

---LWIR Continuous zoom – commercial off the shelf lens

CACTUS

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



FEATURES / APPLICATIONS / CAPABILITIES

- Ideal lens for medium to long range surveillance systems in various demanding applications.
- Excellent MTF performance, low F#
- 20X optical zoom

PARAMETER		VALUE	NOTES
Main	Sub		

🕒 OPTICAL			
Focal Length / F#		15-300mm F/2.0	Nominal values
Detector (FPA) type / size		640 x 512 x 15 μ	Cooled LWIR
Cold Stop		19.8mm	
Working Spectral Range		7.8-10 μ	
HFOV (degrees)		1.8° x 35.5°	All to within \pm 5%
Optical Coatings			
	All internal surfaces	High Efficiency AR coating	Average transmission: 82%
	Front surface	High Durability AR coating	DLC coating is optional
Optical Total lens track		260mm	Nominal, From 1 st lens vertex to FPA
⚙️ MECHANICAL			
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 motorized NUC shutter
💡 ELECTRICAL			
Power Input		12VDC / 3.0A	Current depends of lens controller type
Communication Protocol		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
🌍 ENVIRONMENTAL			
Operating/Storage Temperature		-30°C to +55°C / -40°C to +75°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP66	IP67 By request

