

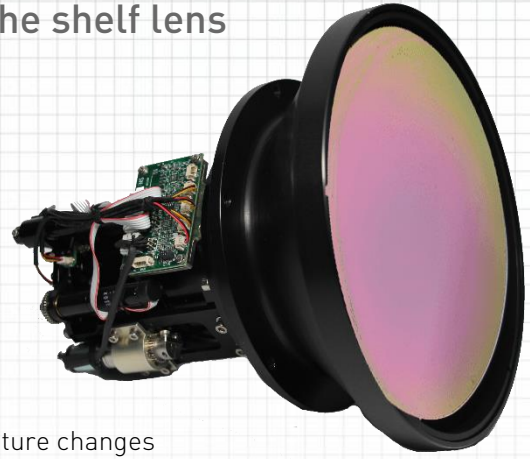
## MWIR Continuous zoom – Commercial off the shelf lens

# ZENITH800

MWIR 40-800mm F/3.4-4.0 Continuous zoom Lens  
for 1,280 x 1,024 x 10 $\mu$  cooled detectors

### FEATURES / APPLICATIONS / CAPABILITIES

- X20 optical zoom lens for HD 10 $\mu$  sensors
- Focus is maintained through the entire zoom range providing extremely fast zoom and focus response
- Actively Athermalized to maintain focus to infinity through temperature changes



	HFOV for Wide (40mm)				HFOV for Narrow (800mm)			
	640x512	1024x768	1280x1024	IFOV (mrad)	640x512	1024x768	1280x1024	IFOV (mrad)
10u	9.15°	14.6°	18.1°	0.014	0.46°	0.73°	0.92°	0.0007
12u	11°			0.017	0.55°			0.0009
15u	13.7°			0.021	0.7°			0.001

PARAMETER		VALUE	NOTES
Main	Sub		

### OPTICAL

Focal Length / F#		40-800mm F/3.4-4.0	F# determined by the detector. ≤ 680mm F/3.4, ≤ 720mm F/3.6, ≤ 800mm
Detector (FPA) type / size		Up to 1,280 x 1,024 x 10 $\mu$	
Working Spectral Range		3 – 5 $\mu$	
Optical Coatings	All internal	High efficiency AR coating	
	Front surface	High Durability AR coating	DLC is available upon request
CSH		19-22mm	

### MECHANICAL

Focus / Zoom mechanism		Motorized	
Focus Range		100 m – Infinity	
Trough zoom boresight		≤ 0.15mm radius at focal plane	
NFOV boresight retention		≤ 0.045mm radius at focal plane	
Total Weight		4.2Kg	
Ext. Dimensions $\varnothing$ x length (mm)		220 x 254	

### ELECTRICAL

Power Input		12VDC, 3.0A	
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		IP67	

\*All values are nominal: to within ±5%



RP Optical Lab 5 Shimshon St, Petach Tikva 49517, ISRAEL  
Tel. +972-3-5057436 | Fax. +972-3-9199878 | Email: info@rp-optical-lab.com