

## Three Compact $\phi 43\text{mm}$ 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" 50mm F/2.8 (Model: MA111F50VIR)

NEW



Model: MA111F16VIR

Model: MA111F25VIR

Model: MA111F50VIR

For

2.5  $\mu\text{m}$

### Main Features

#### > High Resolution and Contrast Unrivaled in the Industry

- Compatible with 1.1" imagers, supporting 2.5 $\mu\text{m}$  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%, 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 10 $\mu\text{m}$  even for the severe impact of vibrations and shocks of max 10G of magnitude.  
\*Vibration frequency 10-150Hz (acceleration 50m/s<sup>2</sup>), 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.

## ■ Specifications

Model		MA111F16VIR	MA111F25VIR	MA111F50VIR
				
Imager Size		1.1"		
Mount Type		C		
Focal Length		16mm	25mm	50mm
Aperture Range		F/2.8 ~ F/16		
Field of View Angle (Horizontal x Vertical)	1.1"	47.7°x36.8°	31.7°x23.9°	16.0°x12.0°
	2/3"	30.8°x23.3°	20.0°x15.0°	10.1°x7.5°
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% *	0.1% *
Weight		178g	196g	181g
Operating Temperature		-20°C ~ +60°C		

\* 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 headquarters, domestic sales offices, China plant as well as three production facilities in Aomori, Japan, and is fully committed to striving for continued and sustainable improvement at all levels and facets of its business operations.

● Specifications subject to change without notice