Hanwha Vision



Network Dome

PNV-A6081R

2MP AI IR Vandal Dome

Key Features

- CloudConnector Compatible – Connects easily with HealthPro, OnCloud, SightMind
- 2MP resolution @120fps
- WDR (120dB)
- Simple focus
- Triple codec H.265/H.264/MJPEG
- WiseStream III compression technology
- extreme WDR
- USB port for easy installation
- true D/N
- Object detection and Attribute Extraction (Person, Face, Vehicle, License Plate)
- BestShot
- POE+/12VDC
- TPM with FIPS 140-2 level 2

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Specifications

Video

Imaging Device	Size	1/2"
	Type	CMOS
Resolution		1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360
Max. Framerate	H.265/H.264	120fps/100fps(60Hz/50Hz)
	MJPEG	15fps
	Others	Max. 60/50fps(60Hz/50Hz) when AI on
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.007
	BW(1/30sec, 30IRE)	0.0007
Video Out		CVBS: 1.0 Vp-p / 75Ω composite for installation, USB: Micro USB Type B. Preview and installation ONLY. Requires WiFi dongle.

Lens

Focal Length (mm)		4.38~9.33
Zoom Ratio	Optical	2.13x
Max Aperture Ratio (F number)	Wide	1.3
	Tele	2.15
Angular Field of View	Horizontal	103.1°~44.5°
	Vertical	54.2°~24.9°
	Diagonal	124°~51.1°
Min. Object Distance		0.5m(1.64ft)
Focus Control		Simple focus
Lens Type		P iris(IR corrected)

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	0°~360°
	Tilt	-45°~85°
	Rotate	0°~355°

Operational

Day & Night	Auto(ICR)

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Operational

Backlight Compensation		BLC, WDR, SSDR
Wide Dynamic Range (dB)		120
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization		Support(built-in gyro sensor)
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	6ea
	Shape	Rectangular zones
	Color / Option	Gray, Black, White
Gain Control		Low, Middle, High
White Balance		ATW, AWC, Manual, Indoor, Outdoor
LDC		Support
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)
	Speed Range	1/5~1/12,000sec
Digital PTZ		Support
Video Rotation		Flip, Mirror, Hallway view(90°/270°)
Alarm Interface	In/Out	2 configurable I/O ports
	Others	12VDC output
Alarm Triggers		Analytics, Network disconnect, Alarm input, App event, Time schedule, MQTT subscription
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP, Notification: e-mail, Recording: SD/SDHC/SDXC or NAS recording at event triggers,Alarm output, Handover: PTZ preset,send message by HTTP/HTTPS/TCP,Audio clip playback, MQTT: publication
Audio In		Selectable(mic in/line in)
Audio Out		Line out
Light Type		IR LED
Light Viewable Length	IR	40m(131.23ft)
IR Wavelength		850nm

Analytics

Classified Object Type		Person, Face, Vehicle, License plate
Attributes	Person	Upper/Lower clothes color, Gender, Bag
	Vehicle	Type(car, bus, truck, motorcycle, bicycle), Color
	Face	Age, Gender, Face mask, Glasses
Thumbnail		BestShot

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Analytics

Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit), Face mask detection, Social distancing detection, Slip & fall detection
	Normal	Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear), WiseDetector for adding custom objects
Business Intelligence	Based on AI Engine	People counting, Queue management, Heatmap, Vehicle counting, Crowd counting

Network

Ethernet		Metal shielded RJ-45(10/100/1000BASE-T)
Video Compression		H.265/H.264: Main/High, MJPEG
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
Smart Codec		Manual, WiseStreamIII
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	Up to 10 users
	Multicast	Support
	Multiple Streaming	Up to 5 profiles
Protocol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMPv2, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast), MQTT
Application Programming Interface	ONVIF	S, G, T, M
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform

Security

OS / Firmware Protect	Encrypted firmware, Secure boot, Signed firmware
User authentication	Digest authentication, Prevent brute-force attack
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	HTTPS, WSS(WebSocket Secure), SRTP
Access Control	IP-based access control
Data Protect	Encryption credentials, Encrypt compress for live recording file export
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	TPM(Trusted platform module), SDcard partition encrypt(AES-256)
Security Certificate	TPM 2.0 with FIPS 140-2 level2, IACS Component Security Requirements Certification (IEC 62443-4-2)

General

Memory	RAM	4GB
	Flash	512MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 512GB x 2slot(Total 1TB)

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Environmental & Electrical

Operating Condition	Temperature	-50°C~+55°C(-58°F~+131°F)
	Humidity	0~90% RH(non-condensing)
	Others	Start up should be done at above -30°C
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
Input Voltage		PoE+(IEEE802.3at, Class4), 12VDC
Power Consumption	PoE	Max 19.5W, typical 16.0W
	12VDC	Max 17.00W, typical 13.50W

Mechanical

Color	White
Material	Aluminum, Hard-coated dome
RAL Code	RAL9003
Product Dimensions	ø180x125mm(7.09x4.92")
Product Weight	1900g(4.19lb)
Compatible Conduit Hole	19.1mm(3/4")(M25)
Compatible Gang Box	Single, Double, 4" Octagon, Square

Certifications & Standards

EMC	FCC 47 CFR 15 Subpart B Class A, ICES-3(A)/NMB-3(A), CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, VCCI CISPR 32 Class A, RCM AS-NZS CISPR 32 Class A, KS C 9832 Class A, KS C 9835
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471
Environment	IEC/EN 63000, IEC 60529 IP66, IEC 60529 IP67, ISO 20653 IP6K9K, IEC 62262 IK10+, NEMA 250 type 4X

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	30.0m(98.43ft)
	Tele	95.0m(311.82ft)
Observe (63PPM/ 19PPF)	Wide	12.0m(39.37ft)
	Tele	38.0m(124.73ft)
Recognize (125PPM/ 38PPF)	Wide	6.0m(19.69ft)
	Tele	19.0m(62.36ft)
Identify (250PPM/ 76PPF)	Wide	3.0m(9.84ft)
	Tele	9.5m(31.18ft)

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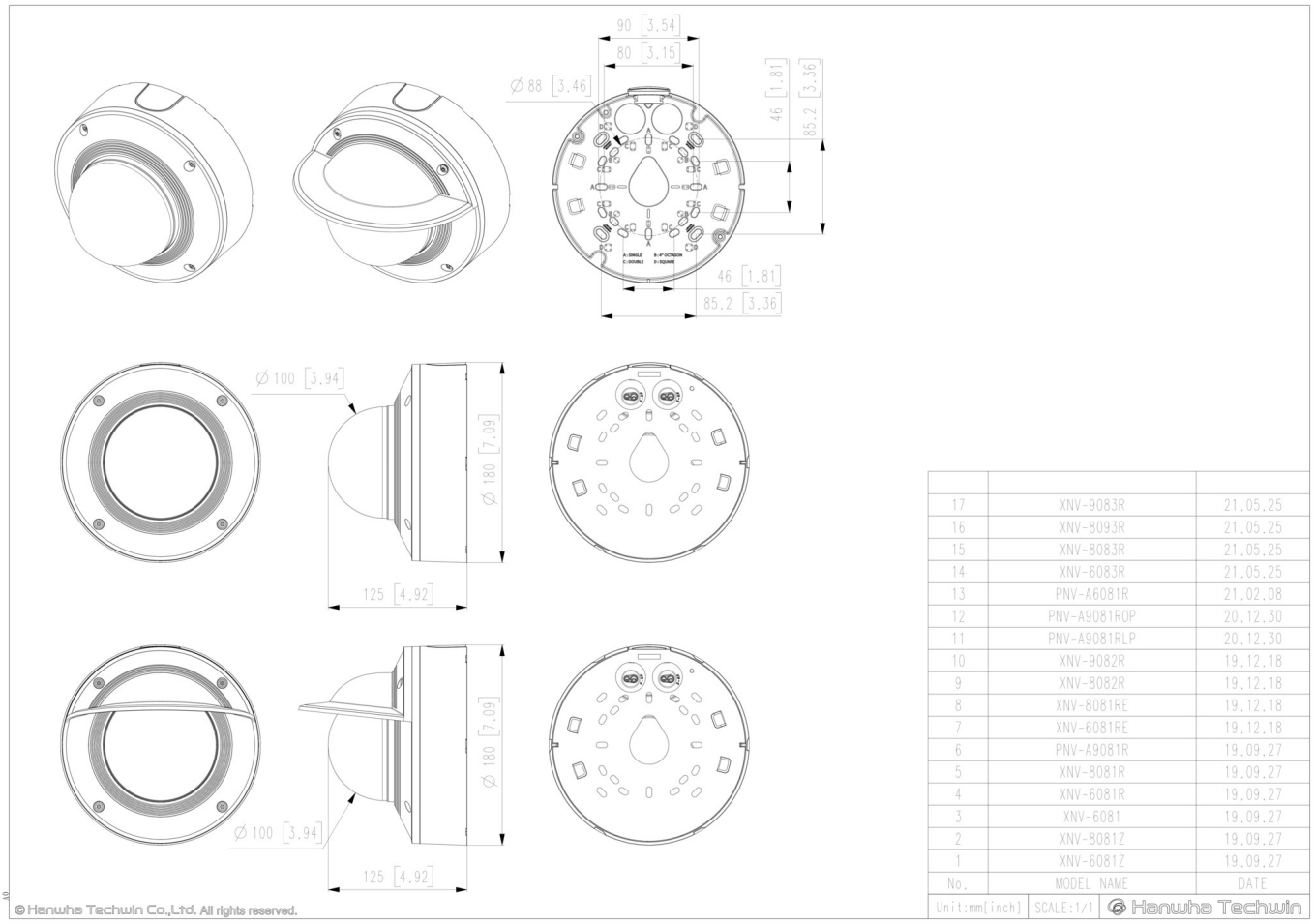
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CAD

Unit: mm [inch]



No.	MODEL NAME	DATE
17	XNV-9083R	21.05.25
16	XNV-8093R	21.05.25
15	XNV-8083R	21.05.25
14	XNV-6083R	21.05.25
13	PNV-A6081R	21.02.08
12	PNV-A9081ROP	20.12.30
11	PNV-A9081RLP	20.12.30
10	XNV-9082R	19.12.18
9	XNV-8082R	19.12.18
8	XNV-8081RE	19.12.18
7	XNV-6081RE	19.12.18
6	PNV-A9081R	19.09.27
5	XNV-8081R	19.09.27
4	XNV-6081R	19.09.27
3	XNV-6081	19.09.27
2	XNV-8081Z	19.09.27
1	XNV-6081Z	19.09.27

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

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