

# TAMRON

**Industry-  
First\*  
Embedded  
VC**

## **Ultra-Compact Camera Module With Unrivalled Optical Vibration- Compensation Performance**



### **MP1010M-VC**

Image Shows the Actual Module Size.

- **Embedded with Industry-First\* Optical Vibration-Compensation**
- **Miniature size and light-weight (a total length of 58.4 mm and a weight of 77g) Supporting 10x Optical Zoom**
- **Compatible with 1080/60 Full HD**

Versatile Miniature-Size Camera Module with Optical Vibration-Compensation

\*In mass-production miniature-size camera modules (survey by Tamron, effective as of January, 2016)

# Embedded with Industry-First\* Optical Vibration-Compensation

Tamron's proprietary optical vibration-compensation employed in MP1010M-VC suppresses the effect of vibration and assures unrivaled crisp and clear image quality; an advantage that particularly stands out in the telephoto range.

\*In mass-production miniature-size camera modules (survey by Tamron, effective as of January, 2016)

[Optical Vibration-Compensation (VC) feature: Comparison of VC ON/OFF image qualities]



\*Part of image enlarged.

Optical Vibration-Compensation (VC) feature: Comparison of VC ON/OFF video qualities (sample video)

URL <http://www.tamron.biz/vcsample/>



## Miniature size and light-weight

Ultimate small size and weight (a total length of 58.4 mm and a weight of 77g) with integrated powerful 10x optical zoom; distinctive advantage for re-using current housings or for installation in limited spaces.

## Compatible with Full HD

High image-quality camera module with video outputs compatible with 1080/60 Full HD and other video formats; powerful solution for myriad applications.

## MP1010M-VC SPEC

### ■ Camera

Image sensor	1/3-type CMOS (Progressive Scan)
Effective number of pixels	Approx. 4,080,000 pixels
Signal system (HD)	1080p/60, 1080p/50, 1080p/30, 1080p/25, 1080i/60, 1080i/50, 720p/60, 720p/50
Minimum illumination	0.5lx (1/30sec, F1.8, 50%)
Recommended illumination	100 lx to 100,000 lx
S/N ratio	More than 50dB
Gain	Auto / Manual
Shutter speed	1/1 to 1/10,000 sec
Sync system	Internal
Exposure compensation	-12dB to +12dB (Total 13 steps)
Backlight compensation	ON/OFF
Gamma	Standard/Straight
Aperture control	16 steps
White balance	ATW1 (Narrow), ATW2 (Wide), One push, Manual (B, R)
AE (Auto exposure mode)	Auto, Manual, Priority mode (shutter/iris)
Lens	10x optical zoom f=3.3 mm (wide) to 33.0 mm (tele) F1.8 to F3.4
Zoom mode	Standard /Variable/Direct
Zoom movement speed	1.4 sec
Focusing system	Auto, Manual, One push, AF sensitivity
Horizontal viewing angle (wide) to (tele)	58.2 degrees to 6.9 degrees
Minimum object distance (wide) to (tele)	10mm to 800mm
Horizontal resolution	800 TV lines

### ■ General

Power requirement	8 V to 12 V DC
Power consumption	Approx. 3W
Operating temperature	-5°C to +60°C
Storage temperature	-40°C to +60°C
Operating humidity	20% to 80% (no condensation)
Storage humidity	20% to 90% (no condensation)
Dimensions (W x H x D)	31.9 x 41.5 x 58.4 mm
Weight	Approx. 77g

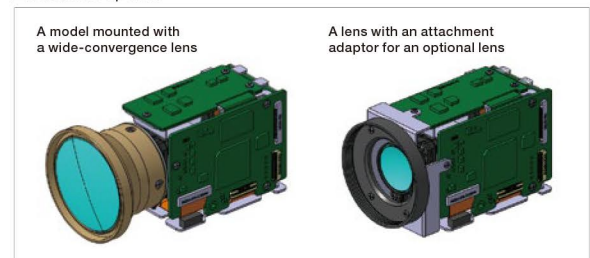
### ■ Interface

Video output	Digital: Y/Pb/Pr 4:2:2 (LVDS)
Camera control interface	VISCA protocol *VISCA is a trademark of Sony Corporation.

### ■ Features

VC (Vibration Compensation)	Standard features
Wide-D	
Defog	
Noise reduction (3D+2D)	
Digital output	
Privacy zone masking	
Slow shutter	
Picture effects (Black White)	
Picture freeze	
Electronic-Flip (E-Flip)	
Mirror image	
Temperature readout	
Title display	

### ■ Available options



Please contact us for detailed specification on these two options.

# TAMRON

Manufacturer of precise and sophisticated optical products for a broad range of industries.

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• The content of this catalog is current as of August 2016.  
• Product specifications, appearance and performance are subject to change without notice.



### Management on Quality and Environment

Tamron is certified with international standards: ISO 9001 for quality and ISO14001 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.