

MWIR Continuous zoom – commercial off the shelf lens

JUNO

MWIR 18 - 275 mm F/5.5 Continuous zoom
High accuracy Lens with DSP controller



FEATURES / APPLICATIONS / CAPABILITIES

- X15 zoom ratio for F/5.5 cooled detectors
- **Weighs ONLY 220g.** Ultra-compact configuration
- Optimized for high accuracy payloads for various applications
- Focus is maintained through the entire zoom range

PARAMETER		VALUE	NOTES
Main	Sub		
OPTICAL			
Focal Length / F#		18 - 275 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: 30.6°(H) x 24.5° (V) Narrow FOV: 2.05° (H) x 1.6°(V)	For detector size of 9.6 x 7.68 mm FOV within \pm 5% accuracy
Optical Coatings			
All internal surfaces		High efficiency AR coating	Average transmission: 90%
Front surface		High Durability AR (HDAR)	DLC is optional upon request
Optical Total lens track		66.5 mm	Nominal
Optical Back Focal Length		27.5 mm	Nominal
Boresight Retention		\leq 0.015mm radius at the focal plane	
Through-zoom Boresight		\leq 0.05mm radius at the focal plane	
MECHANICAL			
Mechanical Back Focal Length		Nominal 24.3 mm	Nominal
Focus / Zoom mechanism		Motorized	5m - Infinity
Total Weight		220 grams	Nominal, including electronic board
External Dimensions		Max Diameter: 63.5mm; Length: 70mm (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 +55°C / -40°C to +70°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP67	By request

