TAMRON
Focus on the Future

FA and Machine Vision Lenses News from TAMRON

NEW RELEASE

Four Compact ϕ43mm Machine-Vision Lenses Compatible with 1.1" Imagers and Full 24-Mega Pixel Resolution

- 1.1" 16mm F/2.8 (Model: MA111F16VIR)
- 1.1" 25mm F/2.8 (Model: MA111F25VIR)
- 1.1" 35mm F/2.8 (Model: MA111F35VIR)
- 1.1" 50mm F/2.8 (Model: MA111F50VIR)

NEW

Model: MA111F16VIR Model: MA111F25VIR Model: MA111F35VIR Model: MA111F50VIR

For

- IMX253 1.1" 12-Mega
- IMX304 1.1" 12-Mega
- IMX532 1.1" 16-Mega
- IMX542 1.1" 16-Mega
- IMX531 1.1" 20-Mega
- IMX541 1.1" 20-Mega

2.5 μm

※24-Mega(max)pixel resolution

Main Features

High Resolution and Contrast Unrivaled in the Industry

- Compatible with 1.1" imagers, supporting 2.5μm pixel-pitch and 24-mega* (max) pixel resolution.
- Offer resolution and contrast outperforming other 24-mega pixel lenses.
  (* resolution at the center)

Industry-Leading Low Distortion (TV Distortion)

- Significantly reduce TV Distortion compared with previous models.
  (* MA111F16VIR: 0.2%, MA111F25VIR: -0.3%, MA111F35VIR: 0.3%, MA111F50VIR: 0.1%)

High-Quality Performance from Close-up to Infinity

- A new comprehensive lens design covering both close-up and infinity shooting distances assures high contrast and resolution throughout the whole focal length range.

New Robust Mechanism for Anti-Vibration and Anti-Shock

- A newly designed mechanism improves anti-vibration and anti-shock performance compared with previous models, limiting the optical (image) deflection to less than 10μm even for the severe impact of vibrations and shocks of max 10G of magnitude.
  * Vibration frequency 10-150Hz (acceleration 50m/s^2), and the number of cycles: 20 cycles.

Reduction of Focus-Shift in between the Visible-Light and the NIR Bands

- Focus-shift associated with the wide spectrum of 400nm to 850nm is reduced to an absolute minimum, which makes the new lenses an optimum choice for cameras compatible with the visible-light and the NIR band.

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■Specifications

Model		MA111F16VIR	MA111F25VIR	MA111F35VIR	MA111F50VIR
					
Imager Size		1.1"			
Mount Type		C			
Focal Length		16mm	25mm	35mm	50mm
Aperture Range		F/2.8 ～ F/16			
Field of View Angle (Horizontal × Vertical)	**1.1"**	47.7°×36.8°	31.7°×23.9°	22.8°×17.2°	16.0°×12.0°
	2/3"	30.8°×23.3°	20.0°×15.0°	14.4°×10.8°	10.1°×7.5°
Focusing Range		0.1m ～ ∞		0.2m ～ ∞	
Operation	**Focus**	Manual w/lock			
	Iris	Manual w/lock			
Filter Size		M40.5 P=0.5mm			
Wave Length		Visible Light～NIR			
TV Distortion		0.2% ✻	−0.3% ✻	0.3% ✻	0.1% ✻
Weight		178g	196g	179g	181g
Operating Temperature		−20℃ ～ +60℃			

✻ Design Value

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Management on Quality and Environment :
Tamron is certified with international standards: ISO 9001 for quality and ISO 14001 for environmental management at its Head Office, domestic sales offices, China plant as well as production facilities in Aomori Factory, Japan, and is fully committed to striving for continued and sustainable improvement at all levels and facets of its business operations.