PNO-A9081R

4K Network AI IR Bullet Camera



Key Features

- Max. 4K resolution
- 0.05Lux@F1.6 (Color), 0Lux (B/W, IR LED on)
- Day & Night(ICR), WDR(120dB)
- H.265, H.264, MJPEG codec, WiseStream II
- Video Analytics based on AI
  - Object detection and classification(Person, Face, Vehicle, License Plate)
  - Attribute, BestShot
- Compatible with Wisenet Retail Insight v2.0 for Business Intelligence
  - Age/gender based People counting
  - Heatmap
  - Queue management

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Video	
Imaging Device	1/1.8" 8MP CMOS
Effective Pixels	3864(H)x2180(V)
Min. Illumination	Color: 0.05Lux(F1.6, 1/30sec) BW: 0Lux(IR LED on)
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation USB: Micro USB Type B, 1280x720 for installation
Lens	
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
Operational	
IR Viewable Length	30m(98.42ft)
Camera Title	Off / On (Up to 85 characters)
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V
Digital Image Stabilization	Support(built-in gyro sensor)
Motion Detection	8ea, polygonal zones
Privacy Masking	6ea, rectangle zones - Color: 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 - Analytics events based on AI engine : Object detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line - 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 Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output Handover

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Audio In	Selectable(mic in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out, Max.output level: 1Vrms
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) MJPEG: Max. 15fps/12fps(60Hz/50Hz)
Smart Codec	Manual(5ea area), WiseStream Ⅱ
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast Multiple streaming(Up to 3 profiles)
Audio Compression	G.711 u-law /G.726 Selectable G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps 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 Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP) Device Certificate(Hanwha Techwin Root CA)
Edge Storage	Micro SD/SDHC/SDXC 2slots 512GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Web Viewer	Supported OS: Windows 8.1, 10, Mac OS X 10.12, 10.13, 10.14 Recommended Browser: Google Chrome 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	-40°C ~ +55°C(-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C
Storage Temperature / Humidity	-50°C ~ +60°C(-58°F ~ +140°F) / Less than 90% RH
Certification	IP66/IP67, IK10, NEMA4X
Electrical	
Input Voltage	PoE+(IEEE802.3at), 12VDC
Power Consumption	PoE+: Max 20.0W, typical 17.00W 12VDC: Max 18.00W, typical 16.00W
Mechanical	
Color / Material	Dark grey / Aluminum
Product dimensions / weight	Ø91.0x368.6mm (3.58" x 14.51") (Without sunshield), Weight : 2.48Kg (5.47lb)

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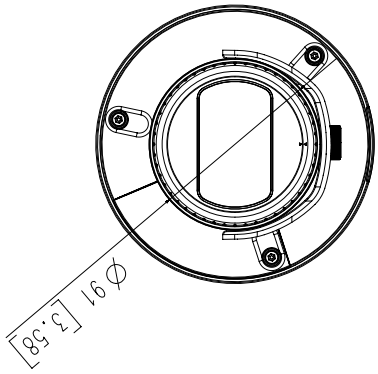
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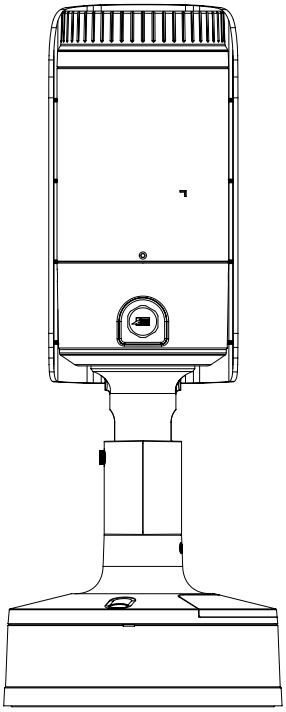
Detect (25PPM/ 8PPF)	Wide: 62.9m(206.34ft) / Tele: 183m(600.33ft)
Observe (63PPM/ 19PPF)	Wide: 25.1m(82.34ft) / Tele: 73.3m(240.46ft)
Recognize (125PPM/ 38PPF)	Wide: 12.6m(41.33ft) / Tele: 36.6m(120.07ft)
Identify (250PPM/ 76PPF)	Wide: 6.3m(20.67ft) / Tele: 18.3m(60.03ft)

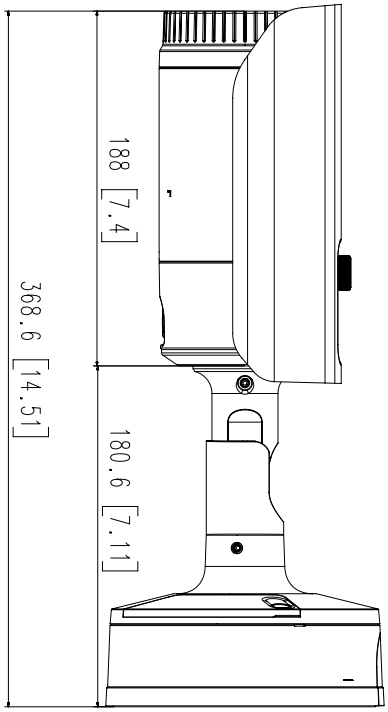
- The lastest product information / specification can be found at hanwha-security.com
- Design and specifications are subject to change without notice.
- Wisenet is the proprietary brand of Hanwha Techwin , formerly known as Samsung Techwin.

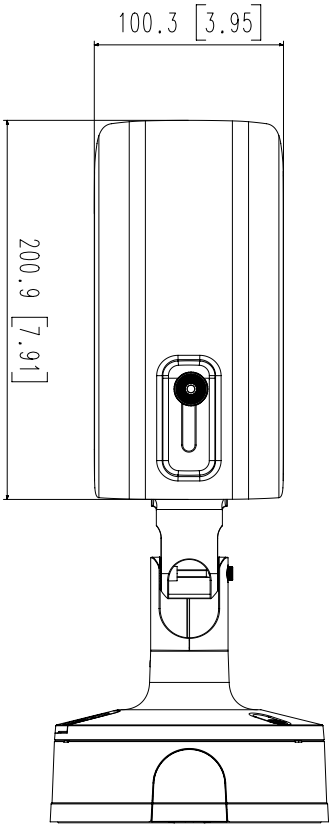
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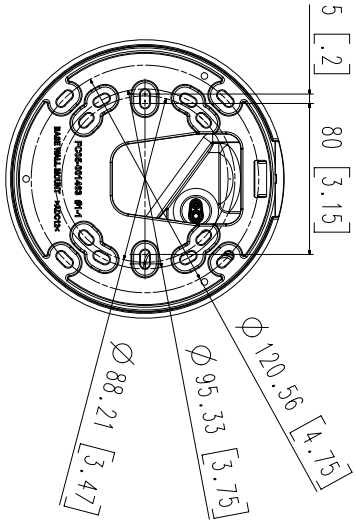
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No.	MODEL NAME	DATE
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2	.	
1	PNO-A9081R/A8081R	'19.10.14

Unit:mm[inch] SCALE:1/1 Hanwha Techwin

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