



## PNB-A9001

4K AI Network Box Camera

### Benefits

- Save time and unnecessary costs associated with false alarms, thanks to highly accurate detection and object classification that uses Deep Learning Artificial Intelligence technology
- Search for specific objects quickly and easily, including various object types, people, vehicles, faces and license plates
- Further narrow down searches by identifying attributes, such as a person's age group, gender and clothing colour, or a vehicle's type and colour
- Unleash the power of Wisenet Retail Insight to gain a greater understanding of customer behaviour and buying patterns
- Get only the best images to optimise storage usage with the BestShot feature
- Keep your eyes on what's important and get close up detail with auto-tracking as a second video stream whilst viewing the entire field of view at the same time
- Have the camera activate connected devices upon a detected event with DC output and alarm in/out ports

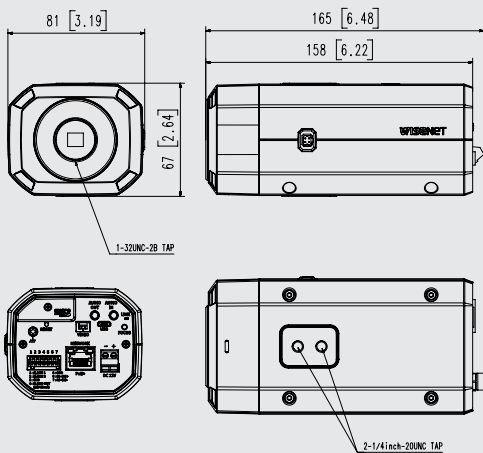
PNB-A9001	
<b>VIDEO</b>	
Imaging Device	1/1.8" 8MP CMOS
Effective Pixels	3864(H)x2180(V)
Min. Illumination	Colour: 0.03Lux(F1.2, 1/30sec)
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation USB: Micro USB Type B, 1280x720 for installation
<b>LENS</b>	
Focus Control	Simple focus
Lens Type	DC auto iris, P iris, Manual, I-CS
Mount Type	C mount, CS mount
<b>OPERATIONAL</b>	
Camera Title	Off / On (Up to 85 characters)
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNRV
Digital Image Stabilization	Support(built-in gyro sensor)
Motion Detection	8ea, polygonal zones
Privacy Masking	6ea, rectangle zones - Colour: Grey/Green/Red/Blue/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)
Video Rotation	Flip, Mirror, Hallway view(90°/270°)
Analytics	- Classified object type : Person/Face/Vehicle/License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection
Business Intelligence	People 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	Input 1ea / Output 1ea / DC 12V Power(Max. 50mA) 1ea
Alarm Triggers	Analytics, Network disconnect, Alarm input
Alarm Events	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output Handover
Audio In	Selectable(mic in/line in/Built in MIC) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out, Max.output level: 1Vrms
<b>NETWORK</b>	
Ethernet	RJ-45(10/100/1000BASE-T)
Video Compression	H.265/H.264: Main/High, MJPEG
Resolution	3840x2160, 3072x1728, 2592x1944, 2688x1520, 2560x1440, 2048x1536, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800 x 600, 800 x 448, 720 x 576, 720x480, 640x480, 640x360
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 15fps/12fps(60Hz/50Hz)

## Key Features

- Max. 4K resolution
- 0.03Lux@F1.2(Color)
- Day & Night(ICR), WDR(120dB)
- H.265, H.264, MJPEG codec, WiseStreamII
- Video Analytics based on AI
  - Object detection and classification (Person, Face, Vehicle, License Plate)
  - Attribute, BestShot
- Compatible with Wisenet Retail Insight v2.0 for Business Intelligence
  - Age/gender based People counting
  - Heatmap
  - Queue management

## Dimensions

Unit:mm(inch)



## PNB-A9001

NETWORK	
Smart Codec	Manual(5ea area), WiseStreamII
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 3 profiles)
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
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)
Security	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)
Edge Storage	Micro SD/SDHC/SDXC 2slots 512GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Web Viewer	Supported OS: Windows 8.1, 10, Mac OS X 10.12, 10.13, 10.14 Recommended Browser: Google Chrome Supported Browser : MS Explore 11, MS Edge, Mozilla Firefox(Window 64bit only), Apple Safari(Mac OS X only)
Memory	4096MB RAM, 512MB Flash
ENVIRONMENTAL	
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
ELECTRICAL	
Input Voltage	PoE+(IEEE802.3at), 12VDC
Power Consumption	PoE+: Max 16.50W, typical 12.50W 12VDC: Max 13.50W, typical 10.80W
MECHANICAL	
Color / Material	Body: Black / Aluminum
Product dimensions / weight	81x67x165mm(3.19x2.64x6.48"), Weight : 0.88kg(1.94lb)

\* The latest product information / specification can be found at [hanwha-security.com](http://hanwha-security.com)

\* Design and specifications are subject to change without notice.

\* Wisenet is the proprietary brand of Hanwha Techwin.