

MM-208

1080p 60fps x20 Zoom Module

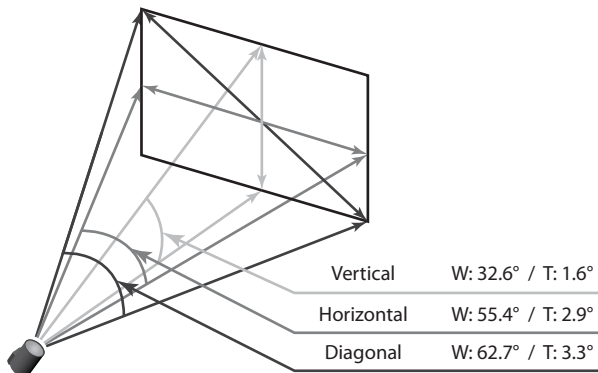
LVDS EX-SDI CVBS



Features

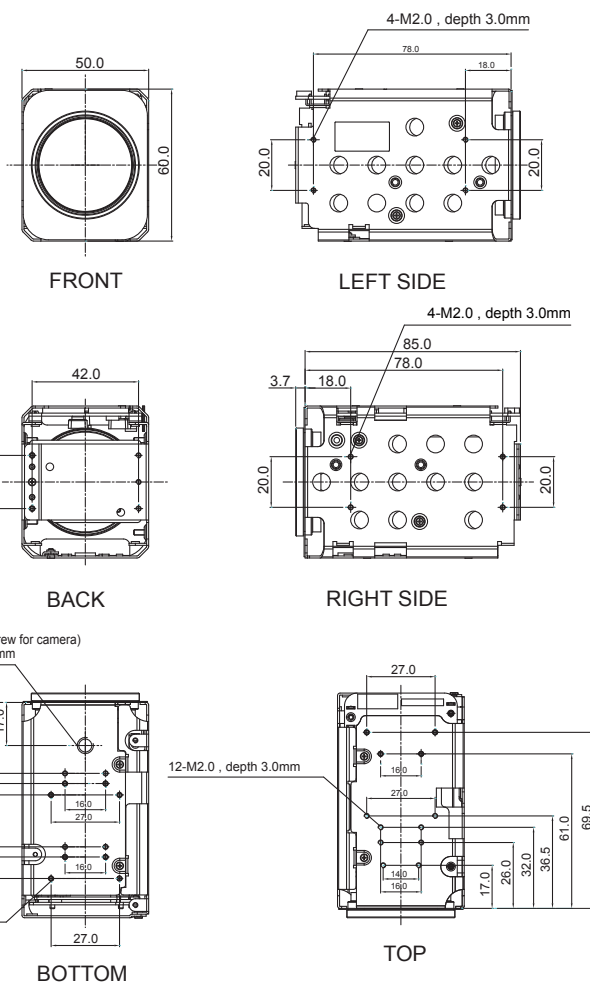
- 1/3" 2MP Panasonic CMOS sensor
- 1080p 60fps/30fps, 720p 60fps
- x20 Optical Zoom(4.7mm~94mm) & x32 Digital Zoom
- Day & Night(ICR)
- Real-time True WDR
- Digital Noise Reduction(2D+3D)
- Digital Image Stabilizer
- Privacy Mask Function
- High Light Compensation
- Intelligent Motion Detection
- Defog Function
- Supports VISCA, Pelco-D/P Protocol
- Video Out : LVDS, EX-SDI, CVBS

Field of View



Dimensions

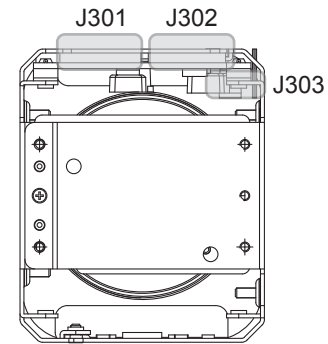
Unit : mm



Specifications

MM-208	
Image Sensor	1/3" Panasonic CMOS Sensor
Total Pixels	1956 (H) x 1266 (V) = 2.48M Pixels
Active Pixels	1944 (H) x 1092 (V) = 2.12M 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) : 0.1lux Color DSS(1/7.5s) : 0.125 lux , BW DSS(1/7.5s) : 0.025 lux
Video Output	HD : Digital(LVDS), EX-SDI Analog SD : VBS(without WDR)
S/N Ratio	more than 50dB(AGC off)
Lens Type	x20 Day & Night Zoom Lens
Zoom Ratio	Optical x20, Digital x32 Zoom
Focal Length	f = 4.7 mm ~ 94.0 mm
Aperture Ratio	F1.6(wide) ~ F3.5(tele)
Angle Of View(D, H, V)	Wide 62.7° 55.4° 32.6° Tele 3.3° 2.9° 1.6°
Focus	Mode / Distance / Zoom Speed / Lens Refresh / E.Zoom
Mode	Auto / One Push / Manual
Distance	0.1 / 1.0 / 3.0 / 6.0 / 10.0 m
Lens Refresh	One Push / 1 ~ 10Day
Digital Zoom	Off / MAX x2 ~ x32
Exposure	Auto / Iris.P / Shut.P / Manual
Gain Control(AGC)	Off / On
Shutter Speed	1/30(25) ~ 1/30,000 sec
Iris	0 ~ 20
Digital Slow Shutter(DSS)	Off / x2 / x4(x8 : 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	Off / 24 positions
Motion Detection	Off / 3 positions
Defect Detection	Off / On
System	NTSC / PAL
HD Format	1080p/30(25)fps / 1080p/60(50)fps / 720p/30(25)fps / 720p/60(50)fps
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 88(D)
Weight	250g

Pin Assignment



J301	
1	TXOUT3+
2	TXOUT3-
3	TXCLKOUT+
4	TXCLKOUT-
5	TXOUT2+
6	TXOUT2-
7	TXOUT1+
8	TXOUT1-
9	TXOUT0+
10	TXOUT0-
11	GND
12	TxD
13	RxD
14	DC IN
15	DC IN
16	DC IN
17	DC IN
18	DC IN
19	GND
20	GND
21	TXOUT7+
22	TXOUT7-
23	TXOUT6+
24	TXOUT6-
25	EXSDI+
26	EXSDI-
27	TXOUT5+
28	TXOUT5-
29	TXOUT4+
30	TXOUT4-

J302	
1	GND
2	TxD
3	RxD
4	NC
5	GND
6	NC
7	GND
8	ADKEY
9	NC
10	D/N-IN
11	NC
12	MD-OUT
13	485-DIR
14	F/W_SEL
15	GND
16	+5V
17	GND
18	VBS-OUT
19	GND
20	DC IN
21	DC IN
22	DC IN
23	DC IN
24	DC IN

Ref 05002HR-24J05(YEONHO)

J303	
1	GND
2	VBS-OUT

Ref 12505WR-02(YEONHO)

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

* Design and specifications are subject to change without notice.