

MWIR Continuous zoom – commercial off the shelf lens

DIAMOND

MWIR 18 - 430 mm F/5.5 Continuous zoom
Lens with DSP controller



FEATURES / APPLICATIONS / CAPABILITIES

- The Highest zoom ratio available!
- The ultimate solution for various applications such as stabilized small payloads
- Front focal length extenders are available, to achieve more than 1400 mm FL
- 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 - 430 mm / F 5.5	Nominal values. F# constant over zoom range
Detector (FPA) type / size		For 9.6 mm x 7.68 mm F/5.5 cooled detectors with 19 – 22 mm cold shield	
Working Spectral Range		3 – 5 μ	
FOV (degrees)		Wide FOV: 29.8°(H) x 24.1° (V) Narrow FOV: 1.28°(H) x 1.02°(V)	For detector size of 7.68 x 9.6 mm All values to within $\pm 5\%$
Optical Coatings			
	All internal surfaces	High efficiency AR coating	Average transmission: 90%
	Front surface	High durability AR coating	DLC is available upon request
Optical Total lens track		130 mm	Nominal
Optical Back Focal Length		24.7 mm	Nominal
MECHANICAL			
Mechanical Back Focal Length		22 mm	Nominal
Zoom mechanism		Motorized	With 2 motors
Focus Range		5m – Infinity	
Total Weight		930 grams	Nominal
External Dimensions		Max Diameter: 96 mm; Length: 125.05 mm (Please refer to MICD for details)	
ELECTRICAL			
Power Input		12VDC, 1.0 A	Nominal
Communication Protocol		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
ENVIRONMENTAL			
Operating/Storage Temperature		-30°C to +50°C / -40°C to +70°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP67	

