

## Ultra-High-Performance Machine Vision Fixed-Focal Lenses for 3.1- $\mu$ m-Pixel-Pitch (12 Mega-Pixel) Imagers



- 1.1" 8mm F/1.8 (Model: M111FM08)
- 1.1" 16mm F/1.8 (Model: M111FM16)
- 1.1" 25mm F/1.8 (Model: M111FM25)
- 1.1" 50mm F/1.8 (Model: M111FM50)



NEW



### Main Features

- > **Industry-Leading High-Contrast and Resolution**
  - Compatible with 3.1- $\mu$ m-pixel-pitch imagers, equivalent to 1.1" 12 mega-pixels
  - The highest-contrast and resolution among Tamron's machine vision fixed-focal lens line-up
  - Equal high-performance for all four lenses irrespective of focal length
- > **Lens Designed for High-Fidelity Imaging**
  - Uniform high-contrast and resolution from the corner to the periphery of images despite the large aperture size
  - The highest-class contrast and resolution further broaden the use of the lenses for new applications including traffic monitoring and, notably, ITS (Intelligent Transport Systems)
- > **Combination of Advanced Coating Technology and Use of Diverse Types of Lenses**
  - Integration of advanced technologies such as broad-band anti-reflection coating, selection of lens materials, and leading-edge geometric design
- > **Uncompromised Image Quality at Close Distances**
  - High image-fidelity at frequently-used close distances
- > **Compatibility With a Broad Range of C-Mount Cameras**
  - Compatible with a broad range of C-mount cameras that use imagers up to 1.1" and image circle diameter of 17.4mm (an effective image circle diameter of 17.6mm)
- > **Elaborate Inspection Procedures**
  - Use of tighter test conditions to ensure high-contrast and resolution, providing ultimate uniformity across the field

Model		M111FM08	M111FM16
			
Imager Size		1.1"	
Mount Type		C	
Focal Length		8mm	16mm
Aperture Range		F/1.8 ~ 22	
Field of View Angle (Horizontal x Vertical)	1.1"	(1:1)	76.0°x76.0°
		(4:3)	83.5°x66.7°
	1"	(1:1)	71.2°x71.2°
		(4:3)	78.4°x62.2°
2/3"		57.8°x44.9°	
Focusing Range		0.3m ~ ∞	
Operation	Focus	Manual w/lock	
	Iris	Manual w/lock	
Filter Size		M77 P=0.75mm	M55 P=0.75mm
Wave Length		Visible Light	
Operating Temperature		-20°C ~ +60°C	

Model		M111FM25	M111FM50
			
Imager Size		1.1"	
Mount Type		C	
Focal Length		25mm	50mm
Aperture Range		F/1.8 ~ 22	
Field of View Angle (Horizontal x Vertical)	1.1"	(1:1)	27.6°x27.6°
		(4:3)	31.1°x23.6°
	1"	(1:1)	25.5°x25.5°
		(4:3)	28.7°x21.7°
2/3"		20.0°x15.0°	
Focusing Range		0.3m ~ ∞	0.4m ~ ∞
Operation	Focus	Manual w/lock	
	Iris	Manual w/lock	
Filter Size		M55 P=0.75mm	M49 P=0.75mm
Wave Length		Visible Light	
Operating Temperature		-20°C ~ +60°C	

**Caution** : Please read the instruction manual carefully before using the camera.

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Tamron has acquired certification for international standards, namely Quality Management Systems (ISO 9001) and Environmental Management Systems (ISO 14001) for its head office, Japanese sales offices, three plants in Aomori and its plant in China, and is endeavoring to make continuous improvements to its business activities.