

LWIR Dual FOV – Commercial off the shelf lens

SHARK



LWIR 85/190mm F/1.2 Dual FOV Lens
for 640 x 480 x 17 μ uncooled detectors

FEATURES / APPLICATIONS / CAPABILITIES

- Discrete zoom lens for medium range, demanding applications
- Excellent MTF performance
- High sensitivity, Low F#

	HFOV for Wide (85mm)				HFOV for Narrow (190mm)			
	640x480	1024x768	1280x1024	IFOV (mrad)	640x480	1024x768	1280x1024	IFOV (mrad)
12u	5.17°			0.0081	2.32°			0.0036
17u	7.32°			0.0114	3.28°			0.0051

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#		85/190mm F/1.2	
Detector (FPA) type / size		Up to 640 x 480 x 17 μ	
Working Spectral Range		8-12 μ	
Optical Coatings	All internal surfaces	High efficiency AR coating	
	Front surface	High durability AR coating	DLC is available upon request

MECHANICAL

Focus / Zoom mechanism		Motorized	
Focus range		30m / 100m – Infinity	For WOFV / NFOV accordingly
NFOV boresight retention		\leq 0.045mm radius at the focal plane	
Total Weight		2.3Kg	
Ext. Dimensions \varnothing x length (mm)		170 x 232	

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		IP66	IP67 By request

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