

MWIR Continuous zoom – commercial off the shelf lens

## ODEM Series

MWIR 15 - 330 mm F/4.0 Continuous zoom  
Lens with DSP controller



### FEATURES / APPLICATIONS / CAPABILITIES

- Highest resolution performance over entire zoom range
- Compact & Light weight design
- Rugged and robust built for harsh environmental conditions
- Focus is maintained throughout the entire zoom range, with fast zoom and focus response
- Available in several versions to support multiple applications
- Available with different types of front Beam Expander (x1.5, x2, x2.5)

PARAMETER	ODEM	ODEM/p	IRIS-P	NOTES
<b>OPTICAL</b>				
<b>Focal Length</b>	15-330 mm	18-320 mm	18-330 mm	Nominal values.
<b>F#</b>	4.0			F# constant over zoom range
<b>Cooled Detector - Size / Cold Shield Height (CSH)</b>	9.6 x 7.68mm / 19-22mm	9.6 x 7.68 mm / 14.5 mm	9.6 x 7.68 mm / 19-22 mm	
<b>Spectral Range</b>	3 – 5 $\mu$			
<b>FOV (degrees)</b>	35.7°x29°	29.8°x24°	29.8°x24.1°	
Wide/ Narrow FOV: H x V	1.7°x1.4°	1.7°x1.4°	1.7°x1.4°	
<b>Optical Coatings</b>				
<b>All internal surfaces</b>	High efficiency AR coating			Average transmission: 90%
<b>Front surface</b>	High durability AR coating			DLC is available upon
<b>Optical Total lens track</b>	138 mm		153 mm	Nominal
<b>Optical Back Focal Length</b>	~ 26 mm	14.5 mm	~ 34 mm	Nominal
<b>MECHANICAL</b>				
<b>Mechanical BFL</b>	~ 15 mm		~ 30 mm	Nominal for standard MICD.
<b>Zoom mechanism</b>	Motorized			
<b>Focus Range</b>	10m – Infinity		5m – Infinity	
<b>Total Weight</b>	850 grams	830 grams	900 grams	Nominal
<b>External Dimensions</b>	96 mm ,123 mm		96 mm, 128 mm	
<b>ELECTRICAL</b>				
<b>Power Input</b>	12VDC, 1.0 A			Nominal
<b>Communication Protocol</b>	RS-422/232 Full Duplex			Baud rate 19,200, n, 8, 1
<b>ENVIRONMENTAL</b>				
<b>Operating/Storage</b>	-30°C to +70°C / -40°C to +70°C			
<b>Shock and Vibrations</b>	Per applicable standard			
<b>Front lens sealing</b>	IP67 By request			

