

MWIR Continuous zoom – Commercial off the shelf lens

DRAGON1200

MWIR 70-1200mm F/4.0 Continuous zoom Lens
for 1920 x 1536 x 10 μ cooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Longest range thermal zoom lens for FHD MWIR
- X17 optical zoom lens for FHD 10 μ sensors
- Focus is maintained 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 (1200mm)			
	640x512	1280x1024	1920 x 1536	IFOV (mrad)	640x512	1280x1024	1920 x 1536	IFOV (mrad)
10u	5.2°	10.4°	15.6°	0.0082	0.31°	0.61°	0.92°	0.0048
12u	6.2°	12.5°		0.0098	0.37°	0.73°		0.0057
15u	7.8°	15.6°		0.012	0.46°	0.92°		0.0072
16u	8.34°			0.013	0.5°			0.0076

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL			
Focal Length / F#		70 - 1200 mm / F 4.0	
Detector (FPA) type / size		Up to 1920 x 1536 x 10 μ	
Working Spectral Range		3.6 – 4.8 μ	
Optical Coatings	Internal surfaces	High Efficiency AR coating	
	Front surface	DLC	
CSH		28mm	
MECHANICAL			
Focus / Zoom mechanism		Motorized	
Focus Range		30m / 250m – Infinity	
Through zoom boresight		≤ 0.15mm radius at the focal plane	
NFOV boresight retention		≤ 0.045 mm radius at the focal plane	
Total Weight		13.5Kg	
Ext. Dimensions \varnothing x length (mm)		335 x 451	
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 $\pm 5\%$

