

MWIR Continuous zoom – Commercial off the shelf lens

IRIS-BB

MWIR 18-330mm F/3.0-4.0 Continuous zoom Lens
for 1280 x 1024 x 10 μ cooled detectors



FEATURES / APPLICATIONS / CAPABILITIES

- Supports HD 10 μ detectors and sensors with up to 16.4mm diagonal
- Available with 19-22mm or 28mm cold shield distances
- Rugged design to fit various applications
- Available with different types of front expanders (x1.5, x2)

	HFOV for Wide (18mm)				HFOV for Narrow (330mm)			
	640x512	1024x768	1280x1024	IFOV (mrad)	640x512	1024x768	1280x1024	IFOV (mrad)
10u	20.1°	31.7°	39.1°	0.032	1.11°	1.8°	2.22	0.0017
15u	29.8°			0.048	1.7°			0.0026

PARAMETER		VALUE	NOTES
Main	Sub		

🔍 OPTICAL			
Focal Length / F#		18 - 330 mm F/3.0-4.0	
Detector (FPA) type / size		Up to 1280 x 1024 x 10 μ	
Working Spectral Range		3.6 – 4.8 μ	
Optical Coatings	All internal surfaces	High efficiency AR coating	
	Front surface	High durability AR coating DLC is available upon request	
CSH		19-22mm or 28mm	
⚙️ MECHANICAL			
Focus / Zoom mechanism		Motorized	
Focus Range		50m / 100m – Infinity For WOFV / NFOV accordingly	
Through zoom boresight		≤0.15 mm radius at the focal plane	
NFOV boresight retention		≤0.09 mm radius at the focal plane	
Total Weight		850gr	
Ext. Dimensions \varnothing x length (mm)		93.46 x 129.4	
💡 ELECTRICAL			
Power Input		12VDC, 1.0 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 By request	

*All values are nominal: to within $\pm 5\%$

