

# MM-308B-M2

1080p 60fps 30x Zoom Module

**HD-SDI EX-SDI TVI 2.0 CVBS**

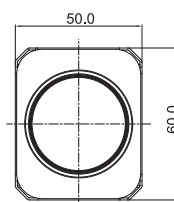


## Features

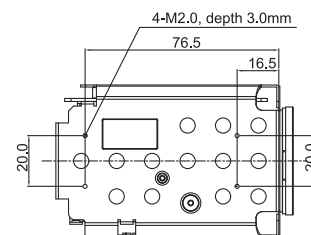
- 1/3" 2MP Panasonic CMOS sensor
- 1080p 60fps/30fps, 720p 60fps/30fps
- 30x Optical Zoom(4.3mm~129mm) & 32x Digital Zoom
- Day & Night(ICR)
- Real-time True WDR
- Digital Noise Reduction(2D+3D)
- Digital Image Stabilization
- Privacy Mask Function
- High Light Compensation
- Intelligent Motion Detection
- Defog Function
- Supports VISCA, Pelco-D/P Protocol
- Video Out : HD-SDI, EX-SDI, TVI 2.0, CVBS

## Dimensions

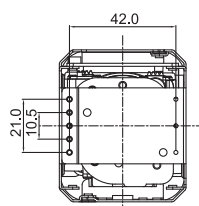
Unit : mm



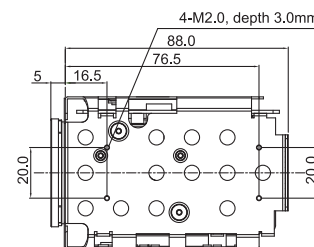
FRONT



LEFT SIDE

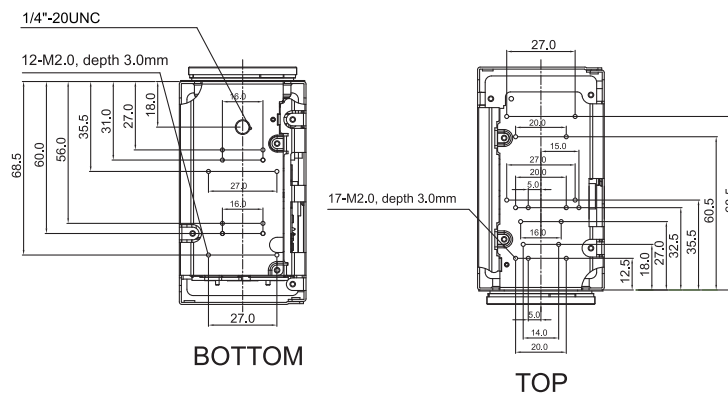
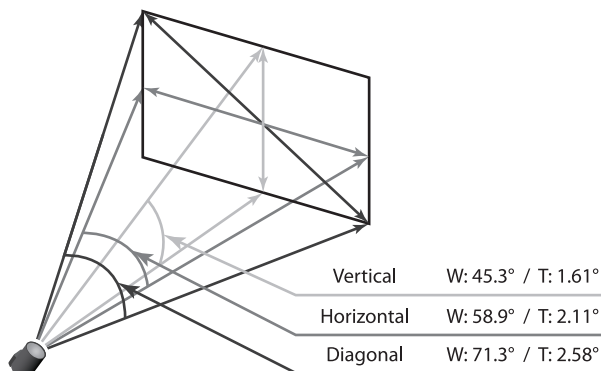


BACK



RIGHT SIDE

## Field of View



BOTTOM

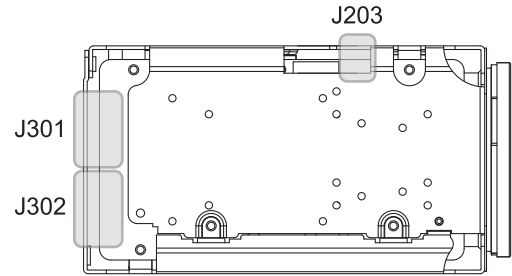
TOP

# Specifications

MM-308B-M2				
Image Sensor	1/3" Panasonic CMOS Sensor			
Total Pixels	1,981 (H) x 1,288 (V) = 2.55M Pixels			
Active Pixels	1,944 (H) x 1,212 (V) = 2.35M Pixels			
Scanning System	Progressive Scan			
Sync. System	Internal			
Resolution	Digital : 1080p/60(50)fps, 1080p/30(25)fps, 720p/60(50)fps, 720p/30(25)fps Analog : 700TVL			
Min. Illumination	Color(1/30s) : 0.5 lux , BW(1/30s) : 0.005 lux Color DSS(1/7.5s) : 0.002 lux , BW DSS(1/7.5s) : 0.0001 lux			
Video Output	HD : HD-SDI, EX-SDI, TVI 2.0 Analog : VBS(except WDR mode)			
S/N Ratio	more than 50dB(AGC off)			
Lens Type	30x Day & Night Zoom Lens			
Zoom Ratio	Optical 30x, Digital 32x Zoom			
Focal Length	f = 4.3 mm ~ 129.0 mm			
Aperture Ratio	F1.6(wide) ~ F4.7(tele)			
Angle Of View(D, H, V)	Wide	72.9°	65.1°	38.4°
	Tele	2.64°	2.34°	1.36°
AF Mode	Auto / One Push / Manual			
Min. Distance	0.1 / 1.0 / 3.0 / 6.0 / 10.0 m			
Lens Refresh	One Push / 1 ~ 10Day			
Digital Zoom	Off / MAX 2x ~ 32x			
Exposure	Auto / Iris.P / Shut.P / Manual			
Gain Control(AGC)	Off / On			
Shutter Speed	1/30(25) ~ 1/30,000 sec			
Iris	0 ~ 20 steps			
Digital Slow Shutter(DSS)	Off / x2 / x4 / x8 / x16 / x32 / x64 ( / x64 : 60 or 50 fps mode only)			
Brightness	0 ~ 20 steps			
WDR/BLC	Off / WDR / BLC			
Day&Night	Auto / Day / Night / Ext-in			
White Balance	Auto / One Push / Manual / Indoor / Outdoor			
HLC	Off / On / Night Only			
DNR	Auto / Off / Low / Middle / High			
Mirror	Off / H / V / H&V			
Sharpness	0 ~ 10 steps			
ACE	Off / Low / Middle / High			
Defog	Off / On(Auto / Manual)			
Privacy Mask	Max. 24 Areas			
Motion Detection	Max. 3 Areas			
Defect Detection	Off / On			
System	NTSC / PAL			
Communication	Baud Rate : 2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200 Protocol : VISCA / Pelco-D / Pelco- P / Update			
Language	English / Simplified Chinese / Traditional Chinese / Japanese			
Power Source	9V to 15V DC			
Power Consumption	500mA			
Power Input	Connector			
Video Output	Connector			
Storage Temperature	-20℃ ~ +60℃ (Humidity : 0%RH ~ 90%RH)			
Operating Temperature	-10℃ ~ +50℃ (Humidity : 0%RH ~ 90%RH)			
Dimensions	50(W) x 60(H) x 93(D)			
Weight	240g			

\* Design and specifications are subject to change without notice.

# Pin Assignment



J301	
1	TVI-OUT
2	GND
3	VBS-OUT
4	GND
5	NC
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	DC+5V OUT
17	GND
18	GND
19	DC+12V IN
20	DC+12V IN
21	DC+12V IN
22	GND
23	GPIO2
24	GPIO1
25	ADKEY(OSD Control)
26	D/N-IN
27	IR-ON
28	MD-OUT
29	RS-485(-)
30	RS-485(+)

J302	
1	RxD
2	TxD
3	GND
4	DC+12V IN
5	GND
6	VBS-OUT
7	GND
8	TVI-OUT
9	GND

Ref 10019HR-09(YEONHO)

J203	
-	HD-SDI

Ref MMCX-R/A

Ref USL00-30L-C(KEL Cop.)