

LWIR Continuous zoom – Commercial off the shelf lens

YARKON

LWIR 24–90mm F/0.9 Continuous zoom Lens
for 1024 x 768 x 12μ uncooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Very high sensitivity zoom lens F/0.9
- Cost effective solution for HLS
- Compact light & small design

	HFOV for Wide (24mm)				HFOV for Narrow (90mm)			
	640x480	1024x768	1280x1024	IFOV (mrad)	640x480	1024x768	1280x1024	IFOV (mrad)
12u	18.2°	28.7°		0.028	4.9°	7.8°		0.0076
17u	25.5°			0.04	6.9°			0.011

PARAMETER		VALUE	NOTES
Main	Sub		

🕒 OPTICAL			
Focal Length / F#		24-90mm F/0.9	
Detector (FPA) type / size		Up to 1024 x 768 x 12μ	
Working Spectral Range		8 – 14μ	
Optical Coatings	All internal surfaces	High Efficiency AR	
	Front surface	High Durability AR	DLC is available upon request
⚙️ MECHANICAL			
Focus / Zoom mechanism		Motorized	
Focus range		30m / 50m – Infinity	For WOFV / NFOV accordingly
Through zoom boresight		≤0.15 mm radius at the focal plane	
NFOV boresight retention		≤0.045 mm radius at the focal plane	
Total Weight		1.2Kg	
Ext. Dimensions ø x length (mm)		113 x 120	
💡 ELECTRICAL			
Power Input		12VDC, 1.0A	
Communication Protocol		RS-422/232 Full Duplex	
🌍 ENVIRONMENTAL			
Operating / Storage Temperature		-25°C to +55°C / -50°C to +75°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP66	IP67 By request

*All values are nominal: to within ±5%