



360° Camera Lens - Theia TY180F

180° fisheye for high resolution cameras

- ❖ **Ultra high resolution for 4k, 5 MP, 8 MP, and up to 12 MP 360-Degree Cameras**
- ❖ Greater than **300 lp/mm** center resolution.
- ❖ **Day-only** lens for accurate color rendition (IR blocking filter)
- ❖ Supports high megapixel **1/2.5" and 1/2.3"** sensors
 - Such as Aptina MT9P006 and Sony IMX172

TY180F Performance Data

	TY180F
Lens	180°
Field of View	1.32mm
Focal length	4.07mm at 180°
Image Circle	100% Fisheye (circular)
Distortion	300 lp/mm center
Resolution	>160 lp/mm at 65° off-axis field angle >125 lp/mm at 85° off-axis field angle
F/#	F/2.0
Relative illumination	>55% at 90° (half angle)
CRA	<10° maximum
Focus Range	0.1m to infinity
Back Focus Length	4.74 mm (in air)
Iris	Fixed
IR cut filter transmission	<ul style="list-style-type: none"> • 395~415nm, 640~660nm: T=50% • 430~610nm: T(avg)>=90% • 695~800nm: T(avg)<=2% • 801~1000nm: T(avg) <=3%
Lens transmission	>80%
Mount	M12x0.5
Weight	~9g
Dimensions	Ø24.0 x 25.1mm (30mm total track)
OperatingTemp	-20C to +70C
Storage Temp.	-40C to +85C
RoHS	Yes