

# MWIR Continuous zoom – Commercial off the shelf lens

## IR-BEE

MWIR 20-330mm F/5.5 Continuous zoom Lens  
for 640 x 512 x 15 $\mu$  cooled detectors

### Features:

- Ultra Compact and light weight lens
- “ZERO” boresight errors for maximum accuracy
- Perfect solution for airborne payloads



HFOV for Wide (20mm)		HFOV for Narrow (330mm)	
640x512	IFOV	640x512	IFOV
15 $\mu$	27.6°	0.75	1.66°
			0.045

Optical			
Focal Length / F#		20-330mm F/5.5	
Detector (FPA) type / size		640 x 512 x 15 $\mu$	
Working Spectral Range		3 – 5 $\mu$	
Optical Coatings	All internal surfaces	High Efficiency AR coating	
	Front surface	High Durability AR coating	DLC is optional
Mechanical			
Focus / Zoom mechanism		Motorized	
Focus Range		20m / 200m – Infinity	For WOFV / NFOV accordingly
Through zoom boresight		$\leq 0.075$ mm radius at focal plane	
NFOV boresight retention		$\leq 0.03$ mm radius at focal plane	
Total Weight		265gr	
Dimensions $\phi$ x length (mm)		79 x 87	
Electrical			
Power Input		12VDC, 1.0 A	
Communication Protocol		RS-422/232 Full Duplex	
Environmental			
Operating / Storage Temperature		-25 $^{\circ}$ C to +55 $^{\circ}$ C / -40 $^{\circ}$ C to +80 $^{\circ}$ C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP66	IP67 By request

\*IFOV is indicated in mrad

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