MAG2-MFS-18-ZZ-RD-X-68-0002-CCTV-P02
Data Sheets

WISENET SSM



Powerful performance, built for security and reliability

Enterprise-grade technology

Management server for SSM, resilient with redundant power supply units, RAID1 system drives, soak tested to ensure it performs as expected and backed by 5 Year Next Business Day warranty.

Ready to use pre-configured system drives and pre-installed operating system with latest security updates saves on installation time.

1U-MSERVER

SSM Management Server

Key Features

- Built and soak tested enterprise grade server for 24x7 operation
- Pre-installed with OS and latest security updates
- Redundant power supply, RAID on system drives
- IPMI for remote management
- Includes rack-mount kit and keyboard/ mouse set for easier installation
- 5 Year Next Business Day Warranty

Specifications	
Form Factor	1U Rackmount
Drive Bays	Hot-swap 4 bays
Processor	Intel Xeon E 6 Core 12 Threads
Memory	16GB DDR4 ECC Server Memory
Ethernet	2 x 1GbE
Graphics	On-board VGA
Operating System	Windows 10 PRO 64bit (Windows Server 2019 Optional)
Operating System Drive	2 x 240GB SSD in RAID1 (hot swap)
RAID	Software RAID
Default RAID	RAID1
Power Supply	Redundant 300W 80 Plus Certified Gold, 100 - 240V, 50 - 60Hz
Peripherals	2 x USB 3.1, 2 x USB 2.0
Dimensions	43mm x 437mm x 550mm (1.7″ x 17.2″ x 21.7″) HxWxD
Weight	17kg (without HDDs)
Operating Temperature	5 - 35°C (50 - 95°F)
Storage Temperature	-40 - +60°C (-40 - 158°F)
Humidity	8 - 90% non-condensing
Storage Humidity Range	5 - 95% non-condensing
Included Accessories	2 x Power Cables, Rack-mount kit and Keyboard/Mouse set
Warranty	5 Year Next Business Day

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Ordering Infromation

Part Number	Description
1U-MSERVER	1U 4 Bay Hot-swap Rackmount Management Server
1U-MSERVER-WINSERVEROS	Upgrade to Windows Server Standard 2019, applies to 1U 4 Bay Hot-swap Rackmount Management Server (1U-MSERVER), must be ordered with the server

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Network

PNM-C34404RQPZ

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

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, WiseStreamIII
- 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

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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)	30fps/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

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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			

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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)

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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	Wisenet7 + 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.				

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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)

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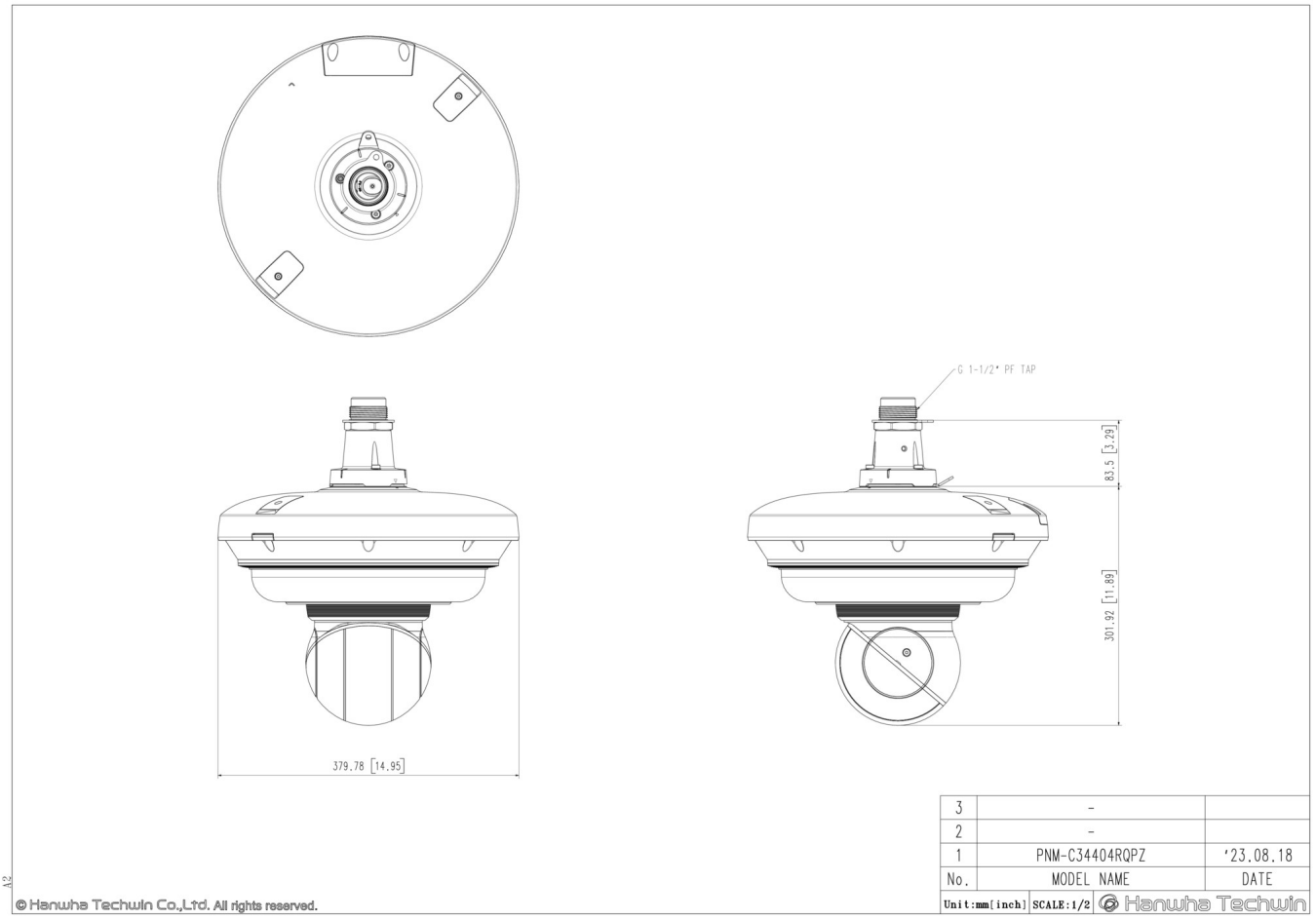
PNM-C34404RQPZ

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



CAD

Unit: mm [inch]



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Network Dome

QNV-C9083R

8MP IR Vandal Dome Camera

Key Features

- Max. 8MP resolution
- Max. 30fps
- Color: 0.06Lux(F1.6, 1/30sec), BW: 0.006Lux(F1.6, 1/30sec, 30IRE)
- Focal length: 3.2~10.2mm(3.2X) motorized varifocal
- 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
- PoE: Max 12.95W

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QNV-C9083R

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: 0.06Lux (F1.6, 1/30sec) BW: 0.006Lux (F1.6, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Out	USB: Micro USB Type B, 1280x720 for installation

Lens	
Focal Length (Zoom Ratio)	3.2~10.2mm(3.2x) motorized varifocal
Max. Aperture Ratio	F1.6(Wide)~F3.1(Tele)
Angular Field of View	H: 104°(Wide)~31°(Tele) V: 55°(Wide)~17°(Tele) D: 124°(Wide)~35°(Tele)
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	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°)

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Analytics	Classified object type: Person/Vehicle Attributes: 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
Alarm I/O	Input 1ea / Output 1ea * Alarm I/O is supported through an optional cable(SPP-C7400)
Alarm Triggers	Analytics, Network disconnect, Alarm input
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
Audio In	Selectable(mic in/line in) * Audio In is supported through an optional cable(SPP-C7400)
Audio Out	Line out, Max.output level: 0.5Vrms * Audio Out is supported through an optional cable(SPP-C7400)
IR Viewable Length	30m(98.42ft)
IR Wavelength	long-life 850 nm IR LED

Network	
Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/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(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)
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API)

Security	
OS / Firmware Protect	Secure boot, Signed firmware, Firmware encryption
User authentication	Digest Authentication, Prevent brute-force attack
Network authentication	802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
Secure Communication	HTTPS, SRTP, WSS(Websocket secure)
Access Control	Access control based on IP address
Data Protect	Authentication information encryption, ZIP compression encryption
Audit	User Access/System/Event log management
Device ID	Device Certificate(Hanwha Private Root CA)
Secure Storage	SDcard partition encrypt
Security Certificate	Secure by default

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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	-30°C~+55°C(-22°F ~ +131°F) / 0~95% RH(non-condensing) * Start up should be done at above -30°C Humidity control /w Air vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F ~ +140°F) / 0~95% RH
Certification	IP66, IK10
Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max 12.95W, typical 5.3W

Mechanical	
Color / Material	White / Aluminum Bubble : Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø140x110.2mm(ø5.51x4.34"), 875g(1.93 lb)
Compatible Conduit hole / Gangbox	Conduit hole : None Gangbox : Single, Double, 4" Octagon
Hanging Mount (Dome)	SBP-140HMW
Backbox	SBV-140BW

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
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

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)

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SBP-156WMW

Wall & Pole Mount



Key Features

- Compatible with XNP-9300RW/8300RW/6400RW
- Material : Aluminum
- Color : White
- Dimensions :135(W)x183(H)x302(D)mm (5.31x7.20x11.89")
- Mounts compatible cameras to a wall or pole. Compatible with optional corner mount SBP-156KMW.

Accessories (Optional)



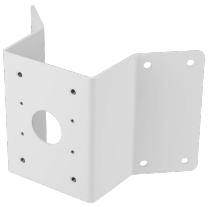
XNP-9300RW



XNP-8300RW



XNP-6400RW



SBP-156KMW

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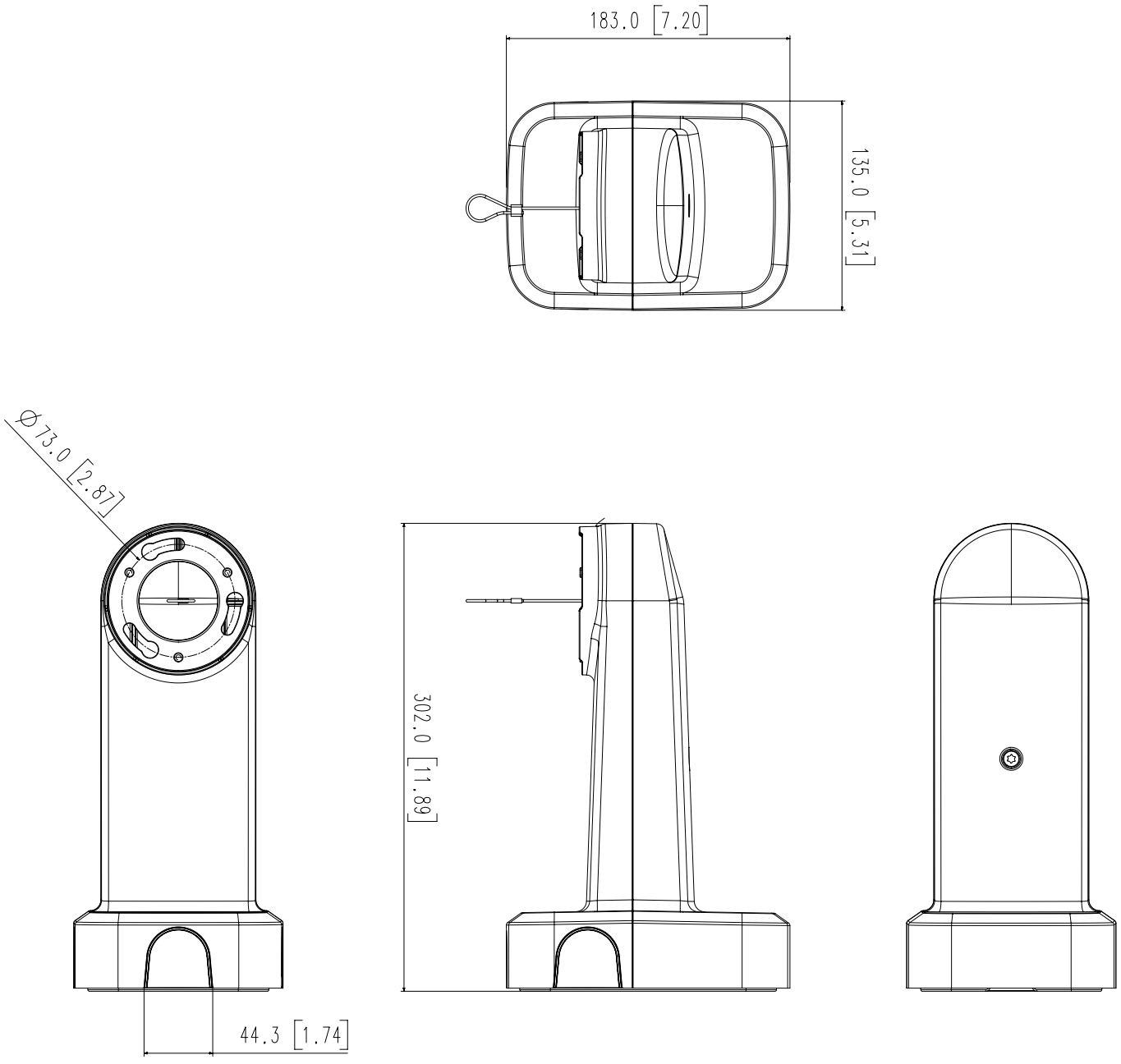
Mechanical

Color	White
Material	Aluminum
RAL code	RAL9003
Product dimensions / weight	135(W)x183(H)x302(D)mm (5.31x7.20x11.89"), 1517g(3.34lb)
Supported products	XNP-9300RW/XNP-8300RW/XNP-6400RW ※ For further compatible models, please visit our website or use Toolbox

- The lastest product information / specification can be found at hanwhasecurity.com
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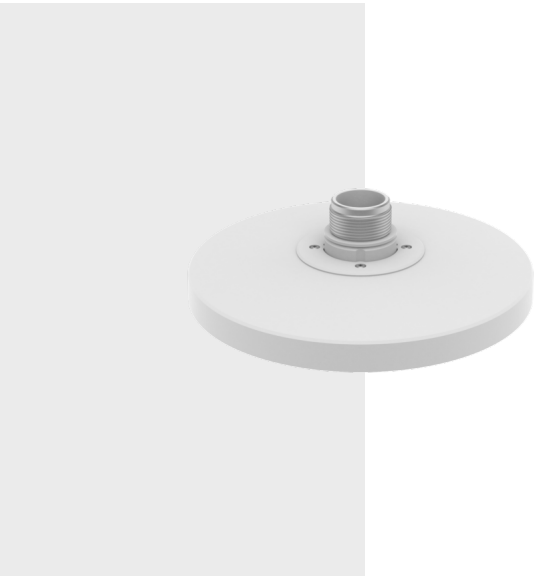
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Unit:mm[inch]	SCALE:1/1	Hanwha Techwin	
No.	MODEL NAME		
1	SBP-156WMW		
DATE	20.06.18		

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Hanwha Techwin



SBP-250HMW

Hanging Adaptor

Key Features

- Color: White
- Material: Aluminum
- Product dimensions / Weight: ø265x74.0mm(ø10.4x2.91"), 450g(0.99lb)
- Mount screw size: TR20

Compatible Accessories (Optional)



PNM-8082VT



PNM-9084RQZ



PNM-9084QZ1



PNM-9002VQ



PNM-9022V



PNM-9031RV



PNM-C9022RV



PNM-C16083RVQ



PNM-C32083RVQ

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SBP-250HMW

Hanging Adaptor



Specifications

Mechanical	
Color	White
Material	Core : Aluminum / Cap : Plastic
RAL code	RAL9003
Product dimensions / weight	ø265x74.0mm(ø10.4x2.91"), 450g(0.99lb)
Mount Screw size	TR20
Max. load	3.5kg
Supported products	PNM-8082VT, PNM-9084QZ(1), PNM-9002VQ, PNM-9022V, PNM-9031RV, PNM-C9022RV, PNM-C16083RVQ/C32083RVQ

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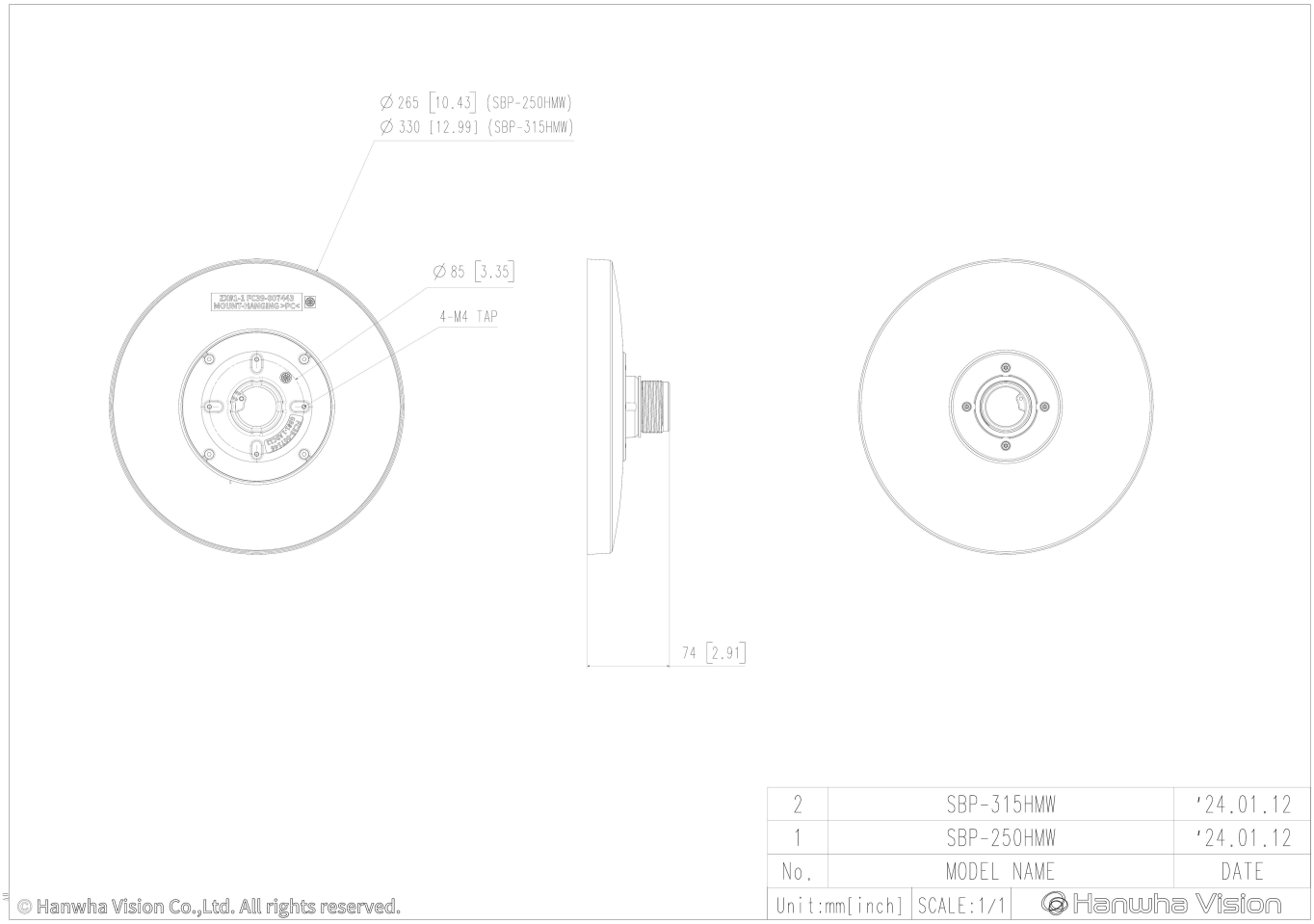
SBP-250HMW

Hanging Adaptor



CAD

Unit:mm [inch]

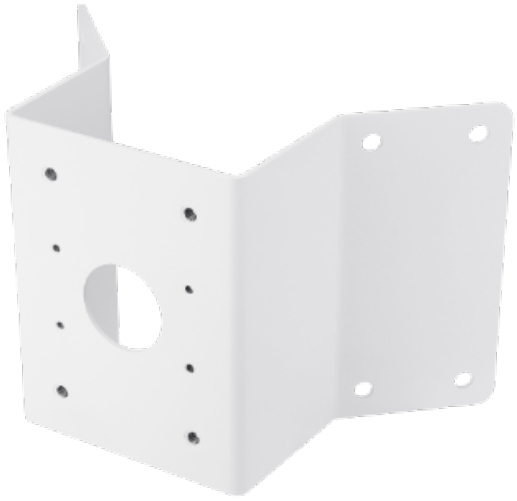


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SBP-300KMW1

Corner Mount



Key Features

- Material: Aluminum
- Dimensions : 280(W) x 183(D) x 159(H)mm (11" x 7.2" x 6.26")
- Weight : 770g (1.7 lb)
- Color : White
- Supported products : SBP-300WMW, SBP-300WMW1

- For further compatible models, please check out Wisenet Toolbox Plus

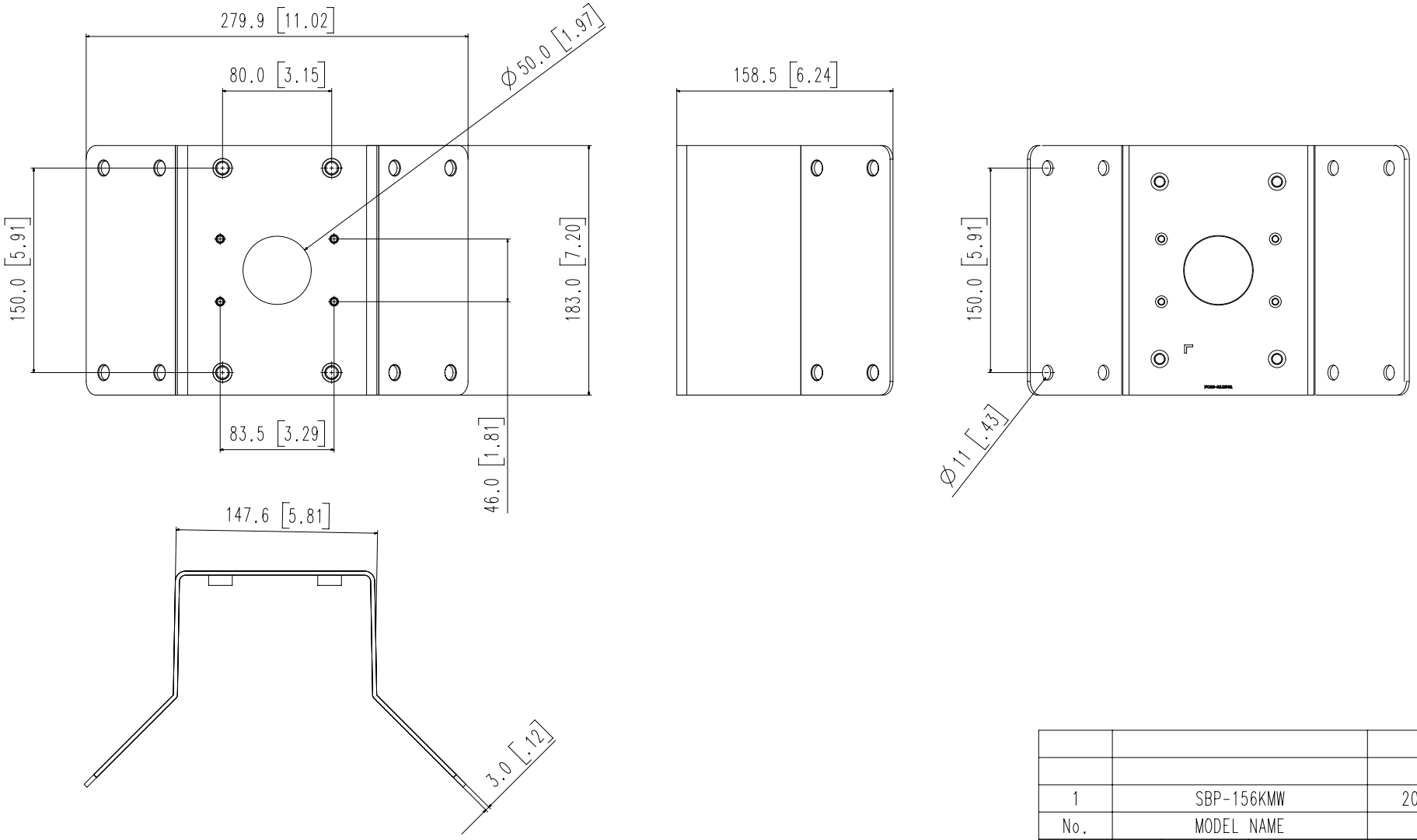
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Environmental	
Operationg Temperature / Humidity	-50°C ~ +60°C(-58°F ~ +140°F) / 0 ~ 100% RH
Storage Temperature / Humidity	-50°C ~ +60°C(-58°F ~ +140°F) / 0 ~ 100% RH
Mechanical	
Color	White
Material	Aluminum
RAL code	RAL9003
Product dimensions / weight	280(W)x183(D)x159(H)mm, 770g
Mount Screw size	M10

※ For compatible models, please visit our website or use Toolbox

- The lastest product information / specification can be found at hanwha-security.com
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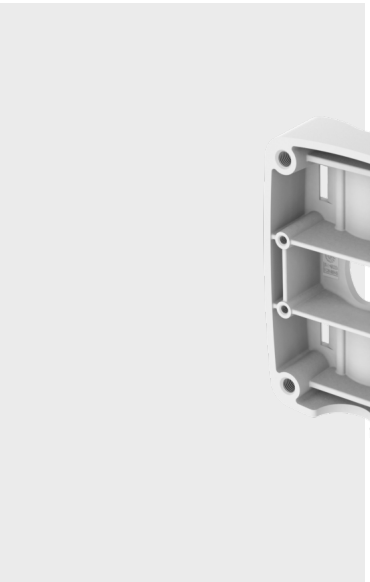
1	SBP-156KMW	20.06.18
No.	MODEL NAME	DATE
Unit:mm[inch]	SCALE:1/1	Hanwha Techwin

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WISENET



SBP-300PMW2

Pole Mount Adaptor

Key Features

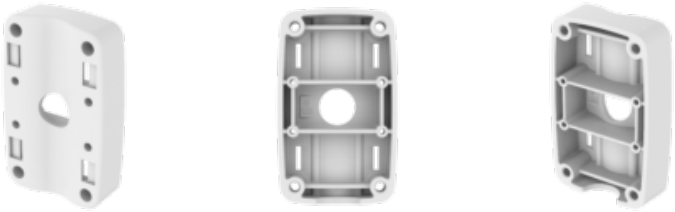
- Material: Aluminum
- Dimensions : 185(W) x 115(D) x 40(H)mm (7.28" x 4.53" x 1.57")
- Weight : 750g (1.65 lb)
- Color : White

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SBP-300PMW2

Pole Mount Adaptor



Specifications

Mechanical	
Color	White
Material	Aluminum
RAL code	RAL9003
Product dimensions / weight	185x115x40mm(7.28"x4.53"x1.57"), 750g(1.65lb)
Supported products	TNO-7180RLP, SBP-300WMW, SBP-300WMW1 ※ For further compatible models, please visit our website or use Toolbox

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SBP-300WMW1

Wall Mount

Key Features

- When using a PTZ camera to a wall construction
- Mount screw size : PF 1 1/2"
- Color : White

Compatible Devices



SBP-300WM1

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SBP-300WMW1

Wall Mount



Specifications

Mechanical

Color	White
Material	Aluminum
RAL code	RAL9003
Product dimensions / weight	112x183x207.5mm / 625g
Max. load	10kg
Supported products	SBP-120HMW, SBP-140HMW, SBP-160HMW1, SBP-180HMW1 ※ For further compatible models, please visit our website or use Toolbox

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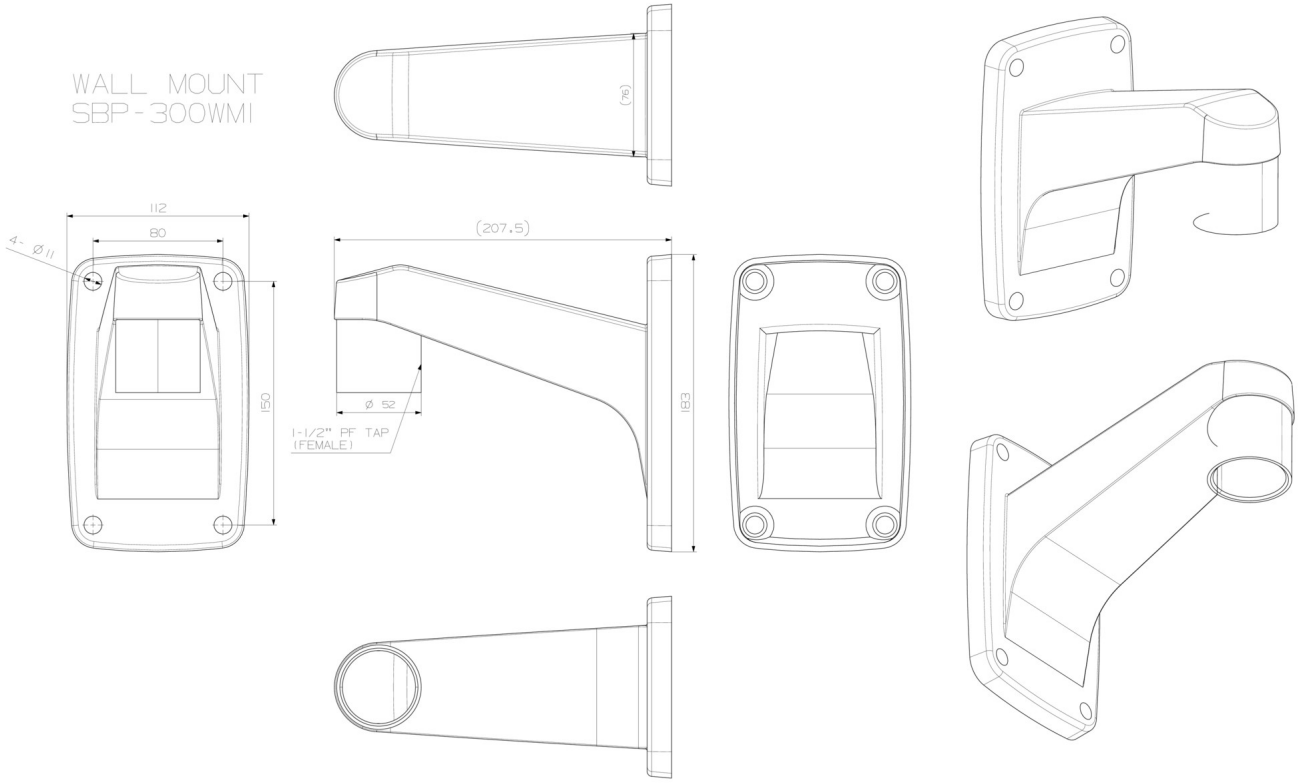
SBP-300WMW1

Wall Mount



CAD

Unit: mm [inch]



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SLA-F2480VA

5MP Lens Module

Key Features

- Compact Cylindrical Design
- 2.45mm Fixed Focal Length
- 122° Horizontal Field of View (HFoV)
- 8m Cable for Flexible Installation
- Compatible with PNM-C20000QB

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SLA-F2480VA

5MP Lens Module



Specifications

Video

Imaging Device	Size	1/2.8"
	Type	CMOS
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.08
	BW(1/30sec, 30IRE)	0.08

Lens

Focal Length (mm)		2.45
Max. Aperture Ratio (F number)	Wide	2.0
	Tele	2.0
Angular Field of View	Horizontal	122°
	Vertical	90°
	Diagonal	158°
Mount Type		RJ12 connected with main unit
Focus Control		Fixed

Environmental & Electrical

Operating Condition	Temperature	-10°C ~ +55°C (+14°F ~ +131°F)
	Humidity	0~95% RH
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	Less than 90% RH

Mechanical

Color	Black
Material	Plastic, Metal
Product Dimensions	30(W)x24.7(H)x45(D)mm(1.18x0.97x1.77"), Cable: 8m(26.2ft)
Product Weight	46.1g(0.1lb), Cable: 350g(0.77lb)
Supported Products	PNM-C20000QB

Certification & 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

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Certification & Standards

Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1
Environment	IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78

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SLA-F2480VA

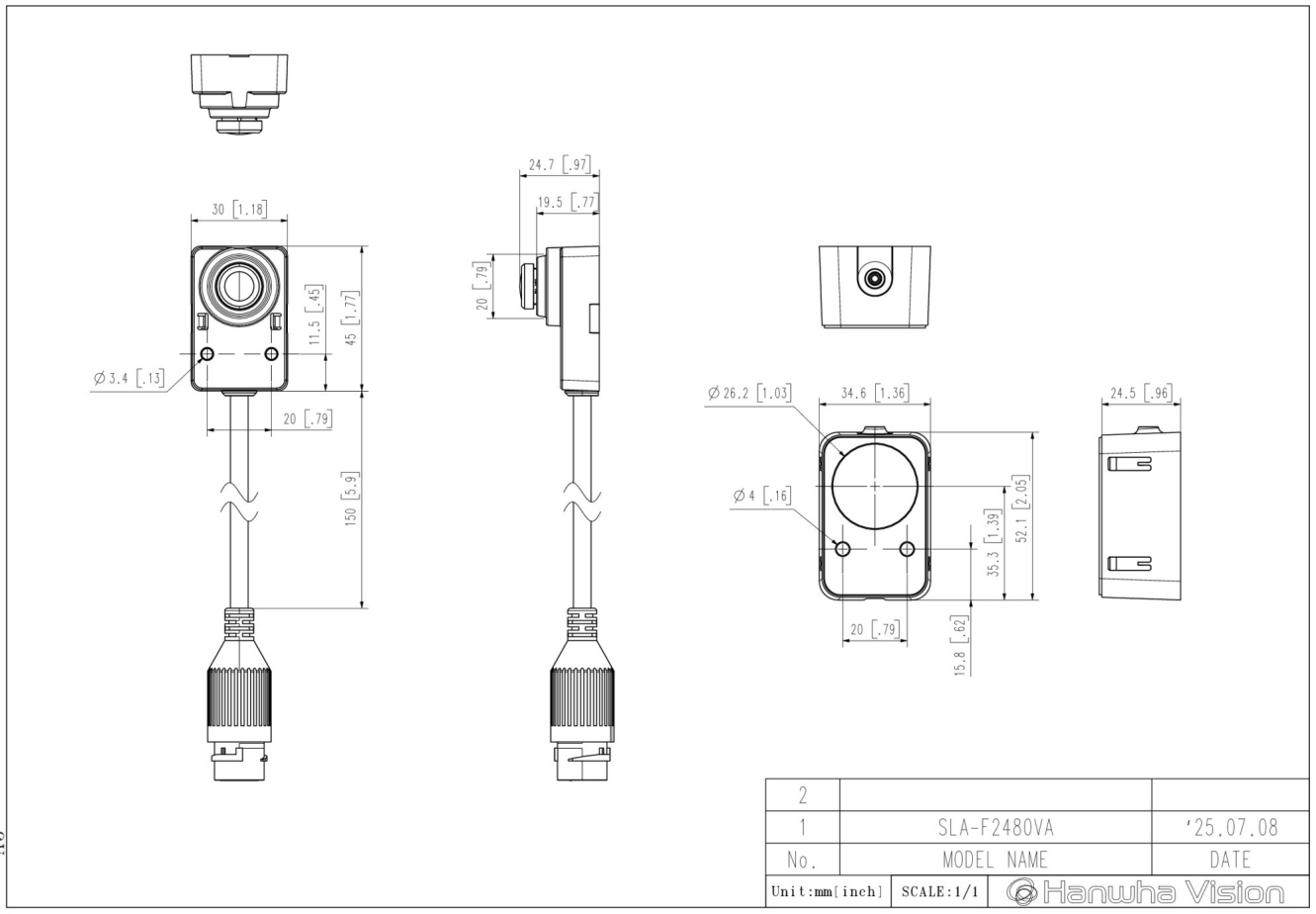
5MP Lens Module





CAD

Unit: mm [inch]



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Network Dome

XND-A8084RV

5MP AI IR Dome Camera

Key Features

- 3.3~9.3mm (2.8x) motorized varifocal
- Dual NPU for AI-based Image enhancement
- Analytics events based on AI engine :
Object detection (Person/Face/Vehicle/License plate),
IVA (Virtual line/Area, Enter/Exit, Loitering, Direction, Intrusion),
Slip&Fall detection, Face mask detection,
Social distancing detection, Motion detection
- Business intelligence based on AI engine :
People/Vehicle/Crowd counting, Queue management, Heatmap
- Support BestShot and full attributes
- Support Dynamic Privacy Masking
- extremeWDR, WiseNR II (Based on AI engine),
WiseStream(Based on AI engine)
- WiseIR: IR viewable length 50 m (164.04 ft)
- IP52, IK10
- Support Wisepower(Power monitoring, ECO mode)
- Use recycled plastic
- Device certificate(Hanwha Vision Root CA),
Secure storage
(Secure element with FIPS 140-3 level3/CC EAL6+ certified), SBOM

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XND-A8084RV

5MP AI IR Dome Camera



Specifications

Video

Imaging Device	Size	1/2.8"
	Type	CMOS
Resolution		2560x1920, 2560x1440, 1920x1080, 1600x1200, 1280x960, 1280x720, 1024x768, 800x600, 640x480, 640x360, 320x240, 320x180
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@5MP Max. 5fps)
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.04
	BW(1/30sec, 30IRE)	0.004
Video Out		USB: Micro USB Type C

Lens

Focal Length (mm)		3.3~9.3
Zoom Ratio	Optical	2.8x
Max Aperture Ratio (F number)	Wide	1.3
	Tele	2.3
Angular Field of View	Horizontal	99°~31°
	Vertical	71°~23°
	Diagonal	133°~39°
Min. Object Distance		0.5m(1.64ft)
Focus Control		Simple focus, Manual
Lens Type		P iris(IR corrected)

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	0°~360°
	Tilt	0°~75°
	Rotate	0°~355°

Operational

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

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Operational

Wide Dynamic Range (dB)		120
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	32ea
	Shape	8point Polygonal zones
	Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow
	Dynamic Privacy Masking: Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow
Gain Control		Off, Max gain, Manual
White Balance		ATW, NarrowATW, AWC, Manual, Indoor, Outdoor
LDC		Support(Fill/stretch mode)
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)
	Speed Range	2~1/30,000sec
Video Rotation		Flip, Mirror, Hallway view(90°/270°)
Alarm Interface	In/Out	2 configurable I/O ports
	Others	Support extra alarm I/O via optional I/O box
Alarm Triggers		Analytics, Network disconnect, Alarm input, Time schedule, MQTT subscription, Day/Night, Storage disruption
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP/SFTP, File upload(video clip): 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,Audio clip playback, MQTT: publication
Audio In		Selectable(mic in/line in)
Audio Out		Line out
Light Type		IR LED
Light Viewable Length	IR	WiseIR 50m(164.04ft)
IR Wavelength		850nm

Analytics

Classified Object Type		Person, Face, Vehicle, License plate
Attributes	Person	Upper/Lower clothes color, Gender, Bag
	Vehicle	Type(car, bus, truck, motorcycle, bicycle), Color
	Face	Age, Gender, Face mask, Glasses
Thumbnail		BestShot

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Analytics

Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Motion detection, Face mask detection, Social distancing detection, Slip & fall detection, Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear)
	Normal	Defocus detection, Tampering, Audio detection, Shock detection
Business Intelligence	Based on AI Engine	People counting, Queue management, Heatmap, Vehicle counting, Crowd counting

Network

Ethernet		Metal shielded RJ-45(10/100BASE-T)
Video Compression		H.265/H.264: Main/Baseline/High, MJPEG
Audio Compression		G.711(PCM): 8kHz(64kbps), G.726(ADPCM): 8kHz(16/24/32/40kbps), AAC-LC: 16kHz(48kbps), OPUS: 16kHz(64kbps)
Smart Codec		WiseStream(Based on AI engine)
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, 3 virtual channel support
Protocol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SFTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT, SMTP(StartTLS), Syslog
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, MAC-based access control, Auto logout
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), Secure element
Supply Chain Security	SBOM
Security Certificate	Secure element(FIPS 140-3 level3, CC EAL6+), Consumer IoT Security Standard (ETSI EN 303 645), Security Built-in Process Certification (IEC 62443-4-1)

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General

SoC	Type	Wisenet9
	Dual NPU	Support
Memory	RAM	4GB
	Flash	8GB eMMC
Edge Storage	Micro SD/SDHC/SDXC	Max. 1TB 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	-10°C~+50°C(+14°F~+122°F)
	Humidity	0~100% RH(condensing)
	Others	Humidity control with AIR vent
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
EPA(Effective Projected Area)		0.02㎡
Input Voltage		PoE(IEEE802.3af, Class3)
Power Consumption	PoE	Max. 9.4W, typical 7.0W
Wisepower		Power monitoring, ECO mode

Mechanical

Color		White
Material		Aluminum, PC(Polycarbonate), Hard-coated dome
Material Management	Declaration	RoHS(EU RoHS directive 2011/65/EU and IEC/EN 63000:2018), REACH(Regulation (EC) No. 1907/2006), Conflict mineral policy(Section 1502 of US Dodd Frank Act)
	Recycle Rate	Recycled plastic: 10.72%
RAL Code		RAL9003
Product Dimensions		ø160x118mm(6.30x4.65")
Product Weight		1,010g(2.23lb)
Compatible Conduit Hole		12.7mm(1/2")(M20)
Compatible Gang Box		Single, Double, 4" Octagon, Square

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, KS C 9832 Class A, KS C 9835
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471
Environment	IEC/EN 63000, IEC 60529 IP52, IEC 62262 IK10, IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78

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DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	43.7m(143.47ft)
	Tele	184.6m(605.71ft)
Observe (63PPM/ 19PPF)	Wide	17.5m(57.39ft)
	Tele	73.8m(242.29ft)
Recognize (125PPM/ 38PPF)	Wide	8.7m(28.69ft)
	Tele	36.9m(121.14ft)
Identify (250PPM/ 76PPF)	Wide	4.4m(14.35ft)
	Tele	18.5m(60.57ft)

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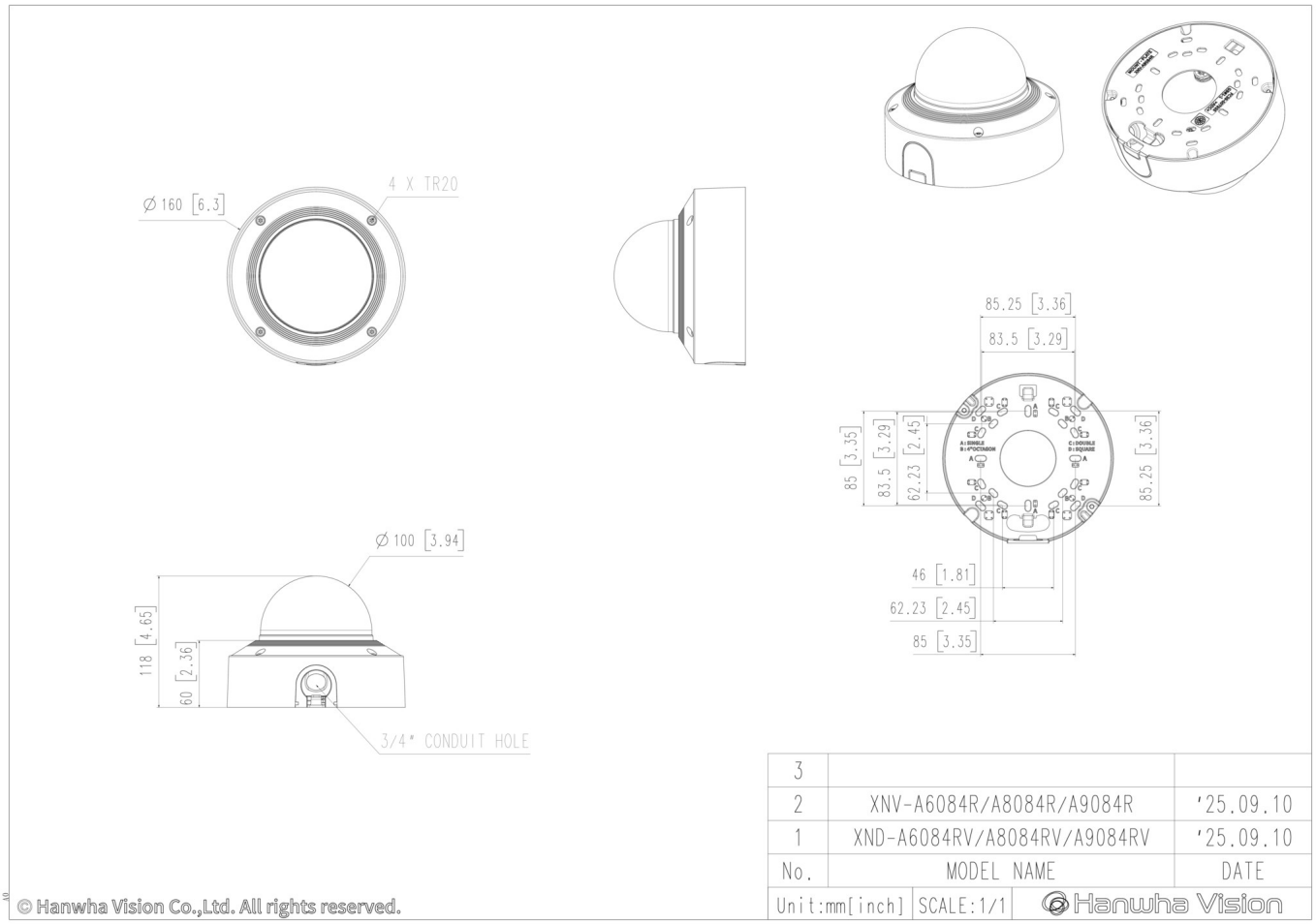
XND-A8084RV

5MP AI IR Dome Camera



CAD

Unit: mm [inch]



No.	MODEL NAME	DATE
3		
2	XNV-A6084R/A8084R/A9084R	'25.09.10
1	XND-A6084RV/A8084RV/A9084RV	'25.09.10

Unit:mm[inch] | SCALE:1/1 | Hanwha Vision

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XNF-9010RV

12MP IR Fisheye Camera

Benefits

- Equipped with Wisenet 7 chipset with its industry leading cyber security features and cutting edge image processing technology
- Built in IR illumination and Wide Dynamic Range ensures superb quality images, regardless of the lighting conditions
- Choice of alternative viewing modes, including single panorama, double panorama and quad views to sort the users' environment
- Digital PTZ allows users to electronically pan, tilt and zoom in on specific areas for a more detailed view, whilst at the same time, continuing to record the whole 360° view
- In the event of network disruption, video is automatically recorded to on-board SDXC storage to ensure that potential video evidence is not lost
- Ideal for the retail sector, built-in retail analytics uses heatmaps, people counting and queue management video analytics giving retailers an understanding of customer behaviour and potential to improve the customer experience.

XNF-9010RV	
VIDEO	
Imaging Device	1/2.3" 12MP CMOS
Resolution	Original view(1:1): 3008x3008~480x480, Double panorama(2:1): 3584x1792~640x320, Single panorama(4:1): 3584x896~640x160, Quad view: 3584x2688~640x480, Q1/Q2/Q3/Q4(4:3): 1792x1344~640x480
Max. Framerate	H.265/H.264: Original view-Max.30fps/25fps@3008x3008(60Hz/50Hz), Double panorama-Max.30fps/25fps@3584x1792(60Hz/50Hz) Single panorama-Max.30fps/25fps@3584x896(60Hz/50Hz) MJPEG: Max.30fps/25fps@1080x1080(60Hz/50Hz)
Min. Illumination	Color: 0.39 Lux (F2.2, 1/30sec), BW : 0Lux(IR LED on)
Video Out	CVBS : 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P), for Installation USB: Micro USB Type B, 1280x720 for installation
LENS	
Focal Length (Zoom Ratio)	1.08mm fixed focal
Max. Aperture Ratio	F2.2
Angular Field of View	H: 187° / V: 187° / D: 187°
Min. Object Distance	0.5m(1.64ft)
Focus Control	Simple focus
OPERATIONAL	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR
Wide Dynamic Range	extremeWDR (120dB)
Digital Noise Reduction	SSNR V
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, polygonal zones - Color: Grey/Green/Red/Blue/Black/White - Mosaic
Gain Control	Low / Middle / High
White Balance	ATW / Narrow ATW / AWC / Manual / Indoor / Outdoor
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)
Digital PTZ	Support(Preset, Group)
Video Rotation	Flip, Mirror
Analytics	Defocus detection, Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Sound classification
Business Intelligence	People counting, Queue management, Heatmap
Alarm I/O	2 configured I/O
Alarm Triggers	Analytics, Network disconnect, Alarm input
Alarm Events	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output PTZ Preset Handover Audio playback
Audio In	Selectable(mic in/line in/built-in mic) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out, Max. output level: 1Vrms
IR Viewable Length	10m(32.8ft), Wise IR

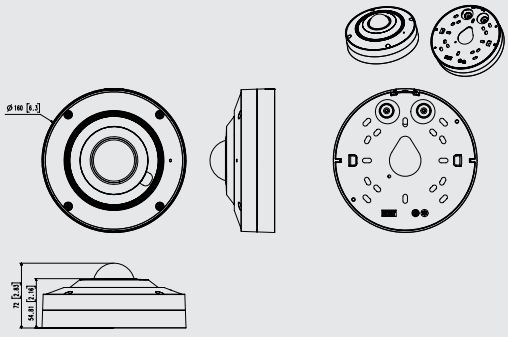
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Key Features

- 1/2.3" 12MP CMOS
- 1.08mm fixed focal lends
- Stereo graphic type lens, enhanced resolution for the peripheral regions
- Fisheye, Single panorama, Double panorama, Quad view
- On board dewarping, Digital PTZ
- Extreme WDR (120dB)
- H.265, H.264, MJPEG codec supported, WiseStreamII support
- Wise IR, IR viewable length 10m
- Plugin support, selectable I/O port
- Advanced Video Analytics, Business Intelligence: Heatmap, People counting, Queue management
- IP66/IK10/NEMA4X

Dimensions

Unit:mm(inch)



XNF-9010RV	
NETWORK	
Ethernet	Metal shielded RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/Baseline/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(5ea area), WiseStreamII
Video Quality Adjustment	H.264/H.265: Target bitrate level control MJPEG: Quality level control
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(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)
Security	HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP) Device Certificate(Hanwha Techwin Root CA)
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
GENERAL	
Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish,, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 2slot 1TB(512GBx2)
Memory	4096MB RAM, 512MB Flash
ENVIRONMENTAL & ELECTRICAL	
Operating Temperature / Humidity	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH
Storage Temperature / Humidity	-50°C ~ +60°C(-58°F ~ +140°F) / Less than 95% RH
Certification	IP66, IK10, NEMA4X
Input Voltage	PoE(IEEE802.3af, Class3), 12VDC
Power Consumption	PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W
MECHANICAL	
Color / Material	White / Aluminum, Hard-coated dome bubble
RAL Code	RAL9003
Product dimensions / weight	Ø160x72mm(62.99x28.35"), 1100g(2.43lb)
Hanging mount(Dome)	SBP-167HMW
DORI (EN62676-4 STANDARD)	
Detect (25PPM/ 8PPF)	34.9m(114.49ft)
Observe (63PPM/ 19PPF)	13.9m(45.60ft)
Recognize (125PPM/ 38PPF)	7.0m(22.96ft)
Identify (250PPM/ 76PPF)	3.5m(11.48ft)

* The latest product information / specification can be found at hanwha-security.com
* Design and specifications are subject to change without notice.
* Wisenet is the proprietary brand of Hanwha Techwin.

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Network PTZ

XNP-C9310R

4K 31x AI IR PTZ Camera

Key Features

- Maximum 4K resolution
- 6.91 ~ 214.7mm(31x) motorised varifocal
- IR viewable length Wise IR 250m(820ft)
- Color: 0.06 Lux(F1.36, 1/30sec, 30 IRE) / BW: 0.006 Lux(F1.36, IR LED Off), 0Lux (IR LED On)
- Day & Night(ICR), WDR(120dB), WiseNR II (Using AI engine), prefer shutter
- H.265, H.264, MJPEG codec, WiseStream II , WiseStream III (Using AI engine)
- DIS with built-in Gyro sensor
- Reinforced durability (IP66/IP67, IK10, NEMA4X)
- ONVIF Profile S/G/T/M, SUNAPI(HTTP API), Wisenet open platform
- Next level cybersecurity (TPM with FIPS 140-2 level2)

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XNP-C9310R

4K 31x AI IR PTZ Camera



Specifications

Video	
Imaging Device	1/1.8" CMOS
Resolution	3840x2160, 2592x1944, 2592x1464, 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/25fps(60Hz/50Hz) (@8MP Max. 5fps)
Min. Illumination	Color: 0.06 Lux(F1.36, 1/30sec, 30 IRE) BW: 0.006 Lux(F1.36, IR LED Off), 0Lux (IR LED On)

Lens	
Focal Length (Zoom Ratio)	6.91 ~ 214.7mm(31x) zoom (digital 32x, total 992x zoom) Support Quick zoom
Optical Zoom	31x
Max. Aperture Ratio	F1.36(Wide)~F4.6(Tele)
Angular Field of View	H : 60.6°(Wide)~2.59°(Tele) V : 35.1°(Wide)~1.45°(Tele) D : 68.8°(Wide)~2.97°(Tele)
Min. Object Distance	3m(9.84ft)
Focus Control	Oneshot AF, Focus save, Focus scan, Wise auto focus
Lens Type	P-iris(IR corrected)

Pan / Tilt / Rotate	
Pan Range	360° Endless
Pan Speed	Preset: 550°/sec, Manual: 0.024°/sec~200°/sec
Tilt Range	110° (90° ~ -20°)
Tilt Speed	Preset: 550°/sec, Manual: 0.024°/sec~200°/sec
Sequence	Preset(300ea), Swing, Group(6ea), Trace, Tour, Auto Run, Schedule
Preset Accuracy	±0.05° (±20°C by temperature at preset setting)

Operational	
Camera Title	Displayed up to 85 characters
Direction Indicator	Support
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support(built-in gyro sensor)
Defog	Support
Motion Detection	8ea, 8point polygonal zones

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Privacy Masking	32ea, 4point quadrangle zones - Color: Gray/Green/Red/Blue/Black/White - Mosaic
Gain Control	Off / Max gain / Manual
White Balance	ATW / NarrowATW / AWC / Manual / Indoor / Outdoor / Mercury / Sodium
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (2~1/12,000sec) Prefer shutter control(Based on AI engine)
Video Rotation	Flip&Mirror
Analytics	Classified object type : Person/Face/Vehicle/License plate Attributes : Vehicle(Type:car/bus/truck/motorcycle/bicycle) Support DetectionShot Analytics events based on AI engine - Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Motion detection Analytics events -Tampering, Fog detection, Shock detection, Virtual area(Appear/Disappear) * Audio detection, Sound classification(Via optional I/O box SPM-4210)
Alarm Triggers	Analytics, Network disconnect, Alarm input((Via optional I/O box SPM-4210), Time schedule, MQTT subscription
Alarm Events	When alarm trigger occurred - File upload(image) : e-mail/FTP/SFTP - FIle upload(video clip): FTP/SFTP - Notification : e-mail - Recording : SD/SDHC/SDXC or NAS recording at event triggers - Handover: PTZ preset, send message by HTTP/HTTPS/TCP - MQTT: publication * Alarm output (Via optional I/O box SPM-4210)
Light Type	IR LED (850nm)
IR Viewable Length	Wise IR 250m(820ft)
Water Removal	Support(Spin dry, Lens heater)
Auto Tracking	Support Object auto tracking(Person/Vehicle) Target lock tracking

Network	
Ethernet	Metal shielded RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG
Smart Codec	Manual(5ea area), WiseStream II , WiseStreamIII(Based on AI engine)
Video Quality Adjustment	H.264/H.265: Target bitrate level control MJPEG: Target bitrate level control
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 10 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), NTCIP1205, 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 attacks
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

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Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	TPM(Trusted platform module), HTPM(Hanwha trusted platform module), 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 2slot 1TB (512MBx2)
Memory	4GB RAM, 512MB Flash

Environmental & Electrical

Operating Temperature / Humidity	Normal : -50°C~+55°(-58°F ~ +131°F)/ +74°C(165°F)(Max) based on NEMA TS-2(2.2.7) * Start up should be done at above -30°C 0~100%RH(Condensing) Humidity control /w AIR vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~90% RH
Certification	IP66/IP67, IK10, NEMA4X Safety(UL, KC-SDOC), EMC(FCC, CE, VCCI, RCM, KC) NEMA-TS 2(2.2.7, 2.2.8, 2.2.9)
Input Voltage	HPoE(IEEE802.3bt type4, Class8, Injector included)
Power Consumption	HPoE: Max 62W, typical 23W

Mechanical

Color / Material	Body : White / Aluminum Head : Black / Polycarbontate Hard-coated dome
RAL Code	White: RAL9003 / Black: RAL9005
Product Dimensions / Weight	ø188x264.9mm(ø7.40x10.47") / 4400g (9.70lb)
Hanging Mount (Dome)	SBP-156HMW
Ceiling Mount (Assy)	SBP-156CMW, SBP-300CMTS, SBP-300CMW1/900CMW, SBP-150CMI/300CMI
Wall Mount	SBP-156WMW, SBP-390WMW2
Pole Mount	SBP-300PMW2
Parapet Mount	SBP-156LMW, SBP-300LMW
Corner Mount	SBP-156KMW, SBP-300KMW1
Cabinet	SBP-300NBW

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/IP67, IEC/EN 62262 IK10 NEMA TS 2-2013 (2.2.7, 2.2.8, 2.2.9) NEMA 250 type 4X

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide: 131.4m(431.19ft) / Tele: 3397.3m(11146.16ft)
Observe (63PPM/ 19PPF)	Wide: 52.6m(172.48ft) / Tele: 1358.9m(4458.46ft)
Recognize (125PPM/ 38PPF)	Wide: 26.3m(86.24ft) / Tele: 679.5m(2229.23ft)
Identify (250PPM/ 76PPF)	Wide: 13.1m(43.12ft) / Tele: 339.7m(1114.62ft)

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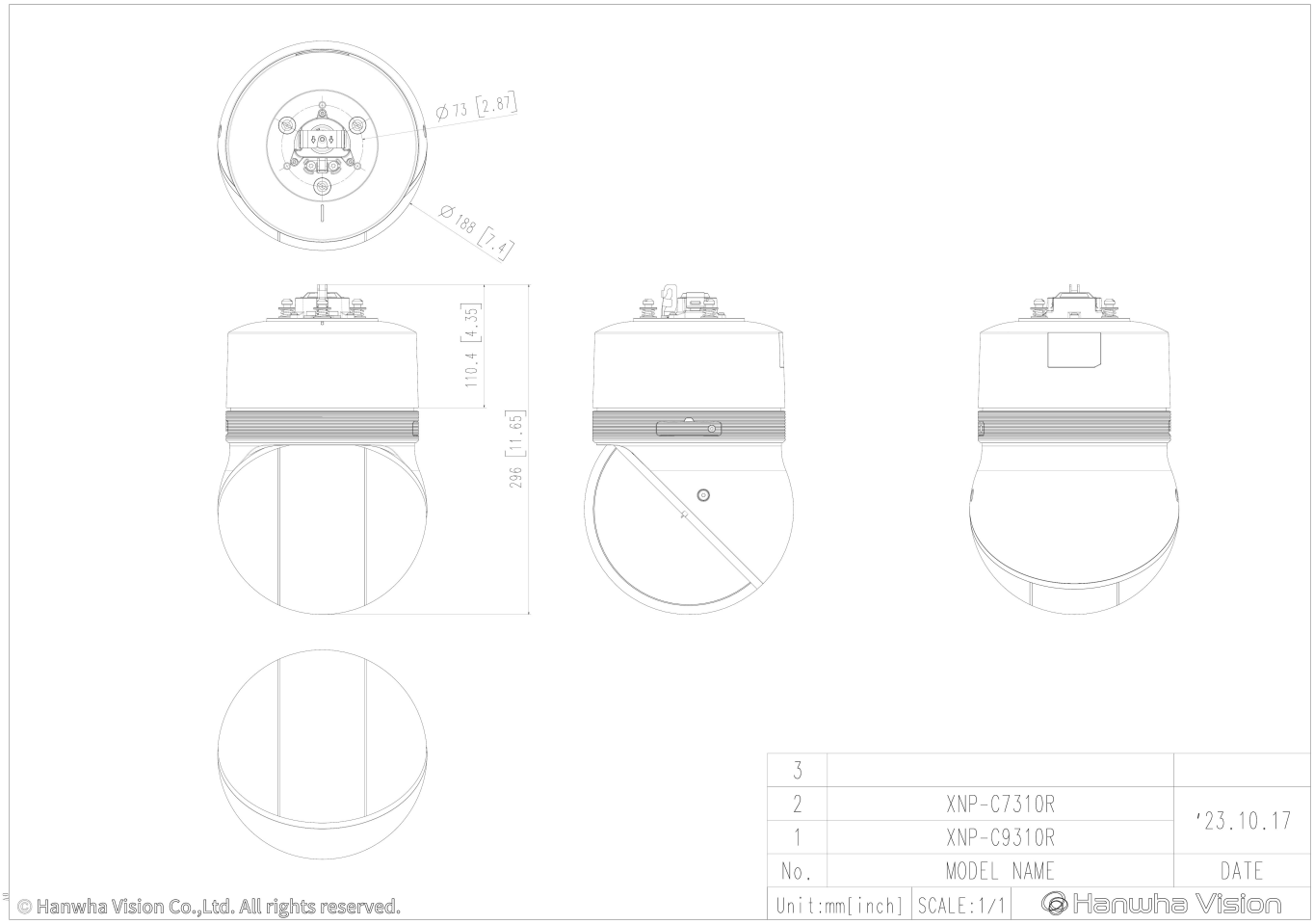
XNP-C9310R

4K 31x AI IR PTZ Camera



CAD

Unit:mm [inch]



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XRN-3220B4

32CH NVR with 12th gen. Intel® Processor

Key Features

- 32CH, 32MP resolution
- SATA 16 HDD Bays (up to 160TB)
- Up to 520Mbps recording / transmission bandwidth
- Easy Channel/Event/Alarm configuration
- Virtual Channel View
- Dynamic layout
- Built-in Support for Web Management (up to 100)
- Compatible with Wisenet Viewer, Wisenet mobile
- NDAA compliant and TPM integrated
- Manual event support

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XRN-3220B4

32CH NVR with 12th gen. Intel® Processor



Specifications

Display		
Network camera	Inputs	Max. 32CH
	Resolution	32MP ~ CIF
	Protocols	SUNAPI, ONVIF
Decoding	Local Display	[Dual Display] HDMI 1: 3840 x 2160 (30Hz) HDMI 2: 1920x1080 (60Hz)
	Multi Screen Display	[Local Monitor] - Dynamic layout, Virtual channel view - Clone Mode : Up to 32 Division - Expand Mode : HDMI1 up to 32 Div. HDMI2 up to 16 Div. [Web] 1/ 2H/ 2V/ 3V/ 4/ 6/ 8/ 9
	Resolution	32M(15fps, H.265 Only), 12M(30fps, H.265 Only), 8.3M(4ch@30fps), 1080p(16ch@30fps), 720P(32ch@30fps), D1(48ch@30fps)
Performance		
Operating System	Embedded	Linux
Record	Compression	H.265, H.264, MJPEG
	Recording Bandwidth	Distributed mode : Up to 520 Mbps Normal mode : Up to 300 Mbps {RAID mode} Normal : Up to 520 Mbps Degrade/ Rebuild : Up to 520 Mbps
	Resolution	32MP ~ CIF
	Mode	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark
	Event Trigger	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
	Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
Search & Play	Playback Bandwidth	Up to 200Mbps(32CH simultaneously)
	User	Max. 4 Users (Local 1, Remote 3)
	Simultaneous playback	Max. 80CH(Local 32CH, Remote 16CH per user)
	Fisheye Dewarping	Support (Local 1CH), CMS
	Mode	Time/ Event/ Text/ ARB/ Bookmark/ Smart search
	Resolution	CIF ~ 32MP (Up to H.264 9MP, H.265 32MP)
	Playback Control	Fast/Slow Forward / Backward, Move one step Up / Down
Storage	Supported HDD	Up to 10TB
	HDD Slot	SATA 16ea(Max. 160TB, Non-RAID mode), Hot swap
	External	iSCSI storage
	RAID	RAID-5/6(Array Size : 8 HDDs x 2 Array)

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Backup	File backup	Recorder/SEC/AVI/JPG(Local), AVI/PNG(Network)
	Function	Multi channel(Up to 16CH) Play, Date-Time/Title display

Network		
Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, NTP, HTTP, DHCP (Server, Client), SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Server, Client)	
DDNS	Hanwha DDNS	
Transmission Bandwidth	Max. 520Mbps	
Audio	Input/Output	32 CH(network)
	Compression	G.711, G.726, AAC(16/48KHz)
	Audio Communication	2-Way
Max Remote Users	Search(3), Live Unicast(10), Multicast(20)	
Security	IP address filtering, User access Log, 802.1x, TLS, Encryption Device certificate(Hanwha Techwin Root CA), Signed firmware, TPM support	
Web viewer	Supported OS	Windows10 or higher, macOS 13.5.2 or higher
	Supported browser	Google Chrome, Microsoft Edge, Mac Safari
Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile Support CGI(SUNAPI) for integration to 3'rd party VMS	

Functions		
Camera Setup	Register	Auto, Manual
	Item	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage
PTZ	Control	Via GUI, Webviewer, SPC-2000/2001
	Preset	300 Presets
Smart phone	Support Model	iOS, Android
	Protocol Support	RTP, RTSP, HTTP, CGI(SUNAPI)
	Control	Live 16CH(Multi-Profile Support), Playback 4CH
	Max. Remote Users	Search(3), Live Unicast(10)
Redundancy	Failover	N+1
	ARB	Support
Easy configuration	P2P(QR code)	

Interface		
Front	Indicator	HDD, Alarm, Power, Record, Backup, Network, RAID
Storage	Yes	
Reset	Power button	
HDD Key Lock	Yes	
HDMI	2EA (Playback/Setup → HDMI1) HDMI1 : 3840x2160 30Hz HDMI2 : 1920x1080 60Hz	
Audio	Out 1EA (3.5mm Audio Jack)	
Ethernet	RJ-45 3EA (LAN/WAN, 1Gbps)	
Alarm	In 8EA, Out 4EA	
USB	4EA(Front 2 x USB 2.0, Rear 2 x USB 3.0)	
Power inlet	AC 1EA	

System

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Log	Log List	Max. 100,000 (System Log, Event Log each)
System Control	Mouse(include wireless), Keyboard(include wireless), Web, Controller (SPC-2000/2001)	
Language	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai, Vietnamese	

Environmental	
Operating Temperature	0°C to +40°C(32°F to 104°F)
Operating Humidity	20% ~ 85% RH

Electrical	
Power Input	100 ~ 240 VAC ±10%; 50/60 Hz, 2.7A (Single SMPS)
Power Consumption	Max. 265W (904.2 BTU with HDD 16ea)

Mechanical	
Color / Material	Black / Metal
Dimension (WxHxD)	440.0 x 132.0 x 571.1mm
Weight	Approx. 14Kg(30.9 lb, HDD not included)

Intelligent Analysis		
AI Search	Object Attribute	Compatible with Hanwha AI Cameras

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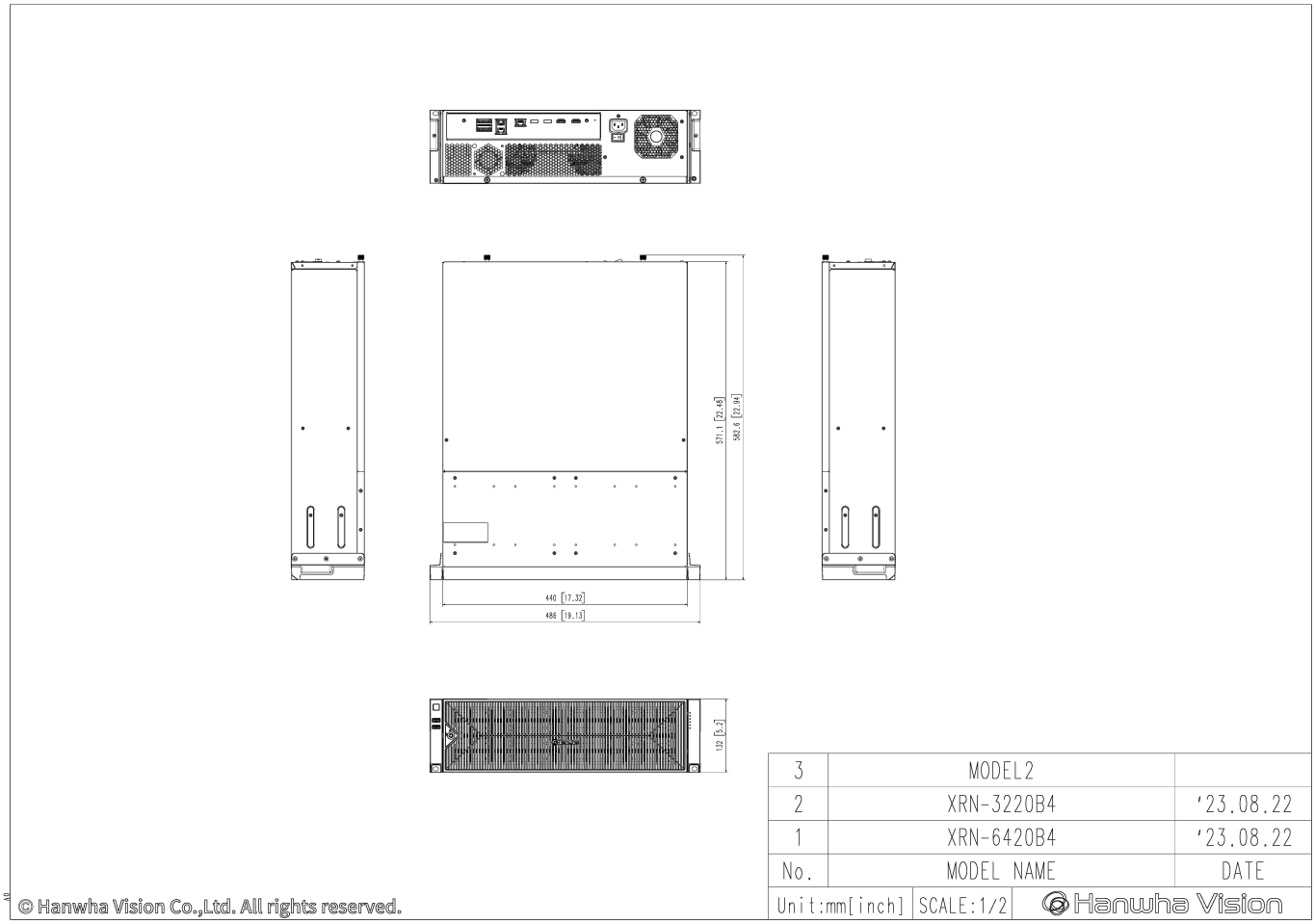
XRN-3220B4

32CH NVR with 12th gen. Intel® Processor



CAD

Unit:mm [inch]



3	MODEL2	
2	XRN-3220B4	'23.08.22
1	XRN-6420B4	'23.08.22
No.	MODEL NAME	DATE
Unit:mm[inch]	SCALE:1/2	Hanwha Vision

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XRN-6420B4

64CH NVR with 12th gen. Intel® Processor

Key Features

- 64CH, 32MP resolution
- SATA 16 HDD Bays (up to 160TB)
- Up to 520Mbps recording / transmission bandwidth
- Easy Channel/Event/Alarm configuration
- Virtual Channel View
- Dynamic layout
- Built-in Support for Web Management (up to 100)
- Compatible with Wisenet Viewer, Wisenet mobile
- NDAA compliant and TPM integrated
- Manual event support

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XRN-6420B4

64CH NVR with 12th gen. Intel® Processor



Specifications

Display		
Network camera	Inputs	Max. 64CH
	Resolution	32MP ~ CIF
	Protocols	SUNAPI, ONVIF
Decoding	Local Display	[Dual Display] HDMI 1: 3840 x 2160 (30Hz) HDMI 2: 1920x1080 (60Hz)
	Multi Screen Display	[Local Monitor] - Dynamic layout, Virtual channel view - Clone Mode : Up to 64 Division - Expand Mode : HDMI1 up to 36 Div. HDMI2 up to 32 Div. [Web] 1/ 2H/ 2V/ 3V/ 4/ 6/ 8/ 9
	Resolution	32M(15fps, H.265 Only), 12M(30fps, H.265 Only), 8.3M(4ch@30fps), 1080p(16ch@30fps), 720P(32ch@30fps), D1(64ch@30fps)
Intelligent Analysis		
AI Search	Object Attribute	Compatible with Hanwha AI Cameras
Performance		
Operating System	Embedded	Linux
Record	Compression	H.265, H.264, MJPEG
	Recording Bandwidth	Distributed mode : Up to 520 Mbps Normal mode : Up to 300 Mbps {RAID mode} Normal : Up to 520 Mbps Degrade/ Rebuild : Up to 520 Mbps
	Resolution	32MP ~ CIF
	Mode	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark
	Event Trigger	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
	Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
Search & Play	Playback Bandwidth	Up to 200Mbps(64CH simultaneously)
	User	Max. 4 Users (Local 1, Remote 3)
	Simultaneous playback	Max. 112CH(Local 64CH, Remote 16CH per user)
	Fisheye Dewarping	Support (Local 1CH), CMS
	Mode	Time/ Event/ Text/ ARB/ Bookmark/ Smart search
	Resolution	CIF ~ 32MP (Up to H.264 9MP, H.265 32MP)
	Playback Control	Fast/Slow Forward / Backward, Move one step Up / Down

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com.
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Storage	Supported HDD	Up to 10TB
	HDD Slot	SATA 16ea(Max. 160TB, Non-RAID mode), Hot swap
	External	iSCSI storage
	RAID	RAID-5/6(Array Size : 8 HDDs x 2 Array)
Backup	File backup	Recorder/SEC/AVI/JPG(Local), AVI/PNG(Network)
	Function	Multi channel(Up to 16CH) Play, Date-Time/Title display

Network

Protocol	IPv4, IPv6, TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTSP, RTCP, NTP, HTTP, DHCP (Server, Client), SMTP, ICMP, IGMP, ARP, DNS, DDNS, uPnP, HTTPS, SNMP, ONVIF (Profile-S), SUNAPI(Server, Client)	
DDNS	Hanwha DDNS	
Transmission Bandwidth	Max. 520Mbps	
Audio	Input/Output	64 CH(network)
	Compression	G.711, G.726, AAC(16/48KHz)
	Audio Communication	2-Way
Max Remote Users	Search(3), Live Unicast(10), Multicast(20)	
Security	IP address filtering, User access Log, 802.1x, TLS, Encryption Device certificate(Hanwha Techwin Root CA), Signed firmware, TPM support	
Web viewer	Supported OS	Windows10 or higher, macOS 13.5.2 or higher
	Supported browser	Google Chrome, Microsoft Edge, Mac Safari
Viewer Software	SSM, Webviewer, Winenet Viewer, Wisenet mobile Support CGI(SUNAPI) for integration to 3'rd party VMS	

Functions

Camera Setup	Register	Auto, Manual
	Item	IP address, Add profile edit, Bitrate, Compression, GOP, Quality, Camera MD setup (4, 8 point polygon) Camera video setup (Simple focus, Brightness/Contrast, Flip/Mirror, IRIS, WDR, D&N, SSNR, Shutter, SSDR, DIS), Fisheye Dewarping Mode, Hallway View Setup, Camera Webpage
PTZ	Control	Via GUI, Webviewer, SPC-2000/2001
	Preset	300 Presets
Smart phone	Support Model	iOS, Android
	Protocol Support	RTP, RTSP, HTTP, CGI(SUNAPI)
	Control	Live 16CH(Multi-Profile Support), Playback 4CH
	Max. Remote Users	Search(3), Live Unicast(10)
Redundancy	Failover	N+1
	ARB	Support
Easy configuration	P2P(QR code)	

Interface

Front	Indicator	HDD, Alarm, Power, Record, Backup, Network, RAID
Storage	Yes	
Reset	Power button	
HDD Key Lock	Yes	
HDMI	2EA (Playback/Setup → HDMI1) HDMI1 : 3840x2160 30Hz HDMI2 : 1920x1080 60Hz	
Audio	Out 1EA (3.5mm Audio Jack)	
Ethernet	RJ-45 3EA (LAN/WAN, 1Gbps)	
Alarm	In 8EA, Out 4EA	

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USB	4EA(Front 2 x USB 2.0, Rear 2 x USB 3.0)
Power inlet	AC 1EA

System		
Log	Log List	Max. 100,000 (System Log, Event Log each)
System Control	Mouse(include wireless), Keyboard(include wireless), Web, Controller (SPC-2000/2001)	
Language	English, French, German, Italian, Spanish, Russian, Turkish, Polish, Dutch, Czech, Portuguese, Danish, Rumanian, Serbian, Croatian, Hungarian, Greek, Norwegian, Finnish, Korean, Chinese, Japanese, Thai, Vietnamese	

Environmental	
Operating Temperature	0°C to +40°C(32°F to 104°F)
Operating Humidity	20% ~ 85% RH

Electrical	
Power Input	100 ~ 240 VAC ±10%; 50/60 Hz, 2.7A (Single SMPS)
Power Consumption	Max. 265W (904.2 BTU with HDD 16ea)

Mechanical	
Color / Material	Black / Metal
Dimension (WxHxD)	440.0 x 132.0 x 571.1mm
Weight	Approx. 14Kg(30.9 lb, HDD not included)

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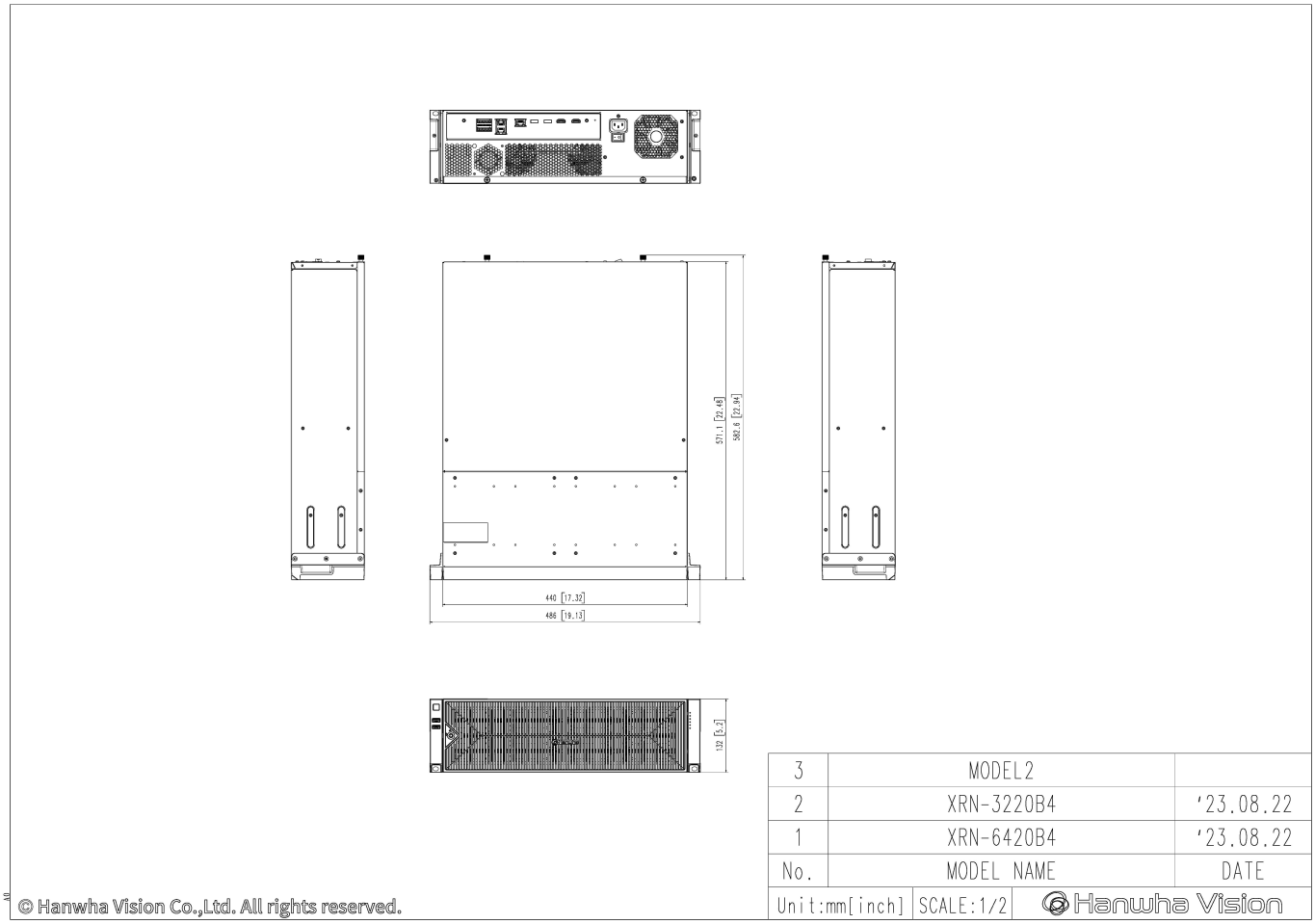
XRN-6420B4

64CH NVR with 12th gen. Intel® Processor



CAD

Unit:mm [inch]



No.	MODEL NAME	DATE
3	MODEL2	
2	XRN-3220B4	'23.08.22
1	XRN-6420B4	'23.08.22
Unit:mm[inch]	SCALE:1/2	Hanwha Vision

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Netgenium

Intelligent Audio

IP PoE Projector Speaker

Native IP Device

Speakers connect to your IP network. Simple to install and easily configured with a web browser.

Power over Ethernet

Single cable deployment. Onboard Audio amplifier delivering up to 10W of power with IEEE803.3af or up to 25W with IEEE802.3at

Prioritised Audio

The ASP7202-IP supports up to 9 levels of priorty for audio announcements for selective muting.

Flex I/O

Features 4 Flex Inputs and 4 Flex Outputs. Each Flex I/O is configurable via the browser interface, providing flexible configuration options for attached I/O.

IP Integration

Netgenium's PolicyServer provides automated announcements along with seamless integration with Cisco Skinny and SIP IP Telephony and Milestone Xprotect Smart Client.



ASP7202-IP

Deploy an audio PA system over an IP Network with Netgenium IP Speakers and make paging announcements via an IP Telephone system or PC.

The IP Speaker offers interoperability between Cisco Call Manager for Audio announcements using G.711 audio, and the ability to 'pipe' background music from a multicast audio source.

Integrate speakers with Netgenium's PolicyServer and NGx consoles applications and make targeted paging announcements to an individual or group of individuals within a specific 'Zone' in your building.

By utilising Power over Ethernet, the speaker is easy to deploy and manage. Features such as mute and volume are controlled via software.

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Netgenium

ASP7202-IP

IP PoE Projector Speaker

Technical Data

Model No:
ASP7202-IP

Connectivity:
1 No. 10/100 Base TX Ethernet (replaceable integral 2.5mtr category 5e cable with RJ45 plug)

Electrical

Effective frequency range, Hz (BSEN60268-5)	110-18,000
S.P.L. @ 1m, 1 watt, dB, Test Signal Bandwidth	100Hz-10 kHz 91
S.P.L. @ Full power, Octave Bandwidth, dB	104
Acoustic Power (dB-PWL@1 watt) 1k/2kHz,dB	89/90
Dispersion at 1k/2k Hz, Degrees	180/120
Directivity Axial Q factor, 1k/2kHz	2.6/5.6

Supported Codecs:
G711 uLaw ,G711 ALaw, PCM
Wav 11.025 Khz, Wav 22.05 Khz, Wav 44.1 Khz, Wav 48 Khz

Onboard I/O:
No 4 Flex Inputs (Requires Digital 0v contact)
No 4 Flex Outputs (12V switched –ve)
Flex I/O can be used for local announcements, IP events and PolicyServer control

Power Supply:

Power over Ethernet	IEEE802.3af or IEEE820.3at
Max Power Output	25W (with IEEE802.3at supply)

Mechanical

Dimensions, front & depth, mm	Ø138 x 204
Net weight, Kgs	1.1Kg
Material	ABS plastic housing with UV inhibitors
Mounting	Stainless Steel U Bracket
IP Rating	66

Netgenium
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Access, Security, Audio & Lighting Control

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Cabinets
Wall Mounting Cabinets

The compact design of the 19" Wall Mounting Cabinets make them ideal for smaller networks and work groups. The cabinets are available in various sizes and are supplied fully assembled. Each cabinet comprises a welded steel frame and adjustable front and rear 19" mounting profiles. Cable access positions with removable plates are situated in the top and bottom of the cabinet. The cabinets feature a ventilation slots in the top, have a lockable glass front door, and removable sides. The cabinet is finished in a high quality attractive black.



Features & Benefits

- Ventilated top
- Adjustable mounting posts
- Removable side panels
- Removable cable plates access in base and top
- Lockable glass front door
- Supplied fully assembled

Cabinet Weight (kg)						
	6U	9U	12U	15U	18U	21U
550W x 450D	14	18	21	25	28	
550W x 550D	15	18	21	24	28	31
600W x 450D	20	23	27	31	36	40
600W x 550D	25	30	35	41	46	52
600W x 600D	28	33	38	45	51	58

Cable Access Holes 63 mm x 343 mm (1 top 1 bottom)

Ordering Information	
Product Description	Part Number
Wall Mounting Cabinet 6u 550W × 450D x 325H	RR-W1-6-G
Wall Mounting Cabinet 9u 550W × 450D x 455H	RR-W1-9-G
Wall Mounting Cabinet 12u 550W × 450D x 590H	RR-W1-12-G
Wall Mounting Cabinet 15u 550W × 450D x 720H	RR-W1-15-G
Wall Mounting Cabinet 18u 550W × 450D x 855H	RR-W1-18-G
Wall Mounting Cabinet 6u 550W × 550D x 325H	RR-W2-6-G
Wall Mounting Cabinet 9u 550W × 550D x 455H	RR-W2-9-G
Wall Mounting Cabinet 12u 550W × 550D x 590H	RR-W2-12-G
Wall Mounting Cabinet 15u 550W × 550D x 720H	RR-W2-15-G
Wall Mounting Cabinet 18u 550W × 550D x 855H	RR-W2-18-G
Wall Mounting Cabinet 21u 550W × 550D x 990H	RR-W2-21-G
Wall Mounting Cabinet 6u 600W × 450D x 325H	RR-W3-6-G
Wall Mounting Cabinet 9u 600W × 450D x 455H	RR-W3-9-G
Wall Mounting Cabinet 12u 600W × 450D x 590H	RR-W3-12-G
Wall Mounting Cabinet 15u 600W × 450D x 720H	RR-W3-15-G
Wall Mounting Cabinet 18u 600W × 450D x 855H	RR-W3-18-G
Wall Mounting Cabinet 21u 600W × 450D x 990H	RR-W3-21-G
Wall Mounting Cabinet 6u 600W × 550D x 325H	RR-W4-6-G
Wall Mounting Cabinet 9u 600W × 550D x 455H	RR-W4-9-G
Wall Mounting Cabinet 12u 600W × 550D x 590H	RR-W4-12-G
Wall Mounting Cabinet 15u 600W × 550D x 720H	RR-W4-15-G
Wall Mounting Cabinet 18u 600W × 550D x 855H	RR-W4-18-G
Wall Mounting Cabinet 21u 600W × 550D x 990H	RR-W4-21-G
Wall Mounting Cabinet 6u 600W × 600D x 325H	RR-W5-6-G
Wall Mounting Cabinet 9u 600W × 600D x 455H	RR-W5-9-G
Wall Mounting Cabinet 12u 600W × 600D x 590H	RR-W5-12-G
Wall Mounting Cabinet 15u 600W × 600D x 720H	RR-W5-15-G
Wall Mounting Cabinet 18u 600W × 600D x 855H	RR-W5-18-G
Wall Mounting Cabinet 21u 600W × 600D x 990H	RR-W5-21-G

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Lightweight, desktop microphone for clear recording or embedding of audio
3.5mm male audio cable for connecting to laptops, notebooks or conferencing equipment
Easily adjustable, unidirectional design for ensuring the optimum height for recording
Small plastic base for positioning on a desk or work surface
2 year warranty

The Lindy 3.5mm audio desktop microphone is a simple solution for recording, video conferencing or embedding audio to a 3.5mm output. Providing clear a...

Read full description

- Lightweight, desktop microphone for clear recording or embedding of audio
- 3.5mm male audio cable for connecting to laptops, notebooks or conferencing equipment
- Easily adjustable, unidirectional design for ensuring the optimum height for recording
- Small plastic base for positioning on a desk or work surface

MPN: RWM20U56BL

by Logon 19" Rack Cabinet 20U 60 x 56 Wallmount



Product Dimensions: 600 x 560 x 1000mm

Colored strips located at the sides of the 4mm, antistatic, tempered, smoothed glass, door having an extruded alminum frame and high fracture resistance present a decorative view.

In free standing type applications, they may be used with optional pinion feet or caster group.

By attaching ventilation module with 2 fans maximum (in option) to the ventilation hole at the upper chassis of the cabinet, active ventilation is achieved.

If no fan module is attached, these ventilation holes enable air circulation inside cabinet and discharging of the hot air by passive ventilation.

Since the side doors are fixed and not detachable, access to the cabinet is ensured only form the front in wall mounting applications and from the back and front in free standing applications.

Standard cabinet is delivered having 1 set and 2 device installation rails mounted thereon. Device installation rails enable the depth adjustments of the devices to be applied into the cabinet.

By means of 145mm x 70mm cable inlet holes at the upper, lower and rear door of the cabinet, it provides cable inlet at 3 directions which in turn facilitates installation.

Thanks to the rubber edged cable entry module, movable for 0-50 mm and with sliding compression system, incoming cables are compressed safely whereas dust is reduced inside at maximum levels.

- Glass Door
- Wallmount
- RAL9005
- Cage nuts can be bought separate

Specifications

Features	**Cable entry point**	Yes
	Castor wheels	No
	Cooling type	Passive
	Frame type	Closed
	Front door construction	Glass/Steel
	Front door key lock	Yes
	International Protection (IP) code	IP20
	Key lock	Yes
	Material	Glass, Steel
	Maximum weight capacity	80 kg

Features	**Mounting hole shape**	Round
	Preassembled	Yes
	Product colour	Black
	Rack capacity	20U
	Rack rails	Yes
	Removable back door	No
	Removable side panels	No
	Soundproof	No
	Type	19" Wall Mounted Rack
Other features	**Dimensions (WxDxH)**	600x560x1000 mm
Vendor information	**Brand Name**	Lanview
	Warranty	5 Year(s)
Weight & dimensions	**Size (imperial)**	19 "

Other products in this series

Rack capacity	Black	White
12U	RWM12U56BL	RWM12U56WH
16U	RWM16U56BL	RWM16U56WH
20U	RWM20U56BL	RWM20U56WH
6U	RWM06U56BL	RWM06U56WH
7U	RWM07U56BL	RWM07U56WH
9U	RWM09U56BL	RWM09U56WH

Other images

