

# XND-8093RV

6MP AI IR Dome Camera



## Key Features

- 6MP resolution
- 10.9~29mm (2.7x) motorized varifocal
- Color: 0.06 Lux (F1.7, 1/30sec, 30IRE), 0 Lux (IR LED on)
- Maximum 30fps (H.265/H.264)
- WiselR: IR viewable length 70m(229.66ft)
- Day & Night (ICR), extremeWDR (120 dB)
- Hard-coated dome bubble
- WiseNR II (Based on AI engine), WiseStreamIII (Based on AI engine)
- 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, IK10

## Compatible Accessories (Optional)



SBP-167HMW

| Video                       |  |
|-----------------------------|--|
| Imaging Device              | 1/1.8" progressive CMOS  |
| Resolution                  | 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: 0.06Lux(F1.7, 1/30sec, 30IRE)<br>BW: 0.006Lux(F1.7, 1/30sec, 30IRE), 0Lux(IR LED on)  |
| Video Out                   | CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation<br>USB: Micro USB Type B, 1280x720 for installation  |
| Lens                        |  |
| Focal Length (Zoom Ratio)   | 10.9~29mm(2.7x) motorized varifocal  |
| Max. Aperture Ratio         | F1.7(Wide) ~ F1.73(Tele)   |
| Angular Field of View       | H : 42.0°(Wide)~15.0°(Tele)<br>V : 22.8°(Wide)~8.4°(Tele)<br>D : 48.7°(Wide)~17.1°(Tele)   |
| Min. Object Distance        | Wide : 2.5m(8.20ft), Tele : 6m(19.69ft)  |
| Focus Control               | Simple focus, Manual   |
| Lens Type                   | DC auto iris with hall sensor  |
| Pan / Tilt / Rotate         |  |
| Pan / Tilt / Rotate Range   | 0°~360° / -45°~85° / 0°~355°   |
| Operational                 |  |
| Camera Title                | Displayed up to 85 characters  |
| Day & Night                 | Auto(ICR)  |
| Backlight Compensation      | BLC, HLC, WDR, SDR   |
| 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°)   |

|  |  |
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| <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, DC 12V output(Max. 50mA)   |
| <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/built-in MIC)<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>                | WiselR 70m(229.66ft)   |
| <b>Network</b>                           |  |
| <b>Ethernet</b>                          | Metal shielded RJ-45(10/100/1000BASE-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>                          | TPM 2.0 (FIPS 140-2 level 2)<br>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>Secure OS/Boot/Storage, Verify firmware forgery  |
| <b>Application Programming Interface</b> | ONVIF Profile S/G/T<br>SUNAPI(HTTP API)<br>Wisenet open platform   |
| <b>General</b>                           |  |
| <b>Webpage Language</b>                  | English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish,, Portuguese, Czech, Polish, Turkish, Dutch, Greek, Hungarian   |

|                     |   |
|---------------------|---|
| <b>Edge Storage</b> | Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2) |
| <b>Memory</b>       | 4GB RAM, 512MB Flash                          |

|                                       |  |
|---------------------------------------|--|
| <b>Environmental &amp; Electrical</b> |  |
|---------------------------------------|--|

|   |   |
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| <b>Operating Temperature / Humidity</b> | -25 °C ~ 50 °C(-13°F ~ +122°F)<br>* Maximum temperature : +55°C (intermittent)<br>less than 95% RH(non-condensing)<br>Humidity control /w GORE vent |
| <b>Storage Temperature / Humidity</b>   | -50°C ~ +60°C(-58°F ~ +140°F) / Less than 90% RH  |
| <b>Certification</b>                    | IP52, IK10  |
| <b>Input Voltage</b>                    | PoE+(IEEE802.3at, Class4), 12VDC  |
| <b>Power Consumption</b>                | PoE+: Max 22.5W, typical 17.9W<br>12VDC: Max 20.0W, typical 15.6W<br>Power redundancy failover  |

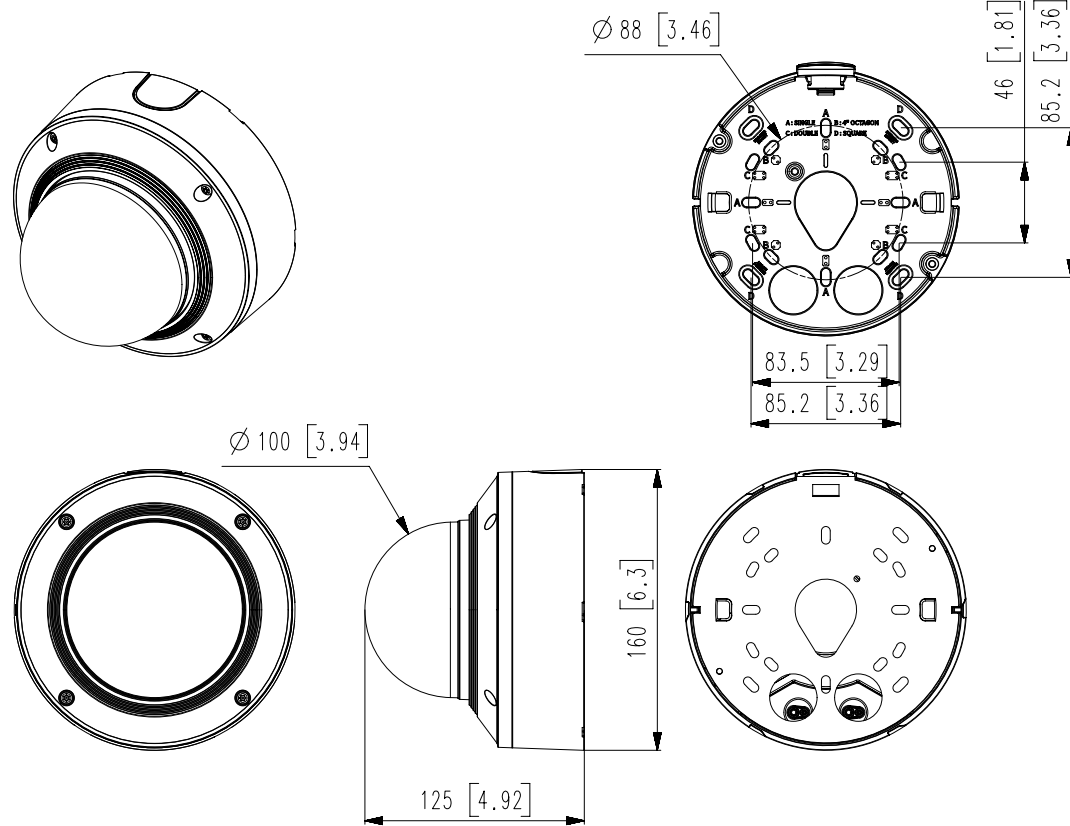
|                   |  |
|-------------------|--|
| <b>Mechanical</b> |  |
|-------------------|--|

|  |   |
|--|---|
| <b>Color / Material</b>                  | White / Aluminum<br>Hard-coated dome bubble         |
| <b>RAL Code</b>                          | RAL9003   |
| <b>Product Dimensions / Weight</b>       | Ø160x125mm(6.30x4.92"), 1600g(3.53 lb)              |
| <b>Compatible Conduit hole / Gangbox</b> | 1/2" (M20)<br>single, double, 4" octagon, 4" square |

|                                  |  |
|----------------------------------|--|
| <b>DORI (EN62676-4 standard)</b> |  |
|----------------------------------|--|

|                                  |   |
|----------------------------------|---|
| <b>Detect (25PPM/ 8PPF)</b>      | Wide: 173.4m(568.88ft) / Tele: 505.6m(1,658.71ft) |
| <b>Observe (63PPM/ 19PPF)</b>    | Wide: 69.4m(227.55ft) / Tele: 202.2m(663.48ft)    |
| <b>Recognize (125PPM/ 38PPF)</b> | Wide: 34.7m(113.78ft) / Tele: 101.1m(331.74ft)    |
| <b>Identify (250PPM/ 76PPF)</b>  | Wide: 17.3m(56.89ft) / Tele: 50.6m(165.87ft)      |

- 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.



|                         |             |                  |
|-------------------------|-------------|------------------|
| 16                      |             |                  |
| 15                      | XND-9083RV  | 21.05.25         |
| 14                      | XND-8093RV  | 21.05.25         |
| 13                      | XND-8083RV  | 21.05.25         |
| 12                      | XND-6083RV  | 21.05.25         |
| 11                      | PND-A6081RV | 21.02.08         |
| 10                      | XND-9082RV  | 19.12.18         |
| 9                       | XND-8082RV  | 19.12.18         |
| 8                       | XND-8081REV | 19.12.18         |
| 7                       | XND-6081REV | 19.12.18         |
| 6                       | PND-A9081R  | 19.09.27         |
| 5                       | XND-8081RV  | 19.09.27         |
| 4                       | XND-6081RV  | 19.09.27         |
| 3                       | XND-6081V   | 19.09.27         |
| 2                       | XND-8081VZ  | 19.09.27         |
| 1                       | XND-6081VZ  | 19.09.27         |
| No.                     | MODEL NAME  | DATE             |
| Unit:mm[inch] SCALE:1/1 |             | © Hanwha Techwin |