

MWIR Continuous zoom – Commercial off the shelf lens

mRUBY

MWIR 18-275mm F/5.5 Continuous zoom Lens
for 640 x 512 x 15µ cooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Ultra-compact configuration, Weights ONLY 265gr
- Optimized for stabilized payloads for various applications
- Focus is maintained through the entire zoom range

	HFOV for Wide (18mm)				HFOV for Narrow (275mm)			
	640x512	1024x768	1280x1024	IFOV (mrad)	640x512	1024x768	1280x1024	IFOV (mrad)
10u	20.1°			0.032	1.33°			0.0021
12u	24.1°			0.038	1.6°			0.0025
15u	29.8°			0.048	2°			0.0031

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#		18-275mm F/5.5	
Detector (FPA) type / size		Up to 640 x 512 x 15µ	
Working Spectral Range		3.6 - 4.8µ	
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	
Focus range		5m /30m – Infinity	For WOFV / NFOV accordingly
Through zoom boresight		≤0.15mm Radius at focal plane	
NFOV boresight retention		≤0.09mm Radius at focal plane	
Total Weight		265gr	
Ext. Dimensions ø x length (mm)		63.5 x 72	

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	
Front lens sealing		IP66	IP67 By request

*All values are nominal: to within ±5%



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