

MWIR HD Continuous zoom – commercial off the shelf lens

# IRIS-BB330 & IRIS-BB660

18 – 330mm & 40 – 660mm MWIR F/3-4  
Continuous zoom Lens for 10 $\mu$  HD sensors



## FEATURES / APPLICATIONS / CAPABILITIES

- Highest resolution performance over entire zoom range
- Very high focal length zoom lens with **X18 optical zoom**
- Rugged design to comply with various applications
- Focus is maintained throughout the entire zoom range, with extremely fast zoom and focus response
- Available with different types of front Beam Expander (x1.5, x2, x2.5)

PARAMETER		VALUE	NOTES
Main	Sub		
<b>OPTICAL</b>		<b>IRIS-BB330</b>	<b>IRIS-BB660</b>
<b>Focal Length / F#</b>		18-330mm F/3-4 Until 245mm F/3.0, until 280 F/3.4, until 300 F/3.6, until 330mm F/4.0	40-660mm F/3-4 Until 490mm F/3.0, until 560 F/3.4, until 600 F/3.6, until 660mm F/4.0
<b>Detector (FPA) type / size</b>		HD 1,280 x 1,024 x 10 $\mu$ (12.8 x 10.24mm) with <b>19.4 or 28mm</b> CSH	
<b>Working Spectral Range</b>		3 – 5 $\mu$	
<b>FOV</b>		Wide: 40.9°(H) x 32.8°(V) Narrow: 2.3°(H) x 1.8°(V)	Wide: 19°(H) x 14°(V) Narrow: 1.15°(H) x 0.9°(V)
<b>For detector size of 12.8 x 10.24mm All values are nominal: to within +/- 5% accuracy</b>			
<b>Optical Coatings</b>	<b>Internal surfaces</b>	High efficiency AR coating	High efficiency AR coating
	<b>Front surface</b>	High Durability AR	DLC
<b>Optical Total lens track</b>		153mm	275mm
<b>Cold Stop distance</b>		For <i>IRIS-BB/19</i> : 19.4 $\pm$ 1mm	For <i>IRIS-BB/28</i> : 28 $\pm$ 1mm
<b>Optical Back Focal Length</b>		36 mm Nominal	
<b>MECHANICAL</b>			
<b>Mechanical Back Focal Length</b>		22-32mm Nominal, refer to MICD.	
<b>Zoom, Focus mechanism</b>		Motorized	
<b>Focus Range</b>		25 – Infinity	50 – Infinity
<b>Total Weight (Nominal)</b>		950gr	3kg
<b>Dimensions (<math>\varnothing</math> x Length)</b>		95 x 125mm	200 x 220mm
<b>ELECTRICAL</b>			
<b>Power Input</b>		12VDC, 1.0 A	Nominal
<b>Communication Protocol</b>		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
<b>ENVIRONMENTAL</b>			
<b>Operating/Storage Temperature</b>		-30°C to +50°C / -40°C to +70°C	
<b>Shock and Vibrations</b>		Per applicable standard	
<b>Front lens sealing</b>		IP66	

