

MWIR Continuous zoom – Commercial off the shelf lens

ELLA1400

MWIR 70-1400mm F/5.5 Continuous zoom Lens
for 640 x 512 x 15μ cooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Longest range thermal zoom lens for MWIR 15μ pitch
- X20 optical zoom lens
- Focus is maintained automatically through the entire zoom range providing extremely fast zoom and focus response
- Actively Athermalized to maintain focus to infinity through temperature changes

	HFOV for Wide (70mm)				HFOV for Narrow (1400mm)			
	640x512	1280x1024	1920 x 1536	IFOV (mrad)	640x512	1280x1024	1920 x 1536	IFOV (mrad)
10u								
12u								
15u	7.8°			0.21	0.4°			0.01

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#		70 - 1400 mm / 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	DLC	
CSH		19-21mm	

MECHANICAL

Focus / Zoom mechanism		Motorized	
Focus Range		30m / 1000m - Infinity	For WOFV / NFOV accordingly
Through zoom boresight		≤ 0.15mm radius at the focal plane	
NFOV boresight retention		≤ 0.045 mm radius at the focal plane	
Total Weight		6.5Kg	
Ext. Dimensions ø x length (mm)		315 x 310	

ELECTRICAL

Power Input		12VDC, 3.0A	
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		IP67	

*All values are nominal: to within ±5%

