



1.1" Machine Vision FA Lens 20MP/20MP-H



2024 V1

For customized projects please Contact us:

info@simtrum.com

www.simtrum.com

20 Mega Pixels 1.1" FA/Machine Vision Lens

SIMTRUM's 20 Mega Pixels 1.1" FA/Machine Vision Lens is designed to support a 20 MP 1.1" 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 20MP 1.1" Camera
- Focus and iris locking screw to ensure stable focusing
- Low distortion
- Compact structure, excellent optical performance

Application

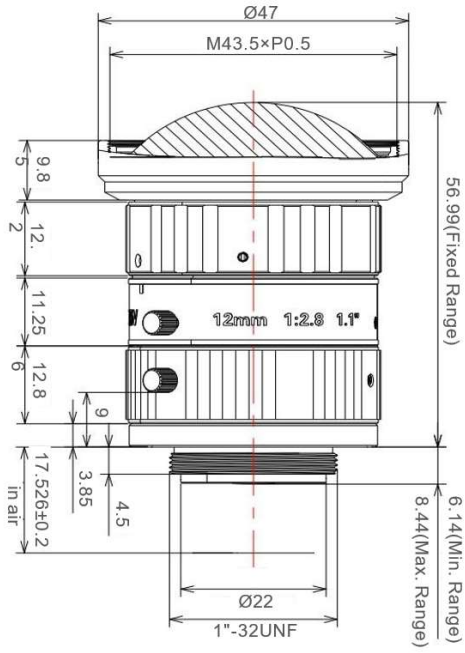
- Machine Vision
- Automatic Production
- Electronic Communication Field



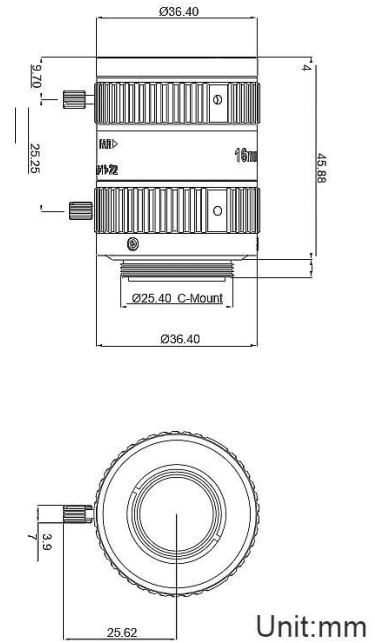
Specification

Parameter	STPM-12UC20M	STPM-16UC20M	STPM-25UC20M	STPM-50UC20M	
Sensor Size	1.1"				
Focal Range	12mm	16mm	25mm	50mm	
Iris Range	F2.8~16	F2.8	F2.8	F2.8	
Resolution	20MP				
TV Distortion	-0.22% @0.4m	-0.73%@y=8.8mm	-0.59%@y=8.8mm	-0.06%@y=8.8mm	
Focus Range	0.1m~∞				
Optical Back Focal Length (in Air)		11.2mm	12.6mm	21.3mm	
FOV (DxHxV)	1.1"	61.22°x46.86°	58.6°x46.8°x35.2°	39.4°x31.5°x23.6°	
	1"	60.05°x40.57°			19.9°x15.9°x11.9°
	1/1.2"	49.85°x32.66°			
Operation Method	Focus	-	Manual		
	Iris	-	Manual		
Iris Type	Manual	-	-	-	
Mount	C-Mount				
Filter Thread	M43.5,P=0.5mm	-	-	-	
Size	Φ47x57mm	-	-	-	
Filter Size		M34x0.5	M30.5x0.5	M37x0.5	
Weight	172±2g	-	-	-	
Work Temperature	-10°C~+50°C	-20°C~+60°C			
Weight	-	0.025kg	0.015kg	0.034kg	

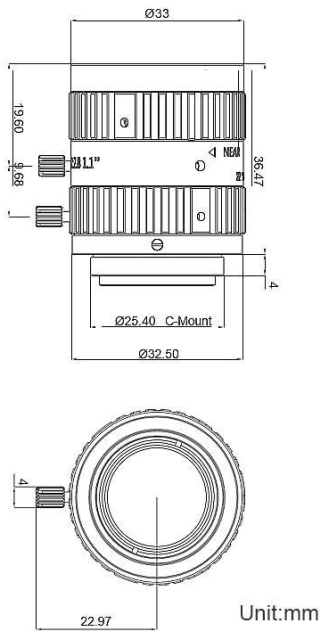
Drawings



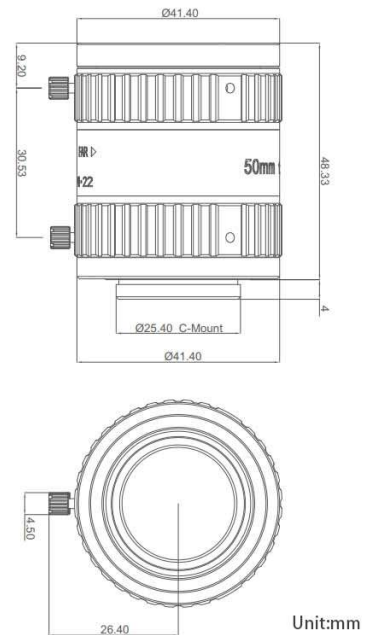
STPM-12UC20M



STPM-16UC20M



STPM-25UC20M



STPM-50UC20M

20 Mega Pixels 1.1" FA/Machine Vision Lens-H

SIMTRUM's 20 Mega Pixels-H is specifically designed to support a 20 MP 1.1" camera, offering high resolution, multi-layer coating with high transmittance for effective suppression of stray light. Its compact structure and small shape make it more suitable for integrated applications, while also providing a lower distortion rate to meet various application requirements.

Feature

- High resolution
- Multi layer coating, high transmittance, effective suppression of stray light
- Compact structure, small shape, more suitable for integrated application
- Lower distortion rate for more application requirements

Application

- Machine Vision
- Automatic Production
- Other Industries

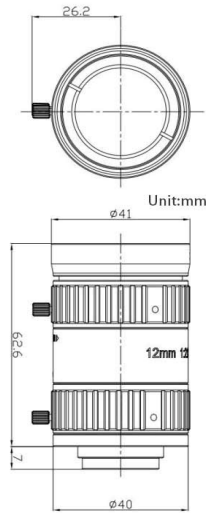


Specification

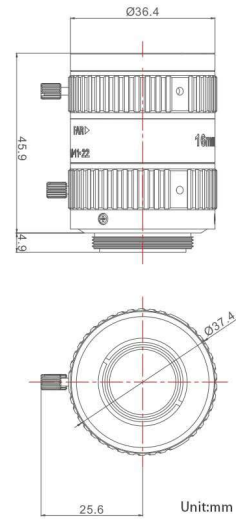
Parameter		STPM-12UC20M-H	STPM-16UC20M-H	STPM-25UC20M-H	STPM-35UC20M-H	STPM-50UC20M-H
Sensor Size		1.1"(17.6 mm)				
Wavelength		420-1000 nm				
Focal Range (mm)		12	16	25	35	50
Iris Range		F2.8-F22				
Optical Back Focal Length (in Air) mm		10.6	11.2	12.6	12.9	21.3
FOV (Diagonal, Horizontal, Vertical)	1.1"	70.6°x59.2°x45.4°	58.6°x46.88°x35.16°	39.46°x31.56°x23.6	28.18°x22.54°x16.9°	19.96°x15.96°x11.96°
	1"	67.6°x56.7°x43.5°	53.94°x43.92°x33.45°	36.21°x29.08°x21.86°	26.10x20.83°x15.72°	18.38°x14.70°x10.98°
	1/2"	37.0°x29.4°x22.0°	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"	27.6°x22.1°x16.8°	21.24°x16.98°x12.94°	13.81°x11.08°x8.34°	9.92°x7.92°x6.00°	6.96°x5.53x4.16°
Object Size (At the closest focusing distance) mm	1.1"	166.4x133.1x99.8	124.8x99.84x74.88	101.76x81.4x61.1	88.72x70.96x53.24	79.3x63.44x47.58
	1"	150.3x119.0x88.4	112.75x89.28x66.33	92.4x73.3x54.6	81.10x64.88x48.66	72.50x57.94x43.34
	1/2"	73.45x58.64x43.7	55.09x43.96x32.82	45.5x36.4x27.2	40.52x32.42x24.31	36.18x28.76x21.66
	1/3"	54.9x44.4x32.77	41.19x33.32x24.58	34.2x27.3x20.5	30.42x24.34x18.25	27.26x21.74x16.34
Operation Method	Focus	Manual				
	Iris	Manual				
Distortion (mm)	1.1"	-0.85%@y=8.8	-0.73%@y=8.8	-0.59%@y=8.8	0.37%@y=8.8	-0.06%@y=8.8
	1"	-0.80%@y=8.0	-0.7%@y=8.0	-0.49%@y=8.0	0.28%@y=8.0	-0.013%@y=8.0
	1/2"	-0.6%@y=4.0	-0.24%@y=4.0	-0.12%@y=4.0	0.07%@y=4.0	0.010%@y=4.0
	1/3"	-0.4%@y=3.0	-0.14%@y=3.0	-0.06%@y=3.0	0.04%@y=3.0	0.008%@y=3.0
Mount		C-Mount				
Filter Size		M37.5xP0.5	M34xP0.5	M30.5xP0.5	M30.5xP0.5	M37xP0.5
Focus Range		0.1m~∞	0.1m~∞	0.15m~∞	0.2m~∞	0.25m~∞
Work Temperature		-20°C~+60°C				
Weight			100.2g	72.2g	68.35g	103.1g

Drawings

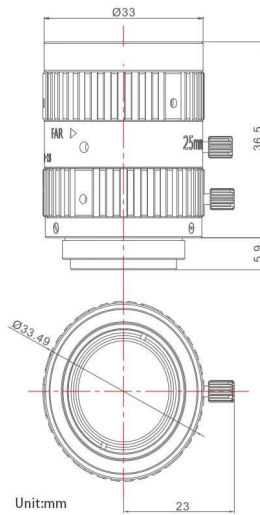
STPM-12UC20M-H



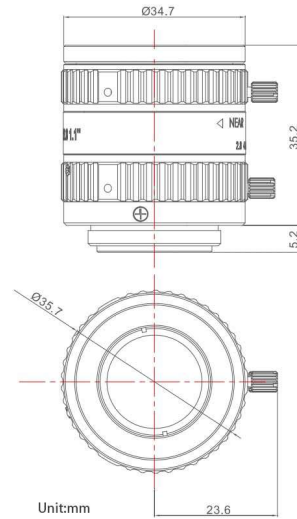
STPM-16UC20M-H



STPM-25UC20M-H



STPM-35UC20M-H



STPM-50UC20M-H

