



Network

PTZ

# XNP-A9314R

8MP 31x AI IR PTZ Camera



## Key Features

- Dual NPU for AI-based Image enhancement
- Analytics events based on AI engine
- DPM(Dynamic Privacy Masking)
- Quick zoom, Wise auto focus(AI based), Focus scan
- IP66/IP67, NEMA4X, IK10, NEMA-TS 2
- Operating Temperature : -50°C~+55°C(-58°F~+131°F)

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## Specifications

| Video                   |                       |                                                                                                                                                                          |
|-------------------------|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imaging Device          | Size                  | 1/1.8"                                                                                                                                                                   |
|                         | Type                  | CMOS                                                                                                                                                                     |
| Resolution              |                       | 3840x2160, 3328x1872, 2592x1944, 2592x1464, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240 |
| Max. Framerate          | H.265/H.264           | 30fps/25fps(60Hz/50Hz)                                                                                                                                                   |
|                         | MJPEG                 | 30fps(@8MP Max. 5fps)                                                                                                                                                    |
| Min. Illumination (Lux) | Color(1/30sec, 30IRE) | 0.06                                                                                                                                                                     |
|                         | BW(1/30sec, 30IRE)    | 0.006                                                                                                                                                                    |

| Lens                          |            |                                                                   |
|-------------------------------|------------|-------------------------------------------------------------------|
| Focal Length (mm)             |            | 6.91 ~ 214.7                                                      |
| Zoom Ratio                    | Optical    | 31x                                                               |
|                               | Digital    | 32x                                                               |
| Max Aperture Ratio (F number) | Wide       | 1.36                                                              |
|                               | Tele       | 4.6                                                               |
| Angular Field of View         | Horizontal | 60.6°~2.59°                                                       |
|                               | Vertical   | 35.1°~1.45°                                                       |
|                               | Diagonal   | 68.8°~2.97°                                                       |
| Min. Object Distance          |            | 3m(9.84ft)                                                        |
| Focus Control                 |            | Auto, Manual, Oneshot AF, Focus save, Focus scan, Wise auto focus |
| Lens Type                     |            | P iris(IR corrected)                                              |

| Pan / Tilt / Rotate       |        |                     |
|---------------------------|--------|---------------------|
| Pan / Tilt / Rotate Range | Pan    | 360° Endless        |
|                           | Tilt   | 110° (90° ~ -20°)   |
| Pan Speed                 | Preset | Max. 550°/sec       |
|                           | Manual | 0.024°/sec~200°/sec |
| Tilt Speed                | Preset | Max. 550°/sec       |
|                           | Manual | 0.024°/sec~200°/sec |

## Pan / Tilt / Rotate

|                 |                                                                                  |
|-----------------|----------------------------------------------------------------------------------|
| Sequence        | Preset(300ea), Swing, Group(6ea), Trace, Tour, Auto Run, Schedule, Home Position |
| Preset Accuracy | ±0.05°                                                                           |

## Operational

|                                          |                                         |                                                                                                                                                                                                                                                                                                   |
|------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Direction Indicator                      |                                         | Support                                                                                                                                                                                                                                                                                           |
| Day & Night                              |                                         | Auto(ICR)                                                                                                                                                                                                                                                                                         |
| Backlight Compensation                   |                                         | BLC, HLC, WDR, SSDR                                                                                                                                                                                                                                                                               |
| Wide Dynamic Range (dB)                  |                                         | 120                                                                                                                                                                                                                                                                                               |
| Digital Noise Reduction                  |                                         | WiseNR II (Based on AI engine), SSNR V                                                                                                                                                                                                                                                            |
| Digital Image Stabilization              |                                         | Support(built-in gyro sensor)                                                                                                                                                                                                                                                                     |
| Defog                                    |                                         | Support                                                                                                                                                                                                                                                                                           |
| Motion Detection                         | Quantity                                | 8ea                                                                                                                                                                                                                                                                                               |
|                                          | Shape                                   | 8point Polygonal zones                                                                                                                                                                                                                                                                            |
| Privacy Masking                          | Quantity                                | 32ea                                                                                                                                                                                                                                                                                              |
|                                          | Shape                                   | 4point Quadrangle zones                                                                                                                                                                                                                                                                           |
|                                          | Color / Option                          | Gray, Green, Red, Blue, Black, White, Mosaic                                                                                                                                                                                                                                                      |
|                                          | Dynamic Privacy Masking: Color / Option | Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow                                                                                                                                                                                                                                      |
| Gain Control                             |                                         | Off, Max gain, Manual                                                                                                                                                                                                                                                                             |
| White Balance                            |                                         | ATW, NarrowATW, AWC, Manual, Indoor, Outdoor, Mercury, Sodium                                                                                                                                                                                                                                     |
| Electronic Shutter                       | Mode                                    | Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine), Prefer shutter control                                                                                                                                                                                                |
|                                          | Speed Range                             | 2~1/30,000sec                                                                                                                                                                                                                                                                                     |
| Video Rotation                           |                                         | Flip&Mirror                                                                                                                                                                                                                                                                                       |
| Alarm Interface                          | Others                                  | Support alarm I/O via optional I/O box                                                                                                                                                                                                                                                            |
| Alarm Triggers                           |                                         | Analytics, Network disconnect, Alarm input, App event, Time schedule, MQTT subscription, Day/Night, Storage disruption                                                                                                                                                                            |
| Alarm Events When Alarm Trigger Occurred |                                         | File upload(image): e-mail/FTP/SFTP, File upload(video clip): FTP/SFTP, 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,NAS recording at event triggers |
| Audio In                                 |                                         | Support via optional I/O box                                                                                                                                                                                                                                                                      |
| Audio Out                                |                                         | Support via optional I/O box                                                                                                                                                                                                                                                                      |
| Light Type                               |                                         | IR LED                                                                                                                                                                                                                                                                                            |
| Light Viewable Length                    | IR                                      | Wise IR 300m(984.25ft)                                                                                                                                                                                                                                                                            |
| IR Wavelength                            |                                         | 850nm                                                                                                                                                                                                                                                                                             |
| Water Removal                            |                                         | Support(Spin Dry, Lens heater)                                                                                                                                                                                                                                                                    |
| Auto Tracking                            |                                         | Support, Object auto tracking(Person/Vehicle), Target lock tracking                                                                                                                                                                                                                               |

## 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, Slip & fall detection, Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear), Auto tracking |
|                        | Normal             | Motion detection, Tampering, Audio detection, Shock detection                                                                                                             |

## Network

|                                   |                    |                                                                                                                                                                                                                                         |
|-----------------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethernet                          |                    | Metal shielded RJ-45(10/100BASE-T)                                                                                                                                                                                                      |
| Video Compression                 |                    | H.265/H.264: Main/Baseline/High, MJPEG                                                                                                                                                                                                  |
| Smart Codec                       |                    | WiseStream(Based on AI engine)                                                                                                                                                                                                          |
| Bitrate Control                   |                    | H.265/H.264: CBR or VBR, MJPEG: VBR                                                                                                                                                                                                     |
| Streaming                         | Unicast            | Up to 20 users                                                                                                                                                                                                                          |
|                                   | Multicast          | Support                                                                                                                                                                                                                                 |
|                                   | Multiple Streaming | Up to 10 profiles                                                                                                                                                                                                                       |
| Protocol                          |                    | IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SFTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT, NTCIP 1205 |
| 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                                                            |
| 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) |

## 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) |

## Environmental & Electrical

|                     |             |                                                                                                                      |
|---------------------|-------------|----------------------------------------------------------------------------------------------------------------------|
| Operating Condition | Temperature | -50°C~+55°C(-58°F~+131°F)                                                                                            |
|                     | Humidity    | 0~100% RH(condensing)                                                                                                |
|                     | Others      | +74°C(+165°F)(Max) based on NEMA-TS 2(2.2.7), Start up should be done at above -30°C, Humidity control with AIR vent |
| Storage Condition   | Temperature | -50°C~+60°C(-58°F~+140°F)                                                                                            |
|                     | Humidity    | 0~90% RH(non-condensing)                                                                                             |
| Input Voltage       |             | PoE++(IEEE802.3bt type3, Class6)                                                                                     |
| Power Consumption   | PoE         | PoE : Max 51.0W, typical 32.5W                                                                                       |

## Mechanical

|                    |                                               |
|--------------------|-----------------------------------------------|
| Color              | White, Black                                  |
| Material           | Aluminum, PC(Polycarbonate), Hard-coated dome |
| RAL Code           | RAL9003, RAL9005                              |
| Product Dimensions | ø188x264.9mm(7.40x10.47")                     |
| Product Weight     | 4570g (10.08lb)                               |

## 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/EN 63000, IEC 60529 IP66, IEC 60529 IP67, IEC 62262 IK10, NEMA TS 2-2013 (2.2.7, 2.2.8, 2.2.9), NEMA 250 type 4X                                                                                     |

## DORI (EN62676-4 standard)

|                           |      |                     |
|---------------------------|------|---------------------|
| Detect (25PPM/ 8PPF)      | Wide | 131.4m(431.19ft)    |
|                           | Tele | 3397.3m(11146.16ft) |
| Observe (63PPM/ 19PPF)    | Wide | 52.6m(172.48ft)     |
|                           | Tele | 1358.9m(4458.46ft)  |
| Recognize (125PPM/ 38PPF) | Wide | 26.3m(86.24ft)      |
|                           | Tele | 679.5m(2229.23ft)   |
| Identify (250PPM/ 76PPF)  | Wide | 13.1m(43.12ft)      |
|                           | Tele | 339.7m(1114.62ft)   |

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CAD

Unit: mm [inch]

