Hanwha Vision

Network | Dome

PNV-A6081R-E1T

2MP Camera with built-in 1TB Rugged SSD

FC | c(UL)us LISTED | CE | EHC | NDAA

Key Features

- Maximum 2MP resolution, Up to 120fps
- Color: 0.007Lux (F1.3, 1/30sec, 30IRE), BW: 0.0007Lux (F1.3, 1/30sec, 30IRE)
- H.265, H.264, MJPEG, WisestreamIII
- SSD 1TB included
- TPM with FIPS 140-2 level2, Secure boot, Verify firmware forgery
- Video Analytics based on AI
- Object detection and classification (Person, Face, Vehicle, License plate)
- Support Attributes, BestShot
- IP66, IP67, IP6K9K, IK10, NEMA4X
- Connect and record up to 5 additional cameras
- Pre-licensed with 1x Wave channel, purchase additional licenses to suit number of connected cameras

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Specifications

Video

Imaging Device	1/2" CMOS
Resolution	1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360
Max. Framerate	H.265/H.264: Max. 60/50fps(60Hz/50Hz, AI analytics on), Max. 120/100fps(60Hz/50Hz, AI analytics off) MJPEG: Max. 15fps/12fps(60Hz/50Hz)
Min. Illumination	Color: 0.007Lux(F1.3, 1/30sec, 30IRE) BW: 0.0007Lux(F1.3, 1/30sec, 30IRE), 0Lux(IR LED on), 30/25fps Color: 0.014Lux(F1.3, 1/60sec, 30IRE) BW: 0.0014Lux(F1.3, 1/60sec, 30IRE), 0Lux(IR LED on), 60/50fps Color: 0.028Lux(F1.3, 1/120sec, 30IRE) BW: 0.0028Lux(F1.3, 1/120sec, 30IRE), 0Lux(IR LED on), 120/100fps
Video Out	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation

Lens

Focal Length (Zoom Ratio)	4.38~9.33mm(2.13x) motorized varifocal
Max. Aperture Ratio	F1.3(Wide)~F2.15(Tele)
Angular Field of View	H: 104°(Wide)~44°(Tele) V: 55°(Wide)~24°(Tele) D: 124°(Wide)~51°(Tele)
Min. Object Distance	0.5m(1.64ft)
Focus Control	Simple focus
Lens Type	P-iris(IR corrected)

Pan / Tilt / Rotate

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

Operational

Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SSDR
Wide Dynamic Range	120dB
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V
Motion Detection	8ea, 8point Polygonal zones
Privacy Masking	6ea, Rectangular zones - Color: Gray/Black/White
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Prefer / Anti flicker(1/5~1/12,000sec) Prefer shutter control(Based on AI engine)

Design and specifications are subject to change without notice. The latest product information / specification can be found at HanwhaVision.com
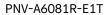Hanwha Vision is formerly known as Hanwha Techwin.

Video Rotation	Flip, Mirror, Hallway view(90°/270°)
Analytics	Classified object type: Person/Face/Vehicle/License plate Attributes: Person(Gender, Color and Bag), Face(Age, Gender, Mask and Glasses), Vehicle(Type: car/bus/truck/motorcycle/bicycle and Color) Support BestShot per object Analytics events based on AI engine - Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit), Face mask detection, Social distancing detection Analytics events - Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear) *Some of the video analytics only works with people and vehicle detection
Alarm I/O	Input 1ea / Output 1ea
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 - 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
IR Viewable Length	40m(131.23ft)

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(5ea area), WiseStreamIII
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(6 users) / Multicast 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, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP(TCP, UDP Unicast), MQTT
Security	TPM 2.0(FIPS 140-2 level 2) HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP) Device Certificate(Hanwha Private Root CA) Secure Boot, Signed firmware
Application Programming Interface	ONVIF Profile S/T/M SUNAPI(HTTP API)

General

Webpage Language	English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Greek, Hungarian
Edge Storage	1TB SSD included(WAVE pre-installed) Possible to register the maximum number of camera - up to 6 camera(Host + 5 camera) - Total bandwidth: up to 33Mbps * Cannot support the camera when host camera use AI mode
Memory	4GB RAM, 512MB Flash

Environmental & Electrical

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Operating Temperature / Humidity	-30°C~+55°C(-22°F~+131°F) / 0~95%RH(non-condensing) * Start up should be done at above -20°C Humidity control /w AIR vent
Storage Temperature / Humidity	-50°C~+60°C(-58°F~+140°F) / 0~90% RH
Certification	IP66/IP67/IP6K9K, NEMA4X, IK10
Input Voltage	PoE+(IEEE802.3at type 2, Class4), 12VDC
Power Consumption	PoE+: Max 19.2W, typical 14.4W 12VDC: Max 17.5W, typical 12.7W Power redundancy failover

Mechanical

Color / Material	White / Aluminum Bubble: Hard-coated dome
RAL Code	RAL9003
Product Dimensions / Weight	ø180x130mm(ø7.09x5.12"), 1900g(4.19 lb)
Compatible Conduit hole / Gangbox	19.1mm(3/4")(M25) single, double, 4" octagon, 4" square
Hanging Mount (Dome)	SBP-187HMW

Certifications & Standards

EMC	FCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCA - EN 55032 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/EN 62471
Environment	IEC/EN 63000 IEC/EN 60529 IP66/IP67, ISO 20653 IP6K9K, IEC/EN 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)