



Network

BOX

# PNB-A9001

4K AI Box Camera



## Key Features

- Maximum 4K resolution
- 0.03Lux@F1.2(Color)
- Day & Night(ICR), WDR(120dB), WiseNR II (Using AI engine), Prefer Shutter
- H.265, H.264, MJPEG codec, 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
- Requires camera firmware v1.41.03 or later to use Face Mask Detection
- System requirements
  - SSM v2.10.8 or later, Genetec plugin v1.0 or later, Milestone plugin v1.0.2 or later

## Compatible Accessories (Optional)



SHB-4301HP



STB-4150V

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## Specifications

### Video

<b>Imaging Device</b>	1/1.8" CMOS
<b>Resolution</b>	3840x2160, 3072x1728, 2592x1944, 2688x1520, 2560x1440, 2048x1536, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800 x 600, 800 x 448, 720 x 576, 720x480, 640x480, 640x360
<b>Max. Framerate</b>	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps/25fps(60Hz/50Hz)
<b>Min. Illumination</b>	Color: 0.03Lux(F1.2, 1/30sec) B/W : 0.003Lux(F1.2, 1/30sec)
<b>Video Out</b>	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation USB: Micro USB Type B, 1280x720 for installation

### Lens

<b>Focus Control</b>	Simple focus
<b>Lens Type</b>	DC auto iris, P iris, Manual, I-CS
<b>Mount Type</b>	C mount, CS mount

### Operational

<b>Camera Title</b>	Displayed up to 85 characters
<b>Day &amp; Night</b>	Auto(ICR)
<b>Backlight Compensation</b>	BLC, WDR, SDR
<b>Digital Noise Reduction</b>	SSNR V, WiseNR II (using AI engine)
<b>Digital Image Stabilization</b>	Stabilization Support(built-in gyro sensor)
<b>Motion Detection</b>	8ea, polygonal zones
<b>Privacy Masking</b>	6ea, rectangle zones - Color: Gray/Black/White
<b>Gain Control</b>	Low / Middle / High
<b>White Balance</b>	ATW / AWC / Manual / Indoor / Outdoor
<b>LDC</b>	Support
<b>Electronic Shutter Speed</b>	Minimum / Maximum / Anti flicker (1/5~1/12,000sec) Auto prefer shutter control based on AI engine
<b>Video Rotation</b>	Flip, Mirror, Hallway view(90/270)
<b>Analytics</b>	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, Digital auto tracking, Social distancing detection Analytics events - Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear)  *Some of the video analytics only works with people and vehicle detection
<b>Business Intelligence</b>	People counting, Queue management, Heatmap based on AI engine
<b>Serial Interface</b>	RS-485(Samsung-T, Pelco-D/P, Panasonic, Bosch, AD, GE, Vicon, Honeywell)
<b>Alarm I/O</b>	2 configurable I/O ports, DC 12V output(Max. 50mA)
<b>Alarm Triggers</b>	Analytics, Network disconnect, Alarm input

<b>Alarm Events</b>	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output Handover Audio playback
<b>Audio In</b>	Selectable(mic in/line in/Built in mic) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
<b>Audio Out</b>	Line out, Max.output level: 1Vrms

## Network

<b>Ethernet</b>	Metal shielded RJ-45(10/100/1000 BASE-T)
<b>Video Compression</b>	H.265/H.264: Main/High, MJPEG
<b>Audio Compression</b>	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
<b>Smart Codec</b>	Manual(5ea area), WiseStream II, WiseStreamIII(using AI engine)
<b>Bitrate Control</b>	H.264/H.265: CBR or VBR MJPEG: VBR
<b>Streaming</b>	Unicast(6 users) / Multicast Multiple streaming(Up to 3 profiles)
<b>Protocol</b>	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)
<b>Security</b>	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) Secure boot
<b>Application Programming Interface</b>	ONVIF Profile S/G/T/M SUNAPI(HTTP API) Wisenet open platform

## General

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

## Environmental & Electrical

<b>Operating Temperature / Humidity</b>	-10°C ~ +55°C(+14°F ~ +131°F) / Less than 90% RH
<b>Storage Temperature / Humidity</b>	-50°C ~ +60°C(-58°F ~ +140°F) / Less than 90% RH
<b>Input Voltage</b>	PoE+(IEEE802.3at), 12VDC
<b>Power Consumption</b>	PoE+: Max 16.50W, typical 12.50W 12VDC: Max 13.50W, typical 10.80W

## Mechanical

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

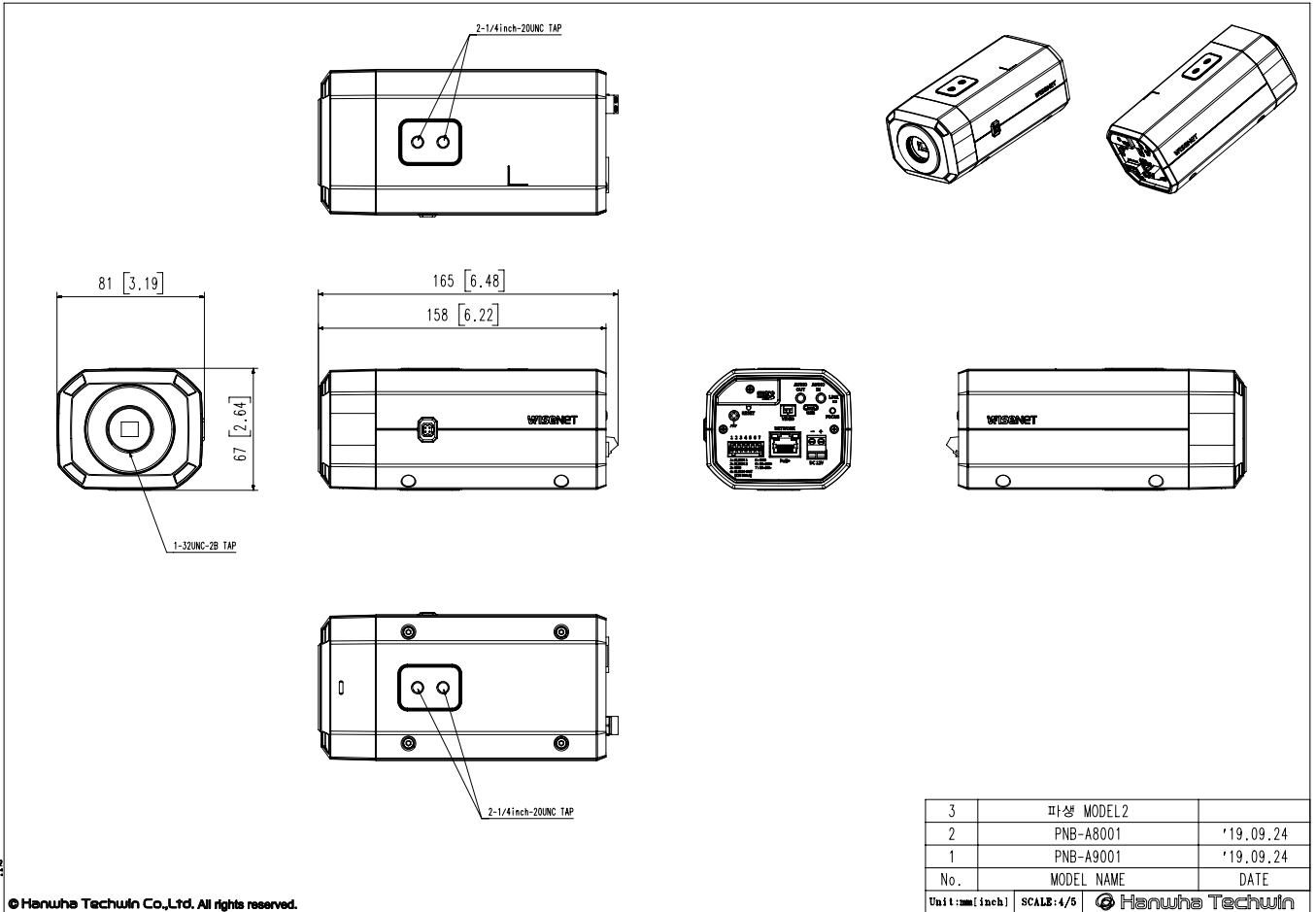
# PNB-A9001

4K AI Box Camera



CAD

Unit: mm [inch]



3	파생 MODEL2	
2	PNB-A8001	'19.09.24
1	PNB-A9001	'19.09.24
No.	MODEL NAME	DATE
Unit: mm [inch] SCALE: 4/5		Hanwha Techwin

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