



福建福特科光电股份有限公司

Foctek Photonics, Inc.

镜头参数 (Parameter of Lens)

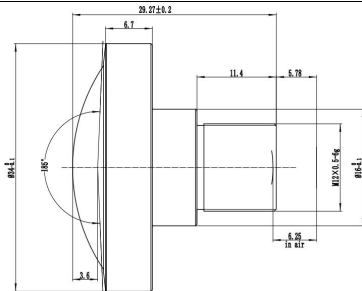
型号 (Model):

M12-1.85IR(12MP)-F



分辨率 (Resolution)	12 Megapixel		
像面尺寸 (Image Circle)	Φ5.6mm@185°		
焦距 (Focal length)	1.85mm		
通光孔径 (Aperture)	F2.0		
接口 (Mount)	M12		
视场角 (Field Angle) D×H×V(°)	1/1.8(IMX226)	1/2	1/2.5
	D	185	185
	H	185	185
V	185	154.9	126.4
畸变 (Optical Distortion)	-97.40%		
主光束入射角 (CRA)	≤14.88°		
最近物距 (M. O. D.)	0.15m		
外形尺寸 (Dimension)	Φ34×29.27mm		
法兰后焦距 (Flange BFL)	/		
重量 (Weight)	30.4g		
光学后焦距 (BFL)	6.25mm (in air)		
机械后焦距 (MBF)	5.78mm		
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)	-20℃ ~ +60℃		

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°		



检测标准 (Test Standard)			
型号 (Model):		M12-1.85IR(12MP)-F	
检测项目 Test Items		检测内容 Test Content	
1	逆投影检测 Resolution Test	Test Range	Φ3.15 (diameter 0.6m)
		Center ≥	250 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	Apperance (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~0.005m can be neglected; the film color is uniform; there is
		Apperance (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
	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 $(-20 \pm 3)^\circ\text{C}$ 放置1.5小时, $(60 \pm 3)^\circ\text{C}$ 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 $(-20 \pm 3)^\circ\text{C}$ for 1.5 hours and in $(60 \pm 3)^\circ\text{C}$ 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 $(60 \pm 3)^\circ\text{C}$, 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 $(60 \pm 3)^\circ\text{C}$,
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 $(\pm 0.1\text{米})$ 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 $(1 \pm 0.1\text{m})$ 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.

