





**Key Features** 



#### XNO-A9084R

8MP AI IR Bullet Camera



• 4.4~9.3mm (2.1x) motorized varifocal

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

• Business intelligence based on AI engine :

People/Vehicle/Crowd counting, Queue management, Heatmap

Support BestShot and full attributes

- Support Dynamic Privacy Masking
- AI-based Image enhancement
- extremeWDR, WiseNR II (Based on AI engine), WiseStream(Based on AI engine)
- WiseIR: IR viewable length 40 m (131.23 ft)
- IP66, IP67, NEMA4X, IK10
- NEMA TS-2 (2.2.7.2-8, 2.2.8, 2.2.9)
- Support Wisepower(Power monitoring, ECO mode)
- Device certificate(Hanwha Vision Root CA), Secure storage
- (Secure element with FIPS 140-3 level3/CC EAL6+ certified), SBOM

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XNO-A9084R 8MP AI IR Bullet Camera





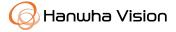
#### **Specifications**

Video	
Imaging Device	1/1.8" CMOS
Resolution	3840x2160, 3328x1872, 3072x1728, 2592x1944, 2688x1512, 2560x1440, 1920x1080, 1600x1200, 1280x960, 1280x720, 1024x768, 800x600, 640x480, 640x360, 320x240, 320x180
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps(@8MP Max. 5fps)
Min. Illumination	Color: 0.04Lux(F1.3, 1/30sec, 30IRE) BW: 0.004Lux(F1.3, 1/30sec, 30IRE), 0Lux(IR LED on)
Video Out	USB: Micro USB Type C for installation
Lens	
Focal Length (Zoom Ratio)	4.4~9.3mm(2.1x) motorized varifocal
Max. Aperture Ratio	F1.3(Wide)~F2.15(Tele)
Angular Field of View	H: 113°(Wide)~47°(Tele) V: 58°(Wide)~26°(Tele) D: 138°(Wide)~54°(Tele)
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	0°~350° / 0°~90° / 0°~350°
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V, WiseNR II (Based on AI engine)
Digital Image Stabilization	Support
Defog	Support
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, 8point polygonal zones - Color: gray/green/red/blue/black/white/purple/yellow - Mosaic Dynamic Privacy Mask(Based on Al engine) - Color: gray/green/red/blue/black/white/purple/yellow - Mosaic
Gain Control	Off / Max Gain / Manual
White Balance	ATW / NarrowATW / AWC / Manual / Indoor / Outdoor
LDC	Support(Fill/Stretch mode)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker(2~1/30,000sec) Prefer shutter control(Based on AI engine)

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# X series XNO-A9084R



Video Rotation	Flip, mirror, hallway view(90°/270°)
Analytics	Classified object type: Person/Face/Vehicle(Type: car/bus/truck/motorcycle/bicycle)/License plate Attributes: Person(Gender, Clothing top/bottom color, Bag), Face(Age, Gender, Mask, Glasses), Vehicle(Type: car/bus/truck/motorcycle/bicycle, Color) Support BestShot Analytics events based on Al engine - Motion detection, Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear), Slip & fall detection, Face mask detection, Social distancing detection
	Analytics events - Defocus detection, Tampering, Shock detection, Audio detection
Business Intelligence	Based on Al engine: People/Vehicle/Crowd counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports *Support extra alarm I/O via optional I/O box
Alarm Triggers	Analytics, Network disconnection, 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(WAV, MP3) - MQTT: publication
Audio In	Selectable(mic in/line in)
Audio Out	Line out
Light Type	IR LED
Light Viewable Length	WiseIR 40m(131.23ft)
IR Wavelength	850nm
0	
Network	
	Metal shielded RJ-45(10/100BASE-T)
Network	
Network Ethernet	Metal shielded RJ-45(10/100BASE-T) H.265/H.264: Main/Baseline/High
Network Ethernet Video Compression	Metal shielded RJ-45(10/100BASE-T) H.265/H.264: Main/Baseline/High MJPEG G.711(PCM): 8kHz(64Kbps) G.726(ADPCM): 8kHz(16/24/32/40Kbps) AAC-LC: 16kHz(48Kbps)
Network Ethernet Video Compression Audio Compression	Metal shielded RJ-45(10/100BASE-T) H.265/H.264: Main/Baseline/High MJPEG G.711(PCM): 8kHz(64Kbps) G.726(ADPCM): 8kHz(16/24/32/40Kbps) AAC-LC: 16kHz(48Kbps) OPUS: 48kHz(64Kbps)
Network Ethernet Video Compression Audio Compression Smart Codec	Metal shielded RJ-45(10/100BASE-T) H.265/H.264: Main/Baseline/High MJPEG G.711(PCM): 8kHz(64Kbps) G.726(ADPCM): 8kHz(16/24/32/40Kbps) AAC-LC: 16kHz(48Kbps) OPUS: 48kHz(64Kbps) WiseStream(Based on Al engine) H.264/H.265: CBR or VBR
Network Ethernet Video Compression Audio Compression Smart Codec Bitrate Control	Metal shielded RJ-45(10/100BASE-T) H.265/H.264: Main/Baseline/High MJPEG G.711(PCM): 8kHz(64Kbps) G.726(ADPCM): 8kHz(16/24/32/40Kbps) AAC-LC: 16kHz(48Kbps) OPUS: 48kHz(64Kbps) WiseStream(Based on AI engine) H.264/H.265: CBR or VBR MJPEG: VBR Unicast(20 users) / Multicast
Network Ethernet Video Compression Audio Compression Smart Codec Bitrate Control Streaming	Metal shielded RJ-45(10/100BASE-T)         H.265/H.264: Main/Baseline/High         MJPEG         G.711(PCM): 8kHz(64Kbps)         G.726(ADPCM): 8kHz(16/24/32/40Kbps)         AAC-LC: 16kHz(48Kbps)         OPUS: 48kHz(64Kbps)         OPUS: 48kHz(64Kbps)         WiseStream(Based on Al engine)         H.264/H.265: CBR or VBR         MJPEG: VBR         Unicast(20 users) / Multicast         Multiple streaming(Up to 5 profiles, 3 virtual channel support)         IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP/SFTP, SMTP(StartTLS), ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, QOS, UPnP, Bonjour,
Network Ethernet Video Compression Audio Compression Smart Codec Bitrate Control Streaming Protocol	Metal shielded RJ-45(10/100BASE-T)         H.265/H.264: Main/Baseline/High         MJPEG         G.711(PCM): 8kHz(64Kbps)         G.726(ADPCM): 8kHz(16/24/32/40Kbps)         AAC-LC: 16kHz(48Kbps)         OPUS: 48kHz(64Kbps)         WiseStream(Based on Al engine)         H.264/H.265: CBR or VBR         MJPEG: VBR         Unicast(20 users) / Multicast         Multiple streaming(Up to 5 profiles, 3 virtual channel support)         IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP/SFTP, SMTP(StartTLS), ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast), CDP, MQTT, Syslog         ONVIF Profile S/G/T/M         SUNAPI(HTTP API)
Network Ethernet Video Compression Audio Compression Smart Codec Bitrate Control Streaming Protocol Application Programming Interface	Metal shielded RJ-45(10/100BASE-T)         H.265/H.264: Main/Baseline/High         MJPEG         G.711(PCM): 8kHz(64Kbps)         G.726(ADPCM): 8kHz(16/24/32/40Kbps)         AAC-LC: 16kHz(48Kbps)         OPUS: 48kHz(64Kbps)         WiseStream(Based on Al engine)         H.264/H.265: CBR or VBR         MJPEG: VBR         Unicast(20 users) / Multicast         Multiple streaming(Up to 5 profiles, 3 virtual channel support)         IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP/SFTP, SMTP(StartTLS), ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast), CDP, MQTT, Syslog         ONVIF Profile S/G/T/M         SUNAPI(HTTP API)
Network         Ethernet         Video Compression         Audio Compression         Smart Codec         Bitrate Control         Streaming         Protocol         Application Programming Interface         Security	Metal shielded RJ-45(10/100BASE-T)         H.265/H.264: Main/Baseline/High         MJPEG         G.711(PCM): 8kHz(64Kbps)         G.726(ADPCM): 8kHz(16/24/32/40Kbps)         AAC-LC: 16kHz(48Kbps)         OPUS: 48kHz(64Kbps)         OPUS: 48kHz(64Kbps)         WiseStream(Based on Al engine)         H.264/H.265: CBR or VBR         MJPEG: VBR         Unicast(20 users) / Multicast         Multiple streaming(Up to 5 profiles, 3 virtual channel support)         IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP/SFTP, SMTP(StartTLS), ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast), CDP, MQTT, Syslog         ONVIF Profile S/G/T/M         SUNAPI(HTTP API)         Hanwha Vision Open Platform
Network         Ethernet         Video Compression         Audio Compression         Smart Codec         Bitrate Control         Streaming         Protocol         Application Programming Interface         Security         OS / Firmware Protect	Metal shielded RJ-45(10/100BASE-T)         H.265/H.264: Main/Baseline/High         MJPEG         G.711(PCM): 8kHz(64Kbps)         G.726(ADPCM): 8kHz(16/24/32/40Kbps)         AAC-LC: 16kHz(48Kbps)         OPUS: 48kHz(64Kbps)         WiseStream(Based on Al engine)         H.264/H.265: CBR or VBR         MJPEG: VBR         Unicast(20 users) / Multicast         Multiple streaming(Up to 5 profiles, 3 virtual channel support)         IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, SSL/TLS, DHCP,         FTP/SFTP, SMTP(StartTLS), ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour,         LLDP, SRTP(TCP, UDP Unicast), CDP, MQTT, Syslog         ONVIF Profile S/G/T/M         SUNAPI(HTTP API)         Hanwha Vision Open Platform

Access Control IP-based access control, MAC-based access control, Auto logout

Data Protect Encryption Credentials, Encrypt compress for live recording file export

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# X series XNO-A9084R



Audit	Access / System / Event Log management
Device ID	Device Certificate(Hanwha vision Root CA)
Secure Storage	Secure element, SDcard partition encrypt(AES-256)
Supply Chain Security	SBOM
Security Certificate	ETSI EN 303 645, Secure element(FIPS 140-3 level3, CC EAL6+)
General	
Webpage Language	English, Korean, Simplified Chinese, Traditional Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 1slot 1TB
Memory	4GB RAM, 8GB eMMC
Environmental & Electrical	
Operating Temperature / Humidity	-40°C~+60°C(-40°F~+140°F) +74°C(+165°F)(MAX) based on NEMA-TS 2(2.2.7) * Start up should be done at above -30°C O~100%RH(Condensing) Humidity control with AIR vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~90% RH
EPA(Effective Projected Area)	0.02m <sup>2</sup>
Certification	IP66/IP67, NEMA4X, IK10, NEMA-TS 2(2.2.7.2-8, 2.2.8, 2.2.9)
Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max. 11.2W, typical 8.4W Support Wisepower - Power monitoring(Max./Current/Avg.) - ECO mode
Mechanical	
Color / Material	White / Aluminum Hard-coated window
Material Management	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)
Material Management RAL Code	REACH(Regulation (EC) No. 1907/2006)
-	REACH(Regulation (EC) No. 1907/2006) Conflict mineral policy(Section 1502 of US Dodd Frank Act)
RAL Code	REACH(Regulation (EC) No. 1907/2006) Conflict mineral policy(Section 1502 of US Dodd Frank Act) RAL9003
RAL Code Product Dimensions / Weight	REACH(Regulation (EC) No. 1907/2006) Conflict mineral policy(Section 1502 of US Dodd Frank Act)RAL9003Ø93.4x276.6mm(3.68x10.89"), 1,630g(3.59lb)
RAL Code Product Dimensions / Weight Compatible Conduit hole / Gangbox	REACH(Regulation (EC) No. 1907/2006) Conflict mineral policy(Section 1502 of US Dodd Frank Act) RAL9003 ø93.4x276.6mm(3.68x10.89"), 1,630g(3.59lb)
RAL Code Product Dimensions / Weight Compatible Conduit hole / Gangbox Certifications & Standards	REACH(Regulation (EC) No. 1907/2006) Conflict mineral policy(Section 1502 of US Dodd Frank Act) RAL9003 Ø93.4x276.6mm(3.68x10.89"), 1,630g(3.59lb) Single, double, 4" octagon, 4" square 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
RAL Code Product Dimensions / Weight Compatible Conduit hole / Gangbox Certifications & Standards EMC	REACH(Regulation (EC) No. 1907/2006) Conflict mineral policy(Section 1502 of US Dodd Frank Act)RAL9003Ø93.4x276.6mm(3.68x10.89"), 1,630g(3.59lb)Single, double, 4" octagon, 4" squareFCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCACE/UKCA- EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3 VCCI CISPR 32 Class A KS C 9832 Class A, KS C 9835UL 62368-1, CAN/CSA C22.2 NO. 62368-1
RAL Code Product Dimensions / Weight Compatible Conduit hole / Gangbox Certifications & Standards EMC Safety Environment	REACH(Regulation (EC) No. 1907/2006)         Conflict mineral policy(Section 1502 of US Dodd Frank Act)         RAL9003         Ø93.4x276.6mm(3.68x10.89"), 1,630g(3.59lb)         Single, double, 4" octagon, 4" square         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         IEC/EN 63000         IEC/EN 60529 IP66/IP67, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA-TS 2(2.2.7.2-8, 2.2.8, 2.2.9)
RAL Code Product Dimensions / Weight Compatible Conduit hole / Gangbox Certifications & Standards EMC Safety Environment Compatible Models	REACH(Regulation (EC) No. 1907/2006)         Conflict mineral policy(Section 1502 of US Dodd Frank Act)         RAL9003         ø93.4x276.6mm(3.68x10.89"), 1,630g(3.59lb)         Single, double, 4" octagon, 4" square         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         IEC/EN 63000         IEC/EN 60529 IP66/IP67, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA-TS 2(2.2.7.2-8, 2.2.8, 2.2.9)         IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-77, IEC 60068-2-78
RAL Code Product Dimensions / Weight Compatible Conduit hole / Gangbox Certifications & Standards EMC Safety Environment	REACH(Regulation (EC) No. 1907/2006)         Conflict mineral policy(Section 1502 of US Dodd Frank Act)         RAL9003         Ø93.4x276.6mm(3.68x10.89"), 1,630g(3.59lb)         Single, double, 4" octagon, 4" square         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         IEC/EN 63000         IEC/EN 60529 IP66/IP67, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA-TS 2(2.2.7.2-8, 2.2.8, 2.2.9)

 Ceiling Mount (Assy)
 SBP-150CMI, SBP-300CMI, SBP-300CMW1, SBP-900CMW, SBP-300CMTW, SBP-300CMTS

 Ceiling Mount (Single Unit)
 SBP-180CMB, SBP-140CMB, SBP-180CMS, SBP-900CMP, SBP-300CMP, SBP-150CMP, SBP-C15P, SBP-C15P

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### X series XNO-A9084R



Wall Mount	SBP-160WMW1, SBP-400WMW, SBP-250WMW, SBP-300WMW, SBP-300WMW1
Pole Mount	SBD-180PMW, SBP-300PMW2
Corner Mount	SBP-156KMW, SBP-300KMW1
Parapet Mount	SBP-156LMW1, SBP-300LMW
Cabinet	SBP-150NBW, SBP-300NBW
Conduit Adaptor	SBP-060BA
Interface Box	SPM-4210
Other Compatible Models	SPP-C7400, SBP-115PFA

DORI (EN62676-4 standard)	
Detect (25PPM/ 8PPF)	Wide: 50.8m(166.77ft) / Tele: 176.6m(579.49ft)
Observe (63PPM/ 19PPF)	Wide: 20.3m(66.71ft) / Tele: 70.7m(231.80ft)
Recognize (125PPM/ 38PPF)	Wide: 10.2m(33.35ft) / Tele: 35.3m(115.90ft)
Identify (250PPM/ 76PPF)	Wide: 5.1m(16.68ft) / Tele: 17.7m(57.95ft)

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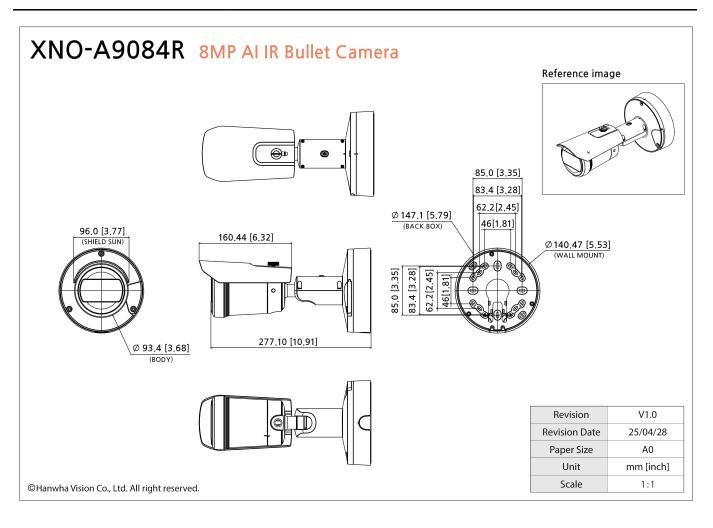


XNO-A9084R 8MP AI IR Bullet Camera



CAD

Unit:mm [inch]



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