


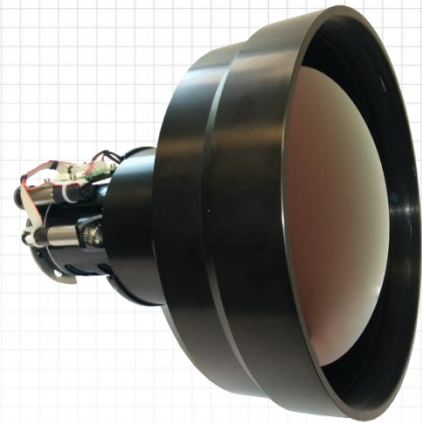
MWIR Continuous zoom – commercial off the shelf lens

 +Beam Expander\*

# ODEM+ Beam Expander

25 – 460mm, 30 – 660mm, 40 – 825 mm

MWIR F/4.0 Continuous zoom Lens with DSP controller



## FEATURES / APPLICATIONS / CAPABILITIES

- Highest resolution performance over entire zoom rang
- Very high focal length zoom lens with highest zoom ratio
- Rugged design to comply with various applications
- Focus is maintained throughout the entire zoom range, with extremely fast zoom and focus response

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL			
<b>Focal Length / F#</b>		25-460, 30-660, 40-825 mm	Nominal. F/4.0 const. over zoom range
<b>Detector (FPA) type / size</b>		For 9.6 mm x 7.68 mm F/4.0 Cooled detectors with 19 - 22 mm CSH	
<b>Working Spectral Range</b>		3 – 5 $\mu$	
<b>FOV (degrees) of the ODEM460 (ODEM + X1.4 BE) 25-460mm</b>		Wide FOV:21.7° (H) x 17.5°(V) Narrow FOV:1.2°(H) x 1°(V)	For detector size of 9.6 x 7.68 mm <b>All values are nominal: to within +/- 5%</b>
<b>FOV (degrees) of the ODEM660 (ODEM + X2 BE) 30-660mm</b>		Wide FOV:18.2° (H) x 14.6°(V) Narrow FOV:0.9°(H) x 0.7°(V)	
<b>FOV (degrees) of the ODEM825 (ODEM + X2.5 BE) 40-825mm</b>		Wide FOV:14.4° (H) x 11.5°(V) Narrow FOV:0.67°(H) x 0.53°(V)	
<b>Optical Coatings</b>	<b>Internal surfaces</b>	High efficiency AR coating	Average transmission: 90%
	<b>Front surface</b>	DLC	
<b>LENS</b>		<b>ODEM460</b>	<b>ODEM660</b>
<b>Optical Total lens track</b>		~192mm	~260mm
<b>Optical Back Focal Length</b>		26 mm Nominal	
MECHANICAL			
<b>Mechanical Back Focal Length</b>		~ 15mm Nominal for standard MICD. (Customized lengths are available)	
<b>Zoom mechanism</b>		Motorized	
<b>Focus Range</b>		15m - Infinity	40m – Infinity
<b>Total Weight (Nominal)</b>		~2,400gr	~3,000 gr.
<b>Ext. Dimensions (DiamxLength)</b>		135 x 192mm	206 X 245mm
<b>230 X 270mm</b>			
ELECTRICAL			
<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
ENVIRONMENTAL			
<b>Operating/Storage Temperature</b>		-30°C to +50°C / -40°C to +70°C	
<b>Front lens sealing</b>		IP67	

