



Network

BOX

PNB-A6001

2MP AI Box Camera



Key Features

- Maximum 2MP resolution, Up to 120fps
- 0.006Lux@F1.2, 1/30sec. (Color), 0.0006Lux@F1.2, 1/30sec. (B/W)
- Day & Night (ICR), WDR (120dB), WiseNR II (Using AI engine)
- H.265, H.264, MJPEG, WiseStream II, WiseStreamIII (Using AI engine)
- Video Analytics based on AI
 - Object detection and classification (Person, Face, Vehicle, License Plate)
 - Face mask detection, Social distancing detection
 - Attribute, BestShot
- TPM with FIPS 140-2 level2, Secure boot, Verify firmware forgery
- System requirements
 - SSM v2.10.8 or later, Genetec plugin v1.0 or later, Milestone plugin v1.0.2 or later, NVR model (XRN-6410DB4/B4, XRN-3210B4)

Compatible Devices



SHB-4301HP



STB-4150V



Occupancy
Monitoring
Application

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Specifications

Video	
Imaging Device	1/2" CMOS
Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360
Max. Framerate	H.265/H.264: Max. 60/50fps(60Hz/50Hz, AI analytics on), Max. 120/100fps(60Hz/50Hz, AI analytics off) MJPEG: Max. 15fps/12fps(60Hz/50Hz)
Min. Illumination	Color: 0.006Lux(F1.2, 1/30sec,30IRE) B/W : 0.0006Lux(F1.2, 1/30sec,30IRE), 30/25fps Color: 0.012Lux(F1.2, 1/60sec,30IRE) B/W : 0.0012Lux(F1.2, 1/60sec,30IRE), 60/50fps Color: 0.024Lux(F1.2, 1/120sec,30IRE) B/W : 0.0024Lux(F1.2, 1/120sec,30IRE), 120/100fps
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)
Backlight Compensation	BLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	WiseNR II (using AI engine) SSNR V
Digital Image Stabilization	Stabilization Support(built-in gyro sensor)
Motion Detection	8ea, polygonal zones
Privacy Masking	6ea, rectangle zones - Color: Gray/Black/White
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) Auto prefer shutter control based on AI engine
Video Rotation	Flip, Mirror, Hallway view(90-/270-)

Analytics

Classified object type: Person/Face/Vehicle/License plate
 Attributes: Person(Gender, Color and Bag), Face(Age, Gender, Mask and Glasses), Vehicle(Type: car/bus/truck/motorcycle/bicycle and Color)
 Support BestShot per object
 Analytics events based on AI engine
 - Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit), Face mask detection, Social distancing detection, Slip&Fall detection
 Analytics events
 - Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear)
 Support WiseDetector for Adding custom objects

*Some of the video analytics only works with people and vehicle detection

Business Intelligence	People/Vehicle/Crowd counting, Queue management, Heatmap based on AI engine
Serial Interface	RS-485(Samsung-T, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell)
Alarm I/O	2 configurable I/O ports, DC 12V output(Max. 50mA)
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 - 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(10/100/1000 BASE-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 , WiseStreamIII(using AI engine)
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(6 users) / Multicast Multiple streaming(Up to 6 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 Profile S/G/T/M SUNAPI(HTTP API) Hanwha Vision Open Platform WiseAI application included Oncloud edge recording, compatible with Hanwha Vision's Micro SD cards up to 1TB

Security

OS / Firmware Protect	Encrypted Firmware, Secure boot, Signed Firmware
User authentication	Digest Authenticaon, Prevent brute-force attack
Network authentication	IEEE 802.1X (EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	HTTPS, WSS (WebSocket Secure)
Access Control	IP-based access control
Data Protect	Encryption Credentials, Encrypt compress for live recording file
Audit	Access / System / Event Log management
Device ID	Device certificate (Hanwha Techwin Root CA)
Secure Storage	TPM, SDcard partition encrypt
Security Certificate	TPM with FIPS 140-2 level 2

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

Hanwha Vision is formerly known as Hanwha Techwin.

General

Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 2slots 512GB
Memory	4096MB RAM, 512MB Flash

Environmental & Electrical

Operating Temperature / Humidity	-10°C ~ +55°C(+14°F ~ +131°F) / Less than 90% RH
Storage Temperature / Humidity	-50°C ~ +60°C(-58°F ~ +140°F) / Less than 90% RH
Input Voltage	PoE+(IEEE802.3at), 12VDC
Power Consumption	PoE+: Max 17.5W, Typ 13.7W 12VDC: Max 14W, Typ 10.6W

Mechanical

Color / Material	Body: Black / Aluminum
Product Dimensions / Weight	81x67x165mm(3.19x2.64x6.48"), Weight : 0.88kg(1.94lb)

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CAD

Unit:mm [inch]

