Hanwha Vision

Network

PNM-C34404RQPZ

4K 4Ch PTRZ + 2MP 40x PTZ AI Camera

EAC | c(UL)us LISTED | NDAA | CE | FC

Key Features

- 360° Analytics events based on AI engine: Classified object (Person/Face/Vehicle/License plate)
- 360° Attributes search (Vehicle type: Car/Bus/Truck/Motorcycle/Bicycle)
- AI based loitering detection and line crossing detection
- AI based WiseNR II , Auto prefer shutter control, WiseStream III
- AI based smart zoom and advanced hand over
- PTRZ remote adjustment
- New design
- Expansion of alarm/audio features
- Next level cybersecurity (TPM 2.0 with FIPS 140-2 level2)
- Reinforced durability (IP66, IK10, NEMA4X)

Compatible Devices

SPM-4210

PNM-C34404RQPZ

4K 4Ch PTRZ + 2MP 40x PTZ AI Camera

Specifications

Video		4CH camera	4CH camera	4CH camera	4CH camera	PTZ
Imaging Device	Size	1/2.8"				
	Type	CMOS				
Resolution		3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	15fps/15fps(60Hz/50Hz)	15fps/15fps(60Hz/50Hz)	15fps/15fps(60Hz/50Hz)	15fps/15fps(60Hz/50Hz)	60fps/50fps(60Hz/50Hz)
	MJPEG	15fps(@8MP Max. 5fps)	15fps(@8MP Max. 5fps)	15fps(@8MP Max. 5fps)	15fps(@8MP Max. 5fps)	30fps
	Others	Max. 20fps when AI off(MJPEG@8MP Max. 5fps)	Max. 20fps when AI off(MJPEG@8MP Max. 5fps)	Max. 20fps when AI off(MJPEG@8MP Max. 5fps)	Max. 20fps when AI off(MJPEG@8MP Max. 5fps)	
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.1	0.1	0.1	0.1	0.05
	BW(1/30sec, 30IRE)	0.01	0.01	0.01	0.01	0.005

Lens

Focal Length (mm)		3.3~5.7	3.3~5.7	3.3~5.7	3.3~5.7mm	4.25~170
Zoom Ratio	Optical	1.7x		1.7x		40x
	Digital					32x
Max Aperture Ratio (F number)	Wide	1.5	1.5	1.5	1.5	1.6
	Tele	1.9	1.9	1.9	1.9	4.95
Angular Field of View	Horizontal	109°~56°	109°~56°	109°~56°	109°~56°	65.66°~1.88°
	Vertical	55°~31°	55°~31°	55°~31°	55°~31°	39.40°~1.09°
	Diagonal	136°~65°	136°~65°	136°~65°	136°~65°	
Min. Object Distance		1.3m(4.27ft)	1.3m(4.27ft)	1.3m(4.27ft)	1.3m(4.27ft)	5m(16.4ft)
Focus Control		Simple focus	Simple focus	Simple focus	Simple focus	Oneshot AF, Focus save
Lens Type		Fixed iris	Fixed iris	Fixed iris	Fixed iris	DC auto iris

P series PNM-C34404RQPZ

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	0°~360°	0°~360°	0°~360°	0°~360°	360° Endless
	Tilt	9°~65°	9°~65°	9°~65°	9°~65°	0°~110°
	Rotate	0°~90°	0°~90°	0°~90°	0°~90°	
	Others	Remote adjustment(Max. 200cycles), Tilt angle with Shield IR: 40°~65°	Remote adjustment(Max. 200cycles), Tilt angle with Shield IR: 40°~65°	Remote adjustment(Max. 200cycles), Tilt angle with Shield IR: 40°~65°	Remote adjustment(Max. 200cycles), Tilt angle with Shield IR: 40°~65°	
Pan Speed	Preset					Max. 700°/sec
	Manual					0.024°/sec~250°/sec
Tilt Speed	Preset					Max. 500°/sec
	Manual					0.024°/sec~250°/sec
Sequence						Preset(300ea), Swing, Group(6ea), Trace, Tour, Auto Run, Schedule
Preset Accuracy						Up to ±0.1°, Pan/Tilt correction

Operational

Direction Indicator						Support
Day & Night	Auto(ICR)					
Backlight Compensation	BLC, WDR, SSDR	BLC, WDR, SSDR	BLC, WDR, SSDR	BLC, WDR, SSDR	BLC, HLC, WDR, SSDR	
Wide Dynamic Range (dB)	120	120	120	120	150	
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V					
Digital Image Stabilization						Support
Defog						Support
Motion Detection	Quantity	8ea				
	Shape	8point Polygonal zones				
Privacy Masking	Quantity	6ea	6ea	6ea	6ea	32ea
	Shape	Rectangular zones	Rectangular zones	Rectangular zones	Rectangular zones	4point Quadrangle zones
	Color / Option	Gray, Black, White	Gray, Black, White	Gray, Black, White	Gray, Black, White	Gray, Green, Red, Blue, Black, White, Mosaic
Gain Control		Low, Middle, High	Low, Middle, High	Low, Middle, High		Off, Max gain, Manual
White Balance		ATW, AWC, Manual, Indoor, Outdoor	ATW, AWC, Manual, Indoor, Outdoor	ATW, AWC, Manual, Indoor, Outdoor		ATW, NarrowATW, AWC, Manual, Indoor, Outdoor, Mercury, Sodium
LDC		Support	Support			

Operational

Electronic Shutter	Mode	Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)				
	Speed Range	2~1/12,000sec				

Video Rotation		Flip, Mirror, Hallway view(90°/270°) - Each channel separately	Flip, Mirror, Hallway view(90°/270°) - Each channel separately	Flip, Mirror, Hallway view(90°/270°) - Each channel separately	Flip, Mirror, Hallway view(90°/270°) - Each channel separately	Flip&Mirror
Alarm Interface	Others	Support alarm I/O via optional I/O box				
Alarm Triggers		Analytics, Network disconnect, Alarm input, App event, Time schedule, 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, MQTT: publication,Smart zoom				
Audio In		Support via optional I/O box				
Audio Out		Support via optional I/O box				
Light Type		IR LED				
Light Viewable Length	IR	20m(65.62ft)	20m(65.62ft)	20m(65.62ft)	20m(65.62ft)	200m(656.17ft)
IR Wavelength		850nm				
Water Removal						Support(Spin Dry, Lens heater)
Auto Tracking						Object auto tracking(Person/Vehicle), Target lock tracking

Analytics

Classified Object Type		Person, Face, Vehicle, License plate	Person, Face, Vehicle, License plate	Person, Face, Vehicle, License plate	Person, Face, Vehicle, License plate	
Attributes	Person	None, Upper/Lower clothes color	None, Upper/Lower clothes color	None, Upper/Lower clothes color	None, Upper/Lower clothes color	
	Vehicle	Type(car, bus, truck, motorcycle, bicycle), Color	Type(car, bus, truck, motorcycle, bicycle), Color	Type(car, bus, truck, motorcycle, bicycle), Color	Type(car, bus, truck, motorcycle, bicycle), Color	
Thumbnail		BestShot	BestShot	BestShot	BestShot	
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit)	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit)	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit)	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit)	
	Normal	Defocus detection, Motion detection, Tampering, Virtual area(Appear/Disappear)	Defocus detection, Motion detection, Tampering, Virtual area(Appear/Disappear)	Defocus detection, Motion detection, Tampering, Virtual area(Appear/Disappear)	Defocus detection, Motion detection, Tampering, Virtual area(Appear/Disappear)	Motion detection, Tampering, Fog detection, Virtual area(Appear/Disappear), Virtual line(Crossing, Direction)

Network

Ethernet	Metal shielded RJ-45(10/100/1000BASE-T)				
Video Compression	H.265/H.264: Main/High, MJPEG	H.265/H.264: Main/High, MJPEG	H.265/H.264: Main/High, MJPEG	H.265/H.264: Main/High, MJPEG	H.265/H.264: Main/Baseline/High, MJPEG
Smart Codec	Manual, WiseStreamIII				
Bitrate Control	H.265/H.264: CBR or VBR, MJPEG: VBR				
Streaming	Unicast	Up to 10 users	Up to 10 users	Up to 10 users	Up to 10 users	Up to 20 users
	Multicast	Support	Support	Support	Support	Support
	Multiple Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 10 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), MQTT				
Application Programming Interface	ONVIF	S, 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
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	TPM(Trusted platform module), SDcard partition encrypt(AES-256)
Security Certificate	Consumer IoT Security Standard (ETSI EN 303 645), Security Built-in Process Certification (IEC 62443-4-1)

General

SoC	Type	Wisenet 7 + CV5				
Memory	RAM	8GB	8GB	8GB	8GB	4GB
	Flash	1GB	1GB	1GB	1GB	512MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 512GB x 2slot(Total 1TB)				
Edge Storage(OnCloud)	Micro SD/SDHC/SDXC	Max. 1TB x 2slots (Total 2TB) *Hanwha Vision branded microSD cards have been certified and recommended for OnCloud edge recording.				

Environmental & Electrical

Operating Condition	Temperature	-40°C~+50°C(-40°F~+122°F)
	Humidity	0~95% RH(non-condensing)
	Others	+74°C(+165°F)(Max) based on NEMA-TS 2(2.2.7), Start up should be done at above -30°C
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
EPA(Effective Projected Area)		0.075
Input Voltage		PoE++(IEEE802.3bt type4, Class8)
Power Consumption	PoE	Max. 64W, typical 45W

Mechanical

Color	White
Material	Aluminum
RAL Code	RAL9003
Product Dimensions	ø379.8x301.9mm(14.95x11.89")
Product Weight	7,900g(17.42lb)

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	54.8m(179.73ft)	54.8m(179.73ft)	54.8m(179.73ft)	54.8m(179.73ft)	59.5m(195.3ft)
	Tele	144.4m(473.88ft)	144.4m(473.88ft)	144.4m(473.88ft)	144.4m(473.88ft)	2340.4m(7678.4ft)
Observe (63PPM/ 19PPF)	Wide	21.9m(71.89ft)	21.9m(71.89ft)	21.9m(71.89ft)	21.9m(71.89ft)	23.8m(78.1ft)
	Tele	57.8m(189.55ft)	57.8m(189.55ft)	57.8m(189.55ft)	57.8m(189.55ft)	936.2m(3071.4ft)
Recognize (125PPM/ 38PPF)	Wide	11.0m(35.95ft)	11.0m(35.95ft)	11.0m(35.95ft)	11.0m(35.95ft)	11.9m(39.1ft)
	Tele	28.9m(94.78ft)	28.9m(94.78ft)	28.9m(94.78ft)	28.9m(94.78ft)	468.1m(1535.7ft)
Identify (250PPM/ 76PPF)	Wide	5.5m(17.97ft)	5.5m(17.97ft)	5.5m(17.97ft)	5.5m(17.97ft)	6.0m(19.5ft)
	Tele	14.4m(47.39ft)	14.4m(47.39ft)	14.4m(47.39ft)	14.4m(47.39ft)	234.0m(767.8ft)

Hanwha Vision

PNM-C34404RQPZ

4K 4Ch PTRZ + 2MP 40x PTZ AI Camera

CAD

G 1-1/2" PF TAP

83.5 [3.29]

301.92 [11.89]

379.78 [14.95]

3	–	
2	–	
1	PNM-C34404RQPZ	'23.08.18
No.	MODEL NAME	DATE
Unit:mm[inch]	SCALE:1/2	Hanwha Techwin

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