

Lenses for Longwave Infrared Cameras - 7-14 μm Wavelengths



LWIR Multiple FOV Lens Assembly

Achieve crisp image quality and high sensitivity with Teledyne FLIR's selection of custom and off-the-shelf LWIR optical assemblies. Available in a variety of lens materials, mounts and features like manual/motorized focus, DFOV, folded optics, boresight stability and thermal compensation. These lenses are suitable for a wide range of defense, security and commercial applications.

SMALL, LIGHT AND POWERFUL

SWaP optimized lenses to provide instant clear imaging able to withstand rugged environments in the air or on the ground.

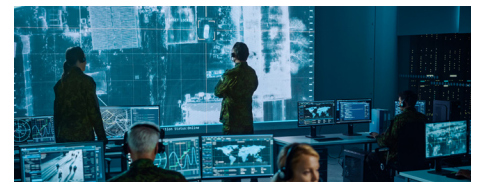
RELIABILITY, ACCURACY AND SUPPORT

With advanced capabilities and support in optical, opto-mechanical, electrical, and software design, our complete control of the process produces the highest quality infrared products, on-time, and on-budget.

BUILD TO YOUR SPECIFICATION

Whatever your requirements, our expertise in end-to-end optical design and integration, can develop a custom solution to meet all your needs.

APPLICATIONS



DEFENSE & SECURITY

- AIRBORNE & GROUND ISR
- NAVIGATION
- TARGETING
- UAV SYSTEMS
- COUNTER UAS

- REMOTE WEAPON STATION
- BORDER SURVEILLANCE
- PERIMETER SECURITY
- SEARCH & RESCUE

COMMERCIAL

- OEM CAMERA LENSES
- THERMOGRAPHY
- COTS

For more information visit:
www.teledyneflir.com/IOA

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SPECIFICATIONS

Optical	LWIR 40-100 DFOV
Waveband (microns)	7.5- 13.5 μ
Focal Length Range (mm)	40/100 mm
#	1.6
Transmission (spectrally weighted)	> 86% (8.0 - 12.0 μ with HEAR)
Distortion	WFOV < 3.1%; NFOV < 2.4%
Cold Shield Height (mm)	6.35 mm
Focal Plane Dimension (mm)	7.68 x 6.14 mm (9.83 mm circular)
Minimum Object Distance (meters)	5 (WFOV)/50 (NFOV)
Mechanical	
Focus/Zoom Mechanism	Motorized adjustable
Focus Time	< 1 sec (infinity to close focus in NFOV)
Zoom Time (end to end)	NFOV to WFOV \leq 1 sec
Through Zoom Boresight (mm)	\leq 0.10mm
Weight (grams)	< 315 grams
Dimensions (mm)	87.7 x 74.9mm
Environment	
Control Features	Thermal Gradient Compensation Object Range Compensation ID Module Built-In Test (BIT) Data Logging Module (optional) High Speed Communication - SPI (optional) User Defined Command Aliases Easily Upgradable and Expandable
Drive Voltage	12VDC
Current Consumption	Standby <0.2A (20 deg C) Power UP <0.7A (20 deg C) Typical Move <0.4A (20 deg C)
Communication Protocol	RS422, 115200 baud (default) Option: RS232 and programmable baud rate
Environmental	
Operating Temperature	-32°C to +80°C
Storage Temperature	-54°C to +85°C
Shock	30 G
Vibration	Random vibration, from 10 Hz to 500 Hz
Front Optic Sealing	IP67

Specifications are subject to change without notice.
For the most up-to-date specs, go to www.teledynelfir.com

SANTA BARBARA
Teledyne FLIR LLC, Inc.
6769 Hollister Ave.
Goleta, CA 93117
PH: +1 805.690.6602

EUROPE
Teledyne FLIR LLC, Inc.
Luxemburgstraat 2
2321 Meer
Belgium
PH: +32 (0) 3665 5106

For more information visit:
www.teledynelfir.com/IOA

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