

**SAMSUNG**  
WISeNET



**WISeNET** Q series

# Comparison Chart

## Wisenet Q series



	<b>WISENET Q QNO-7080R</b>	<b>WISENET Q QND-7080R</b>	<b>WISENET Q QNV-7080R</b>	<b>WISENET Q QNO-7010R/7020R/7030R</b>	<b>WISENET Q QND-7010R/7020R/7030R</b>	<b>WISENET Q QNV-7010R/7020R/7030R</b>
<b>Resolution</b>	4MP	4MP	4MP	4MP	4MP	4MP
<b>Imaging Device</b>	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS
<b>Video Compression Format</b>	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
<b>Resolution / Max. Frame Rate</b>	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps
<b>Streaming Capacity</b>	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)
<b>Max. User Access</b>	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
<b>Min. Illumination (30 IRE)</b>	TBD	TBD	TBD	Color: 0.5Lux (7010R), 0.4Lux (7020R), 0.3Lux (7030R) B/W: 0Lux (IR LED on)	Color: 0.5Lux (7010R), 0.4Lux (7020R), 0.3Lux (7030R) B/W: 0Lux (IR LED on)	Color: 0.5Lux (7010R), 0.4Lux (7020R), 0.3Lux (7030R) B/W: 0Lux (IR LED on)
<b>Lens</b>	2.8 ~ 12mm (4.3x) Motorized V/F	2.8 ~ 12mm (4.3x) Motorized V/F	2.8 ~ 12mm (4.3x) Motorized V/F	2.8mm fixed (F2.2) (7010R) 3.6mm fixed (F2.2) (7020R) 6mm fixed (F2.2) (7030R)	2.8mm fixed (F2.2) (7010R) 3.6mm fixed (F2.2) (7020R) 6mm fixed (F2.2) (7030R)	2.8mm fixed (F2.2) (7010R) 3.6mm fixed (F2.2) (7020R) 6mm fixed (F2.2) (7030R)
<b>Angular Field of View</b>	TBD	TBD	TBD	H: 110.0° / V: 63.0° / D: 128.0° (7010R) H: 81.0° / V: 45.0° / D: 95.0° (7020R) H: 53.0° / V: 31.0° / D: 62.0° (7030R)	H: 110.0° / V: 63.0° / D: 128.0° (7010R) H: 81.0° / V: 45.0° / D: 95.0° (7020R) H: 53.0° / V: 31.0° / D: 62.0° (7030R)	H: 110.0° / V: 63.0° / D: 128.0° (7010R) H: 81.0° / V: 45.0° / D: 95.0° (7020R) H: 53.0° / V: 31.0° / D: 62.0° (7030R)
<b>Focus Control</b>	Simple focus (Motorized V/F) / Manual, Remote control via network	Simple focus (Motorized V/F) / Manual, Remote control via network	Simple focus (Motorized V/F) / Manual, Remote control via network	-	-	-
<b>IR Viewable Length</b>	30m (98.43ft)	20m (65.62ft)	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)	30m (98.43ft)
<b>Pan / Tilt / Rotate</b>	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>Day &amp; Night</b>	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
<b>Backlight Compensation</b>	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
<b>Digital Noise Reduction</b>	SSNR	SSNR	SSNR	SSNR	SSNR	SSNR
<b>Intelligent Video Analytics</b>	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection
<b>Protocol</b>	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)
<b>Alarm I/O</b>	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
<b>Audio</b>	Uni-directional	Uni-directional	Uni-directional	Uni-directional	Uni-directional	Uni-directional
<b>Edge Storage</b>	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS
<b>Environment Protection</b>	IP66, IK10	-	IP66, IK10	IP66, IK10	-	IP66, IK10
<b>Operating Temperature</b>	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -20°C (-4°F)
<b>Power</b>	PoE / DC 12V	PoE / DC 12V	PoE / DC 12V	PoE / DC 12V	PoE / DC 12V	PoE / DC 12V
<b>Dimensions (WxHxD) / Weight</b>	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) TBD	Ø119.8 x 98.8mm (Ø4.72" x 3.89") TBD	Ø137.0 x 106.1mm (Ø5.39" x 4.18") TBD	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 730g (1.61 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb)
<b>Additional Features</b>	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream

# Comparison Chart

## Wisenet Q series



	<b>WISENET Q QNO-6070R</b>	<b>WISENET Q QND-6070R</b>	<b>WISENET Q QNV-6070R</b>	<b>WISENET Q QNO-6010R/6020R/6030R</b>	<b>WISENET Q QND-6010R/6020R/6030R</b>	<b>WISENET Q QNV-6010R/6020R/6030R</b>
<b>Resolution</b>	2MP	2MP	2MP	2MP	2MP	2MP
<b>Imaging Device</b>	1/3" 2.19M CMOS	1/3" 2.19M CMOS	1/3" 2.19M CMOS	1/3" 2.19M CMOS	1/3" 2.19M CMOS	1/3" 2.19M CMOS
<b>Video Compression Format</b>	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
<b>Resolution / Max. Frame Rate</b>	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps
<b>Streaming Capacity</b>	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)
<b>Max. User Access</b>	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
<b>Min. Illumination (30 IRE)</b>	TBD	TBD	TBD	TBD	TBD	TBD
<b>VIDEO</b>						
<b>Lens</b>	2.8 ~ 12mm (4.3x) Motorized V/F	2.8 ~ 12mm (4.3x) Motorized V/F	2.8 ~ 12mm (4.3x) Motorized V/F	2.8mm fixed (F1.8) (7010R) 3.6mm fixed (F1.8) (7020R) 6mm fixed (F1.8) (7030R)	2.8mm fixed (F1.8) (7010R) 3.6mm fixed (F1.8) (7020R) 6mm fixed (F1.8) (7030R)	2.8mm fixed (F1.8) (7010R) 3.6mm fixed (F1.8) (7020R) 6mm fixed (F1.8) (7030R)
<b>Angular Field of View</b>	TBD	TBD	TBD	H: 110.0° / V: 61.0° / D: 125.0° (6010R) H: 86.48° / V: 46.22° / D: 102.44° (6020R) H: 52.54° / V: 28.86° / D: 61.14° (6030R)	H: 110.0° / V: 61.0° / D: 125.0° (6010R) H: 86.48° / V: 46.22° / D: 102.44° (6020R) H: 52.54° / V: 28.86° / D: 61.14° (6030R)	H: 110.0° / V: 61.0° / D: 125.0° (6010R) H: 86.48° / V: 46.22° / D: 102.44° (6020R) H: 52.54° / V: 28.86° / D: 61.14° (6030R)
<b>Focus Control</b>	TBD	TBD	TBD	-	-	-
<b>OPERATIONAL</b>						
<b>IR Viewable Length</b>	30m (98.43ft)	20m (65.62ft)	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)	30m (98.43ft)
<b>Pan / Tilt / Rotate</b>	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>Day &amp; Night</b>	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
<b>Backlight Compensation</b>	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
<b>Digital Noise Reduction</b>	SSNR	SSNR	SSNR	SSNR	SSNR	SSNR
<b>Intelligent Video Analytics</b>	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection
<b>FEATURES</b>						
<b>Protocol</b>	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)	ONVIF profile S & G, SUNAPI (HTTP API)
<b>Alarm I/O</b>	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
<b>Audio</b>	Uni-directional	Uni-directional	Uni-directional	Uni-directional	Uni-directional	Uni-directional
<b>Edge Storage</b>	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS	micro SD/SDHC/SDXC Max. 128G, NAS
<b>Environment Protection</b>	IP66, IK10	-	IP66, IK10	IP66, IK10	-	IP66, IK10
<b>Operating Temperature</b>	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -20°C (-4°F)
<b>Power</b>	PoE / DC 12V	PoE / DC 12V	PoE / DC 12V	PoE / DC 12V	PoE / DC 12V	PoE / DC 12V
<b>Dimensions (WxHxD) / Weight</b>	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) TBD	Ø119.8 x 98.8mm (Ø4.72" x 3.89") TBD	Ø137.0 x 106.1mm (Ø5.39" x 4.18") TBD	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) TBD	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") TBD
<b>Additional Features</b>	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream	Lens Distortion Correction, Hallway view, WiseStream

# WISeNET Q series

We newly launch Wisenet Q series, an affordable product line offering simple but essential features ideal to secure small to medium sized applications. Find your compact camera solution with the professional Wisenet Q series.

## Qualified compact cameras with essential features

- 2Megapixel to 4Megapixel resolution
- H.265 / H.264 codec
- Framerate Max. 20fps@4M, Max. 30fps@2M
- WiseStream
- Hallway view (Rotate 90°/270°)
- LDC (Lens Distortion Correction)
- True WDR (120dB)
- Motion detection, Defocus detection, Tampering
- Audio-in, Alarm-in/out support
- Edge storage (micro SD/SDHC/SDXC 128GB, NAS)
- PoE / DC dual power
- IP66/IK10 (Outdoor cameras)
- Compact design



## Broad line-up of indoor and outdoor cameras

Wisenet Q series offers a wide range of indoor and outdoor Bullet / Dome / Vandal cameras to cover multiple application needs for retails, banks, residences, offices or transportation delivering crisp and clear image qualities.

	BULLET		DOME		IR VANDAL	
	Fixed IR	V/F IR	Fixed IR	V/F IR	Fixed IR	V/F IR
4MP	 QNO-7010R/7020R/7030R	 QNO-7080R	 QND-7010R/7020R/7030R	 QND-7080R	 QNV-7010R/7020R/7030R	 QNV-7080R
2MP	 QNO-6010R/6020R/6030R	 QNO-6070R	 QND-6010R/6020R/6030R	 QND-6070R	 QNV-6010R/6020R/6030R	 QNV-6070R

## Improved bandwidth utilization with WiseStream, H.265

New Wisenet series camera's streaming performance is greatly enhanced by applying an advanced compression technology called WiseStream. WiseStream can reduce bandwidth by 50% by using dynamic GOV control technology, and used with high efficiency video coding(H.265). The bandwidth efficiency can reach up to a 75% savings as compared to other camera technologies.

\* Wisenet Q & P series support WiseStream. Only Wisenet P series support 4K resolution. (Not Q series)



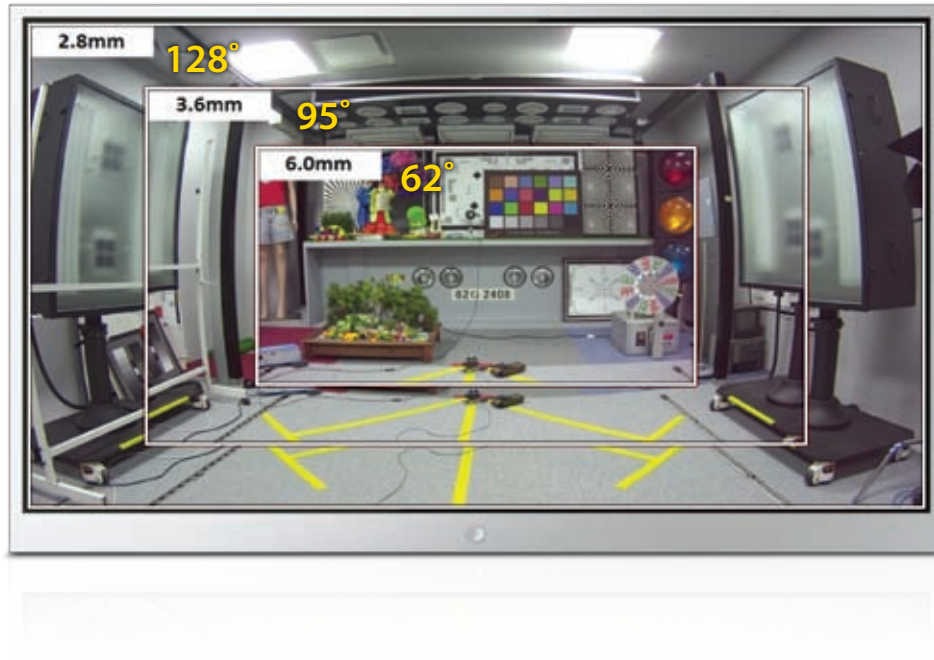
## Defocus detection

The entire Wisenet Q series support defocus detection, which helps to realize when focus is out and greatly improved the efficiency of the operators. User can also adjust the optimal focus remotely via the network (4MP Varifocal product), greatly reducing the installation / optimization time of the camera.



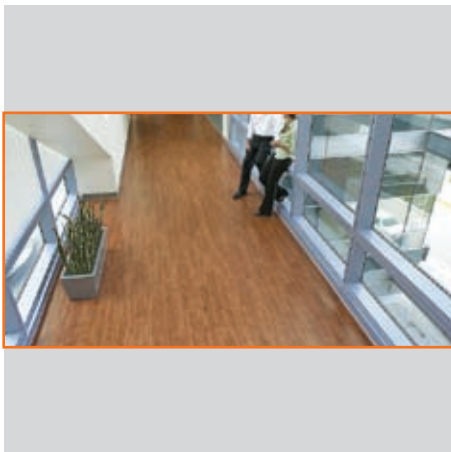
## Various lens

The Wisenet Q series have the fixed lens range from 2.8mm to 6.0mm. If you want wide surveillance, you can use our 2.8mm lens model and if the surveillance object is either small or located far away from the camera, you can use our 6.0mm lens model. So you can choose camera as your needs.

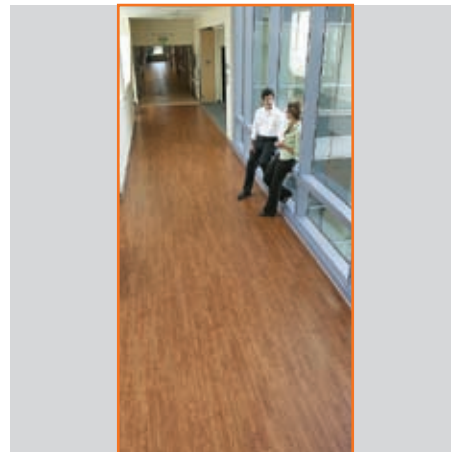


## Hallway view for monitoring vertical shaped areas

In a vertical shaped environment, such as corridors, hallways, tunnels, or aisles, traditional horizontal shaped videos focus on unnecessary edges of the area causing bandwidth and storage waste. By utilizing the hallway view, 3 : 4 and 9 : 16 aspect ratio image is created : a vertically oriented video that maximizes image quality in narrow locations.



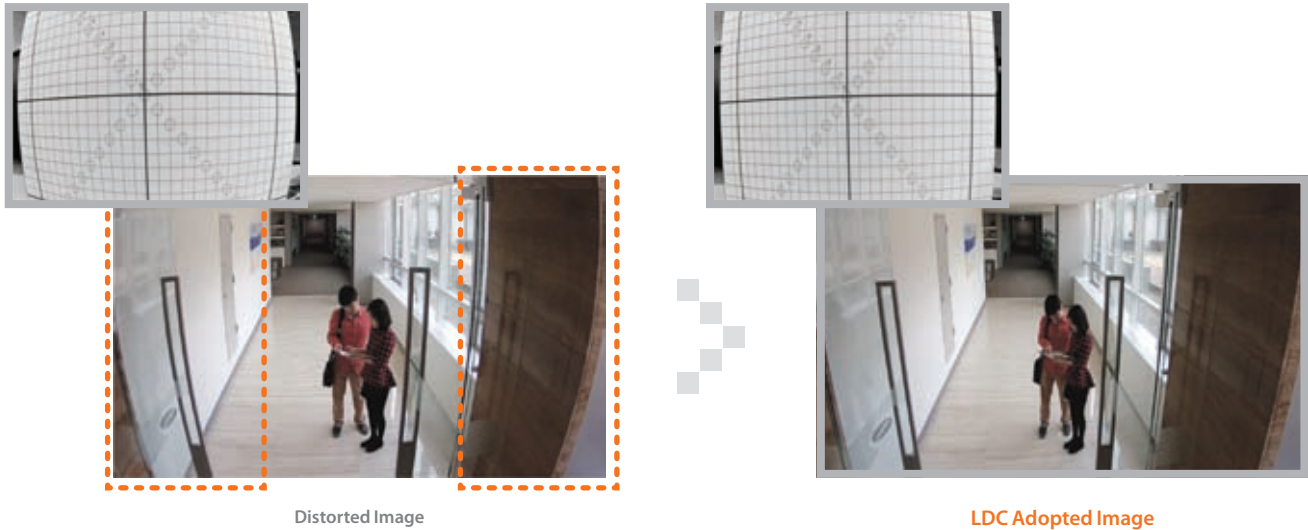
Conventional



Hallway View

## Minimize image distortion by Lens Distortion Correction

Lens Distortion may typically appear in videos causing straight lines close to the edge curve outwards. With the Lens Distortion Correction technology available on the Wisenet Q series, imperfections in images can be easily repaired.



## Specialized for small to medium sized applications

Wisenet Q series are ready to solve any challenges you may face especially on small to medium sized applications.

- By using Wisenet Q series and PoE NVR together as a network solution you can save both installation time and cost, suitable for small to medium sized applications.
- Install cameras on entrance/lobbies, parking lots, elevators, hallways, aisles and more.

This professional surveillance camera will enable you to create a secure environment meeting your needs.

The image displays the Wisenet Q series camera and PoE NVR system. On the left, the Wisenet Q series logo is shown above a row of five different camera models. In the center, a large PoE NVR SRN-1673S/873S/473S is shown. To the right, a large image of a retail store interior is overlaid with several smaller inset images showing various application scenarios: Store Floor, Employee Areas / Bank Office, Receiving & Store Room, Entrance, Checkout & Service Counter, Parking Lot, Elevator, and Lobby.

# QNO-7080R

4Megapixel Network IR Bullet Camera

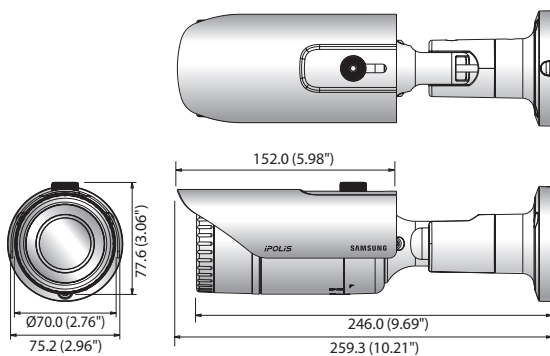


## Key Features

- Max. 4M resolution
- 2.8 ~ 12mm (4.3x) motorized varifocal lens
- Max. 20fps@4M resolutions, Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 30m, IP66, IK10
- Hallway view support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## QNO-7080R

<b>VIDEO</b>	
Imaging Device	1/3" 4M CMOS
Total Pixels	2,720(H) x 1,536(V)
Effective Pixels	2,688(H) x 1,520(V)
Scanning System	Progressive
Min. Illumination	TBD
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8 ~ 12mm (4.3x) motorized varifocal
Max. Aperture Ratio	F1.4
Angular Field of View	TBD
Focus Control	Simple focus (Motorized V/F) / Manual, Remote control via network
Lens Type	Motorized
Mount Type	Board type
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 20 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm I/O	Input 1 / Output 1
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	2592 x 1520, 2560 x 1440 (16 : 9), 2304 x 1296, 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 450, 720 x 576, 720 x 480, 640 x 480, 320 x 240
Max. Framerate	H.265/H.264 : Max. 20fps at 4M, Max. 30fps at 2M all resolutions
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Line in
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SFTP, iCMP, iGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC Max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Portuguese, Turkish, Polish, Czech, Dutch, Hungarian, Greek
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
Pixel Counter	Support (Plug-in viewer only)
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH *Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3) / 12V DC
Power Consumption	TBD
<b>MECHANICAL</b>	
Color / Material	Dark gray / Metal
Dimensions (WxH)	$\varnothing 70.0$ x 246.0mm ( $\varnothing 2.76$ " x 9.69") (Without sunshield)
Weight	TBD

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>



# QND-7080R

4Megapixel Network IR Dome Camera

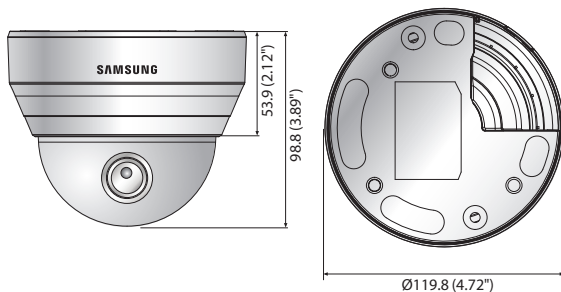


## Key Features

- Max. 4M resolution
- 2.8 ~ 12mm (4.3x) motorized varifocal lens
- Max. 20fps@4M resolutions, Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 20m
- Hallway view support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



## QND-7080R

<b>VIDEO</b>	
Imaging Device	1/3" 4M CMOS
Total Pixels	2,720(H) x 1,536(V)
Effective Pixels	2,688(H) x 1,520(V)
Scanning System	Progressive
Min. Illumination	TBD
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8 ~ 12mm (4.3x) motorized varifocal
Max. Aperture Ratio	F1.4
Angular Field of View	TBD
Focus Control	Simple focus (Motorized V/F) / Manual, Remote control via network
Lens Type	Motorized
Mount Type	Board type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	20m (65.62ft)
Camera Title	Off / On (Displayed up to 20 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm I/O	Input 1 / Output 1
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	2592 x 1520, 2560 x 1440 (16 : 9), 2304 x 1296, 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 450, 720 x 576, 720 x 480, 640 x 480, 320 x 240
Max. Framerate	H.265/H.264 : Max. 20fps at 4M, Max. 30fps at 2M all resolutions
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Built-in mic
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPTS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC Max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Portuguese, Turkish, Polish, Czech, Dutch, Hungarian, Greek
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
Pixel Counter	Support (Plug-in viewer only)
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3) / 12V DC
Power Consumption	TBD
<b>MECHANICAL</b>	
Color / Material	Ivory / Plastic
Dimensions (WxH)	Ø119.8 x 98.8mm (Ø4.72" x 3.89")
Weight	TBD

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# QNV-7080R

4Megapixel Vandal-Resistant Network IR Dome Camera

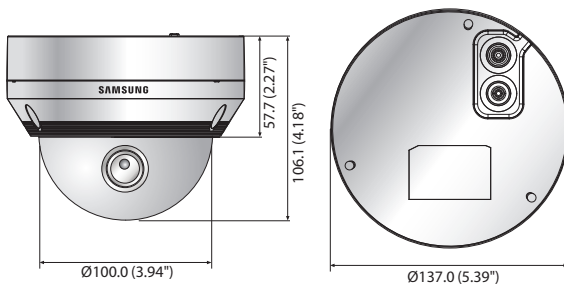


## Key Features

- Max. 4M resolution
- 2.8 ~ 12mm (4.3x) motorized varifocal lens
- Max. 20fps@4M resolutions, Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 30m, IP66, IK10
- Hallway view support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SHD-3000F3 SBP-301HM2 SBP-300LM SBP-300CM SBP-300WM1 SBP-300WM SBP-300KM

## QNV-7080R

<b>VIDEO</b>	
Imaging Device	1/3" 4M CMOS
Total Pixels	2,720(H) x 1,536(V)
Effective Pixels	2,688(H) x 1,520(V)
Scanning System	Progressive
Min. Illumination	TBD
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8 ~ 12mm (4.3x) motorized varifocal
Max. Aperture Ratio	F1.4
Angular Field of View	TBD
Focus Control	Simple focus (Motorized V/F) / Manual, Remote control via network
Lens Type	Motorized
Mount Type	Board type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 20 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm I/O	Input 1 / Output 1
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	2592 x 1520, 2560 x 1440 (16 : 9), 2304 x 1296, 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 450, 720 x 576, 720 x 480, 640 x 480, 320 x 240
Max. Framerate	H.265/H.264 : Max. 20fps at 4M, Max. 30fps at 2M all resolutions
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Line in
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC Max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Portuguese, Turkish, Polish, Czech, Dutch, Hungarian, Greek
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
Pixel Counter	Support (Plug-in viewer only)
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH *Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3) / 12V DC
Power Consumption	TBD
<b>MECHANICAL</b>	
Color / Material	Ivory / Metal
Dimensions (WxH)	Ø137.0 x 106.1mm (Ø5.39" x 4.18")
Weight	TBD

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# QNO-7010R/7020R/7030R

4Megapixel Network IR Bullet Camera

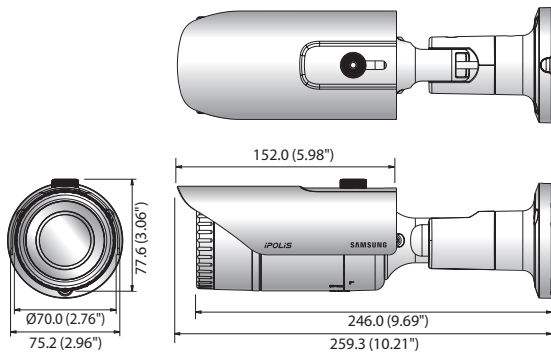


## Key Features

- Max. 4M resolution
- Built-in 2.8mm fixed lens (QNO-7010R)  
3.6mm fixed lens (QNO-7020R)  
6mm fixed lens (QNO-7030R)
- Max. 20fps@4M resolutions, Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 30m, IP66, IK10
- Hallway view, WiseStream support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBO-100B1

## QNO-7010R/7020R/7030R

<b>VIDEO</b>	
Imaging Device	1/3" 4M CMOS
Total Pixels	2,720(H) x 1,536(V)
Effective Pixels	2,688(H) x 1,520(V)
Scanning System	Progressive
Min. Illumination	Color : 0.5Lux (QNO-7010R), 0.4Lux (QNO-7020R), 0.3Lux (QNO-7030R) B/W : 0Lux (IR LED on)
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8mm fixed (QNO-7010R), 3.6mm fixed (QNO-7020R), 6mm fixed (QNO-7030R)
Max. Aperture Ratio	F2.2
Angular Field of View	H : 110.0° / V : 63.0° / D : 128.0° (QNO-7010R) H : 81.0° / V : 45.0° / D : 95.0° (QNO-7020R) H : 53.0° / V : 31.0° / D : 62.0° (QNO-7030R)
Lens Type	Fixed
Mount Type	Board type
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 20 characters per line) - W/W : English / Numeric / Special characters - China : English / Numeric / Special / Chinese characters - Common : Multi-line (Max. 5), Color (Grey / Green / Red / Blue / Black / White), Transparency, Auto scale by resolution
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea polygonal zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm I/O	Input 1 / Output 1
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	2592 x 1520, 2560 x 1440 (16 : 9), 2304 x 1296, 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 450, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.265/H.264 : Max. 20fps at 4M, Max. 30fps at 2M all resolutions MJPEG : Max. 15fps@all resolutions
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Line-in
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC Max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
Pixel Counter	Support (Plug-in viewer only)
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH *Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3) / 12V DC
Power Consumption	Max. 6.6W (PoE), Max. 5.5W (12V DC)
<b>MECHANICAL</b>	
Color / Material	Dark gray / Metal
Dimensions (WxH)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield)
Weight	730g (1.61 lb)

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# QND-7010R/7020R/7030R

4Megapixel Network IR Dome Camera

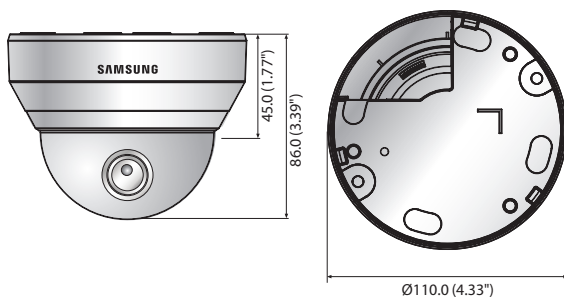


## Key Features

- Max. 4M resolution
- Built-in 2.8mm fixed lens (QND-7010R)  
3.6mm fixed lens (QND-7020R)  
6mm fixed lens (QND-7030R)
- Max. 20fps@4M resolutions, Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 20m
- Hallway view, WiseStream support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBP-300HM7 SBP-300LM SBP-300CM SBP-300WM1 SBP-300WM SBP-300B SBP-300PM SBP-300KM

## QND-7010R/7020R/7030R

<b>VIDEO</b>	
Imaging Device	1/3" 4M CMOS
Total Pixels	2,720(H) x 1,536(V)
Effective Pixels	2,688(H) x 1,520(V)
Scanning System	Progressive
Min. Illumination	Color : 0.5Lux (QND-7010R), 0.4Lux (QND-7020R), 0.3Lux (QND-7030R) B/W : 0Lux (IR LED on)
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8mm fixed (QND-7010R), 3.6mm fixed (QND-7020R), 6mm fixed (QND-7030R)
Max. Aperture Ratio	F2.2
Angular Field of View	H : 110.0° / V : 63.0° / D : 128.0° (QND-7010R) H : 81.0° / V : 45.0° / D : 95.0° (QND-7020R) H : 53.0° / V : 31.0° / D : 62.0° (QND-7030R)
Lens Type	Fixed
Mount Type	Board type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	20m (65.62ft)
Camera Title	Off / On (Displayed up to 20 characters per line) - W/W : English / Numeric / Special characters - China : English / Numeric / Special / Chinese characters - Common : Multi-line (Max. 5), Color (Grey / Green / Red / Blue / Black / White), Transparency, Auto scale by resolution
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea polygonal zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm I/O	Input 1 / Output 1
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	2592 x 1520, 2560 x 1440 (16 : 9), 2304 x 1296, 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 450, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.265/H.264 : Max. 20fps at 4M, Max. 30fps at 2M all resolutions MJPEG : Max. 15fps@all resolutions
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Built-in mic
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC Max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
Pixel Counter	Support (Plug-in viewer only)
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3) / 12V DC
Power Consumption	Max. 6.5W (PoE), Max. 5.43W (12V DC)
<b>MECHANICAL</b>	
Color / Material	Ivory / Plastic
Dimensions (WxH)	Ø110.0 x 86.0mm (Ø4.33" x 3.39")
Weight	290g (0.64 lb)

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# QNV-7010R/7020R/7030R

4Megapixel Vandal-Resistant Network IR Dome Camera

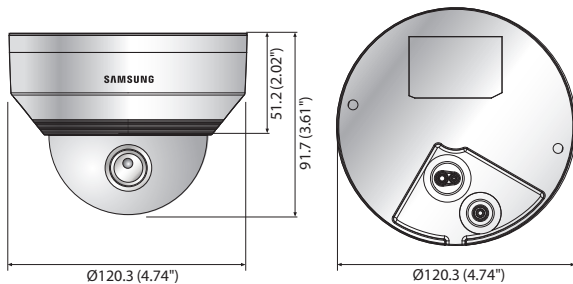


## Key Features

- Max. 4M resolution
- Built-in 2.8mm fixed lens (QNV-7010R)  
3.6mm fixed lens (QNV-7020R)  
6mm fixed lens (QNV-7030R)
- Max. 20fps@4M resolutions, Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 30m, IP66, IK10
- Hallway view, WiseStream support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



QNV-7010R/7020R/7030R	
<b>VIDEO</b>	
Imaging Device	1/3" 4M CMOS
Total Pixels	2,720(H) x 1,536(V)
Effective Pixels	2,688(H) x 1,520(V)
Scanning System	Progressive
Min. Illumination	Color : 0.5Lux (QNV-7010R), 0.4Lux (QNV-7020R), 0.3Lux (QNV-7030R) B/W : 0Lux (IR LED on)
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8mm fixed (QNV-7010R), 3.6mm fixed (QNV-7020R), 6mm fixed (QNV-7030R)
Max. Aperture Ratio	F2.2
Angular Field of View	H : 110.0° / V : 63.0° / D : 128.0° (QNV-7010R) H : 81.0° / V : 45.0° / D : 95.0° (QNV-7020R) H : 53.0° / V : 31.0° / D : 62.0° (QNV-7030R)
<b>Mount Type</b>	
Mount Type	Fixed
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 20 characters per line) - W/W : English / Numeric / Special characters - China : English / Numeric / Special / Chinese characters - Common : Multi-line (Max. 5), Color (Grey / Green / Red / Blue / Black / White), Transparency, Auto scale by resolution
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea polygonal zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm I/O	Input 1 / Output 1
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	2592 x 1520, 2560 x 1440 (16 : 9), 2304 x 1296, 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 450, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240
Max. Framerate	H.265/H.264 : Max. 20fps at 4M, Max. 30fps at 2M all resolutions MJPEG : Max. 15fps@all resolutions
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Line-in
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC Max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
Pixel Counter	Support (Plug-in viewer only)
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH *Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class3) / 12V DC
Power Consumption	Max. 6.8W (PoE), Max. 5.7W (12V DC)
<b>MECHANICAL</b>	
Color / Material	Ivory / Metal
Dimensions (WxH)	Ø120.3 x 91.7mm (Ø4.74" x 3.61")
Weight	490g (1.08 lb)

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# QNO-6070R

2Megapixel Full HD Network IR Bullet Camera

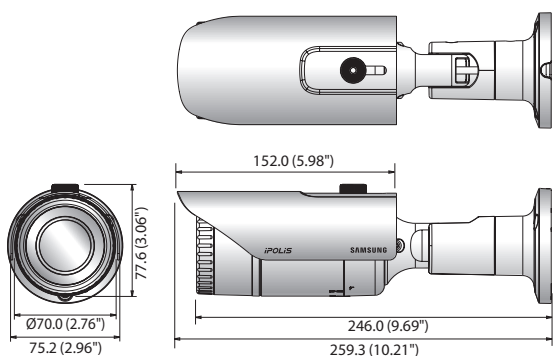


## Key Features

- Max. 2M (1920 x 1080) resolution
- 2.8 ~ 12mm (4.3x) varifocal lens
- Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 30m, IP66, IK10
- Hallway view support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## QNO-6070RN/P

<b>VIDEO</b>	
Imaging Device	1/3" 2M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	TBD
Scanning System	Progressive
Min. Illumination	TBD
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8 ~ 12mm (4.3x) varifocal
Max. Aperture Ratio	TBD
Angular Field of View	TBD
Min. Object Distance	0.5m (1.64ft)
Lens Type	DC auto iris
Mount Type	Board type
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 720 x 576, 720 x 480, 640 x 480, 320 x 240 TBD
Max. Framerate	H.265/H.264 : Max. 30fps at 2M all resolutions MJPEG : 1920 x 1080 - 3fps, 1600 x 1200 - 3fps, Max. 5fps@all other resolution
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Input 1 / Output 1
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek, Norwegian, Finnish
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH *Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class2) / 12V DC
Power Consumption	TBD
<b>MECHANICAL</b>	
Color / Material	Dark gray / Metal
Dimensions (WxH)	$\varnothing 70.0$ x 246.0mm ( $\varnothing 2.76$ " x 9.69") (Without sunshield)
Weight	TBD

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# QND-6070R

2Megapixel Full HD Network IR Dome Camera

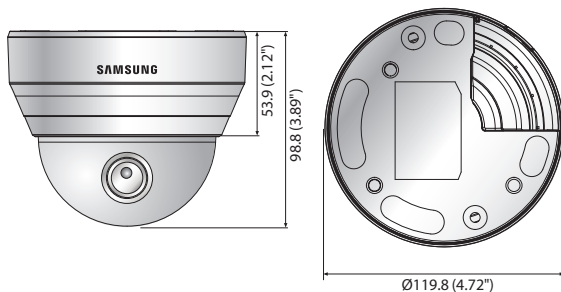


## Key Features

- Max. 2M (1920 x 1080) resolution
- 2.8 ~ 12mm (4.3x) varifocal lens
- Max. 30fps@2M resolutions
- H.265, H.264 codec supported
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot, PoE / 12V DC
- IR viewable length 20m
- Hallway view support (Rotate 90°/270°)
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



## QND-6070RN/P

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	TBD
Scanning System	Progressive
Min. Illumination	TBD
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8 ~ 12mm (4.3x) varifocal
Max. Aperture Ratio	TBD
Angular Field of View	TBD
Min. Object Distance	0.5m (1.64ft)
Lens Type	DC auto iris
Mount Type	Board type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	20m (65.62ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 720 x 576, 720 x 480, 640 x 480, 320 x 240 TBD
Max. Framerate	H.265/H.264 : Max. 30fps at 2M all resolutions MJPEG : 1920 x 1080 - 3fps, 1600 x 1200 - 3fps, Max. 5fps@all other resolution
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Input 1 / Output 1
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek, Norwegian, Finnish
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class2) / 12V DC
Power Consumption	TBD
<b>MECHANICAL</b>	
Color / Material	Ivory / Plastic
Dimensions (WxH)	Ø119.8 x 98.8mm (Ø4.72" x 3.89")
Weight	TBD

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# QNV-6070R

2Megapixel Full HD Vandal-Resistant Network IR Dome Camera

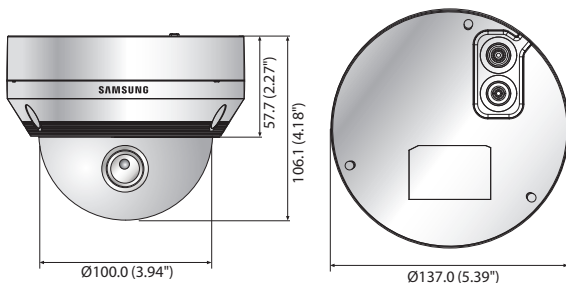


## Key Features

- Max. 2M (1920 x 1080) resolution
- 2.8 ~ 12mm (4.3x) motorized varifocal lens
- Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 30m, IP66, IK10
- Hallway view support (Rotate 90°/270°)
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



## QNV-6070RN/P

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	TBD
Scanning System	Progressive
Min. Illumination	TBD
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8 ~ 12mm (4.3x) varifocal
Max. Aperture Ratio	TBD
Angular Field of View	TBD
Min. Object Distance	0.5m (1.64ft)
Lens Type	DC auto iris
Mount Type	Board type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 720 x 576, 720 x 480, 640 x 480, 320 x 240 TBD
Max. Framerate	H.265/H.264 : Max. 30fps at 2M all resolutions MJPEG : 1920 x 1080 - 3fps, 1600 x 1200 - 3fps, Max. 5fps@all other resolution
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Line in
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatian, Hungarian, Greek, Norwegian, Finnish
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH *Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class2) / 12V DC
Power Consumption	TBD
<b>MECHANICAL</b>	
Color / Material	Ivory / Metal
Dimensions (WxH)	Ø137.0 x 106.1mm (Ø5.39" x 4.18")
Weight	TBD

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>



# QNO-6010R/6020R/6030R

2Megapixel Full HD Network IR Bullet Camera

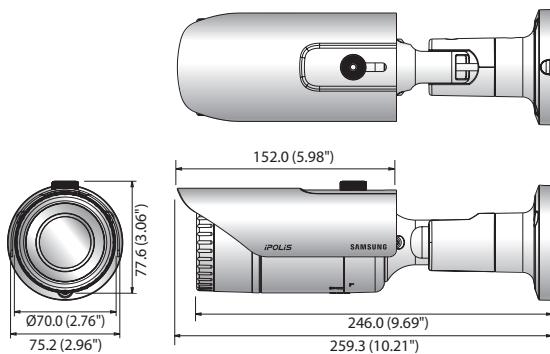


## Key Features

- Max. 2M (1920 x 1080) resolution
- Built-in 2.8mm (F1.8) fixed lens (QNO-6010R)  
3.6mm (F1.8) fixed lens (QNO-6020R)  
6mm (F1.8) fixed lens (QNO-6030R)
- Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 30m, IP66, IK10
- Hallway view, WiseStream support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBO-100B1

## QNO-6010R/6020R/6030R

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	TBD
Scanning System	Progressive
Min. Illumination	TBD
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8mm fixed (QNO-6010R), 3.6mm fixed (QNO-6020R), 6mm fixed (QNO-6030R)
Max. Aperture Ratio	F1.8
Angular Field of View	H : 110° / V : 61.0° / D : 125° (TBD) (QNO-6010R) H : 86.48° / V : 46.22° / D : 102.44° (TBD) (QNO-6020R) H : 52.54° / V : 28.86° / D : 61.14° (TBD) (QNO-6030R)
Min. Object Distance	0.5m (1.64ft)
Lens Type	Fixed
Mount Type	Board type
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm I/O	Input 1 / Output 1
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 720 x 576, 720 x 480, 640 x 480, 320 x 240
Max. Framerate	H.265/H.264 : Max. 30fps at 2M all resolutions MJPEG : 1920 x 1080 - 3fps, 1600 x 1200 - 3fps, Max. 5fps@all other resolution
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Line in
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC Max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH *Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection	IP66
Vandal Resistance	IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class2) / 12V DC
Power Consumption	TBD
<b>MECHANICAL</b>	
Color / Material	Dark gray / Metal
Dimensions (WxH)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield)
Weight	TBD

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# QND-6010R/6020R/6030R

2Megapixel Full HD Network IR Dome Camera

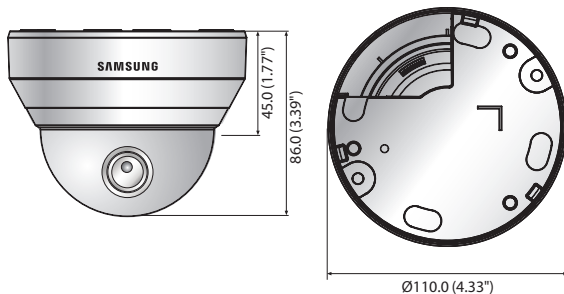


## Key Features

- Max. 2M (1920 x 1080) resolution
- Built-in 2.8mm (F1.8) fixed lens (QND-6010R)  
3.6mm (F1.8) fixed lens (QND-6020R)  
6mm (F1.8) fixed lens (QND-6030R)
- Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 20m
- Hallway view, WiseStream support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



## Accessories (Optional)



SBP-300HM7 SBP-300LM SBP-300CM SBP-300WM1 SBP-300WM SBP-300B SBP-300PM SBP-300KM

## QND-6010R/6020R/6030R

<b>VIDEO</b>	
Imaging Device	1/2.9" 2.19M CMOS
Total Pixels	2,000(H) x 1,121(V)
Effective Pixels	TBD
Scanning System	Progressive
Min. Illumination	TBD
<b>LENS</b>	
Focal Length (Zoom Ratio)	2.8mm fixed (QND-6010R), 3.6mm fixed (QND-6020R), 6mm fixed (QND-6030R)
Max. Aperture Ratio	F1.8
Angular Field of View	H : 110° / V : 61.0° / D : 125° (TBD) (QND-6010R) H : 86.48° / V : 46.22° / D : 102.44° (TBD) (QND-6020R) H : 52.54° / V : 28.86° / D : 61.14° (TBD) (QND-6030R)
Min. Object Distance	0.5m (1.64ft)
Lens Type	Fixed
Mount Type	Board type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	20m (65.62ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection
Alarm I/O	Input 1 / Output 1
Alarm Triggers	Motion detection, Tampering detection, SD card error, NAS error, Alarm input, Defocus detection
Alarm Events	File upload via FTP and E-mail, Local storage recording at event, Notification via E-mail, External output
<b>NETWORK</b>	
Ethernet	RJ-45 (10/100BASE-T)
Video Compression Format	H.265, H.264, MJPEG
Resolution	1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 720 x 576, 720 x 480, 640 x 480, 320 x 240
Max. Framerate	H.265/H.264 : Max. 30fps at 2M all resolutions MJPEG : 1920 x 1080 - 3fps, 1600 x 1200 - 3fps, Max. 5fps@all other resolution
Smart Codec	WiseStream
Video Quality Adjustment	H.265/H.264 : Target bitrate level control, MJPEG : Quality level control
Bitrate Control Method	H.265/H.264 : CBR or VBR, MJPEG : VBR
Streaming Capability	Multiple streaming (Up to 3 profiles)
Audio I/O	Line in
Audio Compression Format	G.711 u-law / G.726 selectable G.726 (ADPCM) 8KHz, G.711 8KHz, G.726 : 16Kbps, 24Kbps, 32Kbps, 40Kbps
Audio Communication	Uni-directional audio
IP	IPv4, IPv6
Protocol	TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour
Security	HTTPS(SSL) login authentication, Digest login authentication IP address filtering, User access log, 802.1x authentication
Streaming Method	Unicast / Multicast
Max. User Access	6 users at unicast mode
Storage	micro SD/SDHC/SDXC Max. 128G, NAS - Motion images recorded in the SD memory card can be downloaded - Manual recording at local PC
Application Programming Interface	ONVIF Profile S, G, SUNAPI (HTTP API)
Webpage Language	English, French, German, Spanish, Italian, Chinese, Korean, Russian, Japanese, Swedish, Danish, Portuguese, Turkish, Polish, Czech, Rumanian, Serbian, Dutch, Croatia, Hungary, Greek, Finnish, Norwegian
Web Viewer	Supported OS : Windows 7, 8, 10, Mac OS X 10.8, 10.9, 10.10, 10.11 Non-plugin Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Support Codec : - Video : H.264, MJPEG (Max. 1M 15fps) - Audio : G.711 Plug-in Webviewer Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only
Central Management Software	SmartViewer
<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class2) / 12V DC
Power Consumption	TBD
<b>MECHANICAL</b>	
Color / Material	Ivory / Plastic
Dimensions (WxH)	Ø110.0 x 86.0mm (Ø4.33" x 3.39")
Weight	TBD

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

# QNV-6010R/6020R/6030R

2Megapixel Vandal-Resistant Full HD Network IR Dome Camera

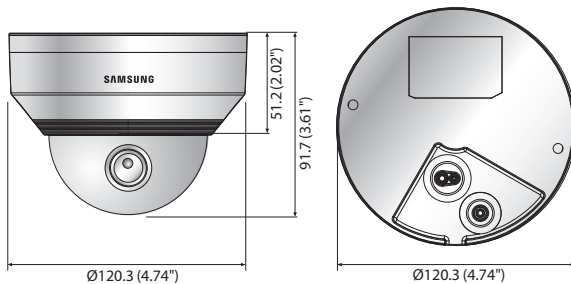


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- Max. 30fps@2M resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD (128GB) memory slot, PoE / 12V DC
- IR viewable length 30m, IP66, IK10
- Hallway view, WiseStream support
- LDC support (Lens Distortion Correction)

## Dimensions

Unit : mm (inch)



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Lens Type	Fixed
Mount Type	Board type
<b>PAN / TILT / ROTATE</b>	
Pan / Tilt / Rotate Range	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
<b>OPERATIONAL</b>	
IR Viewable Length	30m (98.43ft)
Camera Title	Off / On (Displayed up to 15 characters)
Day & Night	True Day & Night
Backlight Compensation	Off / BLC
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR (Off / On)
Motion Detection	Off / On (4ea rectangular zones)
Privacy Masking	Off / On (6ea rectangular zones)
Gain Control	Off / Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
LDC (Lens Distortion Correction)	Off / On (5 levels with min / max)
Electronic Shutter Speed	Minimum / Maximum / Anti flicker
Flip / Mirror	Flip / Mirror / Hallway view
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Central Management Software	SmartViewer

## Accessories (Optional)



<b>ENVIRONMENTAL</b>	
Operating Temperature / Humidity	-30°C ~ +55°C (-22°F ~ +131°F) / Less than 90% RH *Start up should be done at above -20°C (-4°F)
Storage Temperature / Humidity	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH
Ingress Protection / Vandal Resistance	IP66 / IK10
<b>ELECTRICAL</b>	
Input Voltage / Current	PoE (IEEE802.3af, Class2) / 12V DC
Power Consumption	TBD
<b>MECHANICAL</b>	
Color / Material	Ivory / Metal
Dimensions (WxH) / Weight	Ø120.3 x 91.7mm (Ø4.74" x 3.61") / TBD

\* The latest product information / sepecification can be found at <http://security.hanwhatechwin.com>

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