



Network

Fisheye

XNF-9010RV

X series 12 MP sensor 360° Outdoor Fisheye



Key Features

- CloudConnector Compatible – Connects easily with [HealthPro](#), [OnCloud](#)
- 3008 x 3008 resolution, 30fps
- 1.08mm Stereographic type lens, enhanced resolution for the peripheral regions (187°X187°) W/ simple focus
- Built-in IR for up coverage up to 10m with Wise IR multi-zone IR management
- Triple Codec: H.265, H.264 and MJPEG multiple streaming
- On board dewarping, Digital PTZ
- Fisheye, Single panorama, Double panorama, Quad view
- Multiple virtual channels for easy dewarping views
- WiseStream II compression technology
- extreme WDR 120dB @30fps
- Loitering, directional detection, fog detection, tampering, motion detection, object enter or exit an area
- Sound classification, heatmap, people counting and queue line management
- Dual SD cards
- Power: PoE or 12VDC
- IP66/IK10/NEMA4X
- Direct connect female shielded RJ45 connector for easy installation without pigtail
- USB & analog video output for easy installation
- Hard coated dome cover for durability

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Specifications

Video		
Imaging Device	Size	1/2.3"
	Type	CMOS
Resolution		3584x2688, 3584x1792, 3584x896, 3008x3008, 1792x1344, 1504x1504, 1080x1080, 960x960, 768x768, 720x720, 640x640, 640x480, 640x320, 640x160, 480x480
Max. Framerate	H.265/H.264	30fps/25fps(60Hz/50Hz)
	MJPEG	30fps(@9MP Max. 5fps)
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.39
	BW(1/30sec, 30IRE)	0.039
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)		1.08
Max Aperture Ratio (F number)	Wide	2.2
Angular Field of View	Horizontal	187°
	Vertical	187°
	Diagonal	187°
Min. Object Distance		0.5m(1.64ft)
Focus Control		Simple focus
Operational		
Day & Night		Auto(ICR)
Backlight Compensation		BLC, HLC, WDR, SSDR
Wide Dynamic Range (dB)		120
Digital Noise Reduction		SSNR V
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	32ea
	Shape	4point Quadrangle zones
	Color / Option	Gray, Green, Red, Blue, Black, White, Mosaic

Operational

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
	Speed Range	2~1/12,000sec
Video Rotation		Flip, Mirror
Alarm Interface	In/Out	2 configurable I/O ports
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/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		Selectable(mic in/line in), Built-in mic
Audio Out		Line out
Light Type		IR LED
Light Viewable Length	IR	WiseIR 10m(32.8ft)
IR Wavelength		850nm

Analytics

Analytics Events	Normal	Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Virtual area(Lotering, Intrusion, Enter/Exit, Appear/Disappear), Virtual line(Crossing, Direction)
Business Intelligence	Normal	People counting, Queue management, Heatmap

Network

Ethernet		Metal shielded RJ-45(10/100BASE-T)
Video Compression		H.265/H.264: Main/Baseline/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 20 users
	Multicast	Support
	Multiple Streaming	Up to 10 profiles
Protocol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SFTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP(TCP, UDP Unicast), MQTT

Network

Application Programming Interface	ONVIF	S, G, T
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection		Optional (needs gateway)

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	HTPM(Hanwha Trusted Platform Module), SDcard partition encrypt(AES-256)	
Security Certificate	TPM 2.0 with FIPS 140-2 level2	

General

Memory	RAM	4GB
	Flash	512MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 256GB x 2slot(Total 512GB)

Environmental & Electrical

Operating Condition	Temperature	-40°C~+60°C(-40°F~+140°F)
	Humidity	0~95% RH(non-condensing)
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~90% RH(non-condensing)
Input Voltage		PoE(IEEE802.3af, Class3), 12VDC
Power Consumption	PoE	Max 12.95W, typical 11W
	12VDC	Max 11W, typical 9.1W

Mechanical

Color	White
Material	Aluminum
RAL Code	RAL9003
Product Dimensions	ø160x72mm(ø6.30x2.83")
Product Weight	1100g(2.43 lb)
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 62262 IK10, NEMA 250 type 4X

DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	34.9m(114.49ft)
Observe (63PPM/ 19PPF)	Wide	13.9m(45.60ft)
Recognize (125PPM/ 38PPF)	Wide	7.0m(22.96ft)
Identify (250PPM/ 76PPF)	Wide	3.5m(11.48ft)

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CAD

Unit: mm [inch]

