



Network

Dome

XND-A9084RV

8MP AI IR Dome Camera



Key Features

- 4.4~9.3mm (2.1x) motorized varifocal
- Dual NPU for AI-based Image enhancement
- Analytics events based on AI engine :
Object detection (Person/Face/Vehicle/License plate),
IVA (Virtual line/Area, Enter/Exit, Loitering, Direction, Intrusion),
Slip&Fall detection, Face mask detection,
Social distancing detection, Motion detection
- Business intelligence based on AI engine :
People/Vehicle/Crowd counting, Queue management, Heatmap
- Support BestShot and full attributes
- Support Dynamic Privacy Masking
- extremeWDR, WiseNR II (Based on AI engine),
WiseStream(Based on AI engine)
- WiseIR: IR viewable length 40 m (131.23 ft)
- IP52, IK10
- Support Wisepower(Power monitoring, ECO mode)
- Use recycled plastic
- Device certificate(Hanwha Vision Root CA),
Secure storage
(Secure element with FIPS 140-3 level3/CC EAL6+ certified), SBOM

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Specifications

Video		
Imaging Device	Size	1/1.8"
	Type	CMOS
Resolution		320x240, 1920x1080, 2592x1944, 2688x1512, 640x360, 640x480, 320x180, 3072x1728, 800x600, 3328x1872, 3840x2160, 2560x1440, 1600x1200, 1024x768, 1280x960, 1280x720
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@8MP Max. 5fps)
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.04
	BW(1/30sec, 30IRE)	0.004
Video Out		USB: Micro USB Type C
Lens		
Focal Length (mm)		4.4~9.3
Zoom Ratio	Optical	2.1x
Max Aperture Ratio (F number)	Wide	1.3
	Tele	2.15
Angular Field of View	Horizontal	113°~47°
	Vertical	58°~26°
	Diagonal	138°~54°
Min. Object Distance		0.5m(1.64ft)
Focus Control		Simple focus, Manual
Lens Type		P iris(IR corrected)
Pan / Tilt / Rotate		
Pan / Tilt / Rotate Range	Pan	0°~360°
	Tilt	0°~75°
	Rotate	0°~355°
Operational		
Day & Night		Auto(ICR)
Backlight Compensation		HLC, BLC, SSDR, WDR

Operational

Wide Dynamic Range (dB)		120
Digital Noise Reduction		SSNR V , WiseNR II (Based on AI engine)
Digital Image Stabilization		Support
Defog		Support
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	32ea
	Shape	8point Polygonal zones
	Color / Option	Green, Gray, Black, Yellow, Red, Blue, Purple, Mosaic, White
	Dynamic Privacy Masking: Color / Option	Yellow, Green, Red, Gray, Mosaic, Black, Purple, White, Blue
Gain Control		Max gain, Off, Manual
White Balance		Indoor, ATW, Outdoor, Manual, AWC, NarrowATW
LDC		Support(Fill/stretch mode)
Electronic Shutter	Mode	Maximum, Prefer shutter control(Based on AI engine), Anti flicker, Minimum
	Speed Range	2~1/30,000sec
Video Rotation		Mirror, Hallway view(90°/270°), Flip
Alarm Interface	In/Out	2 configurable I/O ports
	Others	Support extra alarm I/O via optional I/O box
Alarm Triggers		Alarm input, Time schedule, Storage disruption, Network disconnect, Analytics, Day/Night, MQTT subscription
Alarm Events When Alarm Trigger Occurred		File upload(video clip): FTP/SFTP, MQTT: publication, Handover: PTZ preset, send message by HTTP/HTTPS/TCP, File upload(image): e-mail/FTP/SFTP, Recording: SD/SDHC/SDXC or NAS recording at event triggers, Notification: e-mail, Audio clip playback, Alarm output
Audio In		Selectable(mic in/line in)
Audio Out		Line out
Light Type		IR LED
Light Viewable Length	IR	WiseIR 40m(131.23ft)
IR Wavelength		850nm

Analytics

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

Analytics

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

Network

Ethernet		Metal shielded RJ-45(10/100BASE-T)
Video Compression		H.265/H.264: Main/Baseline/High, MJPEG
Audio Compression		G.711(PCM): 8KHz(64Kbps), G.726(ADPCM): 8KHz(16/24/32/40Kbps), OPUS: 48KHz(64Kbps), AAC-LC: 16KHz(48Kbps)
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, 3 virtual channel support
Protocol		QoS, RTP(UDP), IPv4, HTTPS, FTP, NTP, TCP/IP, ARP, DHCP, SMTP(StartTLS), RTCP, IPv6, UDP/IP, Bonjour, DNS, SNMPv1/v2c/v3(MIB-2), RTP(TCP), SSL/TLS, DDNS, IGMP, HTTP, SFTP, Syslog, UPnP, CDP, LLDP, MQTT, RTSP, ICMP, SRTP(TCP, UDP Unicast)
Application Programming Interface	ONVIF	M, S, G, T
	Others	Hanwha Vision Open Platform, SUNAPI(HTTP API)
Direct Cloud Connection		Support

Security

OS / Firmware Protect	Signed firmware, Encrypted firmware, Secure boot	
User authentication	Prevent brute-force attack, Digest authentication	
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)	
Secure Communication	SRTP, WSS(WebSocket Secure), HTTPS	
Access Control	Auto logout, MAC-based access control, IP-based access control	
Data Protect	Encrypt compress for live recording file export, Encryption credentials	
Audit	Access / System / Event Log management	
Device ID	Device certificate(Hanwha Vision Root CA)	
Secure Storage	Secure element, SDcard partition encrypt(AES-256)	
Supply Chain Security	SBOM	
Security Certificate	ETSI EN 303 645, Secure element(FIPS 140-3 level3, CC EAL6+)	

General

Memory	RAM	4GB
	Flash	8GB eMMC
Edge Storage	Micro SD/SDHC/SDXC	Max. 1TB x 1slot

Environmental & Electrical

Operating Condition	Temperature	-10°C~+50°C(+14°F~+122°F)
	Humidity	0~100% RH(condensing)
	Others	Humidity control with AIR vent
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
EPA(Effective Projected Area)		0.02m ²
Input Voltage		PoE(IEEE802.3af, Class3)
Power Consumption	PoE	Max. 11.2W, typical 8.4W
WisePower		ECO mode, Power monitoring

Mechanical

Color		White
Material		Aluminum, Hard-coated dome , PC(Polycarbonate)
Material Management	Declaration	REACH(Regulation (EC) No. 1907/2006), RoHS(EU RoHS directive 2011/65/EU and IEC/EN 63000:2018), Conflict mineral policy(Section 1502 of US Dodd Frank Act)
	Recycle Rate	Recycled plastic: 10.63%
RAL Code		RAL9003
Product Dimensions		ø160x118mm(6.30x4.65")
Product Weight		1,020g(2.25lb)
Compatible Conduit Hole		12.7mm(1/2")(M20)
Compatible Gang Box		4" Octagon, Double, Square, Single

Certifications & Standards

EMC	KS C 9832 Class A, KS C 9835, RCM AS-NZS CISPR 32 Class A, CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, ICES-3(A)/NMB-3(A), FCC 47 CFR 15 Subpart B Class A, VCCI CISPR 32 Class A
Safety	UL 62368-1, CAN/CSA C22.2 NO. 62368-1, IEC 62471
Environment	IEC 60529 IP52, IEC/EN 63000, IEC 60068-2-2, IEC 60068-2-27, IEC 60068-2-78, IEC 60068-2-1, IEC 60068-2-6, IEC 60068-2-14, IEC 62262 IK10

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	50.8m(166.77ft)
	Tele	176.6m(579.49ft)
Observe (63PPM/ 19PPF)	Wide	20.3m(66.71ft)
	Tele	70.7m(231.80ft)
Recognize (125PPM/ 38PPF)	Wide	10.2m(33.35ft)
	Tele	35.3m(115.90ft)
Identify (250PPM/ 76PPF)	Wide	5.1m(16.68ft)
	Tele	17.7m(57.95ft)

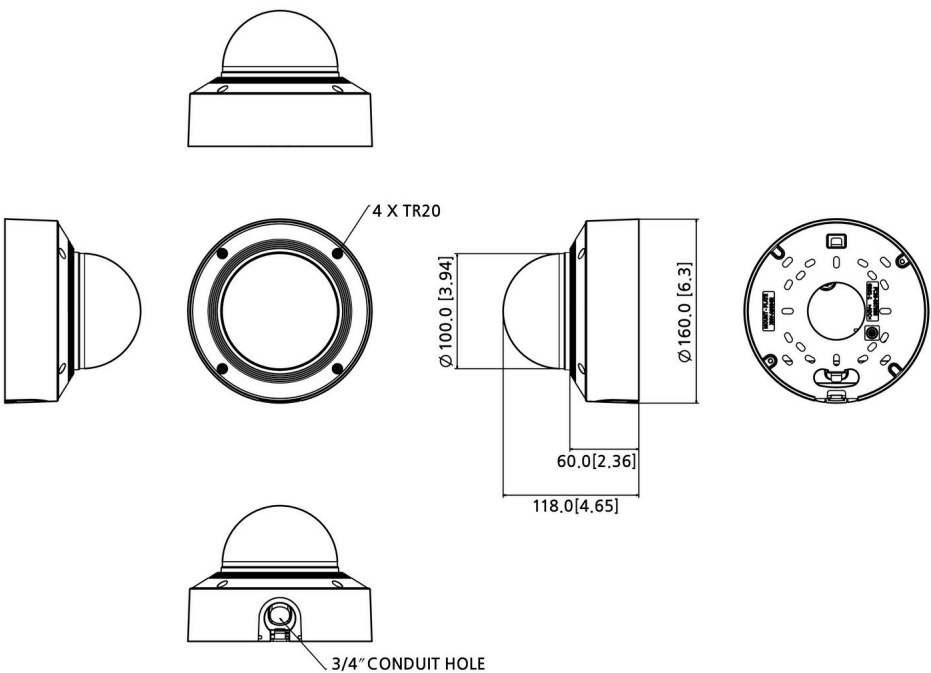
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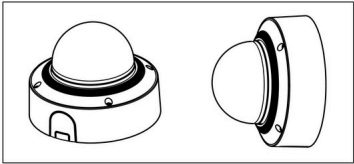
CAD

Unit: mm [inch]

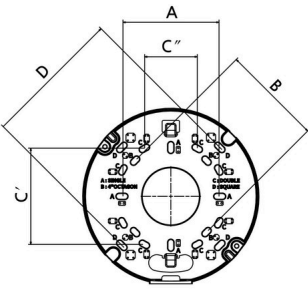
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Reference image



STANDARD GANG		
A	SINGLE	83.5 [3.29]
B	4" OCTAGON	88.0 [3.46]
C' C"	DOUBLE	83.5 [3.29] X 46.0 [1.81]
D	SQUARE	120.2 [4.73]



Revision	V1.0
Revision Date	25/05/30
Paper Size	A0
Unit	mm [inch]
Scale	1:1

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