



Owl-IR (Athermal)

Long-Wave IR Objectives



- **F-number: F/1.0**
- **Wavelength: 8-14 μm**
- **Athermalized**
- **Narrow to Wide Field-Of-View**
- **Optimized for 1024x768 - 17 μm FPA**
- **Image Diagonal: 21.8 mm**
- **Manual fine focus adjustment**
- **Exterior AR Hard Coating (Optional)**

LightWorks Optical Systems (LWOS) offers a series of F/1.0 athermal long wave infra-red (LWIR) fixed focus objectives in the 8 to 14 μm spectral region. These LWIR objectives provide excellent optical MTF performance and are image plane telecentric. A wide range of standard field-of-views are available for various applications. LWOS also provides custom LWIR objectives, engineered and built to customer requirements. Optional camera integrations are available upon request. For pricing or additional information, please contact us at (951) 926-7666 or email us at sales@lwos.com.

OBJECTIVE SPECIFICATION

Focal Length	50 mm	100 mm	150 mm
Wavelength	8-14 μm	8-14 μm	8-14 μm
F Number	1.0	1.0	1.0
Full Field-of-View (FFOV) *	24.6°	12.4°	8.3°
Image Diagonal	21.8 mm	21.8 mm	21.8 mm
MTF @ 30 lp/mm (On-Axis, Nominal)	> 0.5	> 0.5	> 0.5
Mount Type**	T	T	T
Athermal (Passive)	-40° to +60°C	-40° to +60°C	-40° to +60°C
External Coating***	HDC/HCC	HDC/HCC	HDC/HCC
Transmission (Ave.)****	88%	88%	88%



ISO 9001
AS 9100
ISO 13485

* FOV based on indicated FPA size.

** T = Threaded lens mount. (Custom mounts are available).

*** HDC = High Durable Coating; HCC = Hard Carbon Coating ; Coatings shall meet the quality requirements of MIL-C-675, MIL-STD-810, MIL-M-13508, MIL-F-48616, and MIL-C-48497 where applicable.

**** HDC average transmission over the 8-14 μm spectral region.

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