

# XND-C9083RV

4K AI IR Dome Camera

Network



FC | CE | EAC

## Key Features

- 4K resolution
- 4.4~9.3mm (2.1x) motorized varifocal
- Color: 0.04 Lux (F1.3, 1/30sec), 0 Lux (IR LED on)
- Maximum 30 fps (H.265/H.264)
- WiselR: IR viewable length 40 m (131.23 ft)
- Day & Night (ICR), extremeWDR (120 dB)
- Hard-coated dome bubble
- WiseNR II (Based on AI engine), WiseStreamIII (Based on AI engine)
- DIS with built-in Gyro sensor
- Analytics events based on AI engine (NPU) : Object detection (Person/Face/Vehicle - car, truck, bus, bicycle, motorcycle/License plate),  
IVA (Virtual line/Area, Enter/Exit, Loitering, Direction, Intrusion)
- Analytics events : Defocus detection, Motion detection, Tampering, Fog detection  
Audio detection, Sound classification, Shock detection, Appear/Disappear
- IP52, IK08

## Compatible Accessories (Optional)



SBP-167HMW

| Video                       |                                                                                                                                                                                     |
|-----------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Imaging Device              | 1/1.8" progressive CMOS                                                                                                                                                             |
| Resolution                  | 3840x2160, 3328x1872, 3072x1728, 2592x1944, 2688x1520, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360, 320x240 |
| Max. Framerate              | H.265/H.264: Max. 30fps/25fps(60Hz/50Hz)<br>MJPEG: Max. 15fps/12fps(60Hz/50Hz)                                                                                                      |
| 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 B, 1280x720 for installation                                                                                                                                    |
| Lens                        |                                                                                                                                                                                     |
| Focal Length (Zoom Ratio)   | 4.4~9.3mm(2.1x) motorized varifocal                                                                                                                                                 |
| Max. Aperture Ratio         | F1.3(Wide) ~ F2.15(Tele)                                                                                                                                                            |
| Angular Field of View       | H : 112.1°(Wide)~47.5°(Tele)<br>V : 58.0°(Wide)~26.6°(Tele)<br>D : 137.5°(Wide)~54.6°(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° / -45°~75° / 0°~355°                                                                                                                                                        |
| Operational                 |                                                                                                                                                                                     |
| Camera Title                | Displayed up to 85 characters                                                                                                                                                       |
| Day & Night                 | Auto(ICR)                                                                                                                                                                           |
| Backlight Compensation      | BLC, HLC, WDR, SSDR                                                                                                                                                                 |
| Wide Dynamic Range          | extremeWDR (120dB)                                                                                                                                                                  |
| Digital Noise Reduction     | WiseNR II (Based on AI engine), SSNR V                                                                                                                                              |
| Digital Image Stabilization | Support(built-in gyro sensor)                                                                                                                                                       |
| Defog                       | Support                                                                                                                                                                             |
| Motion Detection            | 8ea, 8point Polygonal zones                                                                                                                                                         |
| Privacy Masking             | 32ea, Quadrangle zones<br>- Color : Gray, Green, Red, Blue, Black, White<br>- Mosaic                                                                                                |
| Gain Control                | Support                                                                                                                                                                             |
| White Balance               | ATW / Narrow ATW / AWC / Manual / Indoor / Outdoor                                                                                                                                  |
| LDC                         | Support (Fill/stretch mode)                                                                                                                                                         |
| Electronic Shutter Speed    | Minimum / Maximum / Anti flicker (2~1/12,000sec)<br>prefer shutter control(Based on AI engine)                                                                                      |
| Video Rotation              | Flip, Mirror, Hallway view(90°/270°)                                                                                                                                                |

|                                          |                                                                                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Analytics</b>                         | <ul style="list-style-type: none"> <li>- Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/bus/truck/motorcycle/bicycle)/License plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, Appear/Disappear, intrusion)</li> <li>- Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection</li> </ul> |
| <b>Business Intelligence</b>             | Based on AI engine : People counting, Queue management, Heatmap                                                                                                                                                                                                                                                                                                                                                              |
| <b>Alarm I/O</b>                         | 2 configurable I/O ports                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Alarm Triggers</b>                    | Analytics, Network disconnect, Alarm input, App event, Time schedule                                                                                                                                                                                                                                                                                                                                                         |
| <b>Alarm Events</b>                      | When alarm trigger occurred <ul style="list-style-type: none"> <li>- File upload(image) : e-mail/FTP</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</li> </ul>                                                                               |
| <b>Audio In</b>                          | Selectable(mic in/line in)<br>Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm                                                                                                                                                                                                                                                                                                                                           |
| <b>Audio Out</b>                         | Line out, Max.output level: 1Vrms                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>IR Viewable Length</b>                | WiseIR 40m(131.23ft)                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Network</b>                           |                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Ethernet</b>                          | Metal shielded RJ-45(10/100BASE-T)                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Video Compression</b>                 | H.265/H.264: Main/High, MJPEG                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Audio Compression</b>                 | G.711 u-law /G.726 Selectable<br>G.726(ADPCM) 8KHz, G.711 8KHz<br>G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps<br>AAC-LC: 48Kbps at 16KHz                                                                                                                                                                                                                                                                                           |
| <b>Smart Codec</b>                       | Manual(5ea area), WiseStream II , WiseStreamIII (Based on AI engine)                                                                                                                                                                                                                                                                                                                                                         |
| <b>Bitrate Control</b>                   | H.264/H.265: CBR or VBR<br>MJPEG: VBR                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Streaming</b>                         | Unicast(20 users) / Multicast<br>Multiple streaming(Up to 10 profiles, 3 virtual channel support)                                                                                                                                                                                                                                                                                                                            |
| <b>Protocol</b>                          | 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)                                                                                                                                                                                                                  |
| <b>Security</b>                          | HTTPS(SSL) Login Authentication<br>Digest Login Authentication<br>IP Address Filtering<br>User access log<br>802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)<br>Device Certificate(Hanwha Techwin Root CA, pre-installed)<br>Secure by default certificate<br>HTPM (Hanwha Trusted platform module)<br>Secure OS/Boot/Storage, Verify firmware forgery<br>CyberSecurity assurance program UL CAP (UL 2900-1)     |
| <b>Application Programming Interface</b> | ONVIF Profile S/G/T<br>SUNAPI(HTTP API)<br>Wisenet open platform                                                                                                                                                                                                                                                                                                                                                             |

## General

|                  |                                                                                                                                                      |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| Webpage Language | English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish,, Portuguese, Czech, Polish, Turkish, Dutch, Greek, Hungarian |
| Edge Storage     | Micro SD/SDHC/SDXC 1slot 512GB                                                                                                                       |
| Memory           | 4GB RAM, 512MB Flash                                                                                                                                 |

### Environmental & Electrical

|                                  |                                                                                                                                            |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| Operating Temperature / Humidity | -10 °C ~ 50 °C(14°F ~ +122°F)<br>* Maximum temperature : +55°C (intermittent)<br>0~95% RH(non-condensing)<br>Humidity control /w GORE vent |
| Storage Temperature / Humidity   | -50°C ~ +60°C(-58°F ~ +140°F) / Less than 90% RH                                                                                           |
| Certification                    | IP52, IK08                                                                                                                                 |
| Input Voltage                    | PoE(IEEE802.3af, Class3), 12VDC                                                                                                            |
| Power Consumption                | PoE: Max 12.95W, typical 11.2W<br>12VDC: Max 13.2W, typical 10.8W                                                                          |

### Mechanical

|                             |                                                  |
|-----------------------------|--------------------------------------------------|
| Color / Material            | White / Aluminum + PC<br>Hard-coated dome bubble |
| RAL Code                    | RAL9003                                          |
| Product Dimensions / Weight | Ø160x118mm(Ø6.30x4.65"), 1350g(2.98 lb)          |

### DORI

|                           |                                                |
|---------------------------|------------------------------------------------|
| Detect (25PPM/ 8PPF)      | Wide: 51.7m(169.64ft) / Tele: 174.5m(572.64ft) |
| Observe (63PPM/ 19PPF)    | Wide: 20.7m(67.85ft) / Tele: 69.8m(229.06ft)   |
| Recognize (125PPM/ 38PPF) | Wide: 10.3m(33.93ft) / Tele: 34.9m(114.53ft)   |
| Identify (250PPM/ 76PPF)  | Wide: 5.2m(16.96ft) / Tele: 17.5m(57.26ft)     |

- 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, formerly known as Samsung Techwin.

