



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



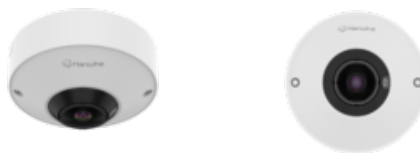
SBP-300CMTW



SBP-300CMTS

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## Specifications

Video	
Imaging Device	1/1.6" 12MP CMOS
Resolution	Overview : 3008x3008, 2560x2560, 1920x1920, 1504x1504, 1280x1280, 800x800, 640x640, 480x480 Double panorama: 3584x1792, 1920x960, 1280x640, 1024x512, 640x320 Single panorama: 3584x896, 1920x480, 1280x320, 1024x256, 640x160 Quad view: 3584x2688, 2048x1536, 1792x1344, 1024x768, 768x576, 512x384 Q1/Q2/Q3/Q4(4:3): 1792x1344, 1024x768, 768x576, 512x384
Max. 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 MJPEG: Max.5fps
Min. Illumination	Color: 0.02Lux (F1.8, 1/30sec) BW: 0.001Lux (F1.8, 1/30sec)
Video Out	USB: Micro USB Type B, 1280x720 for installation
Lens	
Focal Length (Zoom Ratio)	1.76mm fixed focal
Max. Aperture Ratio	F1.8
Angular Field of View	H: 185° / V: 185° / D: 185°
Min. Object Distance	0.5m(1.64ft)
Pan / Tilt / Rotate	
Pan / Tilt / Rotate Range	Digital Rotation
Operational	
Camera Title	Displayed up to 85 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, WDR, SDR
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR V , WiseNR II (Based on AI engine)
Motion Detection	8ea, 8point polygonal zones
Privacy Masking	32ea, 4point quadrangle zones
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC	Support
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5~1/12,000sec)
Video Rotation	Flip, Mirror

Analytics	<p>Classified object type: Person/Vehicle            Attributes: Person(Upper/lower clothes color), Vehicle(color)            Support BestShot</p> <p>Analytics events based on AI engine            - Motion detection*, Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit/Appear/Disappear)</p> <p>Analytics events            - Defocus detection, Tampering</p> <p>* Some of the video analytics only works with people and vehicle detection</p>
Business Intelligence	Based on AI engine: People counting, Queue management, Heatmap
Alarm Triggers	Analytics, Network disconnect
Alarm Events	<p>When alarm trigger occurred</p> <ul style="list-style-type: none"> <li>- File upload(image) : e-mail/FTP/SFTP</li> <li>- Notification : e-mail</li> <li>- Recording : SD/SDHC/SDXC or NAS recording at event triggers</li> <li>- Handover(PTZ preset, Send message by HTTP/HTTPS/TCP)</li> <li>- MQTT: publication</li> </ul>
<b>Network</b>	
Ethernet	RJ-45(10/100BASE-T)
Video Compression	H.265/H.264: Main/High, MJPEG
Smart Codec	Manual(5ea area), WiseStreamIII(Based on AI engine)
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(20 users) / Multicast 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, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP, CDP, SRTP (TCP, UDP Unicast), MQTT
Application Programming Interface	<p>ONVIF Profile S/G/T/M</p> <p>SUNAPI(HTTP API)</p> <p>Hanwha Vision Open Platform</p> <p>Oncloud edge recording, compatible with Hanwha Vision's Micro SD cards up to 1TB</p>
<b>Security</b>	
OS / Firmware Protect	Secure boot, Signed firmware, Firmware encryption
User authentication	Digest Authentication, Prevent brute-force attack
Network authentication	802.1X Authentication(EAP-TLS, EAP-LEAP, EAP-PEAP MSCHAPv2)
Secure Communication	HTTPS, SRTP, WSS(Websocket secure)
Access Control	Access control based on IP address
Data Protect	Authentication information encryption, ZIP compression encryption
Audit	User Access/System/Event log management
Device ID	Device Certificate(Hanwha Private Root CA)
Secure Storage	SDcard partition encrypt
<b>General</b>	
Webpage Language	English, Korean, Simplified Chinese, Traditional Chinese, French, Italian, Spanish, German, Japanese, Russian, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek
Edge Storage	Micro SD/SDHC/SDXC 1slot 256GB
Memory	2GB RAM, 1GB Flash
<b>Environmental &amp; Electrical</b>	
Operating Temperature / Humidity	-10°C~+40°C(+14°F ~ +104°F) / 0~90% RH
Storage Temperature / Humidity	-50°C~+60°C(-58°F ~ +140°F) / 0~90% RH
Certification	IP42

Design and specifications are subject to change without notice. The latest product information / specification can be found at [HanwhaVision.com](http://HanwhaVision.com).

Hanwha Vision is formerly known as Hanwha Techwin.

Input Voltage	PoE(IEEE802.3af, Class3)
Power Consumption	PoE: Max 7.3W, typical 4.3W

Mechanical	
Color / Material	White / Aluminum
RAL Code	RAL9003
Product Dimensions / Weight	ø99x52mm(ø3.9x2.05"), 360g(0.79lb)
Hanging Mount (Dome)	SBP-099HMW

Certifications & Standards	
EMC	FCC 47 CFR 15 Subpart B Class A ICES-3(A)/NMB-3(A) CE/UKCA - EN 55032 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/EN 62471
Environment	IEC/EN 63000 IEC/EN 60529 IP42

Compatible Models	
Hanging Adaptor	SBP-099HMW
Ceiling Mount (Assy)	SBP-150CMI/300CMI, SBP-300CMW1/900CMW, SBP-300CMTW, SBP-300CMTS
Ceiling Mount (Single Unit)	SBP-140CMB/180CMB/180CMS, SBP-150CMP/300CMP/900CMP, SBP-C15P, SBP-C15H
Wall Mount	SBP-125WMW1, SBP-250WMW, SBP-400WMW, SBP-300WMW/300WMW1
Wall Mount Adaptor	SBP-115PFA, SBP-300BW1
Pole Mount	SBD-140PMB, SBP-300PMW2
In-ceiling Mount	SHD-1128FPW
Corner Mount	SBD-140KMB, SBP-156KMW, SBP-300KMW1
Parapet Mount	SBP-300LMW, SBP-156LMW1
Tilt Mount	SBV-099TMW
Cabinet	SBP-300NBW
Gang Plate	SBD-110GP1

DORI (EN62676-4 standard)	
Detect (25PPM/ 8PPF)	36.9m(121.03ft)
Observe (63PPM/ 19PPF)	14.8m(48.42ft)
Recognize (125PPM/ 38PPF)	7.4m(24.21ft)
Identify (250PPM/ 76PPF)	3.7m(12.10ft)

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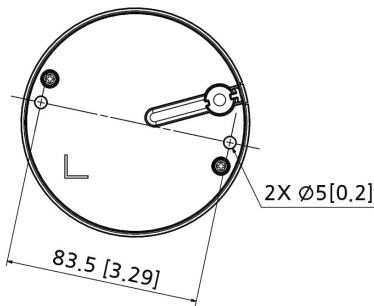
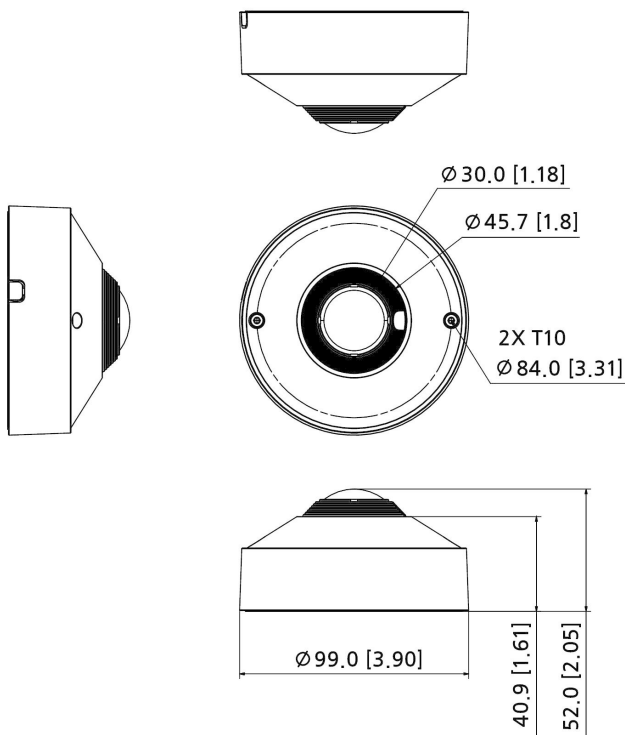
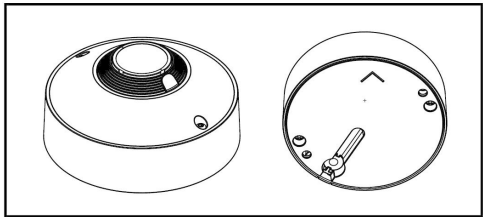


CAD

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