Hanwha Vision



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

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
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4K AI Box Camera



Specifications

Video

Imaging Device	Size	1/1.8"
	Type	CMOS
Resolution		3840x2160, 3328x1872, 3072x1728, 2688x1520, 2592x1944, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@8MP Max. 5fps)
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.03
	BW(1/30sec, 30IRE)	0.003
Video Out		CVBS: 1.0 Vp-p / 75Ω composite for installation, USB: Micro USB Type B. Preview and installation ONLY. Requires WiFi dongle.

Lens

Focus Control	Simple focus
Lens Type	DC auto iris, P iris(IR corrected), Manual, I-CS
Mount Type	C mount, CS mount

Operational

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

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Operational

LDC		Support(Fill/stretch mode)
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°)
Serial Interface		RS-485(Samsung-T, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell)
Alarm Interface	In/Out	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

Analytics

Classified Object Type		Person, Face, Vehicle, License plate
Attributes	Vehicle	Type(car, bus, truck, motorcycle, bicycle)
Thumbnail		DetectionShot
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Motion detection
	Normal	Defocus detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear)
Business Intelligence	Based on AI Engine	People counting, Queue management, Heatmap, Vehicle counting

Network

Ethernet		Metal shielded RJ-45(10/100/1000BASE-T)
Video Compression		H.265: Main, 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, WiseStreamIII
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	Up to 20 users
	Multicast	Support
	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, IGMPv2, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT

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Network

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
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), HTPM(Hanwha Trusted Platform Module), SDcard partition encrypt(AES-256)
Security Certificate	TPM 2.0 with FIPS 140-2 level2

General

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

Environmental & Electrical

Operating Condition	Temperature	-10°C~+55°C(+14°F~+131°F)
	Humidity	0~95% RH(non-condensing)
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
Input Voltage		PoE(IEEE802.3af, Class3), 12VDC
Power Consumption	PoE	Max. 12.95W, typical 9.8W
	12VDC	Max. 19W, typical 9.5W

Mechanical

Color	Black
Material	Aluminum
RAL Code	RAL9005
Product Dimensions	81(W)x67(H)x165(D)mm(3.19x2.64x6.48")
Product Weight	880g(1.94lb)

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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

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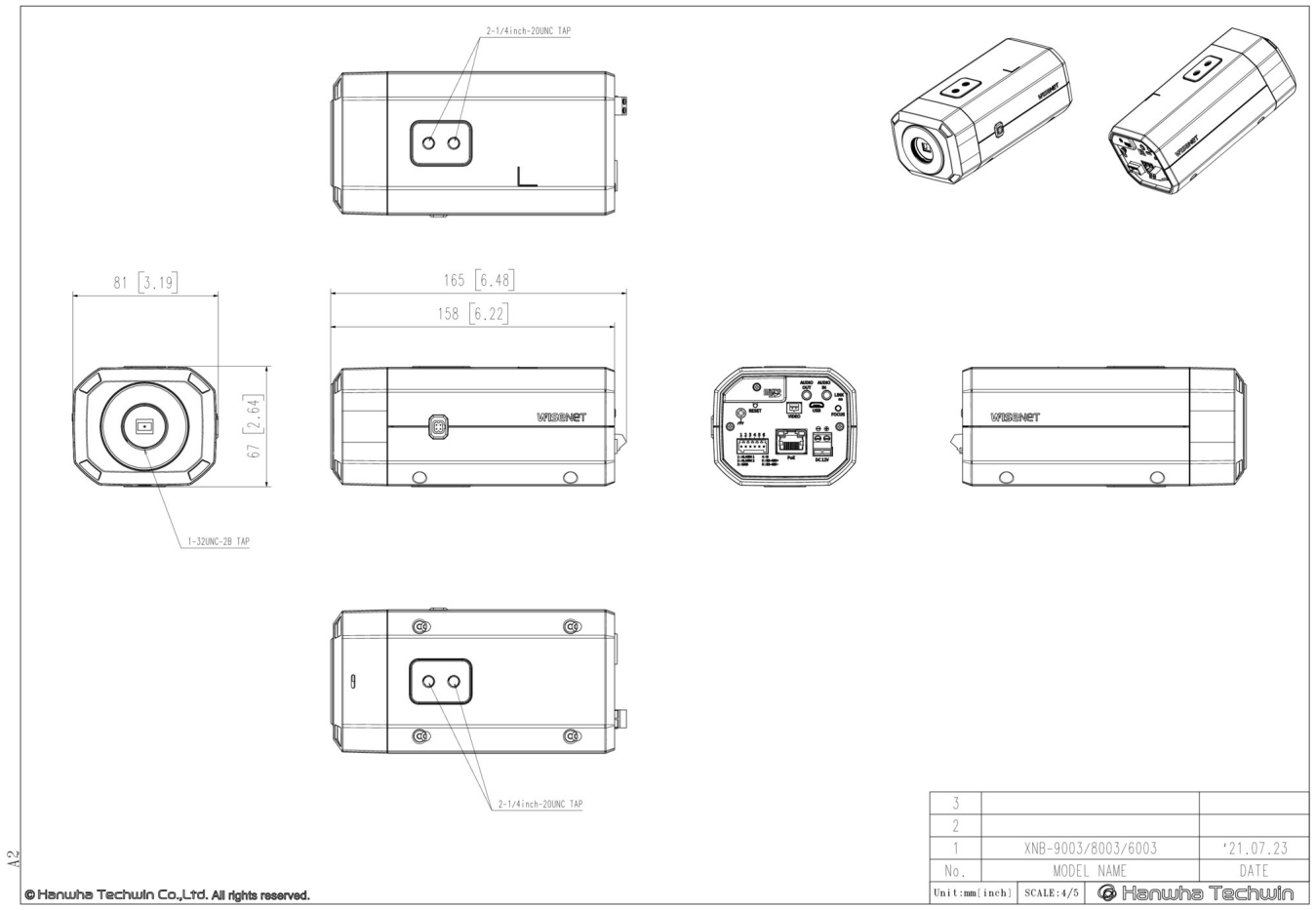
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CAD

Unit: mm [inch]



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