

---LWIR Continuous zoom – commercial off the shelf lens

KEW-HD

LWIR 24 – 225 mm F/1.5 Continuous zoom
 Lens with DSP controller for 25/17 μ detectors



FEATURES / APPLICATIONS / CAPABILITIES

- The ultimate lens for medium to long range surveillance systems in various applications
- Excellent MTF performance, optimized to **HD** resolution
- Optimized for relatively short total track and low weight
- Supports multiple detector types: 640 x 480 x 25 μ & 1024 x 768 x 17 μ pitch

PARAMETER		VALUE	NOTES
Main	Sub		

🔍 OPTICAL			
Focal Length / F#		24-225 mm / F1.5	Nominal values. F# constant for all zoom range
Detector (FPA) type / size		640 x 480 pixels x 17 microns 1024 x 768 pixels x 17 microns	
FOV (degrees)		Wide FOV: 37°(H) x 28° (V) Narrow FOV: 4° (H) x 3° (V)	For detector size of 16 x 12mm (640 x 480 x 25 μ)
		Wide FOV: 38.1°(H) x 29° (V) Narrow FOV: 4.4° (H) x 3.3° (V)	For detector size of 17.4 x 13.06mm (1024 x 768 x 17 μ)
🌟 Optical Coatings			
	All internal surfaces	High efficiency AR coating	Average transmission: 77%
	Front surface	High durability AR coating	DLC is available upon request
Optical Total lens track		220 mm	Nominal, From 1 st lens vertex to FPA
Optical Back Focal Length		~20 mm	Nominal, From last lens vertex to FPA
⚙️ MECHANICAL			
Mechanical Back Focal Length		17.6 mm	Nominal
Focus / Zoom mechanism		Motorized	Focus range: 5m - infinity
Total Weight		~3500 grams	Nominal (Front element is sealed)
External Dimensions		Max Diameter: 179 mm; Length: 210 mm	
💡 ELECTRICAL			
Power Input		12VDC, 1.0A	Nominal
Communication Protocol		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
🌿 ENVIRONMENTAL			
Operating/Storage Temperature		-32°C to +55°C / -40°C to +70°C	
Shock and Vibrations		Per applicable standard	

