

Network Fisheye

QNF-C9010V

12MP AI Fisheye Camera

Key Features

- 12MP Image Resolution
- 1.76mm Focal Length
- AI Object Classification Person, Vehicle, Color
- IP66, IK10 Rated

• 1/1.6" 12MP CMOS
• 1.76mm fixed stereo graphic type lens
• Color: 0.02Lux(F1.8, 1/30sec), BW: 0.001Lux(F1.8, 1/30sec)
• Digital Rotation
• Resolution/Framerate
- Original view: Max. 20fps@3008x3008
- Double panorama: Max. 20fps@3584x1792
- Single panorama: Max. 20fps@3584x896
- Quad view: Max. 20fps@3584x2688
- Q1/Q2/Q3/Q4(4:3): Max. 20fps@1792x1344
• Day & Night (ICR), WDR (120dB), WiseNR II (Using AI engine)
• H.265, H.264, MJPEG, WiseStream III (Using AI engine)
• Analytics events based on AI engine
- Object detection (Person/Vehicle)
- Color Attribute, BestShot
- Motion detection, Virtual line (Crossing/Direction),
Virtual area (Loitering/Intrusion/Enter/Exit)
• IP66, IK10, NEMA4X

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Specifications

Video

Imaging Device	Size	1/1.6"
	Type	CMOS
Resolution		3584x2688, 3584x1792, 3584x896, 3008x3008, 2560x2560, 2048x1536, 1920x1920, 1920x960, 1920x480, 1792x1344, 1504x1504, 1280x1280, 1280x640, 1280x320, 1024x768, 1024x512, 1024x256, 800x800, 768x576, 640x640, 640x320, 640x160, 512x384, 480x480
Max. Framerate	H.265/H.264	20fps/20fps(60Hz/50Hz)
	MJPEG	5fps
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.02
	BW(1/30sec, 30IRE)	0.001
Video Out		USB: Micro USB Type B. Preview and installation ONLY. Requires WiFi dongle.

Lens

Focal Length (mm)		1.76
Max Aperture Ratio (F number)	Wide	F1.8
Angular Field of View	Horizontal	185°
	Vertical	185°
	Diagonal	185°
Min. Object Distance		0.5m(1.64ft)

Pan / Tilt / Rotate

Pan / Tilt / Rotate Range	Others	Digital Rotation

Operational

Day & Night		Auto(ICR)
Backlight Compensation		BLC, WDR, SSDR
Wide Dynamic Range (dB)		120
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones

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Operational

Privacy Masking	Quantity	32ea
	Shape	4point Quadrangle zones
Gain Control		Low, Middle, High
White Balance		ATW, AWC, Manual, Indoor, Outdoor
Electronic Shutter	Mode	Minimum, Maximum, Anti flicker
	Speed Range	1/5~1/12,000sec
Digital PTZ		Support
Video Rotation		Flip, Mirror
Alarm Triggers		Analytics, Network disconnect
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP/SFTP, Notification: e-mail, Recording: SD/SDHC/SDXC or NAS recording at event triggers, Handover: PTZ preset,send message by HTTP/HTTPS/TCP, MQTT: publication

Analytics

Classified Object Type		Person, Vehicle
Attributes	Person	Upper/Lower clothes color
	Vehicle	Color
Thumbnail		BestShot
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Motion detection, Virtual area(Loitering/Intrusion/Enter/Exit/Appear/Disappear)
	Normal	Defocus detection, Tampering
Business Intelligence	Based on AI Engine	People counting, Queue management, Heatmap

Network

Ethernet		RJ-45(10/100BASE-T)
Video Compression		H.265: Main, H.264: Main/High,MJPEG
Smart Codec		Manual, WiseStream(Based on AI engine)
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: 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
Application Programming Interface	ONVIF	S, G, T, M
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection		Support

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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
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)
Secure Storage	SDcard partition encrypt(AES-256)

General

Memory	RAM	2GB
	Flash	1GB
Edge Storage	Micro SD/SDHC/SDXC	Max. 256GB x 1slot
Edge Storage(OnCloud)	Micro SD/SDHC/SDXC	Max. 1TB x 1slot *Hanwha Vision branded microSD cards have been certified and recommended for OnCloud edge recording.

Environmental & Electrical

Operating Condition	Temperature	-40°C~+55°C(-40°F~+131°F)
	Humidity	0~100% RH(condensing)
	Others	Start up should be done at above -30°C
Storage Condition	Temperature	-50°C~+60°C(-58°F~+140°F)
	Humidity	0~95% RH(non-condensing)
Input Voltage		PoE(IEEE802.3af, Class3)
Power Consumption	PoE	Max 6.7W, typical 4.8W

Mechanical

Color	White
Material	Aluminum
RAL Code	RAL9003
Product Dimensions	ø120x72.3mm(ø4.7x2.85")
Product Weight	583g(1.28lb)

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

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DORI (EN62676-4 standard)

Detect (25PPM/ 8PPF)	Wide	36.9m(121.03ft)
Observe (63PPM/ 19PPF)	Wide	14.8m(48.42ft)
Recognize (125PPM/ 38PPF)	Wide	7.4m(24.21ft)
Identify (250PPM/ 76PPF)	Wide	3.7m(12.10ft)

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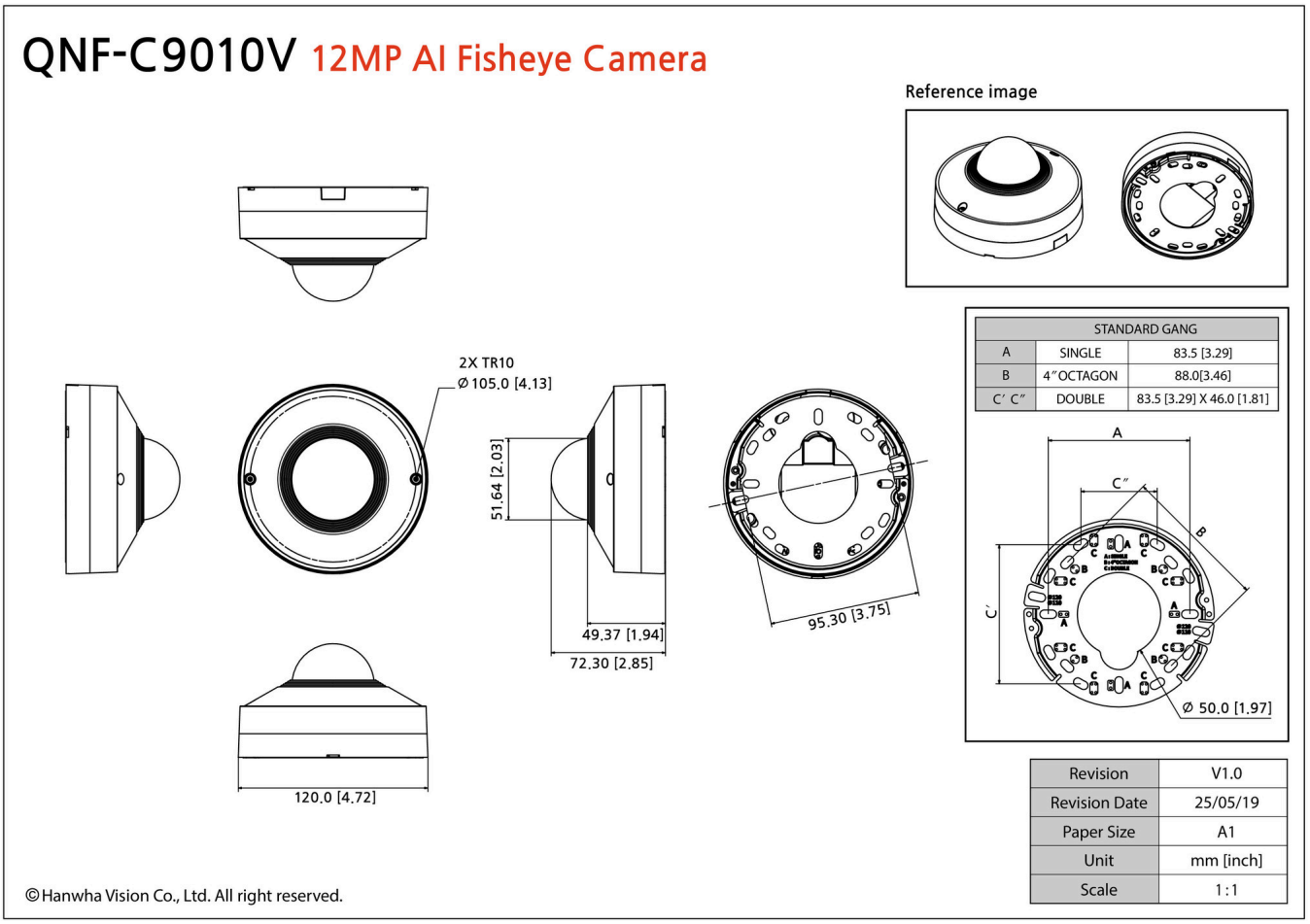
CAD

Unit: mm [inch]



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