

Network | Dome

QNV-C9083R

4K AI IR Vandal Dome with Varifocal lens

Key Features

- CloudConnector Compatible – Connects easily with HealthPro, OnCloud, SightMind
- 4K resolution
- 3.2 ~ 10.2mm (H: 104°~31° / V: 55°~17°) motorized varifocal lens
- 30fps@all resolutions (H.265/H.264)
- Triple codec H.265/H.264/MJPEG with Wisestream III (Based on AI engine), WiseNRII(Based on AI engine), WDR 120dB
- Day & Night (ICR), WDR (120dB)
- Defocus detection, Appear/Disappear, Tampering, Motion Detection based on AI engine, AI Object Detection - Classified object type: Person/Vehicle (vehicle type: car/bus/truck/motorcycle/bicycle); IVA events based on AI engine: Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit)
- People Counting, Heatmap, Queue Management, & Vehicle Counting
- micro SD (256GB) memory slot, PoE / 12V DC
- IR viewable length 30m (98ft)
- IP66, IK10
- Hallway view support
- LDC support (Lens Distortion Correction)
- USB for easy installation, open platform
- Conduit access with optional SBO-147BA adapter accessory
- Audio I/O & Alarm I/O is supported through an optional cable (SPP-C7400)
- Operating temperature -30°C~+55°C (-22°F ~ +131°F), white color

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
Hanwha Vision is formerly known as Hanwha Techwin.

© Hanwha Vision CO., LTD. All rights reserved.

QNV-C9083R

4K AI IR Vandal Dome with Varifocal lens



Specifications

Video

Imaging Device	Size	1/2.8"
	Type	CMOS
Resolution		3840x2160, 3328x1872, 3072x1728, 2688x1520, 2592x1944, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@8MP Max. 5fps)
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.06
	BW(1/30sec, 30IRE)	0.006
Video Out		USB: Micro USB Type B. Preview and installation ONLY. Requires WiFi dongle.

Lens

Focal Length (mm)		3.2~10.2
Zoom Ratio	Optical	3.2x
Max Aperture Ratio (F number)	Wide	1.6
	Tele	3.1
Angular Field of View	Horizontal	104°~31°
	Vertical	55°~17°
	Diagonal	124°~35°
Min. Object Distance		1.2m(3.93ft)
Focus Control		Simple focus
Lens Type		DC auto iris(IR corrected)

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	0°~350°
	Tilt	-35°~70°
	Rotate	0°~355°

Operational

Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SSDR

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
Hanwha Vision is formerly known as Hanwha Techwin.

© Hanwha Vision CO., LTD. All rights reserved.

Operational

Wide Dynamic Range (dB)		120
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	32ea
	Shape	4point Quadrangle zones
	Color / Option	Gray, Green, Red, Blue, Black, White
	Dynamic Privacy Masking: Color / Option	Mosaic
Gain Control		Low, Middle, High
White Balance		ATW, AWC, Manual, Indoor, Outdoor
LDC		Support
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)
	Speed Range	1/5~1/25,000sec
Video Rotation		Flip, Mirror, Hallway view(90°/270°)
Alarm Interface	In/Out	Input 1ea, Output 1ea
	Others	Support alarm I/O through an optional cable
Alarm Triggers		Analytics, Network disconnect, Alarm input, MQTT subscription
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP, Notification: e-mail, Recording: SD/SDHC/SDXC or NAS recording at event triggers,Alarm output, Handover: PTZ preset,send message by HTTP/HTTPS/TCP,Audio clip playback, MQTT: publication
Audio In		Selectable(mic in/line in), Support audio cable as optional
Audio Out		Line out, Support audio cable as optional
Light Type		IR LED
Light Viewable Length	IR	30m(98.42ft)
IR Wavelength		850nm

Analytics

Classified Object Type		Person, Vehicle
Attributes	Person	Upper/Lower clothes color
	Vehicle	Type(car, bus, truck, motorcycle, bicycle), Color
Thumbnail		BestShot
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Motion detection
	Normal	Defocus detection, Tampering, Virtual area(Appear/Disappear)
Business Intelligence	Based on AI Engine	People counting, Queue management, Heatmap, Vehicle counting

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
Hanwha Vision is formerly known as Hanwha Techwin.

© Hanwha Vision CO., LTD. All rights reserved.

Network

Ethernet		RJ-45(10/100BASE-T)
Video Compression		H.265: Main, H.264: Main/High,MJPEG
Audio Compression		G.711 u-law /G.726 selectable,G.726(ADPCM) 8kHz,G.711 8kHz, G.726: 16kbps,24kbps,32kbps,40kbps, AAC-LC: 48kbps at 16kHz
Smart Codec		Manual, WiseStreamIII
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	Up to 20 users
	Multicast	Support
	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, IGMPv2, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT
Application Programming Interface	ONVIF	S, G, T, M
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection		Support

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), SRTP
Access Control	IP-based access control
Data Protect	Encryption credentials, Encrypt compress for live recording file export
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	SDcard partition encrypt(AES-256)

General

Memory	RAM	2GB
	Flash	1GB
Edge Storage	Micro SD/SDHC/SDXC	Max. 256GB x 1slot
Edge Storage(OnCloud)	Micro SD/SDHC/SDXC	Max. 1TB x 1slot *Hanwha Vision branded microSD cards have been certified and recommended for OnCloud edge recording.

Environmental & Electrical

Operating Condition	Temperature	-30°C~+55°C(-22°F~+131°F)
	Humidity	0~100% RH(condensing)
	Others	Start up should be done at above -30°C, Humidity control with AIR vent

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
Hanwha Vision is formerly known as Hanwha Techwin.

© Hanwha Vision CO., LTD. All rights reserved.

Environmental & Electrical

Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~95% RH(non-condensing)
Input Voltage		PoE(IEEE802.3af, Class3)
Power Consumption	PoE	Max 12.95W, typical 5.3W

Mechanical

Color	White
Material	Aluminum, Hard-coated dome
RAL Code	RAL9003
Product Dimensions	ø140x110.2mm(ø5.51x4.34")
Product Weight	875g(1.93lb)
Compatible Gang Box	Single, Double, 4" Octagon

Certifications & Standards

EMC	FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 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
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471
Environment	IEC/EN 63000, IEC 60529 IP66, IEC 62262 IK10, NEMA 250 type 4X

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	60.0m(196.86ft)
	Tele	276.9m(908.57ft)
Observe (63PPM/ 19PPF)	Wide	24.2m(78.74ft)
	Tele	111.7m(363.43ft)
Recognize (125PPM/ 38PPF)	Wide	12.0m(39.37ft)
	Tele	55.4m(181.71ft)
Identify (250PPM/ 76PPF)	Wide	6.0m(19.69ft)
	Tele	27.7m(90.86ft)

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
Hanwha Vision is formerly known as Hanwha Techwin.

© Hanwha Vision CO., LTD. All rights reserved.

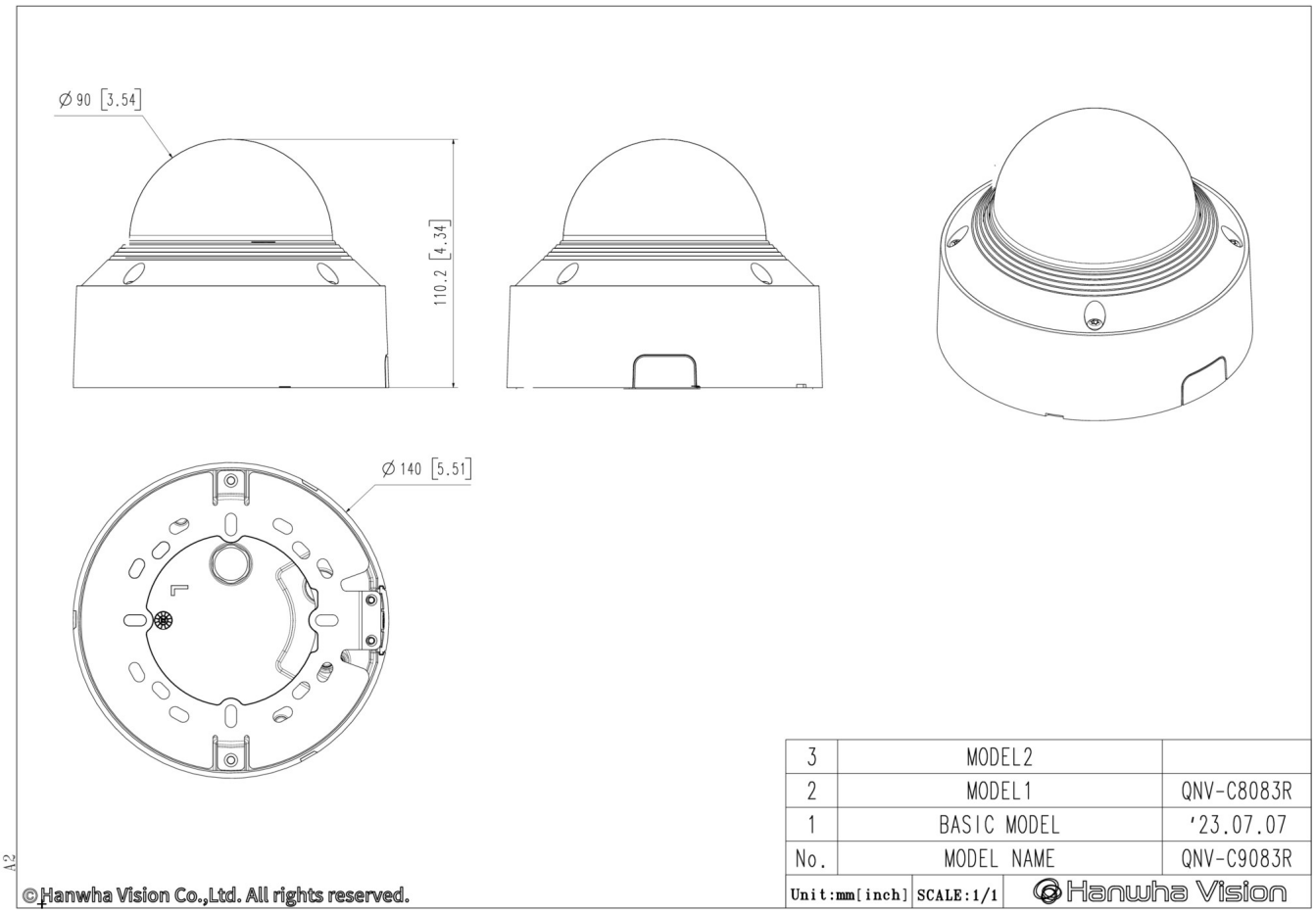
QNV-C9083R

4K AI IR Vandal Dome with Varifocal lens



CAD

Unit: mm [inch]



Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
Hanwha Vision is formerly known as Hanwha Techwin.

© Hanwha Vision CO., LTD. All rights reserved.