

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

# DEKEL

LWIR 25 – 145mm F/1.4 Continuous zoom  
 Lens with DSP controller for 25 / 17μ detectors



## FEATURES / APPLICATIONS / CAPABILITIES

- The ultimate lens for medium range surveillance systems at various applications
- Suitable for 6" stabilized payloads
- Optimized for relatively short total track and low weight
- Supports multiple detector types: 640 x 480 x 17μ pitch & 384 x 288 x 25μ pitch

PARAMETER		VALUE	NOTES
Main	Sub		

🔍 OPTICAL			
<b>Focal Length / F#</b>		25-145 mm / F1.4	Nominal values. F# constant for all zoom range
<b>Detector (FPA) type / size</b>		384 x 288 pixels x 25 microns 640 x 480 pixels x 17 microns	For 17 microns detector applications please inquire "DEKEL / 17 grade" lens
<b>FOV (degrees)</b>		Wide FOV: 21.7°(H) x 16.4° (V) Narrow FOV: 3.8° (H) x 2.8° (V)	For detector size of 9.6 x 7.2 mm (384 x 288 x 25μ)
		Wide FOV: 25°(H) x 19° (V) Narrow FOV: 4.3° (H) x 3.2° (V)	For detector size of 10.88 x 8.16 mm (640 x 480 x 17μ)
🔧 MECHANICAL			
<b>Optical Coatings</b>			
	<b>All internal surfaces</b>	High efficiency AR coating	Average transmission: 90%
	<b>Front surface</b>	Hi durability AR coating	DLC is available upon request
<b>Optical Total lens track</b>		150 mm	Nominal
<b>Optical Back Focal Length</b>		16.25 mm	Nominal, to FPA
<b>Mechanical Back Focal Length</b>		11 mm	Nominal
<b>Focus / Zoom mechanism</b>		Motorized	Focus range: 5m - infinity
<b>Total Weight</b>		1,200 gram	Nominal
<b>External Dimensions</b>		Max Diameter: 127 mm; Length: 142 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	

