

MWIR HD Continuous zoom – Commercial off the shelf lens

PARAGON

MWIR 22-480mm F/4.7 Continuous zoom Lens
for HD 1280 x 1024 x 15μ cooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Supports FHD 10μ detectors and sensors with up to 24.59mm diagonal
- Highest resolution performance over entire zoom range
- Rugged design to comply with different applications
- X21 optical zoom

	HFOV for Wide (22mm)				HFOV for Narrow (480mm)			
	640 x 512	1280x1024	1920 x 1536	IFOV (mrad)	640x512	1280x1024	1920 x 1536	IFOV (mrad)
10u	16.5°	32.4°	47.1°	0.026	0.8°	1.55°	2.3°	0.0012
12u	19.8°	38.5°		0.031	0.92°	1.85°		0.0014
15u	24.6°	47.1°		0.039	1.15°	2.3°		0.0018
16u	26.2°			0.041	1.22°			0.0019

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#		22-480 mm / F4.7	
Detector (FPA) type / size		Up to 1280 x 1024 x 15μ	
Working Spectral Range		3 – 5μ	
Optical Coatings	Internal surfaces	High Efficiency AR	
	Front surface	High Durability AR	DLC is optional
CSH		28±1mm	

MECHANICAL

Zoom / Focus mechanism		Motorized	
Focus Range		20m / 100m – Infinity	For WFOV / NFOV accordingly
Through zoom boresight		≤0.15 mm radius at the focal plane	
NFOV boresight retention		≤0.075 mm radius at the focal plane	
Total Weight		1.5Kg	
Ext. Dimensions ø x length (mm)		120 x 225	

ELECTRICAL

Power Input		12VDC, 3.0 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 optional by request

*All values are nominal: to within ±5%

