

# MC-108

1080p 60fps 10x Zoom Module



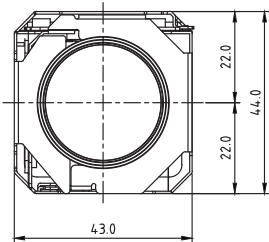
## FEATURES

- 1/3" 2MP 60fps Panasonic CMOS sensor
- 1080p 60fps/30fps, 720p 60fps
- 10x Optical Zoom(5.1~51mm) & 32x Digital Zoom
- Day & Night(ICR)
- Real-time True WDR
- Digital Noise Reduction(2D+3D)
- Privacy Mask Function
- Digital Image Stabilizer
- High Light Compensation
- Intelligent Motion Detection
- Defog Function
- Supports VISCA, Pelco-D/P Protocol
- Video Out : LVDS, EX-SDI, 960H

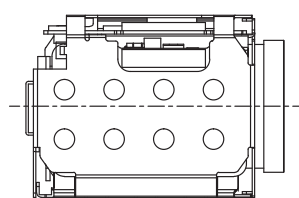
## DIMENSIONS

Unit : mm

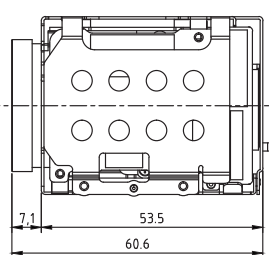
FRONT



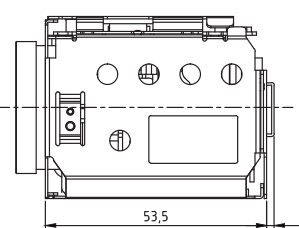
LEFT SIDE



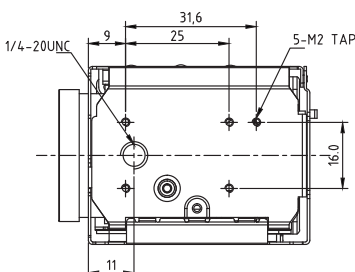
TOP



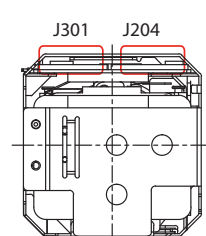
RIGHT SIDE



BOTTOM



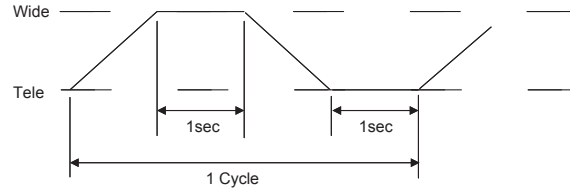
BACK



## Reliability and Environment Condition(10x)

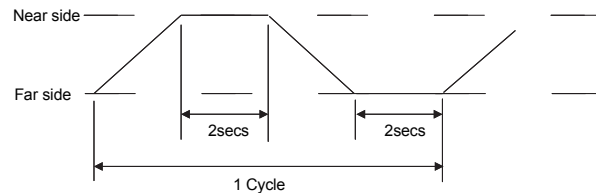
### 1. Zoom

- (1) Zoom operation cycle : 200,000 cycles
- (2) Operation condition : See below
- (3) Test condition : Normal temperature



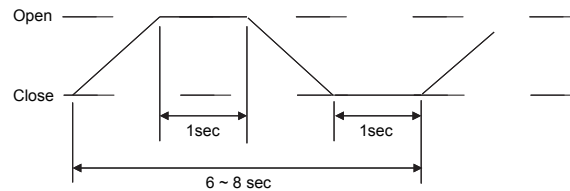
### 2. Focus

- (1) Focus operation cycle : 200,000 cycles
- (2) Operation condition : See below
- (3) Test condition : Normal temperature



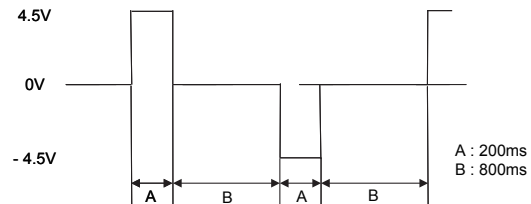
### 3. Auto-iris

- (1) Auto-iris operation cycle: 50,000 cycles
- (2) Operation condition : See below
- (3) Test condition : Normal temperature



### 4. IRCF

- (1) IRCF operation cycle: 50,000 cycles
- (2) Operation condition : See below
- (3) Test condition : Normal temperature



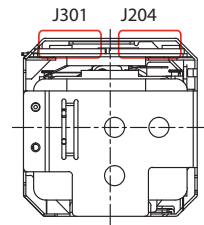
## SPECIFICATIONS

MC-108				
Image Sensor	1/3" Panasonic CMOS Sensor			
Total Pixels	1,956(H) x 1,266(V), 2.48M Pixels			
Active Pixels	1,944(H) x 1,092(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 960H(Over 800 TVL)			
Min. Illumination	Color : 0.5 lux , BW : 0.1lux, Color DSS : 0.002 lux , BW DSS : 0.001 lux			
Video Output	HD : LVDS, EX-SDI Analog SD : VBS(without WDR)			
S/N Ratio	more than 50dB (AGC off)			
Lens Type	10x Day & Night Zoom Lens			
Zoom Ratio	Optical 10x, Digital 32x Zoom			
Focal Length	f = 5.1mm ~ 51mm			
Aperture Ratio	F1.6 (wide) ~ F1.8 (tele)			
Angle Of View(D, H, V)	Wide	68°	54°	31°
	Tele	6.7°	4.9°	4.0°
Focus	Mode / Distance / Zoom Speed / Lens Refresh / E.Zoom			
Mode	Auto / One Push / Manual			
Distance	0.1 / 1.0 / 3.0 / 5.0 / 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 / 2x / 4x (/ 8x : 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 / On (24 points)			
Motion Detection	Off / On (3 points)			
Defect Detection	One Push			
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 : Pelco-P / Pelco-D / VISCA / Update			
Language	English / Simplified Chinese / Traditional Chinese / Japanese			
Power Source	9V to 15V DC			
Power Consumption	250mA			
Power Input	Connector			
Video Output	Connector			
Storage Temperature	-20 °C ~ +60 °C (Humidity : 20%RH ~ 95%RH)			
Operating Temperature	-5 °C ~ +60 °C (Humidity : 20%RH ~ 80%RH)			
Dimensions	43(W) x 44(H) x 61(D)			
Weight	112g			

## 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 CMOS 5 V
13	RxD
14	DC 12V
15	DC 12V
16	DC 12V
17	DC 12V
18	DC 12V
19	GND
20	GND
21	GND
22	GND
23	GND
24	GND
25	NC
26	NC
27	VBS-OUT
28	NC
29	NC
30	NC

USL00-30L-C (KEL Cop.)



J204	
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 12V
21	DC 12V
22	DC 12V
23	DC 12V
24	DC 12V

05002HR-24J05 (YEONHO)

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