

产品规格书

Product Specification

型号：
(Model Name) : YT1.0-4I-V2

主要参数 (Main Items)

光学参数规格 (Optical Specifications)

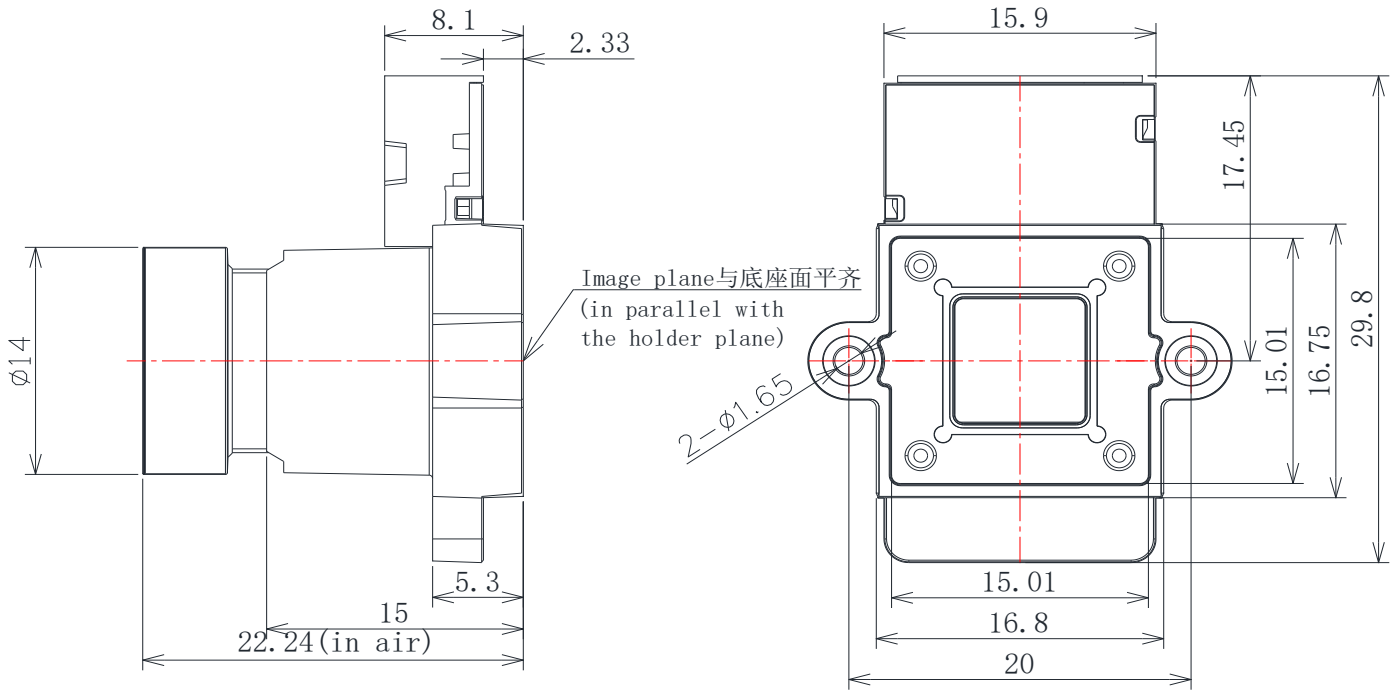
NO.	项目 (Items)		具体规格 (Specification)						
1	F No.		1.0±10%						
2	焦距(Focal-Length)		3.9±5%						
3	光学后焦 (Optical Back Focal Length)		3.94±0.2 (in air)						
4	机械后焦 (Mechanical Back Focal Length)		3.75±0.2 (in air)						
5	镜头总长(TTL)		22.24±0.2 (in air)						
6	像面大小 (Image circle)		Φ6.9 (MAX)						
7	镜片构成 (Lens structure)		1G6P (第一枚镜片为塑胶镜片时, 仅可使用酒精擦拭3次) (The first optical lens is plastic lens, could only be wiped with alcohol 3 times)						
8	接口 (Mount)		M12*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)	
		1/2.7"	5.760*3.240*6.609	88.1°		47.5°		104.1°	
		1/2.8"	5.568*3.132*6.388	84.6°		45.9°		100.0°	
		1/2.9"	5.376*3.024*6.168	81.3°		44.3°		95.5°	
11	光学畸变 (Optical Distortion)		1/2.7"	-34.0%	1/2.8"	-32.0%	1/2.9"	-29.0%	
12	TV畸变 (TV Distortion)		1/2.7"	-11.3%	1/2.8"	-10.4%	1/2.9"	-9.6%	
13	相对亮度 (Relative Illumination)		1/2.7"	40.6%	1/2.8"	43.0%	1/2.9"	45.5%	
14	最大主光线夹角 (CRA)		1/2.7"	11.2°	1/2.8"	10.8°	1/2.9"	10.5°	
15	近摄距 (M.O.D)		2m						
16	解像标准 (Resolution)		分辨率 (Resolution): 2048*1536 (3MP)						
17	建议芯片封装倾斜规格 (tilt tolerance of sensor packaging)		≤5'						
18	重量 (Weight)		/						
19	操作方法 (Operation)		聚焦 (Focus)		手动 (Manual)				
			光圈 (Iris)		固定 (Fixed)				
20	环保&安全 (HSF&Safety)		RoHS						

备注: 以上参数均为理论值, 仅供参考

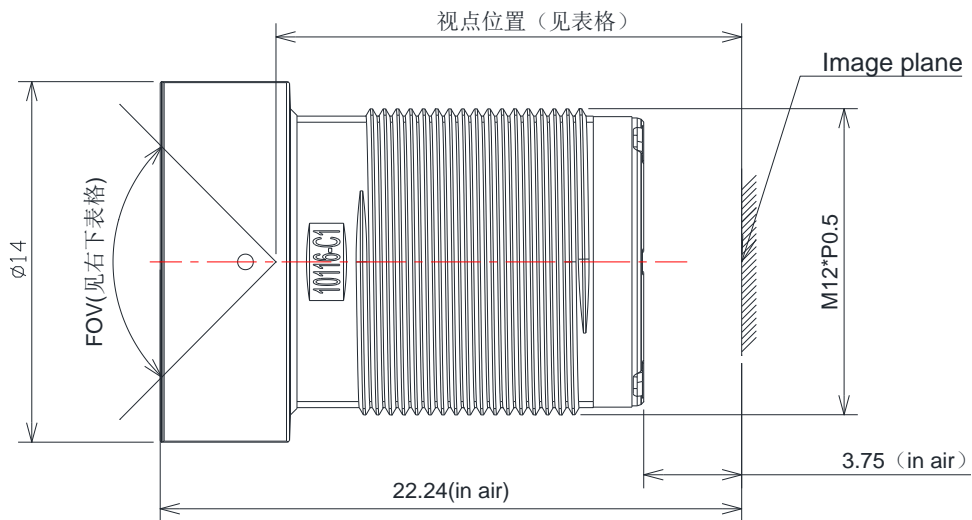
NOTE: The above parameters are theoretical values, for reference only

机构参数规格 (Mechanical Specifications)

外形尺寸图 (Dimension Figure)



5.2.2 视点图 (Viewpoint Figure)



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

视点信息:

全像高	视场角	视点	备注	全像高	视场角	视点	备注
2.1	30.7°	11.26		6.9	110.4°	18.36	
2.2	32.1°	11.61		7	112.6°	18.46	
2.3	33.6°	11.93		7.1			
2.4	35.1°	12.23		7.2			
2.5	36.6°	12.51		7.3			
2.6	38.0°	12.77		7.4			
2.7	39.5°	13.02		7.5			
2.8	41.0°	13.25		7.6			
2.9	42.5°	13.46		7.7			
3	44.0°	13.67		7.8			
3.1	45.4°	13.86		7.9			
3.2	46.9°	14.04		8			
3.3	48.4°	14.22		8.1			
3.4	49.9°	14.39		8.2			
3.5	51.5°	14.55		8.3			
3.6	53.0°	14.71		8.4			
3.7	54.5°	14.86		8.5			
3.8	56.0°	15.00		8.6			
3.9	57.6°	15.14		8.7			
4	59.1°	15.27		8.8			
4.1	60.6°	15.41		8.9			
4.2	62.2°	15.54		9			
4.3	63.8°	15.66		9.1			
4.4	65.3°	15.78		9.2			
4.5	66.9°	15.90		9.3			
4.6	68.5°	16.01		9.4			
4.7	70.1°	16.13		9.5			
4.8	71.7°	16.24		9.6			
4.9	73.4°	16.35		9.7			
5	75.0°	16.45		9.8			
5.1	76.7°	16.56		9.9			
5.2	78.3°	16.66		10			
5.3	80.0°	16.77		10.1			
5.4	81.7°	16.87		10.2			
5.5	83.5°	16.97		10.3			
5.6	85.2°	17.07		10.4			
5.7	87.0°	17.17		10.5			
5.8	88.8°	17.27		10.6			
5.9	90.6°	17.37		10.7			
6	92.4°	17.47		10.8			
6.1	94.3°	17.57		10.9			
6.2	96.2°	17.67		11			
6.3	98.1°	17.76		11.1			
6.4	100.0°	17.86		11.2			
6.5	102.0°	17.96		11.3			
6.6	104.1°	18.06		11.4			
6.7	106.1°	18.16		11.5			
6.8	108.2°	18.26		11.6			

备注:

- 1.最大像高提供至镜头支持的最大靶面（通用产品相对照度按照20%，特殊产品根据需求再联络）
- 2.视点深度一律按照空气中尺寸计算；并且以镜头像面为起始位置；
- 3.模拟参数时，物距暂定按照无穷远计算——此时镜头距离前窗玻璃最远，干涉风险最大；
- 4.各数据的公差按照：视场角精确到0.1度，视点精确到0.01mm；

NOTE:

- 1.The max image height is the largest format that the lens can support (general RI is 20%);
- 2.It is in air depth of viewpoint; counting from lens image .
- 3.Simulated object distance is infinite.
- 4.tolerance: FOV 0.1° ; viewpoint 0.01mm.

IR-CUT参数规格 (IRCUT Specification)

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	29.8*24.8*15
2	开放口径(Opening Aperture)	-	mm	7*7
3	线长(Wire Length)	-	mm	70±5
4	线径(Wire diameter)	-	mm	0.7
5	绝缘等级(Insulation class)	-	-	A
6	端子保持力(Terminal retentivity)	-	N	≥10
7	线圈阻抗(Coil Resistance)	20℃	Ω	20±5
8	静态保持力(Static retention force)	-	g	>0.5
9	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
10	通电时间(Electric time)	参照环境参数规格Refer to the environmental parameter specifications	ms	100~200
11	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: 150ms

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

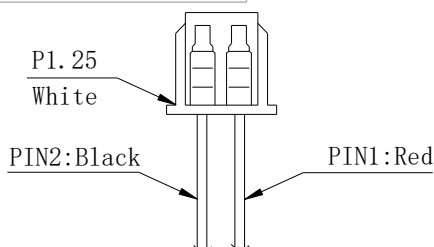
滤光片规格(IR Filter Specifications)

红外波光片 (IR Filter)	镀膜方式 (Coating method)	单面镀膜Single side coating	
	滤光片基材 (Base material)	康宁 Alkali Free Borosilicate Glass	
	尺寸 (Size)	8.2mm*7.6mm*0.21mm(厚度公差±0.02mm)	
	镀膜规格 (Coating Spec)	350nm~380nm	Tave<3%
		420nm±10nm	T=50% 斜率20%~80%<20nm
		440nm~600nm	T>85% Tave>93%
		645nm±10nm	T=50% 斜率80%~20%<20nm
		680nm	T<5%
700nm~1000nm	Tave<1% T<1%		
1000nm~1100nm	Tave<2% T<4%		
白片波光片 (Dummy Glass)	镀膜方式 (Coating method)	双面镀膜Double sided coating	
	滤光片基材 (Base material)	康宁 Alkali Free Borosilicate Glass	
	尺寸 (Size)	8.2mm*7.6mm*0.145mm(厚度公差±0.02mm)	
	镀膜规格 (Coating Spec)	420nm~1100nm T>92% Tave>96%	

切换模式(Switch type)

区分 Distinction	红线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:

