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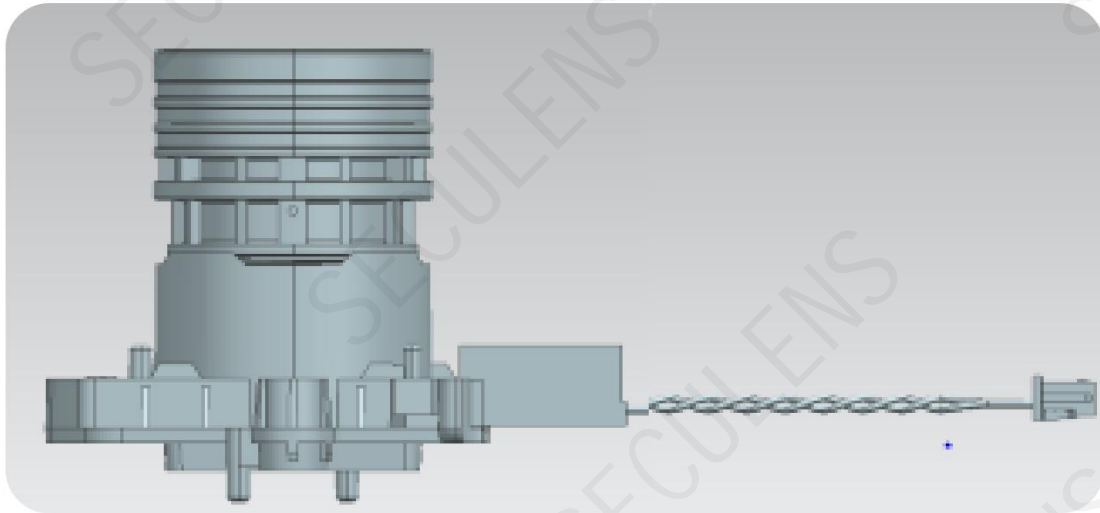
深圳市创威时代光电有限公司

Shenzhen ChuangWei Seculens CO., Ltd.

产品规格书

Product Specification

产品名称:8.23mm (等效1/1.8"6mm) 高清镜头	
Product Name:8.23mm (equivalen1/1.8"6mm) High-definition Lens	
型号:	SECULENS 1047-8MP+H55+IR0507
Model:	SECULENS 1047-8MP+H55+IR0507



图片仅供参考

(Picture only for your reference)

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4.概要 (Outline)

4.1 应用范围 (Application)

适用于我司向贵司提供的镜头产品

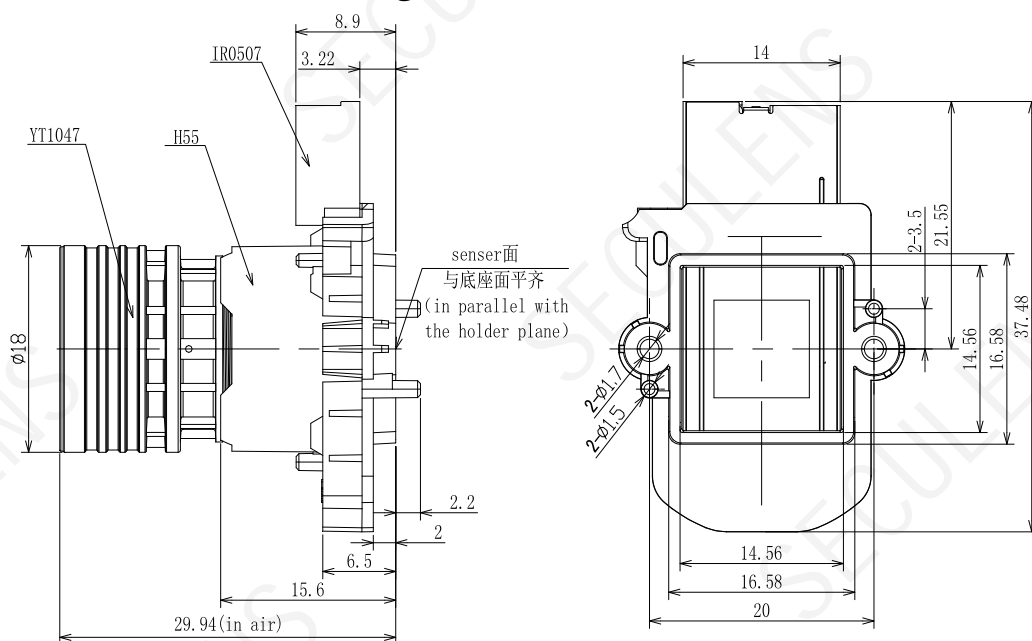
5 主要参数 (Main Items)

5.1 光学参数规格 (Optical Specifications)

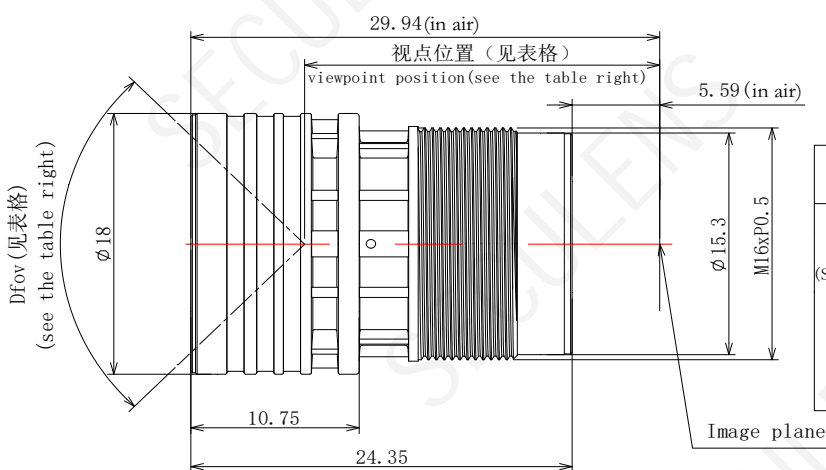
NO.	项目 (Items)		Specification			
1	F No.		0.9±10%			
2	焦距(Focal-Length)		8.23 ±5% (等效equivalen1/1.8" 6mm)			
3	光学后焦 (Optical Back Focal Length)		6.42±0.1 (in air)			
4	机械后焦 (Mechanical Back Focal Length)		5.59 ±0.2 (in air)			
5	镜头总长(TTL)		29.94±0.2 (in air)			
6	像面大小 (Image circle)		φ 9.2 (MAX)			
7	镜片构成 (Lens structure)		5G3P			
8	接口 (Mount)		M16*P0.5			
9	镜头与底座螺纹配合扭力 (Clamp Force)		60-600gf-cm			
10	视场角 (FOV)	sensor型号	H(水平)	V(垂直)	D(对角)	
		IMX334 1/1.8"	54.90°	30.26°	63.81°	
		IMX274 1/2.5"	43.95°	24.46°	50.79°	
11	光学畸变 (Optical Distortion) (sensor Type 4:3)	1/1.8"	-14.50%	1/2.5"	-8.50%	
12	相对亮度 (Relative illumination)	1/1.8"	42%	1/2.5"	57%	
13	最大主光线夹角 (CRA)	1/1.8"	15°	1/2.5"	13°	
14	近摄距 (M.O.D)		2m			
15	解像标准 (Resolution)		分辨率 (Resolution): 3840*2160 (8MP)			
			中心: 225线 (有干涉纹) +1.5mm干涉条纹 (清晰、闪烁2对); 边缘: 100线 (清晰闪烁) +角对角放于距离屏幕2CM处 Center: 225 line (with interference pattern) +1.5mm interference stripe (clear, flashing 2 pairs); Edge: 100 line (clear flicker) + angle diagonally placed at 2CM from the screen			
16	操作方法 (Operation)		聚焦 (Focus)		手动 (Manual)	
			光圈 (Iris)		固定 (Fixed)	
17	环保&安全 (HSF&Safety)		RoHS			

5.2 机构参数规格 (Mechanical Specifications)

5.2.1 外形尺寸图 (Dimension Figure)



5.2.2 视点图 (Viewpoint Figure)



像面大小 (image size)		Dfov	视点位置 (mm) (viewpoint position)
(1/1.8 以下芯片) (Sensor format < 1/1.8")	Ø4.32	30.26°	16.47
	Ø6.22	43.95°	19.75
	Ø7.14	50.79°	20.80
	Ø7.68	54.90°	21.35
	Ø8.81	63.89°	22.37
	Ø9.0	65.47°	22.53
	Ø9.2	67.16°	22.69

未注公差 (Unmarked Tolerance): $\Phi \pm 0.1$, $L \pm 0.15$, 本规格书未注单位 (Unit is not indicated in the document): mm

5.3 光学检测标准 (Optical Performance)

No.	检测项目 (Items)	描述 (Description)
1	解像力 (Resolution)	<p>1.1: TV实拍解像条件 (Condition) A: Chart: OV08相机 (camera) B: 拍摄距离 (Distance): 7.5m</p> <p>1.2: 拍摄方法 (Method) A: 旋转镜头调焦得到最清晰的像面中心 (Adjust the machine interface to get the most clear image plane center)</p> <p>1.3: 实拍标准 (Criteria) 8MP: 中心: 225线 (有干涉纹) + 1.5mm干涉条纹 (清晰、闪烁2对); 边缘: 100线 (清晰闪烁) + 角对角放于距离屏幕2CM处 Center: 225 line (with interference pattern) + 1.5mm interference stripe (clear, flashing 2 pairs); Edge: 100 line (clear flicker) + angle diagonally placed at 2CM from the screen</p>
2	外观标准 (Appearance Standards)	<p>2.1 镜头内污 (LENS DUST) A: 规格 60-20 伤痕: 宽度 < 60um, 长度和 < D/2, ≤ 15um 不计; 脏污: 单点直径 < 200um, 100~200um 点 ≤ 3个。</p> <p>2.2 其他外观 (Other appearance) 外表面颜色均匀, 无明显缺陷、污渍、异物伸出、明显划伤和收缩; 胶水不得溢入有效通光内。</p> <p>2.1 LENS DUST A: Specification 60-20 Scratch: width < 60um, total length < D/2, ≤ 15um ignored; Smudge: Single dot diameter < 200um, 100~200um dot ≤ 3 pcs</p> <p>2.2 Other appearance Outside surface uniform color; no visible flaws, stains, foreign bodies extended, obvious scratch or contraction; no glue spill into the effective aperture.</p>

5.4 环境参数规格 (Environment Specifications)

No.	环境描述 (Items)	条件 (Description)
1	存放环境 (Storage condition)	-30°C ~ +80°C; 10-90%RH (No condensing)
2	工作环境 (Operation condition)	-20°C ~ +60°C; 10-90%RH (No condensing)

6 信赖性测试(Reliability Test)

No.	项目 (ITEM)	测试条件 (CONDITION)
1	高温存放试验 Storage Test At High Temperature	镜头在80℃温度中存放48小时，之后再存放在常温常湿环境中恢复6小时后，所有规格满足规定要求 All specification are to be satisfied after lens is exposed to 80℃ for 48 hours and then to normal temperature/humidity for 6 hours
2	低温存放试验 Storage Test At Low Temperature	镜头在-30℃温度中存放48小时，之后再存放在常温常湿环境中恢复6小时后，所有规格满足规定要求 All specification are to be satisfied after lens is exposed to -30℃ for 48 hours and then to normal temperature/humidity for 6 hours
3	冷热冲击试验 Temperature Cycle Test	镜头在-30℃条件下保持30分钟，然后升温至+80℃，稳定后保持30分钟作为一个周期，共10个周期。之后再存放在常温常湿环境中恢复6小时后，所有规格满足规定要求 All specification are to be satisfied after lens is exposed to -30℃ for 30min, Tank temperature change +80℃ for 30min as one cycle, 10 cycle shall be performed. And then to normal temperature/humidity for 6 hours
4	振动试验 Vibration Test	镜头在振幅为1.5mm、频率为10-55Hz的正弦波参数下，在三个互相垂直的轴线上依次振动25分钟后，镜头无松动并满足所有规格要求 All specification are to be satisfied after lens is subjected to the sine wave of 1.5mm amplitude and 10-55Hz directions for 25 minutes each

7 IR-CUT参数规格 (IRCUT Specifications) (IR0507)

NO	项目ITEM	条件Condition	单位Unit	标准Standard
1	产品外形尺寸(Product size)	装配外形(Assembly exterior)	mm	36.3*14*1.8
2	开放口径(Opening Aperture)	-	mm	8.5*8.3
3	线长(Wire Length)	-	mm	50±5
4	线圈阻抗(Coil Resistance)	20℃	Ω	25±5
5	通电电压(Electric voltage)	参照环境参数规格Refer to the environmental parameter specifications	V	3.5~6.0
6	通电时间(Electric time)	参照环境参数规格Refer to the environmental parameter specifications	ms	100~200
7	推荐驱动条件(Recommend Driving Condition)	参照环境参数规格Refer to the environmental parameter specifications	-	端口电压Port voltage: 3.5V驱动秒时Driving time: 100ms

备注：产品通正反向电压，通断电时间为：通电100ms~200ms，断电30s~60s，不通电时滤光片保持不动。

Note: Positive and negative voltage. Time: power on 100ms ~200ms, power off 30s~60s.

Filter does not move when power is off

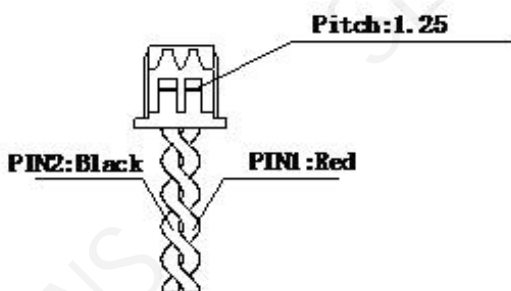
滤光片规格 (IR Filter Specifications)

红外波光片 (IR Filter) (蓝玻璃) (Blue Glass)	尺寸 (Size)	9.6mm*8.8mm*0.21mm
	镀膜规格 (Coating Spec)	350nm~395nm Tave≤3%
		415nm±10nm T=50%斜率20%~80%≤20nm
		440nm~565nm Tave≥92% T≥86%
		640nm~653nm T=50%
		700nm~725nm Tave≤5%
	725nm~1100nm Tave≤3%	
白片波光片 (Dummy Glass)	尺寸 (Size)	9.6mm*8.8mm*0.21mm
	镀膜规格 (Coating Spec)	400nm~1100nm T>92% Tave>96%

切换模式 (Switch type)

区分 Distinction	红色Red line	黑线Black line	状态State
极性Polarity	(-)	(+)	白玻璃片工作 (夜晚) Dummy glass work
	(+)	(-)	红外滤光片工作 (白天) IR Filters work

端子定义terminal:



接线示意图wiring diagram:

