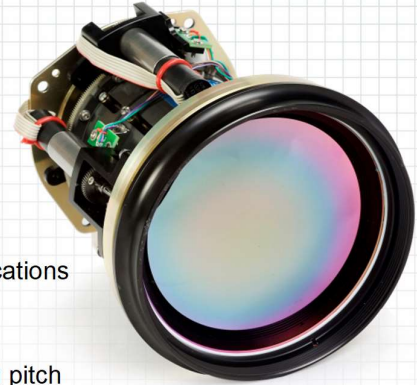


--- LWIR Continuous zoom – commercial off the shelf lens

# 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 |   |  |
| <b>OPTICAL</b>                       |     |   |  |
| <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                                     | For 17 microns detector applications please inquire " <b>DEKEL / 17 grade</b> " lens |
|                                      |     | 640 x 480 pixels x 17 microns                                     |  |
| <b>FOV (degrees)</b>                 |     | Wide FOV: 21.7°(H) x 16.4° (V)<br>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)<br>Narrow FOV: 4.3° (H) x 3.2° (V)     | For detector size of 10.88 x 8.16 mm (640 x 480 x 17μ)                               |
| <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</b>                    |     |   |  |
| <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                              |  |
| <b>ELECTRICAL</b>                    |     |   |  |
| <b>Power Input</b>                   |     | 12VDC, 1.0A   | Nominal  |
| <b>Communication Protocol</b>        |     | RS-422/232 Full Duplex  | Baud rate 19,200, n, 8, 1  |
| <b>ENVIRONMENTAL</b>                 |     |   |  |
| <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 default   |