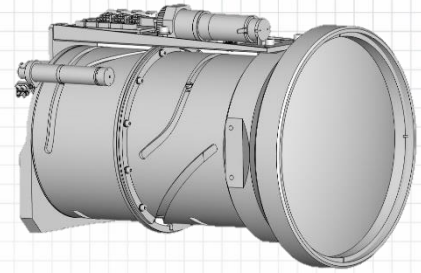


LWIR Continuous zoom – Commercial off the shelf lens

CACTUS

Cooled LWIR 15 – 300 mm F/2 Continuous zoom
Lens for 640 x 512 x 15 μ cooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- The ultimate lens for medium to long range surveillance systems in various applications.
- Excellent MTF performances

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL			
Focal Length / F#		15-300 mm F/2	Nominal values
Detector (FPA) type / size		640 x 512 x 15 μ	Cooled LWIR detector with cold stop at 19.8mm
Cold Stop		19.8mm	
Working Spectral Range		7.8-10 μ	
FOV (degrees)		Wide FOV: 35.5°(H) Narrow FOV: 1.8° (H)	All to within \pm 5%
Optical Coatings			
	All internal surfaces	High efficiency AR coating	Average transmission: 82%
	Front surface	High efficiency AR coating	DLC coating is available upon request
Optical Total lens track		260mm	Nominal, From 1 st lens vertex to FPA
MECHANICAL			
Mechanical Back Focal Length		Please refer to MICD	Nominal
Focus / Zoom mechanism		Motorized	
Thru zoom boresight			\leq 0.15 mm radius at focal plane
NFOV boresight retention			\leq 0.045 mm radius at focal plane
Total Weight		~3Kg	Nominal
Ext. Dimensions \varnothing x length (mm)		170 x 271	Exist NUC shutter
ELECTRICAL			
Power Input		12VDC, 1.0A	Nominal
Communication Protocol		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
ENVIRONMENTAL			
Operating/Storage Temperature		-40°C to +60°C / -40°C to +75°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP66	IP67 By request