





# **QNV-C9011R**

8MP IR Vandal Dome Camera











**Key Features** 

- Max. 8MP resolution
- Max. 30fps
- Color: 0.03Lux(F1.6, 1/30sec), BW: 0.003Lux(F1.6, 1/30sec, 30IRE)
- Focal length: 3.0mm fixed focal
- H.265, H.264, MJPEG codec supported
- Multiple streaming up to 5 profiles
- Day & Night (ICR), WDR (120dB)
- Micro SD/SDHC/SDXC 1 slot 256GB
- IP66, IK10, NEMA4X



## **QNV-C9011R**

#### 8MP IR Vandal Dome Camera







### **Specifications**

Video	
Imaging Device	1/2.8" CMOS
Resolution	3840x2160, 3328x1872, 3072x1728, 2592x1944, 2688x1520, 1920x1080, 1600x1200, 1280x1024,1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps(@8MP Max. 5fps)
Min. Illumination	Color: 0.03Lux (F1.6, 1/30sec) BW: 0.003Lux (F1.6, 1/30sec, 30IRE), OLux(IR LED on)
Video Out	USB: Micro USB Type B, 1280x720 for installation
Lens	
Focal Length (Zoom Ratio)	3.0mm fixed focal
Max. Aperture Ratio	F1.6
Angular Field of View	H: 108°/V: 59°/ D: 127°
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°~350° / -35°~70° / 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	SSNR V , WiseNR II (Based on AI engine)
Motion Detection	8ea, 8point Polygonal zones
Privacy Masking	32ea, 4point quadrangle zones
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)
Video Rotation	Flip, Mirror, Hallway view(90°/270°)



Analytics	Classified object type: Person/Vehicle Attributes: Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on Al 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	None → ( will be supported as R/C in July) Based on Al engine: People counting, Vehicle counting, Queue management, Heatmap
Alarm Triggers	Analytics, Network disconnect
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 - Handover(PTZ preset, Send message by HTTP/HTTPS/TCP)
IR Viewable Length	20m(65.62ft)
IR Wavelength	long-life 850 nm IR LED
Network	
Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/High, MJPEG
Smart Codec	Manual(5ea area), WiseStream II → ( will be supported as R/C in July) 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, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP (TCP, UDP Unicast)
	ONVIF Profile S/G/T/M
Application Programming Interface	SUNAPI(HTTP API)
Application Programming Interface  Security	SUNAPI(HTTP API)
	SUNAPI(HTTP API)  Secure boot, Signed firmware, Firmware encryption
Security	
Security OS / Firmware Protect	Secure boot, Signed firmware, Firmware encryption
Security OS / Firmware Protect User authentication	Secure boot, Signed firmware, Firmware encryption  Digest Authentication, Prevent brute-force attack
Security OS / Firmware Protect User authentication Network authentication	Secure boot, Signed firmware, Firmware encryption  Digest Authentication, Prevent brute-force attack  802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
Security OS / Firmware Protect User authentication Network authentication Secure Communication	Secure boot, Signed firmware, Firmware encryption  Digest Authentication, Prevent brute-force attack  802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)  HTTPS, SRTP, WSS(Websocket secure)
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Security OS / Firmware Protect User authentication Network authentication Secure Communication Access Control Data Protect Audit Device ID	Secure boot, Signed firmware, Firmware encryption  Digest Authentication, Prevent brute-force attack  802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)  HTTPS, SRTP, WSS(Websocket secure)  Access control based on IP address  Authentication information encryption, ZIP compression encryption  User Access/System/Event log management  Device Certificate(Hanwha Private Root CA)
Security OS / Firmware Protect User authentication Network authentication Secure Communication Access Control Data Protect Audit Device ID Secure Storage Security Certificate	Secure boot, Signed firmware, Firmware encryption  Digest Authentication, Prevent brute-force attack  802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)  HTTPS, SRTP, WSS(Websocket secure)  Access control based on IP address  Authentication information encryption, ZIP compression encryption  User Access/System/Event log management  Device Certificate(Hanwha Private Root CA)  SDcard partition encrypt
Security OS / Firmware Protect User authentication Network authentication Secure Communication Access Control Data Protect Audit Device ID Secure Storage	Secure boot, Signed firmware, Firmware encryption  Digest Authentication, Prevent brute-force attack  802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)  HTTPS, SRTP, WSS(Websocket secure)  Access control based on IP address  Authentication information encryption, ZIP compression encryption  User Access/System/Event log management  Device Certificate(Hanwha Private Root CA)  SDcard partition encrypt
Security OS / Firmware Protect User authentication Network authentication Secure Communication Access Control Data Protect Audit Device ID Secure Storage Security Certificate  General	Secure boot, Signed firmware, Firmware encryption  Digest Authentication, Prevent brute-force attack  802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)  HTTPS, SRTP, WSS(Websocket secure)  Access control based on IP address  Authentication information encryption, ZIP compression encryption  User Access/System/Event log management  Device Certificate(Hanwha Private Root CA)  SDcard partition encrypt  Secure by default  English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech,

#### Environmental & Electrical

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.





Operating Temperature / Humidity	-40°C~+55°C(-40°F ~ +131°F) / 0~95% RH  * Start up should be done at above -30°C Humidity control /w Air vapor control
Storage Temperature / Humidity	-50°C~+60°C(-58°F ~ +140°F) / 0~95% RH
Certification	IP66, IK10, NEMA4X
Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max 8.5W, typical 4.9W
Mechanical	
Color / Material	White / Aluminum Bubble : Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø110x77mm(ø4.33x3.03"), 522g(1.15 lb)
Compatible Conduit hole / Gangbox	SBD-110GP1: Single, Double, 4" Octagon (Sold seperately)
	SBP-120HMW
Hanging Mount (Dome)	
Hanging Mount (Dome)  Backbox	SBV-140BW
Backbox	SBV-140BW
	SBV-140BW
Backbox	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
Backbox  Certifications & Standards	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
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 UL 62368-1, CAN/CSA C22.2 NO. 62368-1
Backbox  Certifications & Standards  EMC  Safety  Environment	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  UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 63000
Backbox  Certifications & Standards  EMC  Safety  Environment  DORI (EN62676-4 standard)	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 UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 62471 IEC/EN 63000 IEC/EN 60529 IP66, IEC/EN 62262 IK10
Backbox  Certifications & Standards  EMC  Safety  Environment  DORI (EN62676-4 standard)  Detect (25PPM/ 8PPF)	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  UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 62471  IEC/EN 63000 IEC/EN 60529 IP66, IEC/EN 62262 IK10
EMC  Safety  Environment  DORI (EN62676-4 standard) Detect (25PPM/ 8PPF) Observe (63PPM/ 19PPF)	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 UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 62471 IEC/EN 63000 IEC/EN 60529 IP66, IEC/EN 62262 IK10  55.8m(183.07ft) 22.5m(73.23ft)
Backbox  Certifications & Standards  EMC  Safety  Environment  DORI (EN62676-4 standard)  Detect (25PPM/ 8PPF)	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  UL 62368-1, CAN/CSA C22.2 NO. 62368-1 IEC/EN 62471  IEC/EN 63000 IEC/EN 60529 IP66, IEC/EN 62262 IK10