







XNF-9010RV

12MP IR Fisheye Camera











Key Features

- 1/2.3" 12MP CMOS
- 1.08mm fixed focal lens
- Stereo graphic type lens, enhanced resolution for the peripheral regions
- H.265, H.264, MJPEG codec supported
- Fisheye, Single panorama, Double panorama, Quad view
- On board dewarping, Digital PTZ
- extreme WDR (120dB), WiseStream II support
- Wise IR, IR viewable length 10m
- Virtual channel support
- Plugin support, selectable I/O port
- Video Analytics, Heatmap, People counting
- Queue management
- Hard coated dome cover
- Motion detection, Handover, IP66/IK10/NEMA4X

X series XNF-9010RV



XNF-9010RV

12MP IR Fisheye Camera



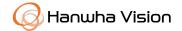


Specifications

Video	
Imaging Device	1/2.3" 12MP CMOS
Resolution	Original view(1:1): 3008x3008~480x480, Double panorama(2:1): 3584x1792~640x320, Single panorama(4:1): 3584x896~640x160, Quad view: 3584x2688~640x480, Q1/Q2/Q3/Q4(4:3): 1792x1344~640x480
Max. Framerate	H.265/H.264: Original view-Max.30fps/25fps@3008x3008(60Hz/50Hz), Double panorama-Max.30fps/25fps@3584x1792(60Hz/50Hz) Single panorama-Max.30fps/25fps@3584x896(60Hz/50Hz) MJPEG: Max.30fps/25fps@1080x1080(60Hz/50Hz)
Min. Illumination	Color: 0.39 Lux (F2.2, 1/30sec), BW : OLux(IR LED on)
Video Out	CVBS : 1.0 Vp-p / 75 Ω composite, 720x480(N), 720x576(P), for Installation USB: Micro USB Type B, 1280x720 for installation
Lens	
Focal Length (Zoom Ratio)	1.08mm fixed focal
Max. Aperture Ratio	F2.2
Angular Field of View	H: 187° / V: 187° / D: 187°
Min. Object Distance	0.5m(1.64ft)
Focus Control	Simple focus
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR
Wide Dynamic Range	extremeWDR (120dB)
Digital Noise Reduction	SSNRV
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, polygonal zones - Color: Grey/Green/Red/Blue/Black/White - Mosaic
Gain Control	Low / Middle / High
White Balance	ATW / Narrow ATW / AWC / Manual / Indoor / Outdoor
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)
Video Rotation	Flip, Mirror
Analytics	Defocus detection, Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Sound classification
Business Intelligence	People counting, Queue management, Heatmap
Alarm I/O	2 configured I/O
Alarm Triggers	Analytics, Network disconnect, Alarm input

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.





Supply voltage: 2.8 VDC.[4mA], Input impedance: 2K Ohm Audio Out Line out, Max. output level: IVrms IR Viewable Length 10m(32.8ft), Wise IR 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 (6.726 Selectable G.726, 118 KHz G.726.10 KMbps 3.2Kbps, 40 KMbps AAC-IC-48 Kbps at 1.6kHz G.726.10 KMbps 3.2Kbps, 40 KMbps AAC-IC-48 Kbps at 1.6kHz Smart Codec Manual(Sea area), WiseStream II Bitrate Control H.264/H.265: CRR or VBR MJPEG: VBR Streaming Unicast120 usera) / Multicast Multiple streaming(Up to 10 profiles) Protocol JPV4, IPV6, TCP/IP. UDP/IP. RTP(IDP), RTCP,RTSP, NTP, HITP. HITPS, SSL/TLS, DHCP, FTP, SMTP, ICMP* (SMP*, SMP*), VGC*,	Alarm Events	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output PTZ Preset Handover Audio playback
IR Viewable Length 10m(32.8ft). Wise IR Network Ethernet Metal shielded RJ-45(10/100BASE-T) Video Compression H.265/H.264 Main/Baselinc/High, M.PEG Audio Compression G.731 L.19w/G.725 Selectable G.726/ADPCM BRHz. G.731 BRHz G.726 Selectable G.727 Selectable	Audio In	
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 (6,726 Selectable G.726,10PCM) BKHE, G.711 BKHz G.726. HIGHZ G.726. HIG	Audio Out	Line out, Max. output level: 1Vrms
Ethernet Metal shielded RJ-45(10/100BASE-T) Video Compression H.265/H.264: Main/Baseline/High, MJPEG Audio Compression G.711 u-law /6,725 selectable G.726. 10KPtg. G.726	IR Viewable Length	10m(32.8ft), Wise IR
Video Compression H.265/H.264: Main/ Baseline/High, MJPEG Audio Compression G.711 u-law (6.726 Selectable G.726 (AppCM) BHtz, G.718 KHz G.718 KHz G.726 (AppCM) BHtz, G.718 KHz	Network	
Audio Compression G.711 u-law / G.726 Selectable G.726 (ADPCM) RMtz. G.712 RMtz G.726 Selectable G.726 (ADPCM) RMtz G.712 RMTz G.726 SEMPS AUGUST G.726 SEMPS AUGUST G.726 SEMPS G.726 SE	Ethernet	Metal shielded RJ-45(10/100BASE-T)
G.726/ADPCN) 8KHz, G.711 8KHz G.726.16kbps, 24Kbps, 32Kbps, 40Kbps AAC-LC:48Kbps at 16KHz Manual(Sea area), WiseStream II Bitrate Control H.264/H.265: CBR or VBR MJPEG: VBR MJ	Video Compression	H.265/H.264: Main/Baseline/High, MJPEG
Bitrate Control H.264/H.265: CBR or VBR MJPEG: VBR Streaming Unicast(20 users) / Multicast Multiple streaming(Up to 10 profiles) Protocol JPV4, JPV6, TCP/JP, UDP/JP, RTP(UDP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP. ICMP, ICMP, SMMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPNP, Bonjour, LLDP, SRTP (TCP, UDP) Unicast) Security HTTPS(SSL) Login Authentication IPAddress Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP) Device Certificate(Hanwha Techwin Root CA) Application Programming Interface General Webpage Language English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek Edge Storage Micro SD/SDHC/SDXC 2slot 1TB(512GBx2) Memory 4096MB RAM, 512MB Flash Environmental & Electrical Operating Temperature / Humidity -40°C ~+60°C (-40°F ~+140°F) / Less than 95% RH Storage Temperature / Humidity -50°C ~+60°C (-58°F ~+140°F) / Less than 95% RH Storage Temperature / Humidity -50°C ~+60°C (-58°F ~+140°F) / Less than 95% RH Certification IPAG. IKIA, NEMAAX Input Voltage Poe(IEEEB02.3af, Class3), 12VDC Power Consumption Poewer Consumption Mechanical Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL 9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35°), 1100g(2.43lb)	Audio Compression	G.726(ADPCM) 8KHz, G.711 8KHz G.726: 16Kbps, 24Kbps, 32Kbps, 40Kbps
Streaming MJPEG: VRR Streaming Microst(20 users) / Multicast Microst(20 users) / Multicast Multiple streaming(Up to 10 profiles) Protocol IPA4_IPV4 TCP/IP, UDP/IP, RTP(UDP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, CMP, EMP, SNMPV1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP (TCP, UDP) Unicast) Profiles / May a manage of the profiles /	Smart Codec	Manual(5ea area), WiseStream II
Multiple streaming(Up to 10 profiles) Protocol IPv4, IPv6, TCP/IP, UDP/IP, RTP(IUDP), 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) FUND Company of Mathentication Digest Login Authentication Dispert Login Authentication Digest	Bitrate Control	·
SMTP, (GMP, ISMPPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP (TCP, UDP Unicast) Security HTTPS(SSL) Login Authentication pigest Login Authentication pigest Login Authentication Posters Filtering B02.1X Authentication (EAP-TLS, EAP-LEAP) Device Certificate(Hanwha Techwin Root CA) Application Programming Interface ONVIF Profile S/G/T SUNAP(HTTP API) Wisenet open platform General Webpage Language English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek Edge Storage Micro SD/SDHC/SDXC 2slot 1TB(512GBx2) Memory 4096MB RAM, 512MB Flash Environmental & Electrical Operating Temperature / Humidity -40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH Storage Temperature / Humidity -50°C ~ +60°C (-58°F ~ +140°F) / Less than 95% RH Certification IP66, IR10, NEMAHX Input Voltage PoE(IEEE802.3af, Class3), 12VDC Power Consumption PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W Mechanical Color / Material RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35°), 1100g(2.43lb)	Streaming	
Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP) Device Certificate (Hanwha Techwin Root CA) Application Programming Interface ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform General Webpage Language English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish,, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek Edge Storage Micro SD/SDHC/SDXC 2slot 1TB(512GBx2) Memory 4096MB RAM, 512MB Flash Environmental & Electrical Operating Temperature / Humidity -40°C ~ +60°C (~40°F ~ +140°F) / Less than 95% RH Storage Temperature / Humidity -50°C ~ +60°C (~58°F ~ +140°F) / Less than 95% RH Certification IP66, IK10, NEMA4X Input Voltage PoE(IEEE802.3af, Class3), 12VDC Power Consumption PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W Mechanical Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL 9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35°), 1100g(2.43lb)	Protocol	SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, SRTP (TCP, UDP
SUNAPI(HTTP API) Wisenet open platform General Webpage Language English, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek Edge Storage Micro SD/SDHC/SDXC 2slot 1TB(512GBx2) Memory 4096MB RAM, 512MB Flash Environmental & Electrical Operating Temperature / Humidity -40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH Storage Temperature / Humidity -50°C ~ +60°C (-58°F ~ +140°F) / Less than 95% RH Certification IP66, IK10, NEMA4X Input Voltage PoE(IEEE802.3af, Class3), 12VDC Power Consumption PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W Mechanical Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Security	Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP)
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Environmental & Electrical Operating Temperature / Humidity -40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH Storage Temperature / Humidity -50°C ~ +60°C (-58°F ~ +140°F) / Less than 95% RH Certification IP66, IK10, NEMA4X Input Voltage PoE(IEEE802.3af, Class3), 12VDC Power Consumption PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W Mechanical Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Edge Storage	Micro SD/SDHC/SDXC 2slot 1TB(512GBx2)
Operating Temperature / Humidity -40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH Storage Temperature / Humidity -50°C ~ +60°C (-58°F ~ +140°F) / Less than 95% RH Certification IP66, IK10, NEMA4X Input Voltage PoE(IEEE802.3af, Class3), 12VDC Power Consumption PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W Mechanical Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Memory	4096MB RAM, 512MB Flash
Storage Temperature / Humidity -50°C ~ +60°C(-58°F ~ +140°F) / Less than 95% RH Certification IP66, IK10, NEMA4X Input Voltage PoE(IEEE802.3af, Class3), 12VDC Power Consumption PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W Mechanical Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Environmental & Electrical	
Certification IP66, IK10, NEMA4X Input Voltage PoE(IEEE802.3af, Class3), 12VDC Power Consumption PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W Mechanical Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Operating Temperature / Humidity	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH
Input Voltage PoE(IEEE802.3af, Class3), 12VDC Power Consumption PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W Mechanical Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Storage Temperature / Humidity	-50°C ~ +60°C(-58°F ~ +140°F) / Less than 95% RH
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Mechanical Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Input Voltage	PoE(IEEE802.3af, Class3), 12VDC
Color / Material White / Aluminum, Hard-coated dome bubble RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Power Consumption	
RAL Code RAL9003 Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Mechanical	
Product Dimensions / Weight Ø160x72mm(62.99x28.35"), 1100g(2.43lb)	Color / Material	White / Aluminum, Hard-coated dome bubble
	RAL Code	RAL9003
Hanging Mount (Dome) SBP-167HMW	Product Dimensions / Weight	Ø160x72mm(62.99x28.35"), 1100g(2.43lb)
	Hanging Mount (Dome)	SBP-167HMW

DORI (EN62676-4 standard)

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