

II-VI LWIR F/1.0 FIXED FOCUS OBJECTIVES

Long-Wave Infrared (Non - Athermal)

II-VI Aerospace & Defense (II-VI A&D) offers a series of F/1.0 Long Wave Infrared (LWIR) fixed focus objectives in the 8-14 μm spectral region. These LWIR objectives are manufactured to provide high optical MTF performance along with manual fine focus adjustment. A wide range of standard field-of-views are provided for various applications.

II-VI Aerospace & Defense also provides customized LWIR objectives engineered and built to customer specifications. Optional camera integrations are available upon request.

LWIR



KEY FEATURES

- | F-number: F/1.0
- | Wavelength: 8-14 microns
- | Narrow to Wide Field-Of-View
- | Optimized for 640x480, 13.6 mm FPA
- | Manual Fine Focus Adjustment
- | Exterior High Durable/HDL AR Coating
- | Standard & Customized Camera Mounts

OBJECTIVE SPECIFICATIONS

FOCAL LENGTH	18 mm	25 mm	50 mm	75 mm	100 mm
Wavelength	8-14 microns	8-14 microns	8-14 microns	8-14 microns	8-14 microns
F Number	1.0	1.0	1.0	1.0	1.0
Image Diagonal (max)	13.6 mm	13.6 mm	13.6 mm	13.6 mm	13.6 mm
Full Field-of-View (for 17 micron pixel) (FFOV)*	41.2°	30.4°	15.5°	10.4°	7.8°
MTF @ 30 lp/mm (On-Axis, Nominal)	>0.4	>0.4	>0.4	>0.4	>0.45
Focus Range	3m to infinity	3m to infinity	3m to infinity	5m to infinity	5m to infinity
Flange to FPA	16.5 mm	16.5 mm	16.5 mm	16.5 mm	16.5 mm
Mount Type**	T	T	T	T	T
External Coating	Broadband AR Coating	Broadband AR Coating	Broadband AR Coating	Broadband AR Coating	Broadband AR Coating
Transmission (Ave.)	>85%	>85%	>85%	>85%	>85%
Back Working Distance (BWD)	29.5 mm	36 mm	30 mm	48.2 mm	?? mm
Weight	258g (0.6 lbs)	372g (0.8 lbs)	490g (1.1 lbs)	1.5 kg (3,3 lbs)	3.3 kg (7.2 lbs)



* FFOV based on indicated FPA size.

** T - threaded lens mount (M34x0.5). Custom mounts are available upon request