



## PND-A9081RF

4K Network AI IR Dome Camera

### Benefits

- Save time and unnecessary costs associated with false alarms, thanks to highly accurate detection and object classification that uses Deep Learning Artificial Intelligence technology
- Search for specific objects quickly and easily, including various object types, people, vehicles, faces and license plates
- Further narrow down searches by identifying attributes, such as a person's age group, gender and clothing colour, or a vehicle's type and colour
- Unleash the power of Wisenet Retail Insight to gain a greater understanding of customer behaviour and buying patterns
- Get only the best images to optimise storage usage with the BestShot feature
- Keep your eyes on what's important and get close up detail with auto-tracking as a second video stream whilst viewing the entire field of view at the same time
- Have the camera activate connected devices upon a detected event with DC output and alarm in/out ports

### PND-A9081RF

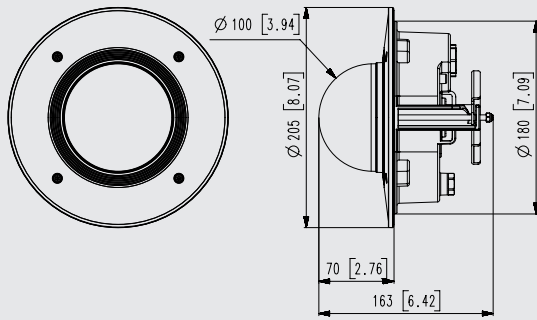
| PND-A9081RF                 |   |
|-----------------------------|---|
| <b>VIDEO</b>                |   |
| Imaging Device              | 1/1.8" 8MP CMOS   |
| Effective Pixels            | 3864(H)x2180(V)   |
| Min. Illumination           | Colour: 0.05Lux(F1.6, 1/30sec)<br>BW: 0Lux(IR LED on)   |
| Video Out                   | CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation<br>USB: Micro USB Type B, 1280x720 for installation   |
| <b>LENS</b>                 |   |
| Focal Length (Zoom Ratio)   | 4.5~10mm(2.2x) motorized varifocal  |
| Max. Aperture Ratio         | F1.6(Wide)~F2.65(Tele)  |
| Angular Field of View       | H:101.4°(Wide)~45.5°(Tele) / V:53.6°(Wide)~25.5°(Tele) / D:120.7°(Wide)~52.3°(Tele)   |
| Min. Object Distance        | 0.5m(1.64ft)  |
| Focus Control               | Simple focus  |
| Lens Type                   | DC auto iris, P iris  |
| <b>PAN / TILT / ROTATE</b>  |   |
| Pan / Tilt / Rotate Range   | 0°~360° / -45°~85° / 0°~355°  |
| <b>OPERATIONAL</b>          |   |
| IR Viewable Length          | 30m(98.42ft)  |
| Camera Title                | Off / On (Up to 85 characters)  |
| Day & Night                 | Auto(ICR)   |
| Backlight Compensation      | BLC, WDR, SDR   |
| Wide Dynamic Range          | 120dB   |
| Digital Noise Reduction     | SSNRV   |
| Digital Image Stabilization | Support(built-in gyro sensor)   |
| Motion Detection            | 8ea, polygonal zones  |
| Privacy Masking             | 6ea, rectangle zones<br>- Colour: Grey/Green/Red/Blue/Black/White   |
| Gain Control                | Low / Middle / High   |
| White Balance               | ATW / AWC / Manual / Indoor / Outdoor   |
| LDC                         | Support   |
| Electronic Shutter Speed    | Minimum / Maximum / Anti flicker (1/5~1/12,000sec)  |
| Video Rotation              | Flip, Mirror, Hallway view(90°/270°)  |
| Analytics                   | - Classified object type : Person/Face/Vehicle/License plate with attributes, BestShot per object<br>- Analytics events based on AI engine : Object detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line<br>- Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection |
| Business Intelligence       | People counting, Queue management, Heatmap based on AI engine   |
| Alarm I/O                   | Input 1ea / Output 1ea / DC 12V Power(Max. 50mA) 1ea  |
| Alarm Triggers              | Analytics, Network disconnect, Alarm input  |
| Alarm Events                | File upload via FTP and e-mail<br>Notification via e-mail<br>SD/SDHC/SDXC or NAS recording at event triggers<br>Alarm output<br>Handover  |
| Audio In                    | Selectable(mic in/line in)<br>Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm  |
| Audio Out                   | Line out, Max.output level: 1Vrms   |

## Key Features

- Max. 4K resolution
- 0.05Lux@F1.6 (Colour), 0Lux (B/W, IR LED on)
- Day & Night(ICR), WDR(120dB)
- H.265, H.264, MJPEG codec, WiseStreamII
- Video Analytics based on Deep Learning Artificial Intelligence (AI)
- Compatible with Wisenet Retail Insight v2.0 for Business Intelligence

## Dimensions

Unit:mm(inch)



## PND-A9081RF

| NETWORK                           |   |
|-----------------------------------|---|
| Ethernet                          | RJ-45(10/100/1000BASE-T)  |
| Video Compression                 | H.265/H.264: Main/High, MJPEG   |
| Resolution                        | 3840x2160, 3072x1728, 2592x1944, 2688x1520, 2560x1440, 2048x1536, 1920x1080, 1600x1200, 1280x1024, 1280x960, 1280x720, 1024x768, 800 x 600, 800 x 448, 720 x 576, 720x480, 640x480, 640x360                     |
| Max. Framerate                    | H.265/H.264: Max. 30fps/25fps(60Hz/50Hz)<br>MJPEG: Max. 15fps/12fps(60Hz/50Hz)  |
| Smart Codec                       | Manual(Sea area), WiseStreamII  |
| Bitrate Control                   | H.264/H.265: CBR or VBR<br>MJPEG: VBR   |
| Streaming                         | Unicast(20 users) / Multicast<br>Multiple streaming(Up to 3 profiles)   |
| Audio Compression                 | 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  |
| Protocol                          | 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)      |
| Security                          | HTTPS(SSL) Login Authentication<br>Digest Login Authentication<br>IP Address Filtering<br>User access log<br>802.1X Authentication(EAP-TLS, EAP-LEAP)<br>Device Certificate(Hanwha Techwin Root CA)             |
| Edge Storage                      | Micro SD/SDHC/SDXC 2slots 512GB   |
| Application Programming Interface | ONVIF Profile S/G/T<br>SUNAPI(HTTP API)<br>Wisenet open platform  |
| Web Viewer                        | Supported OS: Windows 8.1, 10, Mac OS X 10.12, 10.13, 10.14<br>Recommended Browser: Google Chrome<br>Supported Browser : MS Explore11, MS Edge, Mozilla Firefox(Window 64bit only), Apple Safari(Mac OS X only) |
| Memory                            | 4096MB RAM, 512MB Flash   |
| ENVIRONMENTAL                     |   |
| Operating Temperature / Humidity  | -25°C ~ +50°C (-13°F ~ +122°F) / Less than 90% RH   |
| Storage Temperature / Humidity    | -50°C ~ +60°C(-58°F ~ +140°F) / Less than 90% RH  |
| Certification                     | IP52, IK10, Plenum rate   |
| ELECTRICAL                        |   |
| Input Voltage                     | PoE+(IEEE802.3at), 12VDC  |
| Power Consumption                 | PoE+: Max 20.00W, typical 16.00W<br>12VDC: Max 17.70W, typical 14.00W   |
| MECHANICAL                        |   |
| Color / Material                  | White / Aluminum  |
| RAL Code                          | RAL9003   |
| Product dimensions / weight       | Ø205x163mm(8.07x4.92"), Weight : 1.95Kg (4.30lb)  |
| DORI                              |   |
| Detect (25PPM/ 8PPF)              | Wide: 62.9m(206.34ft) / Tele: 183m(600.33ft)  |
| Observe (63PPM/ 19PPF)            | Wide: 25.1m(82.34ft) / Tele: 73.3m(240.46ft)  |
| Recognize (125PPM/ 38PPF)         | Wide: 12.6m(41.33ft) / Tele: 36.6m(120.07ft)  |
| Identify (250PPM/ 76PPF)          | Wide: 6.3m(20.67ft) / Tele: 18.3m(60.03ft)  |

\* 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.