



Network

Dome

## XNV-A8084R

5MP AI IR Vandal Dome Camera



### Key Features

- 3.3~9.3mm (2.8x) motorized varifocal
- Dual NPU for AI-based Image enhancement
- Analytics events based on AI engine :  
Object detection (Person/Face/Vehicle/License plate),  
IVA (Virtual line/Area, Enter/Exit, Loitering, Direction, Intrusion),  
Slip&Fall detection, Face mask detection,  
Social distancing detection, Motion detection
- Business intelligence based on AI engine :  
People/Vehicle/Crowd counting, Queue management, Heatmap
- Support BestShot and full attributes
- Support Dynamic Privacy Masking
- extremeWDR, WiseNR II (Based on AI engine),  
WiseStream(Based on AI engine)
- WiseIR: IR viewable length 40 m (131.23 ft)
- IP66, IP67, NEMA4X, IK10
- NEMA TS-2 (2.2.7.2-8, 2.2.8, 2.2.9)
- Support Wisepower(Power monitoring, ECO mode)
- Use recycled plastic
- Device certificate(Hanwha Vision Root CA),  
Secure storage  
(Secure element with FIPS 140-3 level3/CC EAL6+ certified), SBOM

# XNV-A8084R

5MP AI IR Vandal Dome Camera



## Specifications

### Video

|                   |   |
|-------------------|---|
| Imaging Device    | 1/2.8" CMOS   |
| Resolution        | 2560x1920, 2560x1440, 1920x1080, 1600x1200, 1280x960, 1280x720, 1024x768, 800x600, 640x480, 640x360, 320x240, 320x180 |
| Max. Framerate    | H.265/H.264: Max. 30fps/25fps(60Hz/50Hz)<br>MJPEG: Max. 30fps(@5MP Max. 5fps)   |
| Min. Illumination | Color: 0.04Lux(F1.3, 1/30sec, 30IRE)<br>BW: 0.004Lux(F1.3, 1/30sec, 30IRE), 0Lux(IR LED on)                           |
| Video Out         | USB: Micro USB Type C for installation  |

### Lens

|                           |   |
|---------------------------|---|
| Focal Length (Zoom Ratio) | 3.3~9.3mm(2.8x) motorized varifocal   |
| Max. Aperture Ratio       | F1.3(Wide)~F2.3(Tele)   |
| Angular Field of View     | H: 99°(Wide)~31°(Tele)<br>V: 71°(Wide)~23°(Tele)<br>D: 133°(Wide)~39°(Tele) |
| Min. Object Distance      | 0.5m(1.64ft)  |
| Focus Control             | Simple focus, manual  |
| Lens Type                 | P-iris(IR corrected)  |

### Pan / Tilt / Rotate

|                           |                            |
|---------------------------|----------------------------|
| Pan / Tilt / Rotate Range | 0°~360° / 0°~75° / 0°~355° |
|---------------------------|----------------------------|

### Operational

|                             |  |
|-----------------------------|--|
| Camera Title                | Displayed up to 85 characters  |
| Day & Night                 | Auto(ICR)  |
| Backlight Compensation      | BLC, HLC, WDR, SSDR  |
| Wide Dynamic Range          | 120dB  |
| Digital Noise Reduction     | SSNR V , WiseNR II (Based on AI engine)  |
| Digital Image Stabilization | Support  |
| Defog                       | Support  |
| Motion Detection            | 8ea, 8point polygonal zones  |
| Privacy Masking             | 32ea, 8point polygonal zones<br>- Color: gray/green/red/blue/black/white/purple/yellow<br>- Mosaic<br>Dynamic Privacy Mask(Based on AI engine)<br>- Color: gray/green/red/blue/black/white/purple/yellow<br>- Mosaic |
| Gain Control                | Off / Max Gain / Manual  |
| White Balance               | ATW / NarrowATW / AWC / Manual / Indoor / Outdoor  |
| LDC                         | Support(Fill/Stretch mode)   |
| Electronic Shutter Speed    | Minimum / Maximum / Anti flicker(2~1/30,000sec)<br>Prefer shutter control(Based on AI engine)  |

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](http://HanwhaVision.com).

Hanwha Vision is formerly known as Hanwha Techwin.

|                                   |  |
|-----------------------------------|--|
| Video Rotation                    | Flip, mirror, hallway view(90°/270°)   |
| Analytics                         | <p>Classified object type: Person/Face/Vehicle(Type: car/bus/truck/motorcycle/bicycle)/License plate<br/>           Attributes: Person(Gender, Clothing top/bottom color, Bag), Face(Age, Gender, Mask, Glasses),<br/>           Vehicle(Type: car/bus/truck/motorcycle/bicycle, Color)<br/>           Support BestShot</p> <p>Analytics events based on AI engine<br/>           - Motion detection, Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear), Slip &amp; fall detection, Face mask detection, Social distancing detection</p> <p>Analytics events<br/>           - Defocus detection, Tampering, Shock detection, Audio detection</p> |
| Business Intelligence             | Based on AI engine: People/Vehicle/Crowd counting, Queue management, Heatmap   |
| Alarm I/O                         | <p>2 configurable I/O ports<br/>           *Support extra alarm I/O via optional I/O box</p>   |
| Alarm Triggers                    | Analytics, Network disconnection, Alarm input, Time schedule, MQTT subscription, Day/Night, Storage disruption   |
| Alarm Events                      | <p>When alarm trigger occurred</p> <ul style="list-style-type: none"> <li>- File upload(image): e-mail/FTP/SFTP</li> <li>- File upload(video clip): FTP/SFTP</li> <li>- Notification: e-mail</li> <li>- Recording: SD/SDHC/SDXC or NAS recording at event triggers</li> <li>- Alarm output</li> <li>- Handover: PTZ preset, send message by HTTP/HTTPS/TCP</li> <li>- Audio clip playback(WAV, MP3)</li> <li>- MQTT: publication</li> </ul>  |
| Audio In                          | Selectable(mic in/line in)   |
| Audio Out                         | Line out   |
| Light Type                        | IR LED   |
| Light Viewable Length             | WiseIR 40m(131.23ft)   |
| IR Wavelength                     | 850nm  |
| <b>Network</b>                    |  |
| Ethernet                          | Metal shielded RJ-45(10/100BASE-T)   |
| Video Compression                 | H.265/H.264: Main/Baseline/High<br>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.264/H.265: CBR or VBR<br>MJPEG: VBR  |
| Streaming                         | Unicast(20 users) / Multicast<br>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, SMTP(StartTLS), ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast), CDP, MQTT, Syslog   |
| Application Programming Interface | ONVIF Profile S/G/T/M<br>SUNAPI(HTTP API)<br>Hanwha Vision Open Platform   |
| <b>Security</b>                   |  |
| OS / Firmware Protect             | Encrypted Firmware, Secure boot, Signed Firmware   |
| User authentication               | Digest Authentication, Prevent brute-force attack  |
| Network authentication            | 802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)  |
| Secure Communication              | HTTPS, SRTP, WSS(Websocket secure)   |
| Access Control                    | IP-based access control, MAC-based access control, Auto logout   |
| Data Protect                      | Encryption Credentials, Encrypt compress for live recording file export  |

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](http://HanwhaVision.com).  
 Hanwha Vision is formerly known as Hanwha Techwin.

|                       |  |
|-----------------------|--|
| Audit                 | Access / System / Event Log management                       |
| Device ID             | Device Certificate(Hanwha vision Root CA)                    |
| Secure Storage        | Secure element, SDcard partition encrypt(AES-256)            |
| Supply Chain Security | SBOM   |
| Security Certificate  | ETSI EN 303 645, Secure element(FIPS 140-3 level3, CC EAL6+) |

## General

|                  |  |
|------------------|--|
| Webpage Language | English, Korean, Simplified Chinese, Traditional Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek |
| Edge Storage     | Micro SD/SDHC/SDXC 1slot 1TB   |
| Memory           | 4GB RAM, 8GB eMMC  |

## Environmental & Electrical

|                                  |   |
|----------------------------------|---|
| Operating Temperature / Humidity | -40°C~+50°C(-40°F~+122°F)<br>+74°C(+165°F)(MAX) based on NEMA-TS 2(2.2.7)<br>* Start up should be done at above -30°C<br>0~100%RH(Condensing)<br>Humidity control with AIR vent |
| Storage Temperature / Humidity   | -50°C~+60°C(-58°F~+140°F) / 0~90% RH  |
| EPA(Effective Projected Area)    | 0.02m <sup>2</sup>  |
| Certification                    | IP66/IP67, NEMA4X, IK10, NEMA-TS 2(2.2.7.2-8, 2.2.8, 2.2.9)   |
| Input Voltage                    | PoE(IEEE802.3af, Class3)  |
| Power Consumption                | PoE: Max. 9.4W, typical 7.0W<br>Support Wisepower<br>- Power monitoring(Max./Current/Avg.)<br>- ECO mode  |

## Mechanical

|                                   |   |
|-----------------------------------|---|
| Color / Material                  | White / Aluminum<br>Bubble: Hard-coated dome  |
| Material Management               | RoHS(EU RoHS directive 2011/65/EU and IEC/EN 63000:2018)<br>REACH(Regulation (EC) No. 1907/2006)<br>Conflict mineral policy(Section 1502 of US Dodd Frank Act)<br>Recycled plastic: 4.52% |
| RAL Code                          | RAL9003   |
| Product Dimensions / Weight       | ø160x118mm(6.30x4.65"), 1,210g(2.67lb)  |
| Compatible Conduit hole / Gangbox | 12.7mm(1/2")(M20)<br>Single, double, 4" octagon, 4" square  |

## Certifications & Standards

|             |  |
|-------------|--|
| EMC         | FCC 47 CFR 15 Subpart B Class A<br>ICES-3(A)/NMB-3(A)<br>CE/UKCA<br>- EN 55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3<br>VCCI CISPR 32 Class A<br>RCM AS/NZS CISPR 32 Class A<br>KS C 9832 Class A, KS C 9835 |
| Safety      | UL 62368-1, CAN/CSA C22.2 NO. 62368-1<br>IEC/EN 62471  |
| Environment | IEC/EN 63000<br>IEC/EN 60529 IP66/IP67, IEC/EN 62262 IK10, NEMA 250 Type 4X, NEMA-TS 2(2.2.7.2-8, 2.2.8, 2.2.9)<br>IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-6, IEC 60068-2-14, IEC 60068-2-27, IEC 60068-2-78         |

## Compatible Models

|                      |   |
|----------------------|---|
| Hanging Adaptor      | SBP-160HWM1   |
| Back Box             | SBV-180BW, SBV-180WW  |
| Ceiling Mount (Assy) | SBP-150CMI, SBP-300CMI, SBP-300CMW1, SBP-900CMW, SBP-300CMTW, SBP-300CMTS |

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](http://HanwhaVision.com).

Hanwha Vision is formerly known as Hanwha Techwin.

|                             |  |
|-----------------------------|--|
| Ceiling Mount (Single Unit) | SBP-180CMB, SBP-140CMB, SBP-180CMS, SBP-900CMP, SBP-300CMP, SBP-150CMP, SBP-C15P, SBP-C15H |
| Wall Mount                  | SBP-160WMW1, SBP-400WMW, SBP-250WMW, SBP-300WMW, SBP-300WMW1                               |
| Pole Mount                  | SBD-180PMW, SBP-300PMW2  |
| In-ceiling Mount            | SHD-1600FPW, SHD-1600FW  |
| Corner Mount                | SBP-156KMW, SBP-300KMW1  |
| Parapet Mount               | SBP-156LMW1, SBP-300LMW  |
| Tilt Mount                  | SBP-160TMW1  |
| Cabinet                     | SBP-150NBW, SBP-300NBW   |
| Weather Cap                 | SBV-161WCW   |
| Interface Box               | SPM-4210   |
| Other Compatible Models     | SPP-C7400, SPB-VAN88W, SBP-115PFA  |

|                           |  |
|---------------------------|--|
| DORI (EN62676-4 standard) |  |
| Detect (25PPM/ 8PPF)      | Wide: 43.7m(143.47ft) / Tele: 184.6m(605.71ft) |
| Observe (63PPM/ 19PPF)    | Wide: 17.5m(57.39ft) / Tele: 73.8m(242.29ft)   |
| Recognize (125PPM/ 38PPF) | Wide: 8.7m(28.69ft) / Tele: 36.9m(121.14ft)    |
| Identify (250PPM/ 76PPF)  | Wide: 4.4m(14.35ft) / Tele: 18.5m(60.57ft)     |

XNV-A8084R

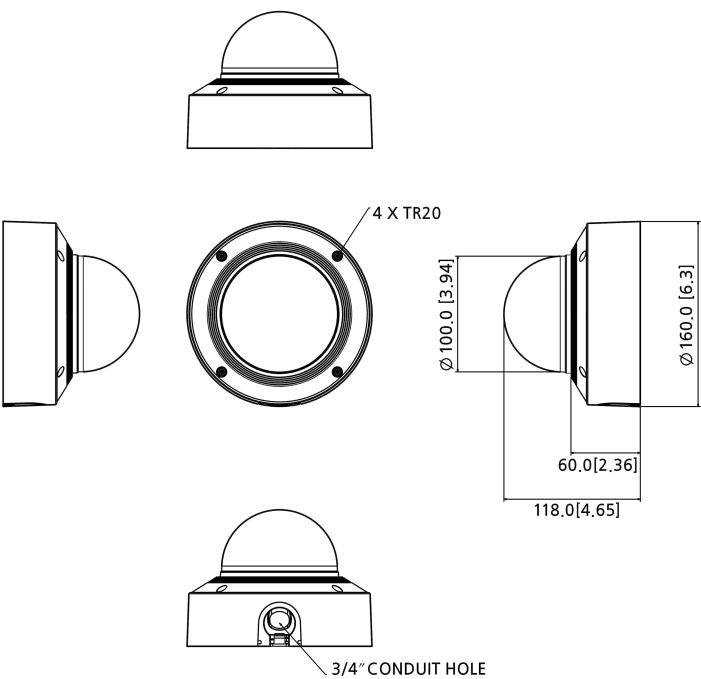
5MP AI IR Vandal Dome Camera



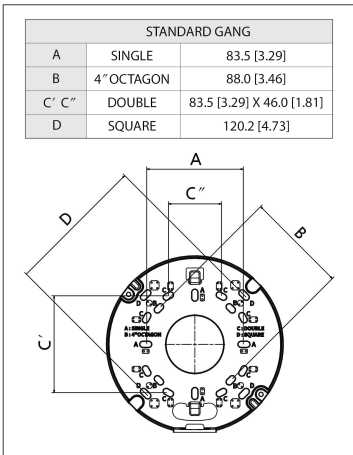
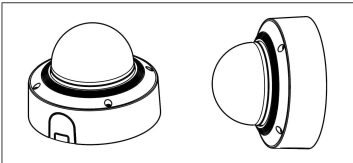
CAD

Unit:mm [inch]

XNV-A8084R 5MP AI IR Vandal Dome Camera



Reference image



|               |           |
|---------------|-----------|
| Revision      | V1.0      |
| Revision Date | 25/05/30  |
| Paper Size    | A0        |
| Unit          | mm [inch] |
| Scale         | 1 : 1     |

©Hanwha Vision Co., Ltd. All right reserved.