

MWIR Continuous zoom – commercial off the shelf lens

NATIV-200

MWIR 25 - 200 mm F/4.0 Continuous zoom
Compact Lens



FEATURES / APPLICATIONS / CAPABILITIES

- Compact and low weight lens
- An ultimate solution for small volume applications
- Designed to VGA resolution FPA detectors: 640 x 512 x 15μ pitch

PARAMETER		VALUE	NOTES
Main	Sub		
OPTICAL			
Focal Length / F#		25 - 200 / F 4.0	Nominal values. F# constant over zoom range
Detector (FPA) type / size		640 x 512 x 15 μ detectors	Support regular detectors with 19 - 22 mm cold shield height.
Working Spectral Range		3 – 5 μ	
FOV (degrees)		Wide FOV: 21.7°(H) x 17.5° (V) Narrow FOV: 2.8°(H) x 2.25°(V)	For detector size of 9.6 x 7.68 mm
Optical Coatings			
	All internal surfaces	High efficiency AR coating	Average transmission: 90%
	Front surface	High durability AR coating	DLC is available. Average transmission 84%
Optical Total lens track		132 mm	Nominal
Optical Back Focal Length		19.8 mm	Nominal
MECHANICAL			
Zoom mechanism		Motorized	With 2 motors
Focus Range		15 m / 30m – Infinity	For WOFV / NFOV accordingly
Thru zoom boresight		Better than 0.15 mm	
NFOV boresight retention		Better than 0.02 mm	
Total Weight		TBD	
External Dimensions		Max flange Diameter: 72 mm; Length: 108 mm (Please refer to MICD for details)	
ELECTRICAL			
Power Input		12VDC, 1.0 A	Nominal with motors active. 0.2A in idle mode.
Communication Protocol		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
ENVIRONMENTAL			
Operating/Storage Temperature		-30°C to +60°C / -40°C to +71°C	
Shock and Vibrations		Per applicable standard	

