



Network

PTZ

# XNP-C9253R

4K 25x AI IR PTZ PLUS Camera



## Key Features

- Max. 8MP resolution
- 5~125mm(25x) zoom (digital 32x, total 800x zoom)
- Day & Night (ICR), extreme WDR, DIS (Built-in gyro sensor)
- Intelligent Analytics, Object auto tracking (Person/Vehicle), Target lock tracking
- H.264, H.265, MJPEG codec, WiseStream II
- IP66, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)
- PTZ PLUS Design applied (Compact, Lighter, Simple cabling)

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4K 25x AI IR PTZ PLUS Camera



### Specifications

| Video                         |                       |                                                                                                                                                               |
|-------------------------------|-----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imaging Device                | Size                  | 1/2.8"                                                                                                                                                        |
|                               | Type                  | CMOS                                                                                                                                                          |
| Resolution                    |                       | 3840x2160, 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) | 0.1                                                                                                                                                           |
|                               | BW(1/30sec, 30IRE)    | 0.01                                                                                                                                                          |
| Lens                          |                       |                                                                                                                                                               |
| Focal Length (mm)             |                       | 5~125                                                                                                                                                         |
| Zoom Ratio                    | Optical               | 25x                                                                                                                                                           |
|                               | Digital               | 32x                                                                                                                                                           |
| Max Aperture Ratio (F number) | Wide                  | 1.6                                                                                                                                                           |
|                               | Tele                  | 3.73                                                                                                                                                          |
| Angular Field of View         | Horizontal            | 57.42°~2.71°                                                                                                                                                  |
|                               | Vertical              | 33.54°~1.55°                                                                                                                                                  |
| Min. Object Distance          |                       | 5m(16.4ft)                                                                                                                                                    |
| Focus Control                 |                       | Oneshot AF, Focus save                                                                                                                                        |
| Lens Type                     |                       | DC auto iris                                                                                                                                                  |
| Pan / Tilt / Rotate           |                       |                                                                                                                                                               |
| Pan / Tilt / Rotate Range     | Pan                   | 360° Endless                                                                                                                                                  |
|                               | Tilt                  | 90°~-20°                                                                                                                                                      |
| Pan Speed                     | Preset                | Max. 700°/sec                                                                                                                                                 |
|                               | Manual                | 0.024°/sec~250°/sec                                                                                                                                           |
| Tilt Speed                    | Preset                | Max. 500°/sec                                                                                                                                                 |
|                               | Manual                | 0.024°/sec~250°/sec                                                                                                                                           |
| Sequence                      |                       | Preset(300ea), Swing, Group(6ea), Trace, Tour, Auto Run, Schedule                                                                                             |

## Pan / Tilt / Rotate

|                 |                                             |
|-----------------|---------------------------------------------|
| Preset Accuracy | Up to $\pm 0.1^\circ$ , Pan/Tilt correction |
|-----------------|---------------------------------------------|

## 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                                                                                                                                                                                                                                     |
| 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)                                                                                                                                                                                                       |
|                                          | Speed Range    | 2~1/12,000sec                                                                                                                                                                                                                                                                    |
| Video Rotation                           |                | Flip&Mirror                                                                                                                                                                                                                                                                      |
| Alarm Interface                          | Others         | Support alarm I/O via optional I/O box                                                                                                                                                                                                                                           |
| Alarm Triggers                           |                | Analytics, Network disconnect, Alarm input, Time schedule, MQTT subscription                                                                                                                                                                                                     |
| 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                                 |                | Support via optional I/O box                                                                                                                                                                                                                                                     |
| Audio Out                                |                | Support via optional I/O box                                                                                                                                                                                                                                                     |
| Light Type                               |                | IR LED                                                                                                                                                                                                                                                                           |
| Light Viewable Length                    | IR             | Wise IR 200m(656.17ft)                                                                                                                                                                                                                                                           |
| 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             | Vehicle | Type(car, bus, truck, motorcycle, bicycle) |

## Analytics

|                  |                    |                                                                                                                    |
|------------------|--------------------|--------------------------------------------------------------------------------------------------------------------|
| Thumbnail        |                    | DetectionShot                                                                                                      |
| Analytics Events | Based on AI Engine | Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Motion detection |
|                  | Normal             | Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear)   |

## Network

|                                   |                    |                                                                                                                                                                                                                                           |
|-----------------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Ethernet                          |                    | Metal shielded RJ-45(10/100BASE-T)                                                                                                                                                                                                        |
| Video Compression                 |                    | H.265/H.264: Main/Baseline/High, MJPEG                                                                                                                                                                                                    |
| Smart Codec                       |                    | Manual, WiseStreamIII                                                                                                                                                                                                                     |
| 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, IGMPv2, 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                                                                               |
| 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         |  | TPM(Trusted platform module), HTPM(Hanwha Trusted Platform Module), SDcard partition encrypt(AES-256) |
| Security Certificate   |  | TPM 2.0 with FIPS 140-2 level2                                                                        |

## General

|              |                    |                               |
|--------------|--------------------|-------------------------------|
| Memory       | RAM                | 4GB                           |
|              | Flash              | 512MB                         |
| Edge Storage | Micro SD/SDHC/SDXC | Max. 512GB x 2slot(Total 1TB) |

## Environmental & Electrical

|                               |             |                                                                                                                      |
|-------------------------------|-------------|----------------------------------------------------------------------------------------------------------------------|
| Operating Condition           | Temperature | -40°C~+55°C(-40°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)                                                                                             |
| Wind Load                     |             | 241km/h(150mph)                                                                                                      |
| EPA(Effective Projected Area) |             | 0.035m <sup>2</sup>                                                                                                  |
| Input Voltage                 |             | PoE++(IEEE802.3bt type3, Class6)                                                                                     |
| Power Consumption             | PoE         | Max. 40W, Typical 24W                                                                                                |

## Mechanical

|                    |                                               |
|--------------------|-----------------------------------------------|
| Color              | White, Black                                  |
| Material           | Aluminum, PC(Polycarbonate), Hard-coated dome |
| RAL Code           | RAL9003, RAL9005                              |
| Product Dimensions | ø158x293.3mm(6.22x11.55")                     |
| Product Weight     | 3200g(7.05lb)                                 |

## 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, 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 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 | 140.2m(460.0ft)    |
|                           | Tele | 3246.9m(10652.4ft) |
| Observe (63PPM/ 19PPF)    | Wide | 56.1m(184.0ft)     |
|                           | Tele | 1298.7m(4261.0ft)  |
| Recognize (125PPM/ 38PPF) | Wide | 28.0m(92.0ft)      |
|                           | Tele | 649.4m(2130.5ft)   |
| Identify (250PPM/ 76PPF)  | Wide | 14.0m(46.0ft)      |
|                           | Tele | 324.7m(1065.2ft)   |

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CAD

Unit: mm [inch]

