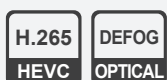


# MM-HS407Q

4MP Network High Resolution 40x Zoom Module

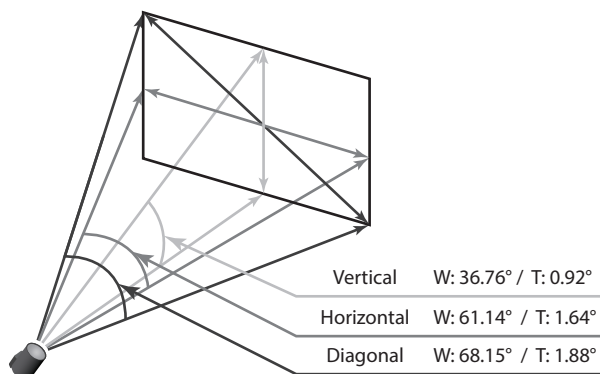
**NETWORK CVBS**



## Features

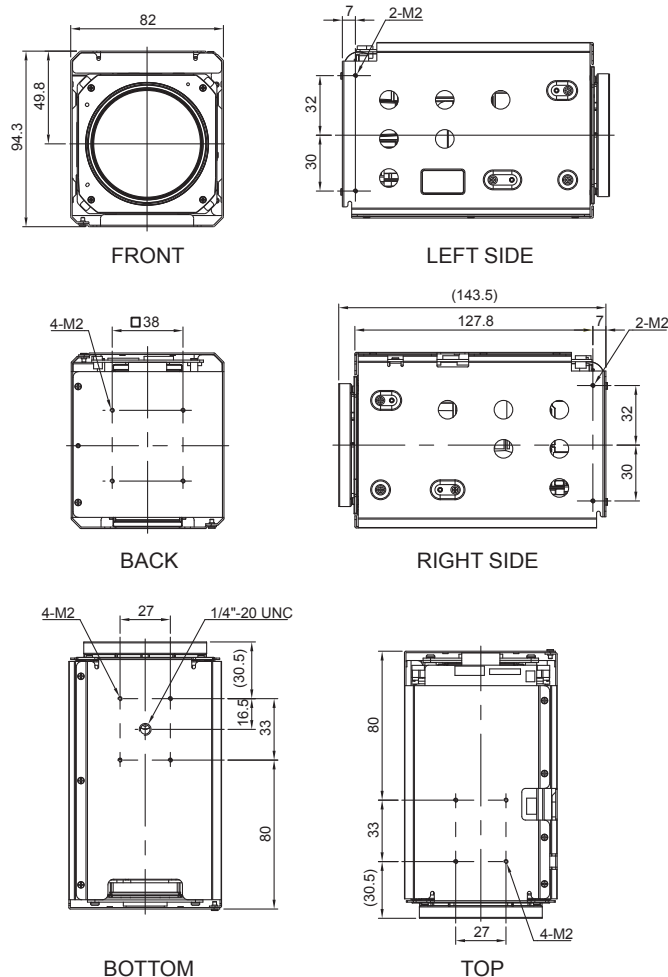
- 1/1.8" 4MP Sony CMOS Sensor
- 1440P 30/25fps, 1080p 30/25fps, 720p 30/25fps
- 40x Optical Zoom(6.5mm ~ 260mm) & 32x Digital Zoom
- F1.5 (wide) ~ F5.3 (tele)
- Day & Night(ICR)
- Wide Dynamic Range
- Digital Noise Reduction(2D+3D)
- Electronic Image Stabilization
- Privacy Mask Function
- High Light Compensation
- Intelligent Motion Detection
- Defog and Optical Defog
- IPv4, IPv6 support
- Quad stream support
- H.265, H.264, MJPEG video compression
- Conformant with ONVIF Profile S
- Edge storage up to Max 512GB
- Bi-directional audio support
- Video Out : NETWORK, CVBS

## Field of View



## Dimensions

Unit : mm



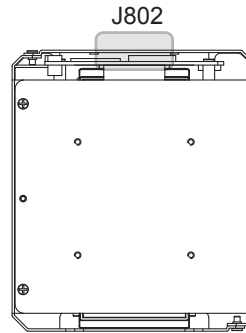
# Specifications

MM-HS407Q	
Image Sensor	1/1.8" Sony CMOS Image Sensor
Total Pixels	2,781(H) x 1,632(V) = 4.53M Pixels
Active Pixels	2,712(H) x 1,536(V) = 4.17M Pixels
Scanning System	Progressive Scan
Sync. System	Internal
Resolution	Digital : 1440p30(25)fps, 1080p30(25)fps, 720p30(25)fps
Min. Illumination	Color(1/30s, 70dB) : 0.01 lux, BW(1/30s, 70dB) : 0.001 lux Color DSS(1/1s, 70dB) : 0.001 lux, BW DSS(1/1s, 70dB) : 0.0001 lux
Video Output	Digital : NETWORK Analog : CVBS(Test Only)
S/N Ratio	more than 50dB (AGC off)
Lens Type	40x Day & Night Zoom Lens
Zoom Ratio	Optical 40x, Digital 32x Zoom
Focal Length	f = 6.5mm ~ 260mm
Aperture Ratio	F1.5 (wide) ~ F5.3 (tele)
Angle Of View(D, H, V)	Wide                      68.15°                      61.14°                      36.76° Tele                        1.88°                        1.64°                        0.92°
AF Mode	Auto / One Push / Manual / Auto-ext
Min. 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)	0 ~ 10 steps
Shutter Speed	1/1 ~ 1/40,000 sec
Iris	F20 ~ F1.5
Digital Slow Shutter(DSS)	Off / 2x / 4x / 8x / 16x / 32x
Brightness	0 ~ 14 steps
Back light	Off / HLC / BLC / WDR
Optical filter	D&N Day / D&N Night / D&N Auto / D&N Ext-in / Optical defog
White Balance	Auto / One Push / Manual / Indoor / Outdoor / Auto-Ext
DNR	2D/3D, 2D+3D
Mirror	Off / H / V / H&V
Sharpness	0 ~ 15 steps
ACE	Off / Low / Middle / High
Defog	Off / On(Auto / Manual)
Privacy Mask	Off / On (24 points)
Motion Detection	Off / On (4 points)
Electronic Image Stabilization(EIS)	Off / On
System	NTSC / PAL
Communication	Baud Rate : 2400 / 4800 / 9600 / 19200 / 38400 / 57600 / 115200 Protocol : WONWOO
Ethernet	RJ-45 (10/100BASE-T)
Video Compression	H.265, H.264, MJPEG
Resolution	2560x1440, 1920x1080, 1280x720, 720x400, 640x360
Bit rate	384Kbps ~ 16Mbps (CBR, VBR, CVBR Support)
Max. frame rate	30fps@2560x1440
Streaming Capability	Quad stream
Audio In / Out	Line In / Line Out
Audio Compression	G.711
Audio Communication	Bi-directional audio
Protocol	ONVIF Profile S IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP
Storage	SDXC (up to Max 512GB, MicroSD)
Security	SHA-256, MD5 Password / iptables (firewall) / SSL
Webpage Language	Korean, English
Web Viewer	Microsoft Edge, Mozilla Firefox, Google Chrome, Apple Safari

Power Source	9V to 15V DC
Power Consumption	Max 560mA (12V DC)
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	82(W) x 94.3(H) x 143.5(D)
Weight	890g

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

## Pin Assignment



J802	
1	DC IN
2	DC IN
3	DC IN
4	GND
5	GND
6	CVBS
7	GND
8	LINE_OUT
9	GND
10	LING_IN
11	GND
12	LED_EXT
13	CDS_IN
14	ALARM_OUT
15	ALARM_IN
16	TF_DAT2
17	TF_DAT3
18	TF_CMD
19	TF_CLK
20	TF_DAT0
21	TF_DAT1
22	UART0_TXD
23	UART0_RXD
24	RS485_DIR
25	TF_DET
26	UART7_TXD
27	UART7_RXD
28	GND
29	NC
30	NC
31	GND
32	AD_KEY
33	RESET
34	LINK#
35	ACT#
36	GND
37	TPRX-
38	TPRX+
39	TPTX-
40	TPTX+