

### HD/HDR Compact SuperFisheye



#### Description

The DSL189 is a cutting-edge, fully-featured fisheye targeted at demanding HD applications such as indoor/outdoor security, automotive, and other HDR, environmentally challenging applications. The DSL189 is a hybrid lens, designed to be athermal when used with the proper mounting. It also boasts best-in-class HDR performance and environmental ruggedization features.

#### Key Features

- HD/HDR Performance
- 195deg Full FOV
- Ruggedized and Athermal Hybrid Design

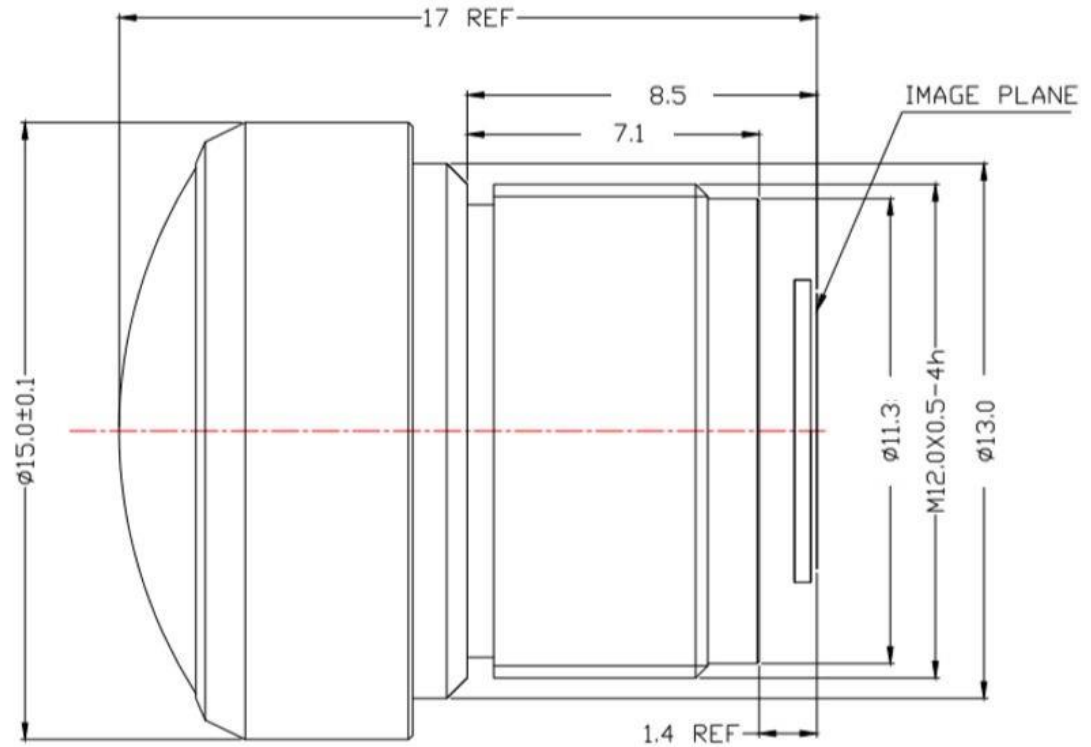
### Optical Specifications

Sunex PN DSL189	
Description	HD/HDR Short TTL SuperFisheye
Imager Format	1/2.7"
Nominal Imager Resolution	2MP
Focal Length	1.4mm
Relative Aperture (F/#)	2.0
Image Circle	5.6mm
Field of View	217° at 5.6mm image circle
Total Track Length	17mm
Distortion (F-Theta)	7.9% max
Chief Ray Angle	16.8° at 5.6mm image circle
IR cut-off filter	-650, -850, -940, -NIR

#### Applications

- Security/Surveillance
- Automotive
- Robotics/Machine Vision

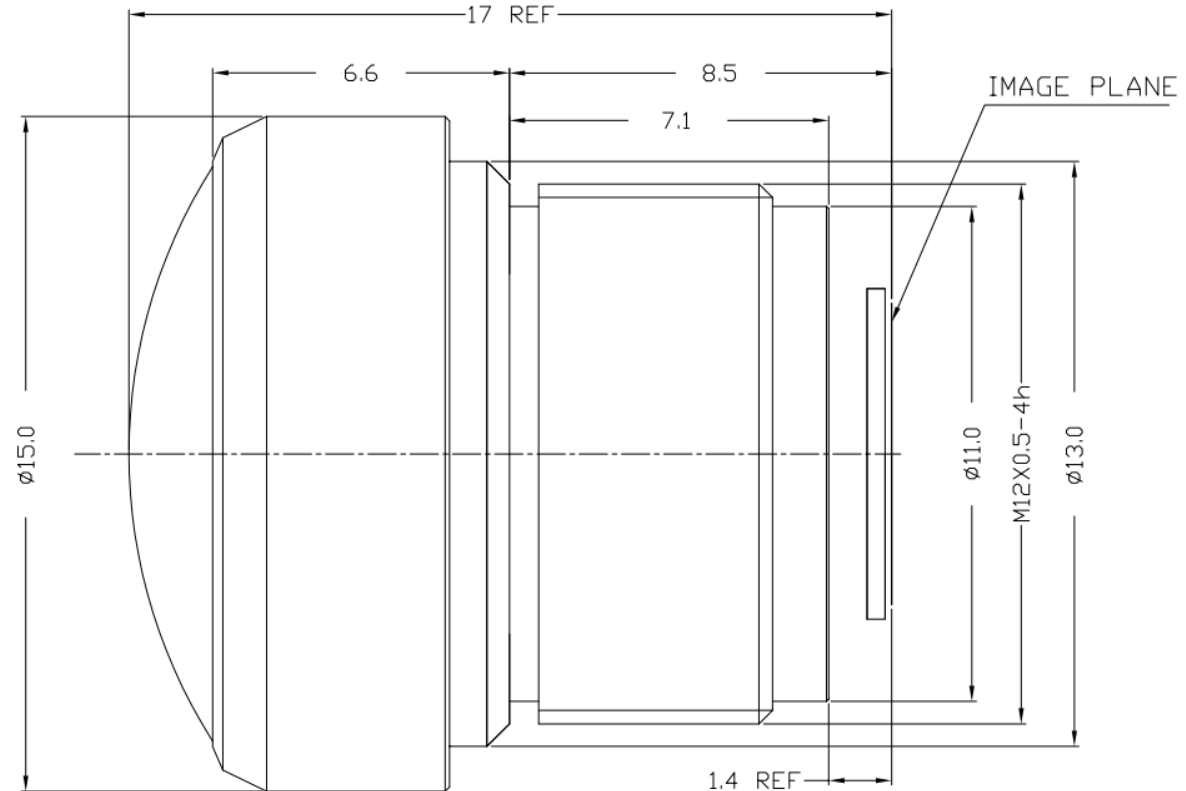
### DSL189A-650-F2.0 Mechanical Dimensions [mm]:



Notes:

1. EFL:  $1.42 \pm 0.1$
2. F#:  $2.0 \pm 0.1$
3. Barrel material: Black anodized AL6061  
Cap material: Black anodized AL6061
4. IR Cut Coating:  $T=50\% @ 650 \pm 20\text{nm}$

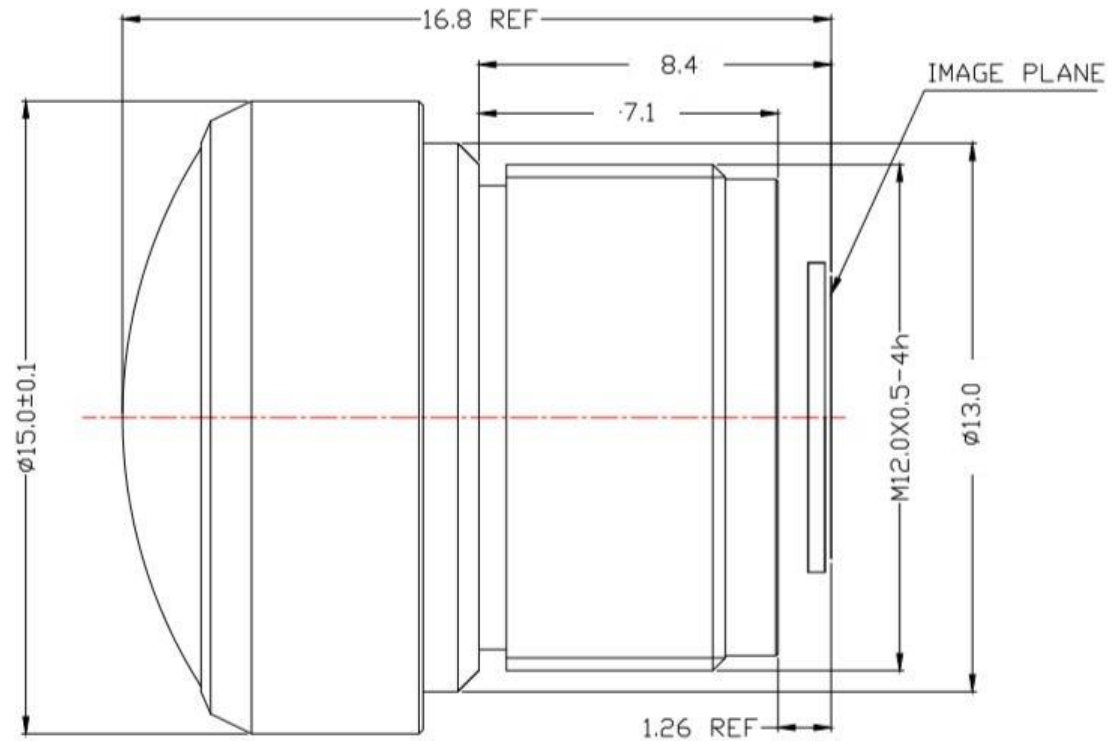
**DSL189A-IRC42-F2.0 Mechanical Dimensions [mm]:**



**Notes:**

- 1.EFL:1.42
- 2.F#:2.0
- 3.Barrel material:Black anodized AL6061  
Cap material:Black anodized AL6061
- 4.IR Cut Coating:  
430-620nm, T<sub>min</sub>>85%, T<sub>avg</sub>>88%;  
T=50%@650±10nm  
680-750nm, T<sub>max</sub><5%, T<sub>avg</sub><2%  
T=80%@800±10nm  
830-870nm, T<sub>min</sub>>85%, T<sub>avg</sub>>88%  
T=80%@900±10nm  
930-1000nm, T<sub>max</sub><5%, T<sub>avg</sub><2%;
5. Specialized SBBAR Coating:420-900nm, R<sub>max</sub>≤1.5% : (prototype phase)
6. Water tightness requirement:IP67/X9K(9K only for reference)

### DSL189A-NIR-F2.0 Mechanical Dimensions [mm]:



Notes:

1. EFL:  $1.42 \pm 0.1$
2. F#:  $2.0 \pm 0.1$
3. Barrel material: Black anodized AL6061  
Cap material: Black anodized AL6061