

Network

PNM-A20084RQZ

Key Features

- 5MP x 4CH Resolution x Ch
- 3.18~7.42mm Focal Length
- 25m IR Length
- IP66, IK10 Rated
- Powered by Wisenet 9 Dual-NPU SoC
- 30 Frames per second at 5MP
- FoV - H: 99.8°~39.9°/ V:
- 72.3°~29.9° / D: 133.6°~49.9°
- Digital Noise Reduction WiseNR II (Based on AI engine)
- Defocus detection, Tampering, Audio detection, Shock detection
- Metal shielded RJ-45, Hard coated dome bubble

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Specifications

Video

Imaging Device	Size	1/2.8"
	Type	CMOS
Resolution		2560x1920, 2560x1440, 1920x1080, 1600x1200, 1280x960, 1280x720, 1024x768, 800x600, 640x480, 640x360, 320x240, 320x180
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@5MP Max. 5fps)
	Others	Max. 20fps in PoE+ mode
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.06
	BW(1/30sec, 30IRE)	0.006

Lens

Focal Length (mm)		3.18~7.42
Zoom Ratio	Optical	2.33x
Max Aperture Ratio (F number)	Wide	1.6
	Tele	2.7
Angular Field of View	Horizontal	99.8°~39.9°
	Vertical	72.3°~29.9°
	Diagonal	133.6°~49.9°
Min. Object Distance		1.5m(4.92ft)
Focus Control		Simple focus
Lens Type		Fixed iris

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Pan	0°~360°
	Tilt	-10°~70°
	Rotate	-10°~100°

Operational

Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR

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Operational

Wide Dynamic Range (dB)		120
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization		Support
Defog		Support
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	32ea
	Shape	8point Polygonal zones
	Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow
	Dynamic Privacy Masking: Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic, Purple, Yellow
Gain Control		Off, Max gain, Manual
White Balance		ATW, NarrowATW, AWC, Manual, Indoor, Outdoor
LDC		Support(Fill/stretch mode)
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker, Prefer shutter control(Based on AI engine)
	Speed Range	2~1/30,000sec
Video Rotation		Flip, Mirror, Hallway view(90°/270°) - Each channel separately
Alarm Interface	In/Out	2 configurable I/O ports
	Others	Support extra alarm I/O via optional I/O box
Alarm Triggers		Analytics, Network disconnect, Alarm input, App event, Time schedule, MQTT subscription, Case tampering, Day/Night, Storage disruption
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP/SFTP, File upload(video clip): FTP/SFTP, 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		Support via optional I/O box
Audio Out		Support via optional I/O box
Light Type		IR LED
Light Viewable Length	IR	WiseIR PoE++ 25m(82.02ft) / PoE+ 15m(49.21ft)
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
Similarity Search		Support
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), Motion detection, Face mask detection, Social distancing detection, Slip & fall detection, Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear), Advanced loitering detection, Tailgating detection
	Normal	Defocus detection, Tampering, Audio detection, Shock detection
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: Main, H.264: Main/Baseline/High,MJPEG
Smart Codec		WiseStream(Based on AI engine)
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	Up to 20 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, SFTP, SMTP, ICMP, IGMPv2, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT, SMTP(StartTLS), Syslog
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, LDAP authentication
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	HTTPS, WSS(WebSocket Secure), SRTP, 802.1AE(MACsec)
Access Control	IP-based access control, MAC-based access control, Auto logout
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	SDcard partition encrypt(AES-256), Secure element
Supply Chain Security	SBOM
Security Certificate	Secure element(FIPS 140-3 level3, CC EAL6+), Consumer IoT Security Standard (ETSI EN 303 645), Security Built-in Process Certification (IEC 62443-4-1)

General

SoC	Type	Wisenet 9 (x2)
	Dual NPU	Support

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General

Memory	RAM	8GB
	Flash	8GB eMMC
Edge Storage	Micro SD/SDHC/SDXC	Max. 1TB x 2slot(Total 2TB)

Environmental & Electrical

Operating Condition	Temperature	-40°C~+55°C(-40°F~+131°F)
	Humidity	0~100% RH(condensing)
	Others	+74°C(+165°F)(Max) based on NEMA-TS 2(2.2.7), Start up should be done at above -20°C
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~95% RH(non-condensing)
EPA(Effective Projected Area)		0.033m²
Input Voltage		PoE+(IEEE802.3at, Class4), PoE++(IEEE802.3bt, Class5)
Power Consumption	PoE	Max. 38.1W, typical 25.2W
	Others	PoE+: Max. 25.5W, typical 25.2W
WisePower		Power mode, Power monitoring

Mechanical

Color		White
Material		Aluminum, Hard-coated dome
Material Management	Declaration	RoHS(EU RoHS directive 2011/65/EU and IEC/EN 63000:2018), REACH(Regulation (EC) No. 1907/2006), Conflict mineral policy(Section 1502 of US Dodd Frank Act)
RAL Code		RAL9003
Product Dimensions		ø315x129.5(H)mm(12.40x5.09")
Product Weight		3800g(8.4lb)
Compatible Conduit Hole		19.1mm(3/4")(M25)
Compatible Gang Box		Single, Double, 4" Octagon, Square
Status LED		Support

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, 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 62262 IK10, NEMA TS 2-2013 (2.2.7, 2.2.8, 2.2.9), NEMA 250 type 4X

AI Detection Distance

Person(1.8m/5.9ft)	Wide	up to 27m(88ft)
	Tele	up to 73m(240ft)

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AI Detection Distance

Vehicle(1.45m/4.8ft)	Wide	up to 35m(116ft)
	Tele	up to 97m(318ft)

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	43.1m(141.45ft)
	Tele	141.1m(462.77ft)
Observe (63PPM/ 19PPF)	Wide	17.1m(56.58ft)
	Tele	56.0m(185.11ft)
Recognize (125PPM/ 38PPF)	Wide	8.6m(28.29ft)
	Tele	28.2m(92.55ft)
Identify (250PPM/ 76PPF)	Wide	4.3m(14.15ft)
	Tele	14.1m(46.28ft)

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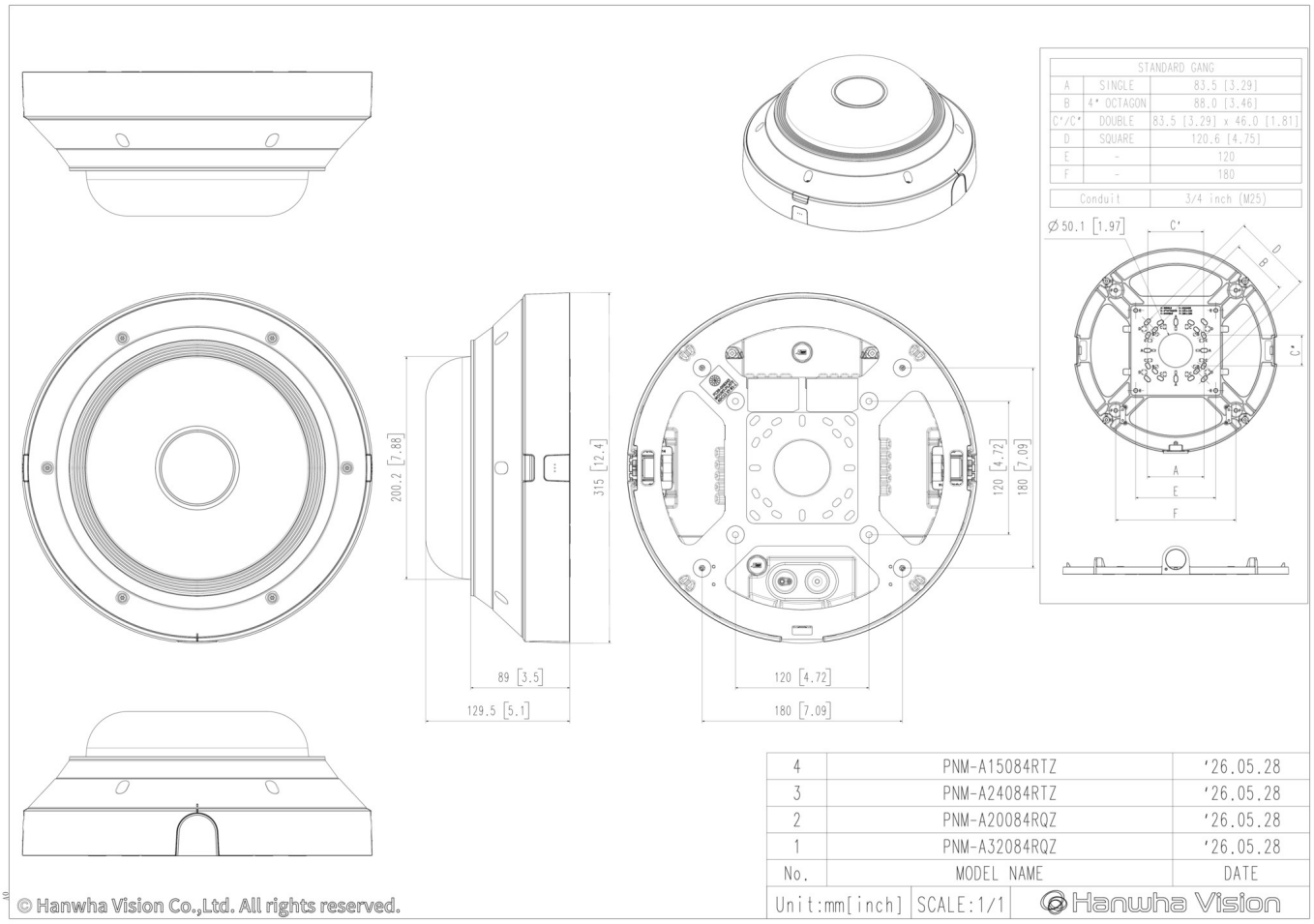
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CAD

Unit: mm [inch]



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Compatible Devices



SBP-140CMB



SBP-180CMB



SBP-180CMS



SBP-150CMP

SBP-300CMP

SBP-900CMP

SBP-C15H



SBP-C15P



SBP-150CMI



SBP-060S



SBP-300CMI



SBP-300CMTS



SBP-300CMTW



SBP-300CMW1



SBP-900CMW



SBP-250WMW



SBP-400WMW



SBP-200WMW



SBP-350WMW



SBP-300WMW



SBP-315C



SBP-315HMW



SBP-150NBW



SBP-156LMW1



SPM-4210



SBP-150S

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