

MWIR HD Continuous zoom – commercial off the shelf lens

PARAGON

MWIR 22 - 480 mm F/4.7 Continuous zoom Lens with DSP controller for HD detectors



FEATURES / APPLICATIONS / CAPABILITIES

- True high definition resolution
- Highest resolution performance over entire zoom range
- Rugged design to comply with different applications
- Focus is maintained throughout the entire zoom range, with fast zoom and focus response

PARAMETER		VALUE	NOTES
Main	Sub		
OPTICAL			
Focal Length / F#		22-480 mm / F4.7	Nominal values. F# 4.7 constant for all zoom range.
Detector (FPA) type / size		Supports HD 1,280 x 1,024 x 15 μm (19.2 x 15.36 mm)	
Working Spectral Range		3 – 5 μ	
FOV (degrees)		Wide FOV: 47.2°(H) x 38.5° (V) Narrow FOV:2.3 °(H) 1.8° (V)	For detector size of 19.2 x 15.36 mm
Optical Coatings			
	All internal surfaces	High efficiency AR coating	Average transmission: 78%
	Front surface	High durability AR coating	DLC is available upon request
Optical Total lens track		260 mm	From Lens vertex to detector cover glass
Cold Stop distance		28 +/- 1 mm	
Optical Back Focal Length		~ 36 mm	From Last lens to detector FPA
MECHANICAL			
Zoom / Focus mechanism		Motorized	
Focus Range		20m – Infinity/ 100m – Infinity	At WFOV and NFOV respectively
Total Weight		1,340 grams	
External Dimensions		Max Diameter: 120 mm; Length: 225 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		-20°C to +55°C / -40°C to +70°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP67	By request