

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

# KEW-HD

LWIR 24 – 225 mm F/1.5 Continuous zoom  
 Lens with DSP controller for 25/17μ 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 25μ & 1024 x 768 x 17μ pitch

PARAMETER		VALUE	NOTES
Main	Sub		

🔍 OPTICAL			
<b>Focal Length / F#</b>		24-225 mm / F1.5	Nominal values. F# constant for all zoom range
<b>Detector (FPA) type / size</b>		640 x 480 pixels x 17 microns 1024 x 768 pixels x 17 microns	
<b>FOV (degrees)</b>		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 25μ)
		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 17μ)
🔧 Optical Coatings			
<b>All internal surfaces</b>		High efficiency AR coating	Average transmission: 77%
<b>Front surface</b>		High durability AR coating	DLC is available upon request
<b>Optical Total lens track</b>		220 mm	Nominal, From 1 <sup>st</sup> lens vertex to FPA
<b>Optical Back Focal Length</b>		~20 mm	Nominal, From last lens vertex to FPA
⚙️ MECHANICAL			
<b>Mechanical Back Focal Length</b>		17.6 mm	Nominal
<b>Focus / Zoom mechanism</b>		Motorized	Focus range: 5m - infinity
<b>Total Weight</b>		~3500 grams	Nominal (Front element is sealed)
<b>External Dimensions</b>		Max Diameter: 179 mm; Length: 210 mm	
💡 ELECTRICAL			
<b>Power Input</b>		12VDC, 1.0A	Nominal
<b>Communication Protocol</b>		RS-422/232 Full Duplex	Baud rate 19,200, n, 8, 1
🌡️ ENVIRONMENTAL			
<b>Operating/Storage Temperature</b>		-32°C to +55°C / -40°C to +70°C	
<b>Shock and Vibrations</b>		Per applicable standard	
<b>Front lens sealing</b>		IP67	By request

