

MWIR Dual FOV – Commercial off the shelf lens

OPAL



MWIR 50/250mm F/4.0 Dual FOV Lens
For 640 x 512 x 15μ cooled detectors

FEATURES / APPLICATIONS / CAPABILITIES

- An ultimate solution for rugged, demanding payloads
- Sealed to IP67 level

	HFOV for Wide (50mm)				HFOV for Narrow (250mm)			
	640x512	1024x768	1280x1024	IFOV (mrad)	640x512	1024x768	1280x1024	IFOV (mrad)
10u	7.32°			0.011	1.5°			0.0023
12u	8.78°			0.013	1.8°			0.0027
15u	10.97°			0.017	2.2°			0.0034
16u								

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#		50 / 250 mm / F4.0	
Detector (FPA) type / size		Up to 640 x 512 x 15μ	
Working Spectral Range		3 – 5μ	
Optical Coatings	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	Single motor
Focus range		20m – Infinity	
NFOV boresight retention		≤ 0.05 mm radius at the focal plane	
Total Weight		1.5Kg	
Structure		Sealed	Open frame config. Upon request
Ext. Dimensions L x W x H (mm)		146 x 93 x 115	Please refer to MICD for details

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	
Sealing		IP67	

*All values are nominal: to within ±5%



