



M12 Camera Lens Module

For 2 μ m Pixel ~3MP, <1/2.7" Sensor

Key Properties

Image Diameter Φ 7.0mm for 1/2.7", 1/3", 1/4" Sensor

Resolution: 2 μ m/3MP or pixel size > 2 μ m Sensor

Focal Length: 2.1mm/2.5mm/2.8mm/3.6mm/4.0mm/4.2mm

6.0mm/8.0mm/12mm/16mm/25mm

Lens Mount for M12 x 0.5P

IR Cut Filter Built in, Others Optical Filter Optional



Application

Camera Module / Image Sensor Module / Out Door

Video Surveillance / Camcorder / Security / Car Camcorder

Feature

- ◆ Different view angle option and glass lens material with good reliability.
- ◆ Image diameter ~7mm can be used for 1/2.7", 1/3", 1/4" or smaller dimension size sensors.
 - Pixel size resolution: 2 μ m pixel or bigger pixel size sensors can be suitable.
 - The sensor pixel resolution suitable around 3MP or below sensors.
- ◆ M12 x 0.5P is convenient for standard S-Mount M12 holder.
- ◆ IR cut filter built-in to cut the infrared light for the outdoor environment.
 - The other optical filters optional as your requirement like IR pass filter for IR sensing system or special wavelength band customized.

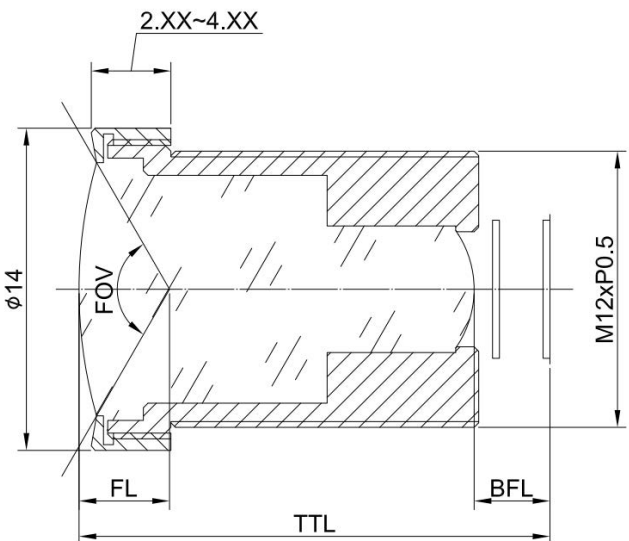
Introduction

CL12P2I7 series is a 4G to 6G(Glass) elements lens designed for image circle < Φ 7.0mm sensor size suitable to 1/2.7", 1/3", 1/4" or smaller size image sensors. The optical design resolution for 2 μ m pixel size, it can match to 3MP, 2MP or below resolution also can be used for bigger pixel size sensors. The wide view angle range from 15 degree to 170 degree FOV options for M12 standard S-Mount holder is convenient to find the suitable lens you need.

The glass lens has good reliability advantages for outdoor, wide temperature range performance, good material life time, and good for scratch and chemical material. The M12 designed convenient for the standard S-Mount holder of camera module. CL12P2I7 camera lenses are the most cost effective and good choice for surveillance, security, car camcorder, out door etc. applications.



Specifications

Lens Mount Type		M12 x P0.5																																																																												
Dimension(mm)		Φ 14 x TTL																																																																												
Element		4G/6G + IR																																																																												
Image Circle(mm)		Φ 7~Φ 8mm																																																																												
For Sensor Size		1/2.7", 1/3", 1/4"																																																																												
Focal Length (EFL)		±3%																																																																												
Back Focal Length (BFL)		±3%																																																																												
F/No. (Infinite)		as the Table.1																																																																												
Field of View (FOV)	D	as the Table.1																																																																												
	H	as the Table.1																																																																												
	V	as the Table.1																																																																												
Optical Distortion		as the Table.1																																																																												
Resolution		2μm / ~3MP																																																																												
Chief Ray Angle (CRA)		-																																																																												
IR Filter Spec. (Others available)			Table.1 <table><tr><th>FL</th><th>F/no.</th><th>TTL</th><th>BFL</th><th>Dist.</th><th>FOV(1/2.7")</th></tr><tr><td>2.1mm</td><td>2.0</td><td>22.0mm</td><td>6.3mm</td><td>45%</td><td>D170/H120/V80</td></tr><tr><td>2.5mm</td><td>2.0</td><td>20.9mm</td><td>5.5mm</td><td>-15%</td><td>D138/H116/V85</td></tr><tr><td>2.8mm</td><td>2.0</td><td>23.7mm</td><td>6.3mm</td><td>12%</td><td>D120/H98/V75</td></tr><tr><td>3.6mm</td><td>2.0</td><td>23.5mm</td><td>7.3mm</td><td>-11%</td><td>D107/H92/V68</td></tr><tr><td>4.0mm</td><td>2.0</td><td>21.6mm</td><td>6.35mm</td><td>8%</td><td>D105/H85/V55</td></tr><tr><td>4.2mm</td><td>2.0</td><td>22.3mm</td><td>6.0mm</td><td>-11%</td><td>D95/H73/V55</td></tr><tr><td>6.0mm</td><td>2.0</td><td>24.1mm</td><td>6.9mm</td><td>10%</td><td>D65/H56/V33</td></tr><tr><td>8.0mm</td><td>2.0</td><td>22.9mm</td><td>7.4mm</td><td>3%</td><td>D43/H35/V26</td></tr><tr><td>12mm</td><td>2.0</td><td>23.7mm</td><td>11.5mm</td><td>2%</td><td>D35/H25/V19</td></tr><tr><td>16mm</td><td>2.0</td><td>22.5mm</td><td>6.3mm</td><td>2%</td><td>D24/H19/V14</td></tr><tr><td>25mm</td><td>2.4</td><td>26.0mm</td><td>6.1mm</td><td>1%</td><td>D15/H12/V9</td></tr></table>				FL	F/no.	TTL	BFL	Dist.	FOV(1/2.7")	2.1mm	2.0	22.0mm	6.3mm	45%	D170/H120/V80	2.5mm	2.0	20.9mm	5.5mm	-15%	D138/H116/V85	2.8mm	2.0	23.7mm	6.3mm	12%	D120/H98/V75	3.6mm	2.0	23.5mm	7.3mm	-11%	D107/H92/V68	4.0mm	2.0	21.6mm	6.35mm	8%	D105/H85/V55	4.2mm	2.0	22.3mm	6.0mm	-11%	D95/H73/V55	6.0mm	2.0	24.1mm	6.9mm	10%	D65/H56/V33	8.0mm	2.0	22.9mm	7.4mm	3%	D43/H35/V26	12mm	2.0	23.7mm	11.5mm	2%	D35/H25/V19	16mm	2.0	22.5mm	6.3mm	2%	D24/H19/V14	25mm	2.4	26.0mm	6.1mm	1%	D15/H12/V9
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Tavg ≥ 88% @440nm-620nm, T=50% @650nm Tavg ≤ 3% @700nm-1000nm, T<5% @1050nm																																																																														
Working Temperature	-20 °C ~ +80 °C																																																																													

Specifications are subject to change without notice.

