

Excellence in Digital Imaging Optics

4K, F/1.4 Miniature Wide Angle Lens



Description

The DSL147 is a high-performance, wide-angle, low-light lens with 4K resolution and F/1.4 aperture, designed for 1/3" and 1/2.8" HDR sensors. The all-glass construction makes it thermally stable and ideally-suited for indoor or outdoor applications in harsh environments.

Key Features

- F/1.4 Aperture
- Wide-Angle; 122° HFOV @ 5.2mm (typical 1/2.8" horizontal)
- 4K (6-8mp) resolution on 1/3" and 1/2.8" sensors
- All glass/metal construction

Optical Specifications

Sunex PN DSL147	
Description	4K, F/1.4 Wide-Angle Lens
Imager Format	Up to 1/2.8"
Nominal Imager Resolution	Up to 8MP (4K)
Focal Length	2.5mm
Relative Aperture (F/#)	F/1.4
Image Circle	6.5mm
Field of View	156° @ 6.5mm image circle
Total Track Length	30.0mm
Distortion	-6% from F-θ @ 6.5mm image circle
Chief Ray Angle	7.5° @ 6.5mm image circle
IR cut-off filter	Optional IR cut-off filter

Applications

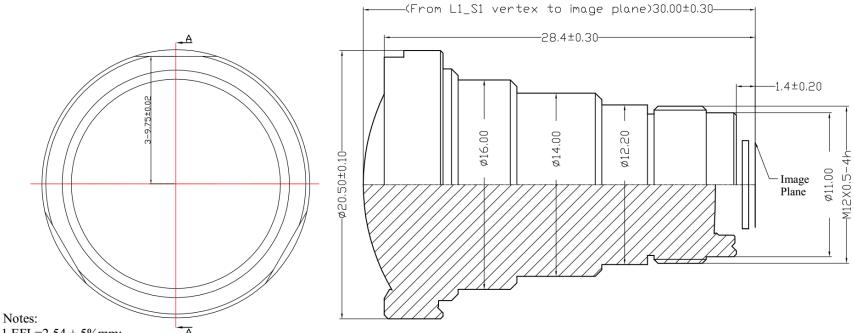
- Security
- Automotive/ADAS
- Autonomous Vehicles
- Commercial Drones



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DSL147A-NIR-F1.4 and DSL147A-650-F1.4 Mechanical Dimensions [mm]:

Note: DSL147A is intended for use with Sunex CMT168-1122 (or -1119) and CMT821 mount



 $1.EFL=2.54 \pm 5\%$ mm;

 $2.F/\# = 1.4 \pm 5\%$

3.Barrel material: AL6061 4.Cap material: AL6061

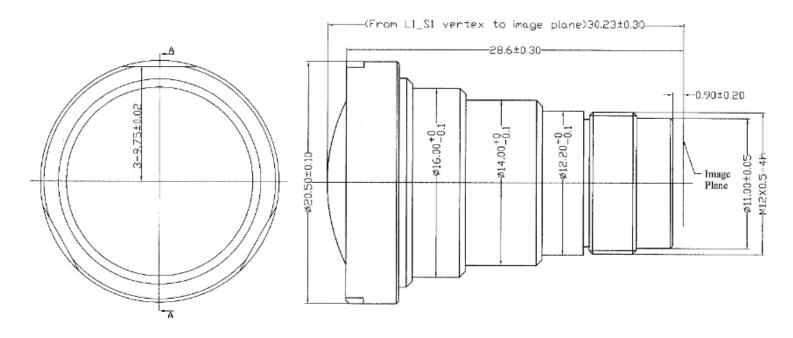
5.Material surface color: Black.

6.IR Cut: T=50%@650±10nm; (optional)



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DSL147A-BP940-F1.4-TOF Mechanical Dimensions [mm]:



Notes:

 $1.EFL=2.57 \pm 5\%$ mm;

 $2.F/\# = 1.4 \pm 5\%$

3.Barrel material : AL6061

4.Cap material: AL6061

5.Material surface color : Black.

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6. Work wavelength AR Coating:

800-1000nm.

7. Bandpass filter optional:

BP940:

400nm-860nm,Tmax<3%,Tavg<1%

T=50%@900±10nm

920nm-960nm,Tmin>88%,Tavg>90%

T=50%@980±10nm

1020-1150nm,Tmax<3%,Tavg<1%