



Key Features



## QND-C8023R

5MP AI IR Dome Camera



- Max. 5MP resolution
- Color: 0.05Lux(F1.6, 1/30sec), BW: 0.005Lux(F1.6, 1/30sec, 30IRE)
- Maximum 30fps@5MP (H.265/H.264)
- IR viewable length 30m (98.42ft)
- Day & Night (ICR), WDR (120dB), WiseNR II (Using AI engine)
- H.265, H.264, MJPEG, WiseStreamIII (Using AI engine)
- Dynamic Privacy Masking (Person/Vehicle)
- Analytics events based on AI engine (NPU) :
- Object detection (Person/Vehicle car, truck, bus, bicycle, motorcycle),
- Color Attribute, BestShot
- Motion detection, Virtual line(Crossing/Direction),
- Virtual area(Loitering/Intrusion/Enter/Exit)
- Hard-coated dome bubble
- PoE: Max 8.1W









## **Specifications**

Video	
Imaging Device	1/2.8" CMOS
Resolution	2592x1944, 2560x1440, 1920x1080, 1280x960, 1280x720, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) (WDR on/off) MJPEG: Max. 30fps(@5MP Max. 5fps)
Min. Illumination	Color: 0.05Lux(F1.6, 1/30sec, 30IRE) BW: 0.005Lux(F1.6, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Out	USB: Micro USB Type B, 1280x720 for installation
Lens	
Focal Length (Zoom Ratio)	4.0mm fixed focal
Max. Aperture Ratio	F1.6
Angular Field of View	H: 80°/ V: 59°/ D: 102°
Min. Object Distance	0.5m (1.64ft)
Focus Control	Fixed
Lens Type	Fixed IRIS
Mount Type	M12
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	0°~355° / 0°~75° / 0°~355°
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	WiseNR II (Based on Al engine) SSNR V
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, 4point quadrangle zones - Color: Gray/Green/Red/Blue/Black/White Dynamic Privacy Mask - Mosaic
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/25,000sec) Prefer shutter control(Based on Al engine)
Video Rotation	Flip, Mirror, Hallway view(90°/270°)

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Analytics	Classified object type: Person/Vehicle(Type:car/bus/truck/motorcycle/bicycle) Attributes: Person(Upper/lower clothes color), Vehicle(Type:car/bus/truck/motorcycle/bicycle and color) Support BestShot Analytics events based on AI engine - Motion detection*, Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit) Analytics events - Defocus detection, Tampering, Virtual area(Appear/Disappear) * Some of the video analytics only works with people and vehicle detection
Business Intelligence	Based on Al engine: People counting, Vehicle counting, Queue management, Heatmap
Alarm I/O	Input 1ea / Output 1ea * Alarm I/O is supported through an optional cable(SPP-C7200)
Alarm Triggers	Analytics, Network disconnect, Alarm input, MQTT subscription
Alarm Events	When alarm trigger occurred - File upload(image) : e-mail/FTP/SFTP - Notification : e-mail - Recording : SD/SDHC/SDXC or NAS recording at event triggers - Alarm output - Handover(PTZ preset, Send message by HTTP/HTTPS/TCP) - MQTT: publication
Audio In	Built-in MIC
Light Type	IR LED (850nm)
Light Viewable Length	30m(98.42ft)
Network	
Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/High, MJPEG
Smart Codec	Manual(5ea area), WiseStreamIII(Based on Al engine)
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 5 profiles)
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP/SFTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API) Hanwha Vision Open Platform
Security	
OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware
User authentication	Digest authentication, Prevent brute-force attack
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	HTTPS, WSS(WebSocket Secure)
Access Control	IP-based access control
Data Protect	Encryption credentials, Encrypt compress for live recording file
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	SDcard partition encrypt
General	
Webpage Language	English, Korean, Simplified Chinese, Traditional Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 1slot 256GB
Memory	2GB RAM, 1GB Flash



Environmental & Electrical	
Operating Temperature / Humidity	-10°C~+45°C(+14°F~+113°F) / 0~95% RH(Non-Condensing)
Storage Temperature / Humidity	-30°C~+60°C(-22°F~+140°F) / 0~95% RH
Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max 8.1W, typical 4.0W
Mechanical	
Color / Material	White / Plastic Bubble : Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø110x90mm(ø4.33x3.54"), 317.0g(0.70 lb
Compatible Conduit hole / Gangbox	SBD-110GP1 : Single, Double, 4" Octagon (Sold seperately)
Certifications & Standards	
EMC	FCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCA - EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3 VCCI CISPR 32 Class A RCM AS/NZS CISPR 32 Class A KS C 9832 Class A , KS C 9835
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 62471
Environment	IEC/EN 63000
Compatible Models	
Hanging Adaptor	SBP-120HMW
Back Box	SBV-140BW, SBV-140WW
Ceiling Mount (Assy)	SBP-150CMI, SBP-300CMI, SBP-300CMW1, SBP-900CMW, SBP-300CMTW, SBP-300CMTS
Ceiling Mount (Single Unit)	SBP-140CMB, SBP-140CMT, SBP-180CMB, SBP-180CMS, SBP-150CMP, SBP-300CMP, SBP-900CMP, SBP-C15P, SBP-C15H
Wall Mount	SBP-125WMW1, SBP-250WMW, SBP-300WMW, SBP-300WMW1, SBP-400WMW
Wall Mount Adaptor	SBP-115PFA, SBP-300BW1
Pole Mount	SBD-140PMB, SBD-140PMW, SBP-300PMW2
In-ceiling Mount	SHD-1101FW, SHD-1100FPW
Corner Mount	SBD-140KMB, SBP-156KMW, SBP-300KMW1
Parapet Mount	
	SBP-156LMW1, SBP-300LMW
Tilt Mount	SBP-156LMW1, SBP-300LMW SBV-140TMW
Tilt Mount Cabinet	
	SBV-140TMW
Cabinet	SBV-140TMW SBP-150NBW, SBP-300NBW
Cabinet Gang Plate	SBV-140TMW SBP-150NBW, SBP-300NBW SBD-110GP1
Cabinet Gang Plate Other Compatible Models	SBV-140TMW SBP-150NBW, SBP-300NBW SBD-110GP1
Cabinet Gang Plate Other Compatible Models DORI (EN62676-4 standard)	SBV-140TMW   SBP-150NBW, SBP-300NBW   SBD-110GP1   SPP-C7200
Cabinet Gang Plate Other Compatible Models DORI (EN62676-4 standard) Detect (25PPM/ 8PPF)	SBV-140TMW   SBP-150NBW, SBP-300NBW   SBD-110GP1   SPP-C7200   61.8m(202.7ft)



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5MP AI IR Dome Camera







CAD

Unit:mm [inch]

