Hanwha Vision

Network   Dome

QNV-C8012

5MP AI Micro Vandal Dome Camera

Key Features

- Max. 5MP resolution
- 2.4 mm fixed lens
- Color: 0.05Lux(F2.0, 1/30sec),
BW: 0.005Lux(F2.0, 1/30sec, 30IRE)
- Maximum 30fps@5MP (H.265/H.264)
- Day & Night (ICR), WDR (120dB), WiseNR II (Using AI engine)
- Hard-coated dome bubble
- H.265, H.264, MJPEG, WiseStreamIII (Using AI engine)
- Analytics events based on AI engine (NPU) : Object detection
(Person/Vehicle - car, truck, bus, bicycle, motorcycle),
Motion detection, Virtual line(Crossing/Direction),
Virtual area(Loitering/Intrusion/Enter/Exit)
- IP66, IK10, NEMA4X
- PoE: Max 7W
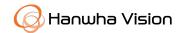
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Specifications

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(F2.0, 1/30sec, 30IRE) BW: 0.005Lux(F2.0, 1/30sec, 30IRE)
Video Out	USB: Micro USB Type B, 1280x720 for installation

Lens

Focal Length (Zoom Ratio)	2.4mm fixed focal
Max. Aperture Ratio	F2.0
Angular Field of View	H: 123°/ V: 91°/ D: 159°
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	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
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(Type:car/bus/truck/motorcycle/bicycle) Attributes: Person, Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot 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 Triggers	Analytics, Network disconnect, 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 - Handover(PTZ preset, Send message by HTTP/HTTPS/TCP) - MQTT: publication

Network

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, 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, 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	-40°C~+55°C(-40°F~+131°F) / 0~100% 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

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.

Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max 7W, 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)

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 IEC/EN 60529 IP66, IEC/EN 62262 IK10

Compatible Models

Hanging Adaptor	SBP-120HMW
Back Box	SBV-140BW
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-1100FW, SHD-1200FPW
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

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	28.1m(92.35ft)
Observe (63PPM/ 19PPF)	11.3m(36.94ft)
Recognize (125PPM/ 38PPF)	5.6m(18.47ft)
Identify (250PPM/ 76PPF)	2.8m(9.23ft)

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QNV-C8012

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CAD

Unit:mm [inch]

Ø 110 [4.33]

95.3 [3.75]

77 [3.03]

43.2 [1.7]

68.05 [2.68]

A2

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2		
1	QNV-C9011R/C8011R/C8012	'23.04.17
No.	MODEL NAME	DATE
Unit:mm[inch]	SCALE:1/1	Hanwha Vision