

## A Merger of Exotic Electro-Optics & LightWorks Optics



## Owl-IR

## (Athermal) MWIR Objectives

• F-number: F/2

• Wavelength: 3-5 μm

Athermalized (-40 to +60C)

Narrow to Wide Field-Of-View

Optimized for 1280x1024, 24.5mm FPA

• Manual fine focus adjustment

• Exterior High Durable/HDL AR Coating

• Bayonet camera interface

**LightWorks Optical Systems (LWOS)** offers a series of F/2 mid-wave infra-red (MWIR) fixed focus radiometric objectives in the 3-5μm spectral region. These MWIR objectives are designed to provide diffraction limited performance with low distortion, low stray light and high MTF performance. A wide range of standard field-of-views are provided for various applications. LWOS also provides customized MWIR 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@exotic-eo.com.

## **OBJECTIVE SPECIFICATION**

Focal Length	50 mm	75 mm	100 mm	150 mm
Wavelength	3-5 μm	3-5 μm	3-5 μm	3-5 μm
F Number	2.0	2.0	2.0	2.0
Image Diagonal	24.5 mm	24.5 mm	24.5 mm	24.5 mm
MTF @ 42 lp/mm (On-Axis, Nominal)	~ 0.5	~ 0.5	~ 0.5	~ 0.5
Focus Range	3 m to ∞			
External Coating *	HDL/HCC	HDL/HCC	HDL/HCC	HDL/HCC
Transmission (Ave.)**	>90%	>90%	>90%	>90%
Athermal (passive)	-40 to +60 C			
Cold Stop -FPA distance, mm (Nominal)	25.4 mm	25.4 mm	25.4 mm	25.4 mm
Dewar Window (Nominal)	1.0 mm Ge	1.0 mm Ge	1.0 mm Ge	1.0 mm Ge



<sup>\*</sup> 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.

<sup>\*\*</sup> HDC average transmission over the 3-5 μm spectral region.