

MWIR Continuous zoom – commercial off the shelf lens

ZENITH

- MWIR 18 - 400 mm F/3.4-4.0 Continuous zoom Lens with DSP controller for 10 μ HD sensors



FEATURES / APPLICATIONS / CAPABILITIES

- Very high zoom ratio lens for HD 10 micron sensors
- Compatible with detectors having F# from 3.4 to 4.0
- Front focal length extenders are available X1.5, X1.8 X2.0, X2.5
- Focus is maintained through the entire zoom range providing extremely fast zoom and focus response

PARAMETER		VALUE	NOTES
Main	Sub		
OPTICAL			
Focal Length / F#		18 - 400 mm / F 3.4 – 4.0	Nominal values. F# shall be determined by the detector. Until 340mm F/3.4, until 360mm F/3.6, & until 400mm F/4.0
Detector (FPA) type / size		For 1,280 x 1,024 x 10 μ F/3.4-4.0 cooled detectors with 19.4 mm CSH	
Working Spectral Range		3 – 5 μ	
FOV (degrees)		Wide FOV: 46.6°(H) x 38° (V) Narrow FOV: 1.8°(H) x 1.44°(V)	For detector size of 12.8 x 10.24 mm All values to within \pm 5%
Optical Coatings			
	All internal surfaces	High efficiency AR coating	Average transmission: 80%
	Front surface	High durability AR coating	DLC is available upon request
Optical Total lens track		170 mm	Nominal
MECHANICAL			
Mechanical Back Focal Length		28 mm	Nominal
Mechanical air gap to detector cover glass		7 mm	Enables inserting NUC flag (not a part of the lens)
Zoom mechanism		Motorized	With 2 motors
Focus Range		10m – Infinity	
Total Weight		Approx 1,350 grams	Nominal
External Dimensions		Max Diameter: 130 mm; Length: 153 mm (Please refer to MICD for details)	
ELECTRICAL			
Power Input		12VDC, 1.0A	Nominal
Communication Protocol		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
ENVIRONMENTAL			
Operating/Storage Temperature		-30°C to +55°C / -40°C to +70°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP67	By request