

MWIR Continuous zoom – Commercial off the shelf lens

IR-FLYs

MWIR 18-250mm F/4.0 Continuous zoom Lens
for 1280 x 1024 x 10 μ cooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Ultra Compact and light weight lens
- Perfect solution for airborne payloads
- High accuracy "ZERO BORESIGHT" design for maximum accuracy

	HFOV for Wide (18mm)				HFOV for Narrow (250mm)			
	640x512	1024x768	1280x1024	IFOV (mrad)	640x512	1024x768	1280x1024	IFOV (mrad)
10u	20°	30°	34°	0.032	1.5°	2.35°	2.9°	0.0023
15u	29°			0.048	2.2°			0.0034
16u	31°			0.051	2.35°			0.0036

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#		18-250mm F/4.0	
Detector (FPA) type / size		Up to 1280 x 1024 x 10 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		20m / 200m – Infinity	For WOFV / NFOV accordingly
Through zoom boresight		≤ 0.075 mm radius at focal plane	
NFOV boresight retention		≤ 0.03 mm radius at focal plane	
Total Weight		265gr	
Ext. Dimensions \varnothing x length (mm)		78.7 x 87	

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 +80°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP66	IP67 By request

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

