



福建福特科光电股份有限公司

Foctek Photonics, Inc.

镜头参数 (Parameter of Lens)

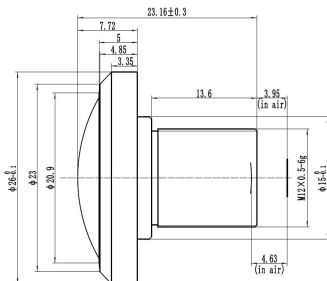
型号 (Model) :

M12-1.55IR(12MP)-F



分辨率 (Resolution)	12 Megapixel			
像面尺寸 (Image Circle)	Φ4.7mm@195°			
焦距 (Focal length)	1.55mm			
通光孔径 (Aperture)	F2.0±0.15			
接口 (Mount)	M12			
视场角 (Field Angle) D×H×V(°)		1/2.3	1/2.5	1/2.7
	D	195	195	195
	H	195	195	195
	V	195	172	157
畸变 (Optical Distortion)	-98%			
主光束入射角 (CRA)	≤11.6°			
最近物距 (M. O. D.)	0.15m			
外形尺寸 (Dimension)	Φ26×23.16mm			
重量 (Weight)	8g			
法兰后焦距 (Flange BFL)	/			
光学后焦距 (BFL)	4.63mm (in air)			
机械后焦距 (MBF)	3.95mm (in air)			
日夜共焦 (IR Correction)	Yes			
操作方法 (Operation)	光圈 (Iris)	固定光圈 (Fixed)		
	聚焦 (Focus)	/		
	变焦 (Zoom)	/		
工作温度 (Operating temperature)	-30℃~+70℃			

尺寸 (Size)



尺寸公差 Size tolerance (mm) :	0-10 ±0.05	10-30 ±0.10	30-120 ±0.20
角度公差 Angle tolerance	±2°		



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检测标准 (Test Standard)

型号 (Model) :

M12-1.55IR(12MP)-F

检测项目 Test Items

检测内容 Test Content

1

逆投影检测
Resolution Test

Test Range

Φ4.5 (diameter 0.6m)

Center ≥

300 lp/mm

edge ≥

250 lp/mm

Image standard

The image should be clear.

环境
Environment

25±2℃, ≤1 lux Dark room

2

外观检测
Appearance Inspection

Appearance (Inner barrel)

60-40: The maximum scratch width is allowed to be 0.06mm, the length allows the 1/4 edge position of the lens; the visually invisible fineness is negligible; the maximum diameter of the pip is allowed to be 0.2mm, and only one lens surface is allowed; the pip is smaller than 0.002mm~0.005mm can be neglected; the film color is uniform; there is no obvious color spot on the surface.

Appearance (Outer barrel)

The lens barrel has no obvious color difference, scratch, break, deformation; the glue is not allowed to overflow into the effective light path; no word drop, clear writing, the same font size, even spacing, etc.

环境
Environment

25±2℃
700~1000 lux



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环境可靠性测试 (Reliability and Environmental Testing)

型号 (Model):

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检测项目 Test Items

检测内容 Test Content

1

温度循环试验
Temperature Cycling Test

镜头在试验温度 (-30 ± 3) $^{\circ}\text{C}$ 放置1.5小时, (70 ± 3) $^{\circ}\text{C}$ 放置3小时的条件
下, 放置2个循环。试验后, 将镜头放置于室温24小时后进行检验, 各指标均合格。

Lens is placed on two cycles in the test temperature (-30 ± 3) $^{\circ}\text{C}$ for 1.5 hours and in (70 ± 3) $^{\circ}\text{C}$ for 3 hours separately. Then, the indicators are qualified after placing the lens at room temperature for 24 hours.

2

高温高湿试验
Damp heat test

镜头在试验温度 (70 ± 3) $^{\circ}\text{C}$, 湿度85%RH的条件下, 放置48小时。试验后, 将镜头放置于室温24小时后进行检验, 各指标均合格。

Lens is placed in the test temperature (70 ± 3) $^{\circ}\text{C}$, humidity 85% RH for 48 hours. Then, the indicators are qualified after placing the lens at room temperature for 24 hours.

3

跌落试验
Drop Test

镜头在1米高 (± 0.1 米) 处, 自由跌落到混凝土地板上。试验后, 镜头各指标均合格。

Lens drops from the height of (1 ± 0.1 m) to the concrete ground. After the testing, the indicators are qualified.

4

振动试验
Vibration Test

镜头正弦波振动2小时, 在振幅为1mm, 频率为50Hz的条件下, 试验后, 镜头各指标均合格。

Lens vibrates 2h in sinusoidal wave under 1 mm of amplitude and 50Hz of frequency. After the testing, the indicators are qualified.



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包装规格 (Packing Specification)

型号 (Model) :

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1. Stick label on the surface of lens after capped.
2. Put the lens into the carton box.
3. The unit will be packaged in a corrugated box.
4. Seal the corrugated box with tape and mark the surface.

