



Network

BOX

XNB-9003

4K AI Box Camera



Key Features

- 4K resolution
- Color: 0.03 Lux (F1.2, 1/30sec, 30IRE), BW: 0.003 Lux (F1.2, 1/30sec, 30IRE)
- Maximum 30fps (H.265/H.264)
- Day & Night (ICR), extremeWDR (120dB)
- WiseNR II (Based on AI engine), WiseStreamIII (Based on AI engine)
- Analytics events based on AI engine (NPU) : Object detection (Person/Face/Vehicle - car, truck, bus, bicycle, motorcycle/License plate),
IVA (Virtual line/Area, Enter/Exit, Loitering, Direction, Intrusion)
- Analytics events : Defocus detection, Motion detection, Tampering, Fog detection
Audio detection, Sound classification, Shock detection, Appear/Disappear

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Specifications

Video	
Imaging Device	1/1.8" CMOS
Resolution	3840x2160, 3328x1872, 3072x1728, 2592x1944, 2688x1520, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps(@8MP Max. 5fps)
Min. Illumination	Color: 0.03Lux(F1.2, 1/30sec, 30IRE) BW: 0.003Lux(F1.2, 1/30sec, 30IRE)
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation USB: Micro USB Type B, 1280x720 for installation
Lens	
Focus Control	Simple focus
Lens Type	DC auto iris, P-iris, Manual, I-CS
Mount Type	C mount, CS mount
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR) / Color / B/W / External / Schedule
Backlight Compensation	BLC, HLC, WDR, SSSR
Wide Dynamic Range	extremeWDR(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
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
LDC	Support(Fill/stretch mode)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker(2~1/12,000sec) prefer shutter control(Based on AI engine)
Video Rotation	Flip, Mirror, Hallway view(90°/270°)
Analytics	Classified object type: Person/Face/Vehicle(Type: car/bus/truck/motorcycle/bicycle)/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 - Defocus detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear)
Business Intelligence	Based on AI engine: People/Vehicle counting, Queue management, Heatmap

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](https://www.hanwhavision.com).

Hanwha Vision is formerly known as Hanwha Techwin.

Serial Interface	RS-485(Samsung-T, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell)
Alarm I/O	2 configurable I/O ports
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/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/built-in MIC)
Audio Out	Line out

Network	
Ethernet	Metal shielded RJ-45(10/100/1000BASE-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), 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 10 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, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT
Application Programming Interface	ONVIF Profile S/G/T/M SUNAPI(HTTP API) Wisenet open platform

Security	
OS / Firmware Protect	Encrypted Firmware, Secure boot, Signed Firmware
User authentication	Digest Authenticaon, 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
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	TPM, HTPM(Hanwha trusted platform module), SDcard partition encrypt
Security Certificate	TPM with FIPS 140-2 level 2

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 Max. 1TB(512GBx2)
Memory	4GB RAM, 512MB Flash

Environmental & Electrical	
Operating Temperature / Humidity	-10°C~+55°C(-14°F~+131°F) / 0~95% RH(non-condensing)
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~90% RH

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Input Voltage	PoE(IEEE802.3af, Class3), 12VDC
Power Consumption	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W
Mechanical	
Color / Material	Black / Aluminum
Product Dimensions / Weight	81(W)x67(H)x165(D)mm(3.19x2.64x6.48"), 880g(1.94 lb)
Pole Mount	SBP-300PMW2+SBB-300PMW1
Housing (Box)	SHB-4301HP, SHB-4200/4200H
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

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CAD

Unit:mm [inch]

