

LWIR Continuous zoom – Commercial off the shelf lens

TOPAZc

LWIR 18–60mm F/1.4 Continuous zoom Lens
for 640 x 480 x 17μ uncooled detectors

FEATURES / APPLICATIONS / CAPABILITIES

- Ultra Compact continuous zoom lens, fits 4" gimbals
- Very low boresight errors for maximum accuracy
- Unique design and shape, for airborne payloads



	HFOV for Wide (18mm)				HFOV for Narrow (60mm)			
	640x480	1024x768	1280x1024	IFOV (mrad)	640x480	1024x768	1280x1024	IFOV (mrad)
12u	24°			0.038	7.32°			0.011
17u	33.6°			0.054	10.4°			0.016

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#		18-60 mm / F1.4	
Detector (FPA) type / size		Up to 640 x 480 x 17μ	
Working Spectral Range		8-12μ	
Optical Coatings	All internal surfaces	High efficiency AR coating	
	Front surface	High durability AR coating	DLC is available upon request

MECHANICAL

Mechanical Back Focal Length		5.92mm	
Focus / Zoom mechanism		Motorized	
Focus range		5m / 10m – Infinity	For WOFV / NFOV accordingly
Through zoom boresight		≤0.045mm radius at focal plane	
NFOV boresight retention		≤0.03mm radius at focal plane	
Total Weight		220gr	
Ext. Dimensions ø x length (mm)		70 x 76	

ELECTRICAL

Power Input		12VDC, 1.0A	
Communication Protocol		RS-422/232 Full Duplex	

ENVIRONMENTAL

Operating / Storage Temperature		-20°C to +55°C / -40°C to +70°C	
Shock and Vibrations		Per applicable standard	
Front lens sealing		IP66	IP67 By request

*All values are nominal: to within ±5%

