

FA and Machine Vision Lenses News from TAMRON

NEW RELEASE

A New Model of Industrial Lenses Covering a Wide Spectral Band from Visible-Light to SWIR Band

- 1" 12mm F/1.6 (Model: SMA11F12)
- 1" 16mm F/1.6 (Model: SMA11F16)
- 1" 25mm F/1.6 (Model: SMA11F25)

NEW



For

**IMX990
IMX991**

For

5 μ m

Main Features

> Significant Reduction of Focus-Shift in between the Visible-Light and the SWIR Bands

- Focus-shift occurring in between different bands is effectively reduced over the whole spectrum corresponding to the wavelength of 400 nm to 1700 nm.
- The new lens offers an optimum optical component for machine-vision cameras operating in the visible light band, industrial-use cameras operating in the SWIR band, and industrial-use cameras operating in both bands.

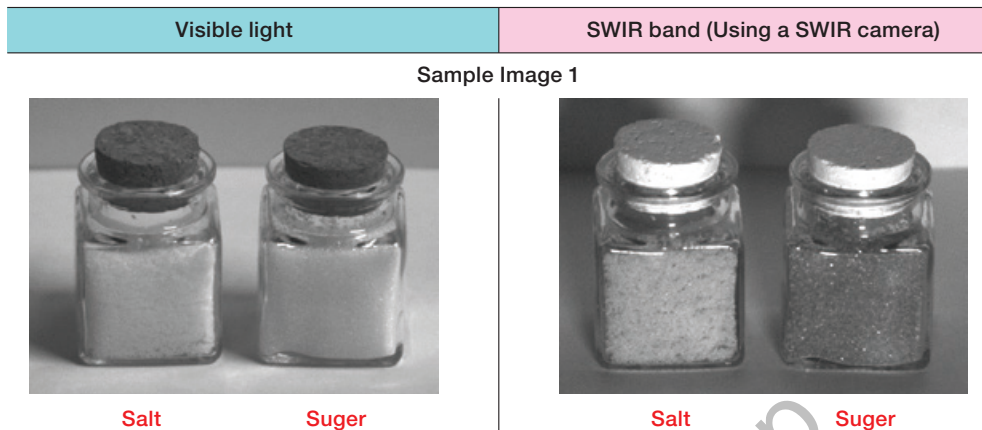
> Industry-Leading Spectrum Transmittance

- Tamron's new proprietary lens coating technology assures an approx. 80% constant spectrum transmittance over the whole spectrum from the visible-light to the SWIR* band.
* Band corresponding to the wavelength of 400 – 1700nm




> Enhanced Imaging Performance at Close-Up Distances

- The image contrast is substantially enhanced at commonly used close-up distances.
- The new lens is compatible with imagers with a pixel-pitch 5 μ m.
The lens is also compatible with IMX990/IMX991*.
* Products of Sony Semiconductor Solutions Corporation

■ Shooting image sample



■ Specifications

| Model | | SMA11F12 | SMA11F16 | SMA11F25 |
|--------------------------------------------------------|--------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| | |  |  |  |
| Imager Size | | 1" | | |
| Mount Type | | C | | |
| Focal Length | | 12mm | 16mm | 25mm |
| Aperture Range | | F/1.6 ~ F/22 | | |
| Field of View Angle (Horizontal × Vertical) | 1" | 57.9°×44.6° | 44.1°×33.7° | 29.1°×21.9° |
| | 1/2" | 30.2°×24.3° | 22.7°×18.1° | 14.7°×11.7° |
| Focusing Range | | 0.2m ~ ∞ | | |
| Operation | Focus | Manual w/lock | | |
| | Iris | Manual w/lock | | |
| Filter Size | | M52 P=0.75mm | M49 P=0.75mm | M46 P=0.75mm |
| Wave Length | | Visible Light~SWIR | | |
| TV Distortion | | -1.2% * | -1% * | -1% * |
| Weight | | 260g | | |
| Operating Temperature | | -20°C ~ +60°C | | |

* Design Value