

MWIR Continuous zoom – Commercial off the shelf lens

DIAMOND

MWIR 18-430mm F/5.5 Continuous zoom Lens
for 640 x 512 x 15 μ cooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- The Highest zoom ratio available
- Front beam extenders are available, to achieve more than 1400mm FL
- Focus is maintained through the entire zoom range providing extremely fast zoom and focus response

	HFOV for Wide (18mm)			IFOV (mrad)	HFOV for Narrow (430mm)			IFOV (mrad)
	640x512	1024x768	1280x1024		640x512	1024x768	1280x1024	
15u	29.8°			0.048	1.3°			0.002

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#		18 - 430 mm / F 5.5	
Detector (FPA) type / size		Up to 640 x 512 x 15 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	With 2 motors
Focus Range		5m / 30m – Infinity	For WOFV / NFOV accordingly
Through zoom boresight		\leq 0.15 mm radius at the focal plane	
NFOV boresight retention		\leq 0.09 mm radius at the focal plane	
Total Weight		900gr	
Ext. Dimensions \varnothing x length (mm)		96 x 125	

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 \pm 5%

