380 g
Size (L × D)	167 × 60 mm



IR image of electrical component with 100 µm lens



IR image of electrical component with 50 µm lens



IR image of electrical component with 25 µm lens



IMPORTANT: optical data listed above comes from optical design software. The technical data contained herein are intended as information only; critical data for user must be confirmed. Specifications are subject to change without notice. Because we cannot anticipate or control the many different conditions under which our products may be used, we cannot guarantee the applicability of this information or the suitability of our products in any individual situation. Screenshots of 3D assembly are presented for demonstration purposes only and do not commit FLIR ATS to any specification

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Lenses compatible with the FLIR SC5000 Series

FLIR SC5000 MW G0.5 F/3.0 Close-up lens	
Part number	L0510 LC
Spatial resolution	30 μm
Spectral band	2.5 - 5.1 μm
Field of View for:	640x512, 15 μm pitch detector
Horizontal	19.20 mm
Vertical	15.36 mm
Diagonal	24.60 mm
F number	3 +/- 10%
Transmission	>93%
Image Field Flatness (mm)	-0.5/+0.8
Distortion	<0.5%
Working distance	46.12+/-0.5 mm
Operating temperature	0°C to 50°C
Weight	100 g



FLIR SC5000 MW G5 F/3.0 Close-up lens	
Part number	L0808
Spatial resolution	3 μm
Spectral band	2.5 - 5.1 μm
Field of View for:	640x512, 15 μm pitch detector
Horizontal	1.92 mm
Vertical	1.53 mm
Diagonal	2.46 mm
F number	3 +/- 10%
Transmission	>70%
Image Field Flatness (mm)	+/-0.2
Distortion	< 0.5%
Distance Lens-object	28.88+/-0.05 mm
Operating temperature	0°C to 50°C
Weight	1.5 kg

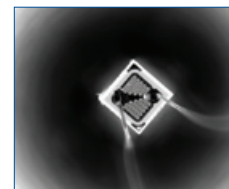
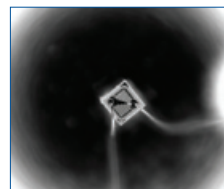
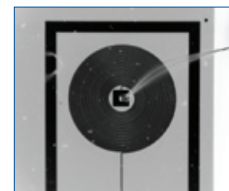
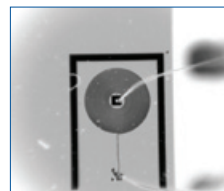


FLIR SC5000 MW G1 F/3.0 Close-up lens	
Part number	L0510
Spatial resolution	15 μm
Spectral band	2.5 - 5.1 μm
Field of View for:	640x512, 15 μm pitch detector
Horizontal	9.6 mm
Vertical	7.7 mm
Diagonal	12.3 mm
F number	3 +/- 10%
Transmission	>93%
Image Field Flatness (mm)	-0.5/+0.8
Distortion	<0.5%
Working distance	17.66+/-0.2 mm
Operating temperature	0°C to 50°C
Weight	100 g



IR images of different electrical components viewed with 3x lens

IR images of different electrical components viewed with 5x lens



FLIR SC5000 MW G3 F/3.0 Macro lens	
Part number	L0605
Spatial resolution	5 μm
Spectral band	2.5 - 5.1 μm
Field of View for:	640x512, 15 μm pitch detector
Horizontal	3.20 mm
Vertical	2.56 mm
Diagonal	4.10 mm
F number	3 +/- 10%
Transmission	>90%
Image Field Flatness (mm)	-0.7/+0.8
Distortion	<1%
Lens - Object distance	38.8 +/- 0.01mm
Operating temperature	0°C to 50°C
Weight	590 g



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