



# 1" Machine Vision FA Lens 5MP/8MP



**2024 V1**

For customized projects please Contact us:

[info@simtrum.com](mailto:info@simtrum.com)

## 5 Mega Pixels 1" FA/Machine Vision Lens

SIMTRUM's 5 Mega Pixels 1" FA/Machine Vision Lens is designed to support a 5 MP 1" camera, with a focus and iris locking screw ensuring stable focusing. It delivers low distortion, sharp images, and has a compact structure, providing excellent optical performance.

### Feature

- Support 5 MP 1" camera
- Focus and iris locking, screw to ensure stable focusing
- Low distortion sharp image
- Compact structure, excellent optical performance

### Application

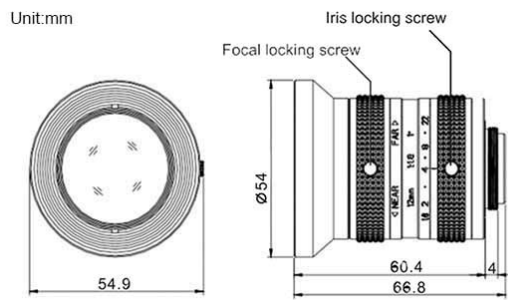
- Machine Vision
- Automatic Production
- Electronic Communication Field



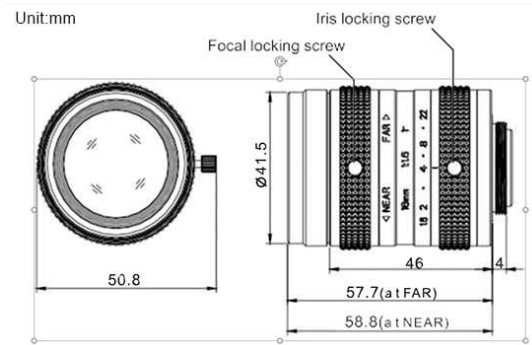
### Specification

Parameter		STPM-12LC5M	STPM-16LC5M	STPM-20LC5M	STPM-25LC5M
Resolution		5 MP;160lp/mm (center)100lp/mm (corner)			
Focal Length (mm)		12	16	20	25
Iris Range		F1.6-F22			
Max.Sensor Size		1"(12.8mmX9.6mm Ø16mm)			
Field of View(Diagonal x Horizontal x Verticle)	1"	68.8°x 57.1°x44.1°	54.3°x 44.2°x33.5°	44.4°x 35.8°x27.2°	36.2°x29.0°x21.8°
	2/3"	50.0°x 40.6°x30.9°	38.3°x 30.8°x23.2°	31.0°x 25.0°x18.8°	25.0°x20.0°x15.0°
Control	FocuS	Manual			
	Iris	Manual			
Distortion(mm)	1"	-2.88%@y=8.0	-3.73%@y=8.0	-1.82%@y=8.0	-2.06%@y=8.0
	2/3"	-1.79%@y=5.5	-1.98%@y=5.5	-0.79%@y=5.5	0.98%@y=5.5
Effective Image Dimension		16mm			
Back Focal Length (in air) mm		13.54	12.17	13.08	12.69
Mount		C-mount			
Filter Thread (mm)		M52.0x0.75	M37.5x0.5		
Working Temperature		-10°C~+50°C			

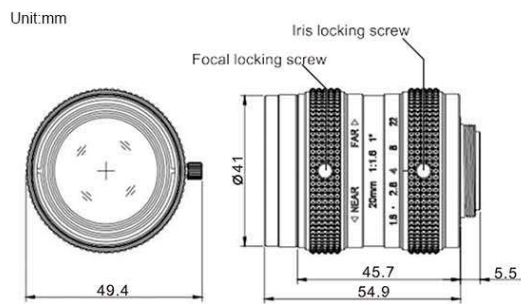
## Drawings



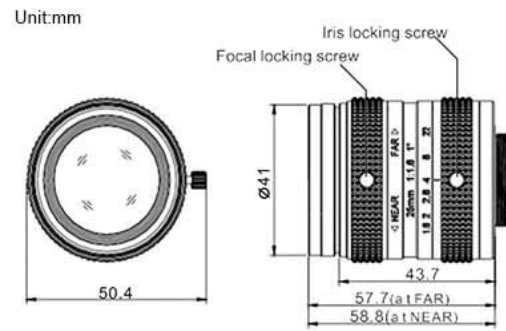
STPM-12LC5M



STPM-16LC5M



STPM-20LC5M



STPM-25LC5M

## 8 Mega Pixels 1" FA/Machine Vision Lens

SIMTRUM's 8 Mega Pixels 1" FA/Machine Vision Lens is designed to support a 8 MP 1" camera, with a focus and iris locking screw ensuring stable focusing. It delivers low distortion, sharp images, and has a compact structure, providing excellent optical performance.

### Feature

- Support 8 MP 1" camera
- Focus and iris locking, screw to ensure stable focusing
- Low distortion sharp image
- Compact structure, excellent optical performance

### Application

- Machine Vision
- Automatic Production
- Other Industries

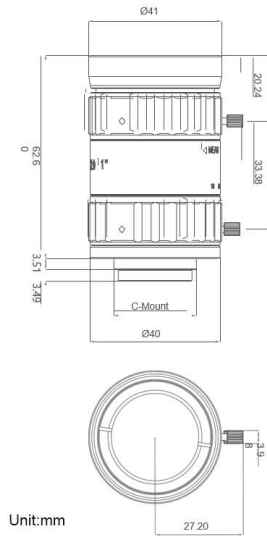


### Specification

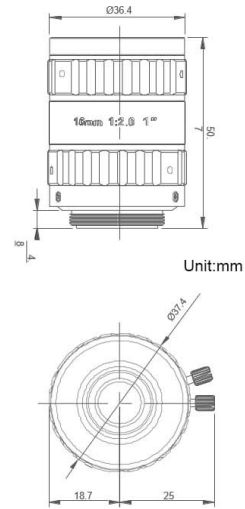
Parameter	STPM-12LC8M	STPM-16LC8M	STPM-25LC8M	STPM-35LC8M	STPM-50LC8M	
Resolution	8MP					
Focal Length (mm)	12	16	25	35	50	
Corresponding Wavelength	420-1000nm					
Iris Range	F2.0-C	F2.0-close	F1.8-close	F2.0-close	F2.0-close	
Max.Sensor Size	1"(16mm)					
Imaging Range	0.1m~∞	0.1m~∞	0.15m~∞	0.2m~∞	0.25m~∞	
Field of View (Diagonal x Horizontal x Vertical)	1"	69.63°x60.71°x40.33°	53.94°x43.92°x33.45°	36.21°x29.08°x21.86°	26.10°x20.83°x15.72°	18.38°x14.70°x10.98°
	1/2"	37.32°x30.11°x22.74°	28.23°x22.62°x16.97°	18.45°x14.72°x11.08°	13.28°x10.65°x7.94°	9.34°x7.42°x5.5°
	1/3"		21.24°x16.98°x12.94°	13.81°x11.08°x8.34°	9.92°x7.92°x6.00°	6.96°x5.53°x4.16°
Control	Focus	Manual				
	Iris	Manual	M-Iris			
Object Size (mm)	1"	155.01x130.05x90.3	112.75x89.28x66.33	92.4x73.3x54.6	81.10x64.88x48.66	72.50x57.94x43.34
	1/2"	74.93x59.76x44.73	55.09x43.96x32.82	45.5x36.4x27.2	40.52x32.42x24.31	36.18x28.76x21.66
	1/3"		41.19x33.32x24.58	34.2x27.3x20.5	30.42x24.34x18.25	27.26x21.74x16.34
Distortion (mm)	1"	-1.27%@y=4.0	-2.02%@y=8	-1.41%@y=8	0.28%@y=8	-0.013%@y=8.0
	1/2"	-4.1%@y=8	-0.68%@y=4.0	-0.32%@y=4.0	0.07%@y=4.0	0.010%@y=4.0
	1/3"		-0.39%@y=3.0	-0.18%@y=3.0	0.04%@y=3.0	0.04%@y=3.0
Effective Image Dimension	16					
Back Focal Length (in air) mm	15.07	11.20	12.68	12.96	21.35	
Mount	C-mount					
Filter Thread (mm)	M35.5x0.5	M34x0.5	M30.5x0.5	M30.5x0.5	M37x0.5	
Working Temperature	-20°C ~ +60°C					
Weight (g)		101.25	73.65	70.35	105.25	

## Drawings

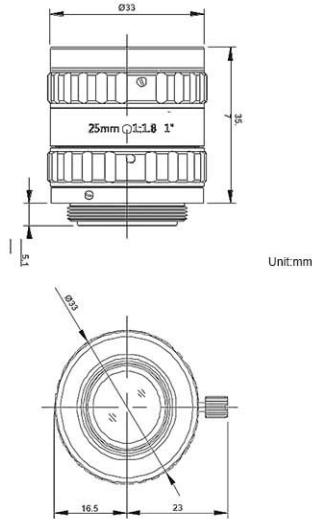
STPM-12LC8M



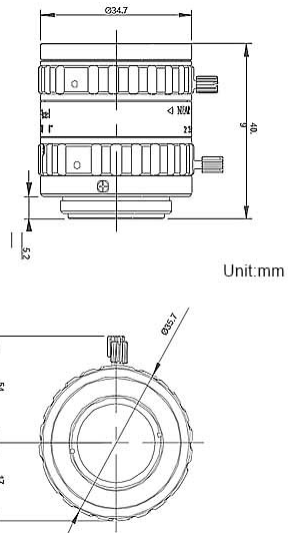
STPM-16LC8M



STPM-25LC8M



STPM-35LC8M



STPM-50LC8M

