



**FA and Machine Vision Lenses News from TAMRON**

NEW RELEASE

**Four Compact  $\phi$ 43mm 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)



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  $\mu$ m**

※24-Mega(max)pixel resolution

Main Features

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

- Compatible with 1.1" imagers, supporting 2.5 $\mu$ 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%, 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 10 $\mu$ 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	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 x Vertical)	1.1"	47.7°x36.8°	31.7°x23.9°	22.8°x17.2°	16.0°x12.0°
	2/3"	30.8°x23.3°	20.0°x15.0°	14.4°x10.8°	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% *	0.3% *	0.1% *
Weight		178g	196g	179g	181g
Operating Temperature		-20°C ~ +60°C			

\* Design Value

**TAMRON CO., LTD.** <http://www.tamron.biz/en/>  
1385, Hasunuma, Minuma-ku, Saitama-shi, Saitama 337-8556 JAPAN  
Tel: +81-48-684-9129 Fax: +81-48-683-8594

**TAMRON USA, INC.** <http://www.tamron-usa.com>  
10 Austin Boulevard, Commack, NY 11725, USA Tel: +1-631-858-8400 Fax: +1-631-543-3963

**TAMRON Europe GmbH.** <http://www.tamron.de>  
Robert Bosch-Str. 9, 50769 Cologne, GERMANY Tel: +49-221-669544-0 Fax: +49-221-669544-404

**TAMRON INDUSTRIES (HONG KONG) LIMITED** <http://www.tamron.com.hk>  
Unit 908, 9/F, Elite Centre, 22 Hung To Road, Kwun Tong, Kowloon, Hong Kong Tel: +852-2721-7797 Fax: +852-2620-1631

**TAMRON (Russia) LLC.** <http://www.tamron.ru>  
Unikon Business Center 5F No. 9, Plekhanova Street 4a, Moscow, 111123, Russian Federation  
Tel: +7-495-970-0112 Fax: +7-495-970-0112

**TAMRON OPTICAL (SHANGHAI) CO., LTD.** <http://www.tamron.com.cn>  
Room 1707, Ruijin Building, No.205, Maoming South Road, Shanghai, 200020, CHINA  
Tel: +86-21-5102-8880

**TAMRON INDIA PRIVATE LIMITED** <http://www.tamron.in>  
805, 806 & 807 8th floor, Vatika City Point, MG Road, Gurgaon-122001, Hayana, India  
Tel: +91-124-41-168-12 Fax: +91-124-40-822-72



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● Specifications subject to change without notice