

成像镜头技术指标要求表

Technical parameters list for imaging lens

| 基本系统参数 BASIC SYSTEM PARAMETERS | | | |
|--------------------------------|-------------------------------------|---------------|--|
| 序号 Number | 参数名称 Parameter name | 参数值 Reference | 备注 Note |
| 1 | 工作距离 Working Distance(mm) | | 从镜头前端到被成像物体的距离。 The distance from the front end of lens to object. |
| 2 | 结构后焦距 Back focal length(mm) | | 镜头最后机械端面到探测器的距离。 The distance from the front end of lens to object. |
| 3 | 物像总距离 I/O (mm) | | 被成像物体到探测器的距离, 此参数决定了成像镜头正常工作时占用的空间。 The distance between the image and object. |
| 4 | 系统焦距 Focal length of system(mm) | | |
| 5 | 入瞳口径 Diameter of Entrance pupil(mm) | | 成像时有效通光孔径。 Effective clear aperture when imaged. |
| 6 | 工作波段 Working wavelength range(nm) | | 镜头工作的光学谱段。 The spectrum range when imaging lens worked. |
| 7*1 | 全视场角 Full angle of field(°) | | 被检测物体的全可视角度。 The viewing angle that can view the whole object. |
| 8*2 | 结构后焦距 Back focal length(mm) | | 被检测物体的全可视区域。 The viewing area that can view the whole object. |
| 9 | 传感器尺寸 Sensor size(mm x mm) | | 探测器靶面大小 The target size of detector. |
| 10 | 主要放大倍率 Primary magnification | | 传感器尺寸与视场之间的比例。 The ratio between sensor size and FOV. |
| 11 | 变焦倍率 Zoom Ratio | | 变焦镜头不同工作焦距下传感器尺寸与视场之间的比例。 The ratio between the sensor size and FOV when the working focal length is different for zoom lens. |

请参阅下一页
(Please refer to following pages)

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| 光学性能 OPTICAL PERFORMANCE | | | |
|--------------------------|-------------------------------|---------------|---|
| 序号 Number | 参数名称 Parameter name | 参数值 Reference | 备注 Note |
| 12 | 透过率 Transmission(%) | | 镜头对成像光束强度的衰减率。 Attenuation rate of lens to image beam intensity. |
| 13 | 相对照度 Relative illumination(%) | | 外围照度与中心照度的比值。 The ratio of outer illumination and central illumination. |
| 14 | 光学传函MTF MTF(%@lp/mm) | | 每1mm可解析线对数下的条纹对比度。 The stripe contrast under distinguishable line pair per millimeter. |
| 15 | 畸变 Distortion(%) | | 轴外光束成像点与理想成像点高度差与理想成像点高度的比值。 The ratio of the height difference between off-axis beam imaging point and ideal imaging point and the height of ideal imaging point. |

| 探测器参数 DETECTOR PARAMETERS | | | |
|---------------------------|---|---------------|---|
| 序号 Number | 参数名称 Parameter name | 参数值 Reference | 备注 Note |
| 16 | 靶面尺寸 Sensor size (mm x mm) | | 探测器靶面大小。 The target size of detector |
| 17 | 水平/垂直分辨率 Horizontal/Vertical resolution(px x px) | | 探测器水平像元数与垂直像元数。 The horizontal pixel QTY of detector and vertical pixel QTY of detector. |
| 18 | 水平/垂直像元尺寸 Horizontal/Vertical pixel size (μm x μm) | | |

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(Please refer to following pages)

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| 接口要求 PORT REQUIREMENT | | | |
|-----------------------|---|---------------|---|
| 序号 Number | 参数名称 Parameter name | 参数值 Reference | 备注 Note |
| 19 | 镜头总长 The total length of lens (mm) | | |
| 20 | 入瞳位置 The position of entrance pupil(mm) | | 镜头入瞳距镜头前机械端面的距离。 The distance between the entrance pupil of lens and the front mechanical end surface of lens. |
| 21 | 入瞳尺寸 Size of entrance pupil(mm) | | 镜头入瞳直径。 The diameter of entrance pupil for lens. |
| 22 | 最大直径 The maximum diameter(mm) | | |
| 23 | 重量 Weight(kg) | | |

| 照明* ³ ILLUMINATION* ³ | | | |
|---|---|---------------|--|
| 序号 Number | 参数名称 Parameter name | 参数值 Reference | 备注 Note |
| 24 | 物体发光特性函数 The object luminous characteristic function | | 被成像物体发光强度与发光角度的变化函数 The changes in the function between the emitted intensity of object and angle of emission. |
| 25 | 物体发光特性函数 Lighting characteristic function | | 照明光源发光强度与发光角度的变化函数 The changes in the function between emitted intensity of light source and angle of emission. |
| 26 | 物体反射特性 The reflective character of object | | 被成像物体对照明光的反射特性函数 The function of reflective character for object to lighting light. |

请参阅下一页
(Please refer to following pages)

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| 环境要求 ENVIRONMENT | | | |
|------------------|---------------------------------|---------------|--|
| 序号 Number | 参数名称 Parameter name | 参数值 Reference | 备注 Note |
| 27 | 工作温度要求 Work temperature (°C) | | 镜头能够正常工作时的环境温度范围 The environmental temperature range when the lens worked normally. |
| 28 | 存储温度要求 Storage temperature (°C) | | 镜头存储环境温度范围 The environmental temperature range when the lens is stored |
| 29 | 振动 Vibration(g) | | 镜头正常工作时所需承受的最大振动加速度 The maximum vibratory acceleration when the lens worked normally. |
| 30 | 冲击 Impact(g) | | 镜头所需承受的最大冲击加速度 Maximum impact acceleration that the lens can be allowed. |
| 31 | 其它环境要求 Others | | 湿度、酸碱性、密封性等 Humidity, Acid and alkali, Sealing etc. |

注意事项 Precautions

*1: 7、8两项可相互转换, 二选一填写即可。
Choose one from item 7 and 8 or both.

*2: 7、8两项可相互转换, 二选一填写即可。
Choose one from item 7 and 8 or both.

*3: 客户无确定函数可定性描述。
Customer can describe his requirements if do not have specified parameters.