



Network

Fisheye

# QNF-C9010

12MP AI Fisheye Camera



## Key Features

- 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, WiseStreamIII (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)
- PoE: Max 7.3W

## Compatible Devices



SBP-150CMI



SBP-300CMI



SBP-300CMW1



SBP-900CMW



SBP-300CMTW



SBP-300CMTS

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## Specifications

Video		
Imaging Device	Size	1/1.6"
	Type	CMOS
Resolution		512x384, 3584x2688, 3008x3008, 640x160, 1920x960, 1792x1344, 640x640, 1024x768, 480x480, 800x800, 1920x480, 1280x320, 1920x1920, 2560x2560, 1280x640, 2048x1536, 640x320, 1024x512, 1504x1504, 768x576, 3584x896, 1280x1280, 3584x1792, 1024x256
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
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		WDR, SSDR, BLC
Wide Dynamic Range (dB)		120
Digital Noise Reduction		WiseNR II (Based on AI engine), SSNR V
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones

## Operational

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

## Analytics

Classified Object Type		Vehicle, Person
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	Tampering, Defocus detection
Business Intelligence	Based on AI Engine	Heatmap, People counting, Queue management

## Network

Ethernet		RJ-45(10/100BASE-T)
Video Compression		H.265/H.264: Main/High, MJPEG
Smart Codec		WiseStream(Based on AI engine), Manual
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		NTP, TCP/IP, ARP, DHCP, RTP(UDP), HTTPS, FTP, RTCP, IPv6, UDP/IP, Bonjour, DNS, SNMPv1/v2c/v3(MIB-2), RTP(TCP), SSL/TLS, QoS, SMTP, DDNS, IGMP, HTTP, SFTP, UPnP, CDP, LLDP, MQTT, RTSP, ICMP, SRTP(TCP, UDP Unicast), IPv4
Application Programming Interface	ONVIF	M, T, S, G
	Others	SUNAPI(HTTP API), Hanwha Vision Open Platform
Direct Cloud Connection		Support

## Security

OS / Firmware Protect		Signed firmware, Encrypted firmware, Secure boot
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## Security

User authentication	Prevent brute-force attack, Digest authentication
Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP, EAP-PEAP, MSCHAPv2)
Secure Communication	WSS(WebSocket Secure), SRTP, HTTPS
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

## Environmental & Electrical

Operating Condition	Temperature	-10°C~+40°C(+14°F~+104°F)
	Humidity	0~90% 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)
Power Consumption	PoE	Max 7.3W, typical 4.3W

## Mechanical

Color	White
Material	Aluminum
RAL Code	RAL9003
Product Dimensions	ø99x52mm(ø3.9x2.05")
Product Weight	360g(0.79lb)

## Certifications & Standards

EMC	RCM AS-NZS CISPR 32 Class A, KS C 9832 Class A, KS C 9835, CE/UKCA - EN55032 Class A, EN 50130-4, EN 61000-3-2, EN 61000-3-3, ICES-3(A)/NMB-3(A), VCCI CISPR 32 Class A, FCC 47 CFR 15 Subpart B Class A
Safety	IEC 62471, UL 62368-1, CAN/CSA C22.2 NO. 62368-1
Environment	IEC/EN 63000, IEC 60529 IP42

## 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)

**DORI (EN62676-4 standard)**

Identify (250PPM/ 76PPF)	Wide	3.7m(12.10ft)
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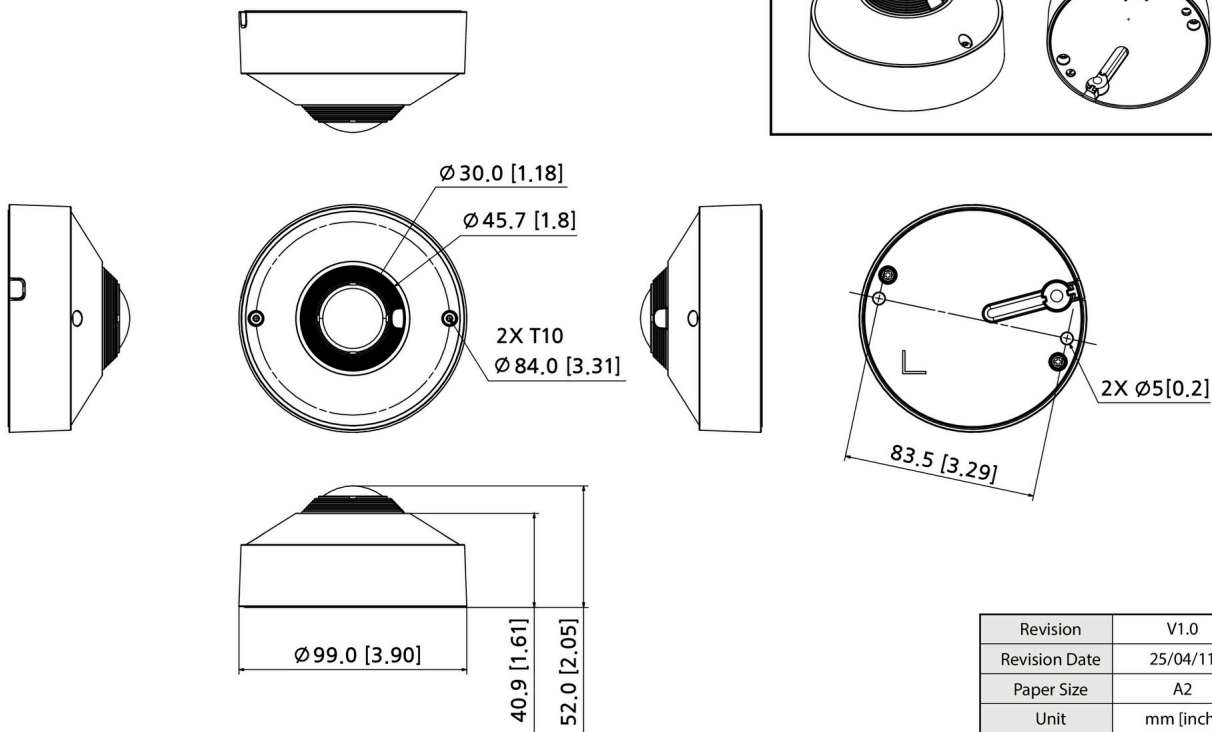
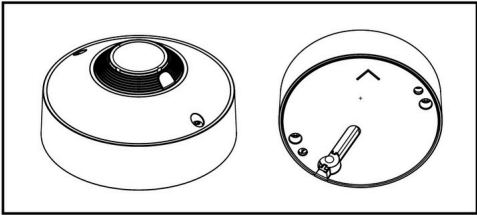


CAD

Unit: mm [inch]

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Reference image



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Revision	V1.0
Revision Date	25/04/11
Paper Size	A2
Unit	mm [inch]
Scale	1:1