

# PNO-A9081RLP

4K LPR/ANPR IR Bullet Camera

Network



FC | eUL | CE | EAC

## Key Features

- Max. 4K resolution
- 0.05Lux@F1.6 (Color), 0Lux (B/W, IR LED on)
- Day & Night(ICR), WDR(120dB)
- IR Viewable Length 30m (98.42ft)
- H.265, H.264, MJPEG codec, WiseStream II
- Wisenet Road AI application (Pre-installed)
  - License/Number Plate Recognition
  - Make/Model/Color Recognition
  - Black/White list notification
  - Smart Search (LP/NP, Country, brand, model, color)

\* Supported features may vary by region. Please contact your regional manager for more details.

## Compatible Accessories (Optional)



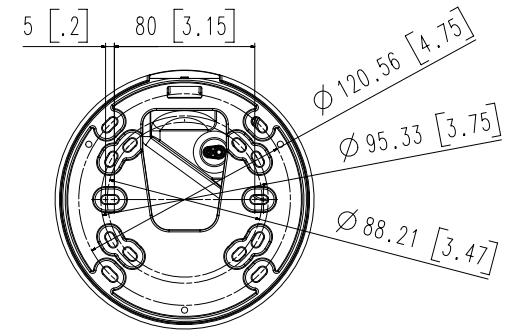
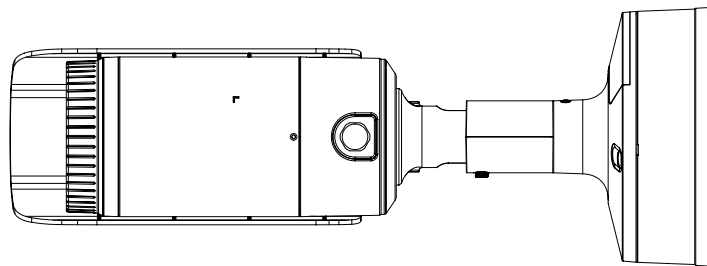
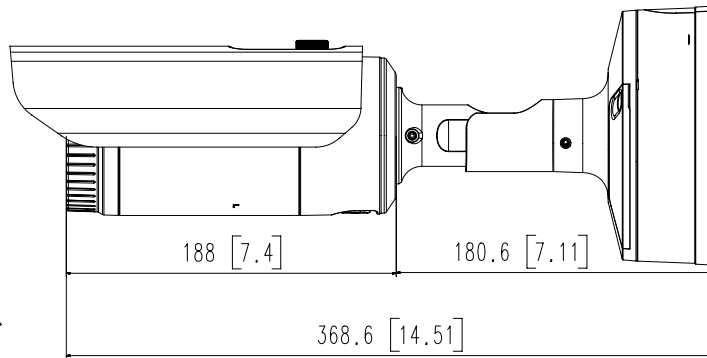
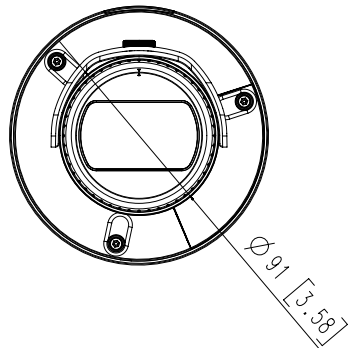
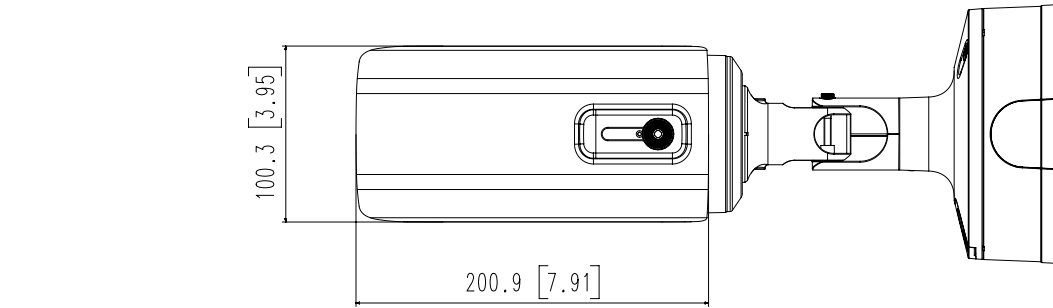
SBP-302PM

Video		
Imaging Device	1/1.8" CMOS	None
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	None
Max. Framerate	H.265/H.264: Max. 30fps/25fps(60Hz/50Hz) MJPEG: Max. 30fps/25fps(60Hz/50Hz)	None
Min. Illumination	Color: 0.05Lux(F1.6, 1/30sec) BW: 0.005Lux(F1.6, 1/30sec), 0Lux(IR LED on)	None
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation USB: Micro USB Type B, 1280x720 for installation	None
Lens		
Focal Length (Zoom Ratio)	4.5~10mm(2.2x) motorized varifocal	None
Max. Aperture Ratio	F1.6(Wide)~F2.65(Tele)	None
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)	None
Min. Object Distance	0.5m(1.64ft)	None
Focus Control	Simple focus	None
Lens Type	P iris	None
Operational		
Camera Title	Displayed up to 85 characters	None
Day & Night	Auto(ICR)	None
Backlight Compensation	BLC, WDR, SDR	None
Digital Noise Reduction	SSNR V	None
Digital Image Stabilization	Stabilization Support(built-in gyro sensor)	None
Motion Detection	8ea, polygonal zones	None
Privacy Masking	6ea, rectangle zones - Color: Gray/Black/White	None
Gain Control	Low / Middle / High	None
White Balance	ATW / AWC / Manual / Indoor / Outdoor	None
LDC	Support	None
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)	None
Video Rotation	Flip, Mirror, Hallway view(90/270)	None
Analytics	Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection	None
Alarm I/O	Input 1ea / Output 1ea / DC 12V Power(Max. 50mA) 1ea	None
Alarm Triggers	Analytics, Network disconnect, Alarm input	None

<b>Alarm Events</b>	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output Handover Audio playback	None
<b>Audio In</b>	Selectable(mic in/line in/Built in mic) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm	None
<b>Audio Out</b>	Line out, Max.output level: 1Vrms	None
<b>IR Viewable Length</b>	30m(98.42ft)	None
<b>Network</b>		
<b>Ethernet</b>	Metal shielded RJ-45(10/100/1000 BASE-T)	None
<b>Video Compression</b>	H.265/H.264: Main/High, MJPEG	None
<b>Audio Compression</b>	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	None
<b>Smart Codec</b>	Manual(5ea area), WiseStream II	None
<b>Bitrate Control</b>	H.264/H.265: CBR or VBR MJPEG: VBR	None
<b>Streaming</b>	Unicast(6 users) / Multicast Multiple streaming(Up to 3 profiles)	None
<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, SRTSP (TCP, UDP Unicast)	None
<b>Security</b>	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) Secure boot	None
<b>Application Programming Interface</b>	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	None
<b>General</b>		
<b>Webpage Language</b>	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek	None
<b>Edge Storage</b>	Pre-installed with 32GB Micro SD to support 10,000 LPR images	None
<b>Memory</b>	4096MB RAM, 512MB Flash	None
<b>Environmental &amp; Electrical</b>		
<b>Operating Temperature / Humidity</b>	-40°C ~ +55°C(-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C	None
<b>Storage Temperature / Humidity</b>	-50°C ~ +60°C(-58°F ~ +140°F) / Less than 90% RH	None
<b>Certification</b>	IP66/IP67, IK10, NEMA4X	None
<b>Input Voltage</b>	PoE+(IEEE802.3at), 12VDC	None
<b>Power Consumption</b>	PoE+: Max 20.0W, typical 17.00W 12VDC: Max 18.00W, typical 16.00W	None

Mechanical		
Color / Material	Dark gray / Aluminum	None
Product Dimensions / Weight	Ø91.0x368.6mm (3.58" x 14.51") (Without sunshield), Weight : 2.48Kg (5.47lb)	None
DORI		
Detect (25PPM/ 8PPF)	Wide: 62.9m(206.34ft) / Tele: 183m(600.33ft)	None
Observe (63PPM/ 19PPF)	Wide: 25.1m(82.34ft) / Tele: 73.3m(240.46ft)	None
Recognize (125PPM/ 38PPF)	Wide: 12.6m(41.33ft) / Tele: 36.6m(120.07ft)	None
Identify (250PPM/ 76PPF)	Wide: 6.3m(20.67ft) / Tele: 18.3m(60.03ft)	None
Wisenet Road AI LPR/ANPR/MMCR		
Solution	Community Traffic Observation	None
Speed Description	Moderate Speed	None
Lane Coverage	Up to 2 lanes (5m/18ft Wide)	None
Speed limit	Up to 70kmh (45mph)	None
Min. Forward Distance	12m (38ft)	None
Max. Forward Distance	17m (55ft)	None
Max. Horizontal Angle	25°	None
Max. Vertical Angle	25°	None
Horizontal Offset	Up to 5m (18ft)	None
Camera Height	Up to 5m (18ft)	None
Vehicle Recognition	Make : 70+ Model : 600+ Color : 10	None
Available Countries	Albania, Armenia, Austria, Belarus, Belgium, Bosnia and Herzegovina, Bulgaria, Cyprus, Czechia, Denmark, Estonia, Finland, France, Greece, Germany, Hungary, Ireland, Iceland, Italy, Lithuania, Luxembourg, Latvia, Montenegro, North Macedonia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Spain, Switzerland, Turkey, United Kingdom, United States of America, Canada, Russian Federation, Azerbaijan, Uzbekistan, Ukraine, Kyrgyzstan, Kazakhstan, Tajikistan, Georgia, Turkmenistan, Australia, Newziland, Hongkong, Indonesia, Vietnam, Taiwan, Bahrain, Kuwait, Oman, Qatar, KSA (Kingdom of Saudi Arabia), UAE, South Africa	None

- 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.



3	PNO-A6081R	'21.04.26
2	XNO-9082R/8082R	'20.05.21
1	PNO-A9081R/A8081R	'19.10.14
No.	MODEL NAME	DATE
Unit:mm[inch]		SCALE:1/1
Hanwha Techwin		

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