

Network BOX

# XNB-A6004

## 2MP AI Box Camera

## Key Features

- 2MP Image Resolution
- Crowd Detection Business Intelligence
- WisePower Power Monitoring
- FIPS 140-3 Level 3 Certified
- WiseNR II , WiseStream
- Analytics events based on AI

※ The lens module is sold separately

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# XNB-A6004

2MP AI Box Camera



## Specifications

### Video

| | | |
|---|---|---|
| **Imaging Device** | Size | 1/2.8" |
| | Type | CMOS |
| **Resolution** | | 1920x1080, 1280x960, 1280x720, 1024x768, 800x600, 640x480, 640x360, 320x240, 320x180 |
| **Max. Framerate** | H.265/H.264 | 60fps/50fps(60Hz/50Hz)(WDR off) / 30fps/25fps(60Hz/50Hz)(WDR on) |
| | MJPEG | 30fps |
| **Min. Illumination (Lux)** | Color(1/30sec, 30IRE) | 0.02 |
| | BW(1/30sec, 30IRE) | 0.002 |
| **Video Out** | | USB: USB Type C. 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)** | | 150 |
| **Digital Noise Reduction** | | WiseNR II (Based on AI engine), SSNR V |
| **Digital Image Stabilization** | | Support |
| **Defog** | | Support |
| **Motion Detection** | Quantity | 8ea |
| | Shape | 8point Polygonal zones |
| **Privacy Masking** | Quantity | 32ea |
| | Shape | 8point Polygonal zones |
| | Color / Option | Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow |
| | Dynamic Privacy Masking: Color / Option | Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow |
| **Gain Control** | | Off, Max gain, Manual |

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## Operational

| | | |
|---|---|---|
| **White Balance** | | ATW, NarrowATW, AWC, Manual, Indoor, Outdoor |
| **LDC** | | Support(Fill/stretch mode) |
| **Electronic Shutter** | Mode | Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine) |
| | Speed Range | 2~1/30,000sec |
| **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 |
| | Others | Support extra alarm I/O via optional I/O box |
| **Alarm Triggers** | | Analytics, Network disconnect, Alarm input, Time schedule, MQTT subscription, Day/Night, Storage disruption |
| **Alarm Events When Alarm Trigger Occurred** | | File upload(image): e-mail/FTP/SFTP,<br>File upload(video clip): FTP/SFTP,<br>Notification: e-mail,<br>Recording: SD/SDHC/SDXC or NAS recording at event triggers,Alarm output,<br>Handover: PTZ preset,send message by HTTP/HTTPS/TCP,Audio clip playback,<br>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** | Person | Upper/Lower clothes color, Gender, Bag |
| | Vehicle | Type(car, bus, truck, motorcycle, bicycle), Color |
| | Face | Age, Gender, Face mask, Glasses |
| **Thumbnail** | | BestShot |
| **Analytics Events** | Based on AI Engine | Object detection, Virtual line(Crossing/Direction), Motion detection, Face mask detection, Social distancing detection, Slip & fall detection, Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear) |
| | Normal | Defocus detection, Tampering, Audio detection, Shock detection |
| **Business Intelligence** | Based on AI Engine | People counting, Queue management, Heatmap, Vehicle counting, Crowd counting |

## Network

| | |
|---|---|
| **Ethernet** | Metal shielded RJ-45(10/100BASE-T) |
| **Video Compression** | H.265/H.264: Main/Baseline/High, MJPEG |
| **Audio Compression** | G.711(PCM): 8kHz(64kbps),<br>G.726(ADPCM): 8kHz(16/24/32/40kbps),<br>AAC-LC: 16kHz(48kbps),<br>OPUS: 48kHz(64kbps) |
| **Smart Codec** | WiseStream(Based on AI engine) |
| **Bitrate Control** | H.265/H.264: CBR or VBR,<br>MJPEG: VBR |

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## Network

| | | |
|---|---|---|
| **Streaming** | Unicast | Up to 20 users |
| | Multicast | Support |
| | Multiple Streaming | Up to 5 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, ICMP, IGMPv2, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT, SMTP(StartTLS), Syslog |
| **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, 802.1AE(MACsec) |
| **Access Control** | IP-based access control, MAC-based access control, Auto logout |
| **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** | SDcard partition encrypt(AES-256), Secure element |
| **Supply Chain Security** | SBOM |
| **Security Certificate** | Secure element(FIPS 140-3 level3, CC EAL6+), Consumer IoT Security Standard (ETSI EN 303 645), Security Built-in Process Certification (IEC 62443-4-1) |

## General

| | | |
|---|---|---|
| **SoC** | Type | Wisenet 9 |
| | Dual NPU | Support |
| **Memory** | RAM | 4GB |
| | Flash | 8GB eMMC |
| **Edge Storage** | Micro SD/SDHC/SDXC | Max. 1TB x 2slot(Total 2TB) |
| **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 |

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## Environmental & Electrical

| | | |
|---|---|---|
| **Power Consumption** | PoE | Max. 7.5W, typical 6.0W |
| | 12VDC | Max. 6.9W, typical 5.6W |
| **WisePower** | | Power monitoring, Eco mode |
| **Power Redundance Failover** | | Support |

## Mechanical

| | | |
|---|---|---|
| **Color** | | Black |
| **Material** | | Aluminum |
| **Material Management** | Declaration | RoHS(EU RoHS directive 2011/65/EU and IEC/EN 63000:2018), REACH(Regulation (EC) No. 1907/2006), Conflict mineral policy(Section 1502 of US Dodd Frank Act) |
| **RAL Code** | | RAL9005 |
| **Product Dimensions** | | 81(W)x67(H)x165(D)mm(3.19x2.64x6.48") |
| **Product Weight** | | 851g(1.88lb) |

## 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 |
| **Environment** | IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78 |

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## Compatible lenses

the specifications for lenses



SLA-T-M1250DN



SLA-T-M410DN

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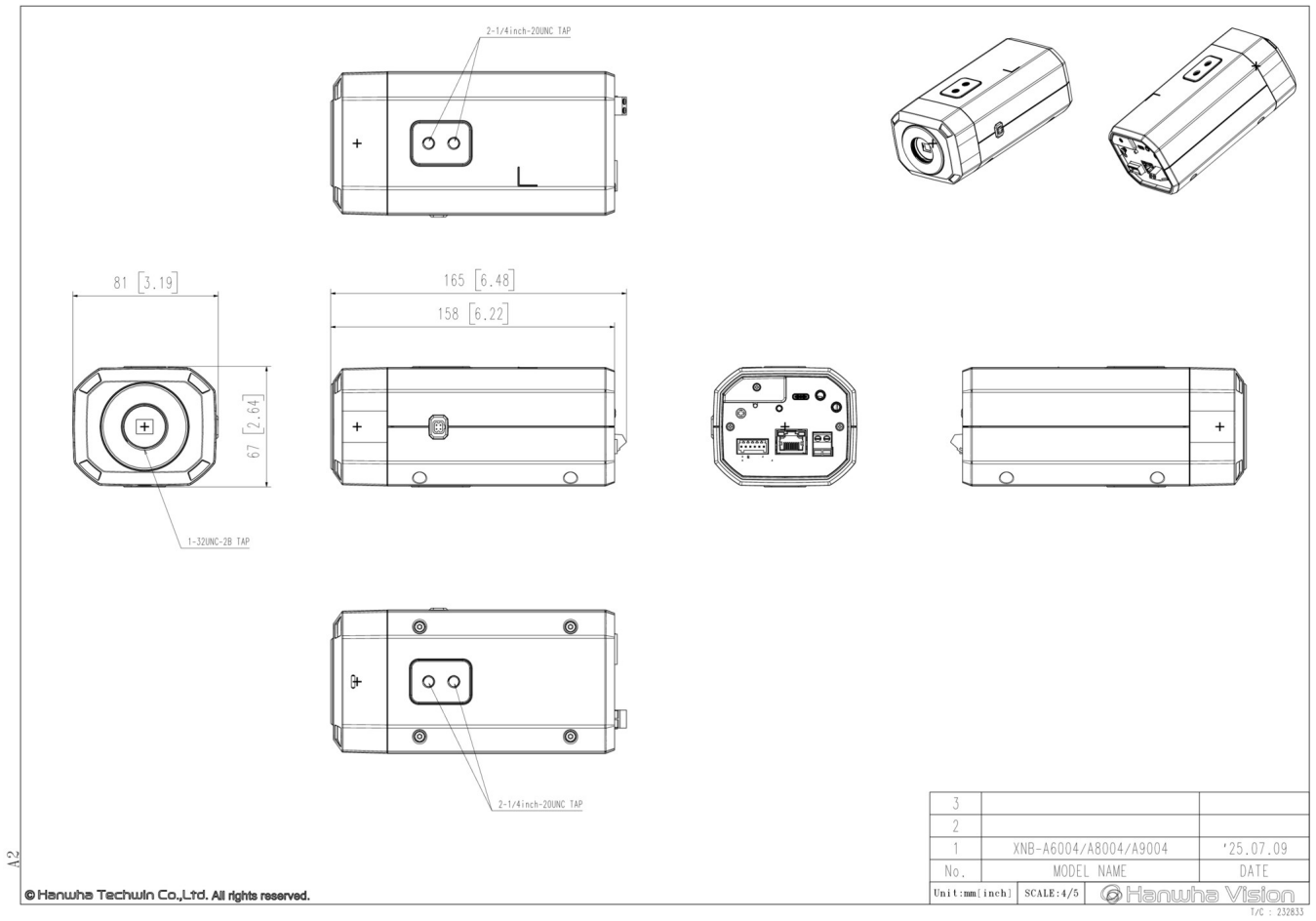
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## CAD

**Unit:** mm [inch]




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## Compatible Devices



SHB-4200



SHB-4200H



SHB-4301HP



STB-4150V

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