

LWIR Dual/Triple FOV – commercial off the shelf lens

BARKAT

LWIR 45/135 mm Dual FOV
 Lens with DSP controller for 25 / 17 μ detectors



FEATURES / APPLICATIONS / CAPABILITIES

- The ultimate lens for medium to long range surveillance systems at various applications
- Optimized for relatively short total track and low weight
- Supports detector types: 384 x 288 x 25 μ pitch and 640 x 480 x 17 μ pitch

PARAMETER		VALUE	NOTES
Main	Sub		

OPTICAL

Focal Length / F#	45/135 mm / F1.1-1.6	Nominal values.	
Detector (FPA) type / size	640 x 480 pixels x 17 microns	Max FPA effective area is: 10.88 mm W x 8.16 mm H (13.6 mm diagonal)	
	384 x 288 pixels x 25 microns		
FOV (degrees)	Wide: 13.8°(H) x 10.3° (V) Narrow: 4.6° (H) x 3.4° (V)	For detector size of 640 x 480 pixels x 17 μ	
	Wide: 12.2°(H) x 9.2° (V) Narrow: 4.1° (H) x 3.1° (V)	For detector size of 384 x 288 pixels x 25 μ	
Optical Coatings			
	All internal surfaces	High efficiency AR coating	Average transmission: 92%
	Front surface	Hi durability AR coating	DLC is available upon request
Optical Total lens track	150 mm	Front element vertex to FPA, Nominal Value	

MECHANICAL

Mechanical Back Focal Length	Min. 9.24 mm	Request MICD for details. Other distances available
Zoom mechanism / Focus	Motorized	With single motor
Total Weight	1,600 gram	Nominal
Structure	Environmentally sealed configuration	
External Dimensions	98mm W x 110mm H x 142mm Length (Please refer to MICD for details)	

ELECTRICAL

Power Input	12VDC, 0.5A	Nominal
Communication Protocol	RS-422/232 Full Duplex	Default is RS422; Baud rate 19,200, n, 8, 1

ENVIRONMENTAL

Operating/Storage Temperature	-30°C to +60°C / -40°C to +70°C	
Shock and Vibrations	Per applicable standard	
Sealing	IP67	

