

MWIR Continuous zoom – Commercial off the shelf lens

ODEM

MWIR 15-330mm F/4.0 Continuous zoom Lens
for 640 x 512 x 15 μ cooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- X22 optical zoom
- Rugged and robust built for harsh environmental conditions
- Available in long BWD (IRIS-P) version, in which a NUC shutter can be added
- Available with different types of front expanders (x1.5, x2, x2.5)

	HFOV for Wide (15mm)				HFOV for Narrow (330mm)			
	640x512	1024x768	1280x1024	IFOV (mrad)	640x512	1024x768	1280x1024	IFOV (mrad)
10u	24.1°	37.6°		0.038	1.11°	1.8°		0.0017
12u	28.7°			0.046	1.33°			0.0021
15u	35.4°			0.057	1.7°			0.0026

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#		15 - 330 mm F/4.0	
Detector (FPA) type / size		Up to 640 x 512 x 15 μ	
Working Spectral Range		3 – 5 μ	
Optical Coatings	All internal surfaces	High efficiency AR coating	
	Front surface	High durability AR coating	DLC is available upon request
CSH		19-22mm	

MECHANICAL

Focus / Zoom mechanism		Motorized	
Focus Range		10m / 50m – Infinity	For WOFV / NFOV accordingly
Through zoom boresight		\leq 0.15 mm radius at the focal plane	
NFOV boresight retention		\leq 0.09 mm radius at the focal plane	
Total Weight		850gr	
Ext. Dimensions \varnothing x length (mm)		96 x 123	

ELECTRICAL

Power Input		12VDC, 1.0 A	
Communication Protocol		RS-422/232 Full Duplex	

ENVIRONMENTAL

Operating / Storage Temperature		-25°C to +55°C / -40°C to +70°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP66	IP67 By request

*All values are nominal: to within \pm 5%

