



Network

Dome

# QND-C8023R

5MP AI IR Dome Camera



## Key Features

- 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

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## 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°
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### Operational

Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SDDR
Wide Dynamic Range	120dB
Digital Noise Reduction	WiseNR II (Based on AI 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 AI engine)
Video Rotation	Flip, Mirror, Hallway view(90°/270°)

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](http://HanwhaVision.com).

Hanwha Vision is formerly known as Hanwha Techwin.

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 AI 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)
<b>Network</b>	
Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/High, MJPEG
Smart Codec	Manual(5ea area), WiseStreamIII(Based on AI 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
<b>Security</b>	
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
<b>General</b>	
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

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**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

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**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)

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**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

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**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	SBV-140TMW
Cabinet	SBP-150NBW, SBP-300NBW
Gang Plate	SBD-110GP1
Other Compatible Models	SPP-C7200

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**DORI (EN62676-4 standard)**

Detect (25PPM/ 8PPF)	61.8m(202.7ft)
Observe (63PPM/ 19PPF)	24.7m(81.1ft)
Recognize (125PPM/ 38PPF)	12.4m(40.5ft)
Identify (250PPM/ 76PPF)	6.2m(20.3ft)

# QND-C8023R

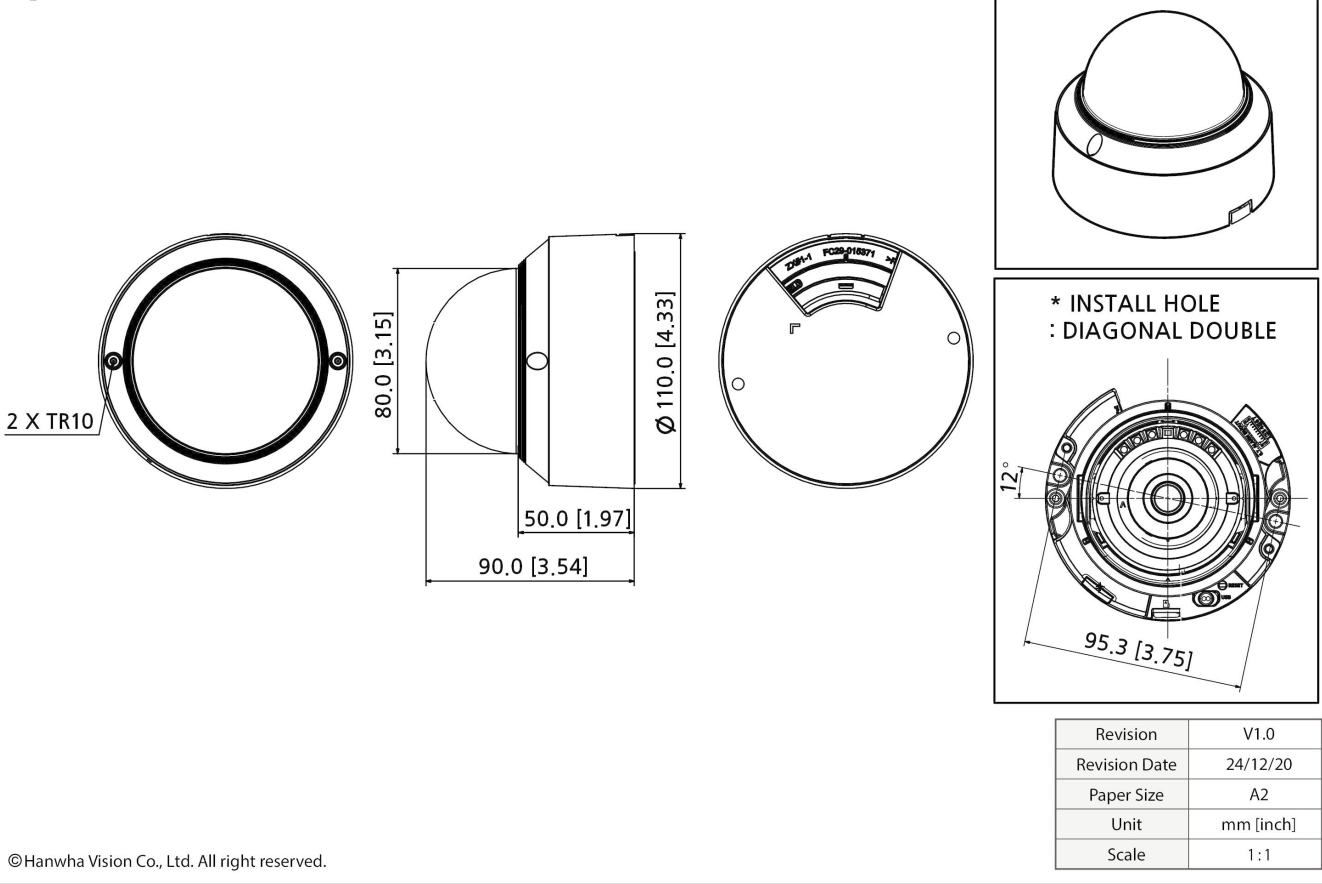
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CAD

Unit:mm [inch]

## QND-C8013R/C8023R INDOOR DOME CAMERA



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