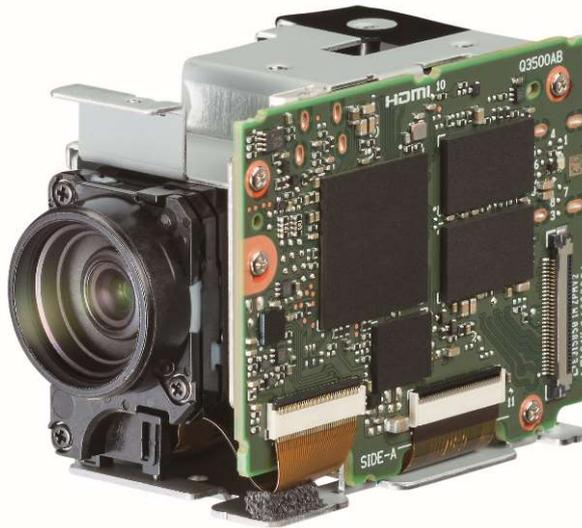


Ultra-Compact Full-HD Camera Module

Industries' most compact and lightweight 10x optical zoom module

Model Name MP3010M-EV



Ultra-Compact 10x Zoom

Key Features

Full Upgrading Compatibility with the Models of the Previous Series

- Module size is effectively identical with the previous models.
- Mounting hole size and locations are identical with the previous models.
- Equipped with an industry-leading compact 10x optical zoom lens.
- Supports LVDS video output. (30-pin connector: pins are identical with the previous models)
- Module supports camera control by VISCA

Improved Performance and Utility for a Wide Range of New Applications

- High sensitivity due to implementation of a new Sony STARVIS™ image sensor.
Required minimum illumination of 0.1 lx (1/30 sec, F/1.8, 50% Color, typical) is achieved.
- A new day/night feature is added to enhance the nighttime operation in indoor/outdoor scenes.
- Equipped with a state-of-the-art EIS (Compensating horizontal and vertical vibration, and rotation)
- Equipped with a Multi-Interface to support various video outputs:
 - New HDMI Type D (Micro HDMI) connector provides video output via HDMI
 - New UVC/USB control and video output (up to 1080/30p) in addition to the FULL-HD digital video and the LVDS SD (NTSC/PAL) analog video outputs equipped in the previous models

<SPECIFICATIONS>

Image sensor	Sony's CMOS image sensor with STARVIS™ technology *1
Signal system(HD)	1920x1080 or 1280x720 1080p/60, 1080p/59.94, 1080p/50, 1080p/30, 1080p/29.97, 1080p/25, 720p/60, 720p/59.94, 720p/50, 720p/30, 720p/29.97, 720p/25
Signal system(SD)	NTSC/PAL
Minimum illumination	0.1 lx (1/30sec,F/1.8,50%,Color,Typical) 0.025 lx (1/30sec,F/1.8,50%,B&W,Typical)
S/N	More than 50dB
Gain	Auto/Manual
Shutter speed	1/1~1/10,000 sec
Sync system	Internal
Backlight compensation	ON/OFF
White balance	ATW1(Narrow), ATW2(Wide), INDOOR, OUTDOOR, One push, Manual
Lens	10x optical zoom f=3.3~33mm F/1.8~F/3.4
Digital zoom	Up to 16x

Focusing system	Auto, Manual, One push, AF sensitivity
Minimum object distance (wide to tele)	Visible light: 10mm(w)-800mm(t) 850nm: 10mm(w)-1200mm(t)
Horizontal viewing angle (wide to tele)	59.2° (wide)~6.7° (tele) *2
Day/Night	ON/OFF (ICR switching)
EIS	OFF/ON
Horizontal resolution	Center: 800TV lines (Typical)
Video output (HD)	LVDS: digital Y/Pb/Pr 4:2:2 HDMI*3: digital Y/Pb/Pr 4:2:2 USB: UVC (up to 1080/30p)
Video output (SD)	CVBS 1.0V(p-p,75Ω)
Camera control	VISCA*4
Power requirement	DC 8~12 ± 10%
Power consumption	Approx. 2.5W (Approx. 4.4W during zoom and focus operation)
Operating temperature	-5° ~ +60°C
Storage temperature	-40° ~ +60°C
Operating humidity	20% ~ 80% (no condensation)
Storage humidity	20% ~ 90% (no condensation)
Dimensions (W x H x D)	33 x 43 x 59mm
Weight	about 70g

*1 STARVIS is trademark of Sony Group corporation or its affiliates.

*2 Except when EIS is operated

*3 The Adopted Trademarks HDMI, HDMI High-Definition Multimedia Interface, and the HDMI Logo are trademarks or registered trademarks of HDMI Licensing Administrator, Inc. in the United States and other countries.

*4 VISCA is trademark of Sony Group corporation or its affiliates.

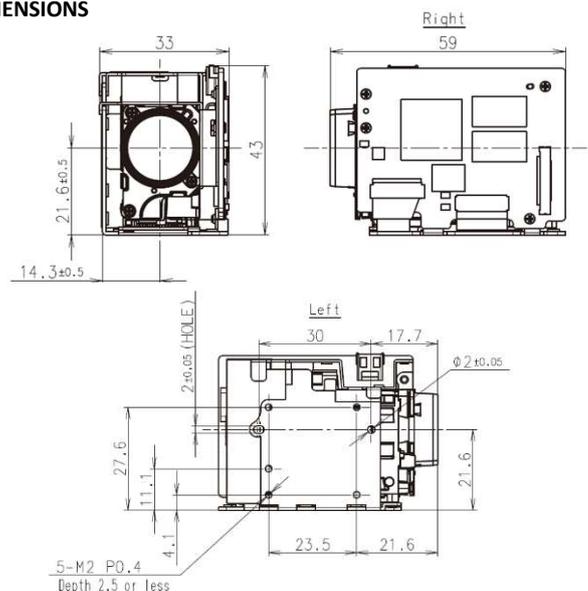
PIN ASSIGNMENT

30pins micro coaxial connector for connection between camera and interface board

Pin No	Name	Level
1	TXOUT3+	
2	TXOUT3-	
3	TXCLKOUT+	
4	TXCLKOUT-	
5	TXOUT2+	
6	TXOUT2-	
7	TXOUT1+	
8	TXOUT1-	
9	TXOUT0+	
10	TXOUT0-	
11	GND	
12	TxD HOST 1	CMOS 3.3V
13	RxD HOST 1	CMOS 3.3V
14	DC IN	8~12V DC
15	DC IN	8~12V DC

Pin No	Name	Level
16	DC IN	8~12V DC
17	DC IN	8~12V DC
18	DC IN	8~12V DC
19	GND	
20	GND	
21	TXOUT7+	Single out mode: open
22	TXOUT7-	Single out mode: open
23	TXOUT6+	Single out mode: open
24	TXOUT6-	Single out mode: open
25	CVBS OUT	
26	RESET	
27	TXOUT5+	Single out mode: open
28	TXOUT5-	Single out mode: open
29	TXOUT4+	Single out mode: open
30	TXOUT4-	Single out mode: open

DIMENSIONS



TAMRON Europe GmbH

Robert Bosch Str. 9, 50769 Cologne, Germany
Tel: +49-221-669544-0
www.tamron.vision