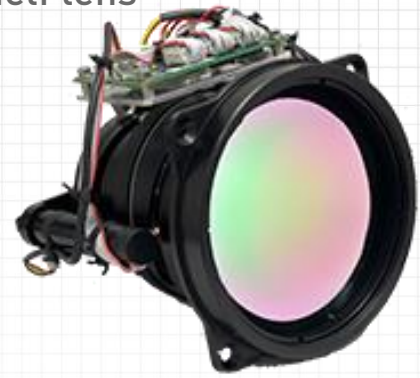


## LWIR Continuous zoom – commercial off the shelf lens

# ALDAN

**Cooled LWIR 60-180mm F/2.24 Continuous zoom Lens with DSP controller**



### FEATURES / APPLICATIONS / CAPABILITIES

- Ultra Compact continuous zoom lens
- Suitable for various applications
- Rugged design for harsh environments

PARAMETER		VALUE	NOTES
Main	Sub		

🔍 OPTICAL			
Focal Length / F#		60 – 180mm F/2.24	Nominal values
Detector (FPA) type / size		640 x 512 x 15 $\mu$	Cooled detector with cold shield position at 22.2mm nominal.
Optical Spectral Range		7.5 – 9.5 $\mu$	
FOV (degrees)		Wide: 8.9 °(H) x 7.15° (V) Narrow: 2.95°(H) x 2.35°(V)	For detector size of 640 x 512 x 15 $\mu$ Wide IFOV: 0.0046° Narrow IFOV: 0.014°
Optical Coatings			
	All internal surfaces	High efficiency AR coating	More than 90% transmittance
	Front surface	High durability AR coating	DLC is available upon request
Optical Total lens track		90 mm	Front element vertex to FPA
⚙️ MECHANICAL			
Mechanical Back Focal Length		6.5 mm	Free air gap between rear flange of lens and detector glass.
Zoom mechanism/ Focus		Motorized	
Thru zoom boresight		$\leq 0.15$ mm radius at the focal plane	
NFOV boresight retention		$\leq 0.03$ mm radius at the focal plane	
Total Weight		840 grams	Nominal
Ext. Dimensions $\phi$ x length (mm)		95 x 94	
💡 ELECTRICAL			
Power Input		12VDC, 0.5 A	Nominal
Communication Protocol		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
🌍 ENVIRONMENTAL			
Operating/Storage Temperature		-20°C to +50°C / -30°C to +60°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP67	By request

