- LWIR Continuous zoom - Commercial off the shelf lens

TOPAZc

LWIR 18–60mm F/1.4 Continuous zoom Lens for $640 \times 480 \times 17 \mu$ 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	24.1°			0.038	7.3°			0.011
17u	33.6°			0.054	10.3°			0.016

PARAMETER		VALUE	NOTES		
Main	Sub				
◎ OPTICA	AL				
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	All internal surfaces	High efficiency AR coating			
Coatings	Front surface	High durability AR coating	DLC is available upon request		
☆ MECH	ANICAL				
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 Weig	ht	220gr			
Ext. Dimen	sions ø x length (mm)	70 x 76			
P ELECT	RICAL				
Power Input		12VDC, 1.0A			
Communic	ation Protocol	RS-422/232 Full Duplex			
% ENVIR	ONMENTAL				
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 a	re nominal: to within +5%				

^{*}All values are nominal: to within ±5%

