

## MWIR Continuous zoom – Commercial off the shelf lens

# MIMOSA

MWIR 20-200mm F/4.0 Continuous zoom Lens  
for 640 x 512 x 15 $\mu$  Cooled detector



### FEATURES / APPLICATIONS / CAPABILITIES

- Ultra-compact configuration, Weighs ONLY 220g
- Optimized for high accuracy demanding payloads
- Focus is maintained to infinity through the entire zoom & temperature range

	HFOV for Wide (20mm)				HFOV for Narrow (200mm)			
	640x512	1024x768	1280x1024	IFOV (mrad)	640x512	1024x768	1280x1024	IFOV (mrad)
10u	18.1°			0.028	1.83°			0.0028
12u	21.7°			0.034	2.2°			0.0034
15u	27°			0.043	2.75°			0.0043

PARAMETER		VALUE	NOTES
Main	Sub		
<b>OPTICAL</b>			
Focal Length / F#		20-200mm F/4.0	
Detector (FPA) type / size		Up to 640 x 512 x 15 $\mu$	
Working Spectral Range		3.6 - 4.8 $\mu$	
Optical Coatings	Internal surfaces	High efficiency AR coating	
	Front surface	High durability AR coating	DLC is available upon request
CSH		19-22mm	
<b>MECHANICAL</b>			
Focus / Zoom mechanism		Motorized	
Focus Range		30m / 250m – Infinity	For WOFV / NFOV accordingly
Through zoom boresight		$\leq$ 0.075 mm radius at the focal plane	
NFOV boresight retention		$\leq$ 0.03 mm radius at the focal plane	
Total Weight		220gr.	
Ext. Dimensions $\varnothing$ x length (mm)		63.5 x 69	
<b>ELECTRICAL</b>			
Power Input		12VDC, 1.0 A	
Communication Protocol		RS-422/232 Full Duplex	
<b>ENVIRONMENTAL</b>			
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%