

MWIR Continuous zoom – Commercial off the shelf lens

+Beam Expander\*

# GALAXY + Beam Expander



30 – 450mm, 36 – 540mm, 40 – 600mm  
 MWIR F/3.4-4.0 Continuous zoom double folded  
 Lens for 10μ HD sensors

## FEATURES / APPLICATIONS / CAPABILITIES

- Highest resolution performance over entire zoom range
- 180° Folded, Compact & light weight design
- Rugged and robust built for harsh environmental conditions
- Focus is maintained throughout the entire zoom range, with extremely fast zoom and focus response

PARAMETER		VALUE	NOTES
Main	Sub		

### OPTICAL

Focal Length / F#		30-450mm F/3.4-4.0, 36-540mm F/3.4-4.0, 40-600mm F/4.0	Nominal
Detector (FPA) type / size		1280 x 1024 x 10μ	Regular 19-22mm CSH
Working Spectral Range		3 – 5μ	
FOV (degrees) GALAXY450		Wide FOV: 24 ° (H) x 19°(V) Narrow FOV: 1.6°(H) x 1.3°(V)	For detector size of 12.8 x 10.24 mm <b>All values are nominal: to within +/- 5%</b>
FOV (degrees) GALAXY540		Wide FOV: 20.1° (H) x 16.2 °(V) Narrow FOV: 1.36°(H) x 1.1°(V)	
FOV (degrees) GALAXY600		Wide FOV: 18.2° (H) x 14.5°(V) Narrow FOV: 1.22°(H) x 1 °(V)	
Optical Coatings	Internal surfaces	High efficiency AR coating	
	Front surface	High durability AR coating	DLC is available upon request

### MECHANICAL

LENS	GALAXY450	GALAXY540	GALAXY600	Lens is folded
Mechanical Back Focal Length	~ 28mm			Nominal for standard MICD.
Thru zoom boresight	≤0.15mm radius at focal plane			
NFOV boresight retention	≤0.04mm radius at focal plane			
Zoom mechanism	Motorized			
Focus Range	25m - Infinity	40m - Infinity	50m - Infinity	
Total Weight	~2.2 Kg.	~3.15Kg	~3.5 Kg.	
Ext. Dimensions L x W x H (mm)	245 x 163 x 175	256 x 196 x 196	253 x 170 x 176	

### 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	-25°C to +55°C / -40°C to +70°C	
Front lens sealing	IP66	IP67 By request

