

MWIR HD Continuous zoom – commercial off the shelf lens

DOVE115 & DOVE170

15-115mm & 25-170mm MWIR F/3.6
Miniature Continuous zoom Lens
for 10 μ SD sensors



FEATURES / APPLICATIONS / CAPABILITIES

- Miniature, low weight lens
- Highest resolution performance over entire zoom range
- X7.5 optical zoom
- Rugged design to comply with various applications
- Focus is maintained throughout the entire zoom range, with extremely fast zoom and focus response

PARAMETER		VALUE	NOTES
Main	Sub		
OPTICAL		DOVE115	DOVE170
Focal Length / F#		15-115mm F/3.6	25-170mm F/3.6
Detector (FPA) type / size		640 x 512 x 10 μ m (6.4 x 5.12mm) with ~12mm CSH	
Working Spectral Range		3 – 5 μ	
FOV		Wide: 24.5°(H) x 20°(V) Narrow: 3.2°(H) x 2.5°(V)	Wide: 16.3°(H) x 13°(V) Narrow: 2.15°(H) x 1.7°(V)
For detector size of 6.4 x 5.12mm All values are nominal: to within +/- 5% accuracy			
Optical Coatings	Internal surfaces	High efficiency AR coating	High efficiency AR coating
	Front surface	HDAR or DLC	HDAR or DLC
Optical Total lens track		85mm	119mm
Cold Stop distance		12 \pm 1mm	
Optical Back Focal Length		19mm Nominal	
MECHANICAL			
Mechanical Back Focal Length		18.25mm Nominal for standard MICD.	
Zoom, Focus mechanism		Motorized	
Thru Focus / zoom boresight		< 6 pixels diameter around optical axis	
Boresight retention		< 2 pixels diameter	
Focus Range		10m – Infinity	15m – Infinity
Total Weight (Nominal)		180gr	270gr
Dimensions (\varnothing x Length)		45 x 65mm	63 x 110mm
ELECTRICAL			
Power Input		12VDC, 1.0 A	Nominal
Communication Protocol		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
ENVIRONMENTAL			
Operating/Storage Temperature		-30°C to +50°C / -40°C to +70°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP66 By request	IP66 By default

