

TAMRON

**Industry-
First*
Embedded
VC**

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



**MP1010M-VC
MP1110M-VC**

Image shows MP1110M-VC.

- 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

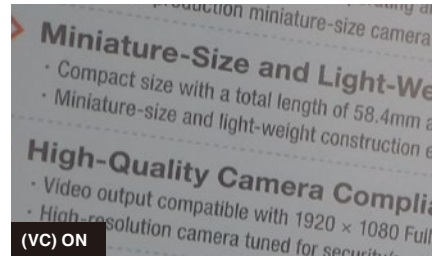
*For MP1010M-VC, in mass-production miniature-size camera module (survey by Tamron, effective as of January, 2016)

Embedded with Industry-First* Optical Vibration-Compensation

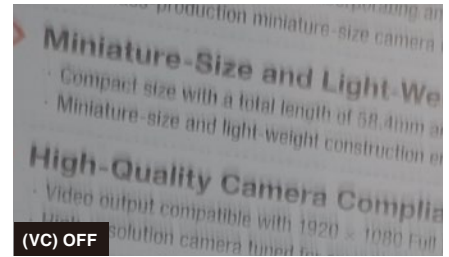
Tamron's proprietary optical vibration-compensation employed in MP1010M-VC / MP1110M-VC suppresses the effect of vibration and assures unrivaled crisp and clear image quality; an advantage that particularly stands out in the telephoto range.

*For MP1010M-VC, in mass-production miniature-size camera module (survey by Tamron, effective as of January, 2016)

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



(VC) ON
*Part of image enlarged.



(VC) OFF

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 / MP1110M-VC SPEC

Camera

	MP1010M-VC	MP1110M-VC
Image sensor (Effective number of pixels)	1/3-type CMOS (Progressive Scan) (Approx. 4,080,000 pixels)	
Pixel output	1920x1080, 1280x720	
Signal system (HD)	1080p/60, 1080p/50, 1080p/30, 1080p/25, 1080i/60, 1080i/50, 720p/60, 720p/50, 720p/30p, 720p/25p	1080p/60, 1080p/59.94, 1080p/50, 1080p/30, 1080p/29.97, 1080p/25, 1080i/60, 1080i/59.94, 1080i/50, 720p/60, 720p/59.94, 720p/50, 720p/30, 720p/29.97, 720p/25
Signal system (SD)	-	NTSC/PAL
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 (wide to tele)	1.4 sec	
Digital zoom	-	16x
Focusing system	Auto, Manual, One push, AF sensitivity	
Horizontal viewing angle (wide to tele)	59.2 degrees to 6.7 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 (Approx. 4.5W during motor operation)
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

	MP1010M-VC	MP1110M-VC
Video output (HD)	Digital: Y/Pb/Pr 4:2:2 (LVDS)	
Video output (SD)	-	CVBS
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	
Motion detection	
Slow shutter	
Picture effects (Black White)	
Picture freeze	
Electronic-Flip (E-Flip)	
Mirror image	
Temperature readout	
Title display	

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 April 2018.
*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.