



WISENET Q series

Comparison Chart



| | Wisenet Q QNO-7080R | Wisenet Q QNO-7010R/7020R/7030R | Wisenet Q QND-7080R | Wisenet Q QND-7010R/7020R/7030R | Wisenet Q QNV-7080R | Wisenet Q QNV-7010R/7020R/7030R |
|--------------------------------|--|--|---|--|---|--|
| Resolution | 4MP | 4MP | 4MP | 4MP | 4MP | 4MP |
| Imaging Device | 1/3" 4M CMOS | 1/3" 4M CMOS | 1/3" 4M CMOS | 1/3" 4M CMOS | 1/3" 4M CMOS | 1/3" 4M CMOS |
| Video Compression Format | 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 |
| Resolution / Max. Frame Rate | 4M / 20fps, 2M / 30fps | 4M / 20fps, 2M / 30fps | 4M / 20fps, 2M / 30fps | 4M / 20fps, 2M / 30fps | 4M / 20fps, 2M / 30fps | 4M / 20fps, 2M / 30fps |
| Streaming Capacity | 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) |
| Max. User Access | 6 (Unicast) | 6 (Unicast) | 6 (Unicast) | 6 (Unicast) | 6 (Unicast) | 6 (Unicast) |
| Min. Illumination (30 IRE) | Color : 0.15Lux, B/W : 0Lux (IR LED on) | Color : 0.5Lux (7010R), 0.4Lux (7020R), 0.3Lux (7030R) B/W : 0Lux (IR LED on) | Color : 0.15Lux, B/W : 0Lux (IR LED on) | Color : 0.5Lux (7010R), 0.4Lux (7020R), 0.3Lux (7030R) B/W : 0Lux (IR LED on) | Color : 0.15Lux, B/W : 0Lux (IR LED on) | Color : 0.5Lux (7010R), 0.4Lux (7020R), 0.3Lux (7030R) B/W : 0Lux (IR LED on) |
| Lens | 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) | 2.8 ~ 12mm (4.3x) Motorized V/F | 2.8mm fixed (F2.2) (7010R) 3.6mm fixed (F2.2) (7020R) 6mm fixed (F2.2) (7030R) | 2.8 ~ 12mm (4.3x) Motorized V/F | 2.8mm fixed (F2.0) (7010R) 3.6mm fixed (F2.2) (7020R) 6mm fixed (F2.2) (7030R) |
| Angular Field of View | H : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1° | 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 : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1° | 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 : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1° | H : 111.0° / V : 63.0° / D : 133.0° (7010R) H : 81.0° / V : 45.0° / D : 95.0° (7020R) H : 53.0° / V : 31.0° / D : 62.0° (7030R) |
| Focus Control | 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 | - |
| IR Viewable Length | 30m (98.43ft) | 20m (65.62ft) (7010R) 25m (82.02ft) (7020R) 30m (98.43ft) (7030R) | 20m (65.62ft) | 20m (65.62ft) | 30m (98.43ft) | 20m (65.62ft) (7010R) 25m (82.02ft) (7020R) 30m (98.43ft) (7030R) |
| Pan / Tilt / Rotate | - | - | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| Day & Night | True (ICR) | True (ICR) | True (ICR) | True (ICR) | True (ICR) | True (ICR) |
| Backlight Compensation | WDR (120dB) | WDR (120dB) | WDR (120dB) | WDR (120dB) | WDR (120dB) | WDR (120dB) |
| Digital Noise Reduction | SSNR | SSNR | SSNR | SSNR | SSNR | SSNR |
| Intelligent Video Analytics | 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 |
| Protocol | 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) |
| Alarm I/O | 1 / 1 | 1 / 1 | 1 / 1 | 1 / 1 | 1 / 1 | 1 / 1 |
| Audio | Uni-directional | Uni-directional | Uni-directional | Uni-directional | Uni-directional | Uni-directional |
| Edge Storage | 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 |
| Environment Protection | IP66, IK10 | IP66, IK10 | - | IK8 | IP66, IK10 | IP66, IK10 |
| Operating Temperature | -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) | -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) |
| Power | Max. 8W (PoE), Max. 7W (12V DC) | Max. 7W (PoE), Max. 6W (12V DC) | Max. 7.2W (PoE), Max. 6.4W (12V DC) | Max. 7W (PoE), Max. 5.8W (12V DC) (7010R) Max. 6.5W (PoE), Max. 5.43W (12V DC) (7020R/7030R) | Max. 7.2W (PoE), Max. 6.4W (12V DC) | Max. 7W (PoE), Max. 5.8W (12V DC) (7010R) Max. 6.8W (PoE), Max. 5.7W (12V DC) (7020R/7030R) |
| Dimensions (WxHxD) / Weight | Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 750g (1.65 lb) | Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 730g (1.61 lb) | Ø119.8 x 98.8mm (Ø4.72" x 3.89") 355g (0.78 lb) | Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64 lb) | Ø137.0 x 106.1mm (Ø5.39" x 4.18") 680g (1.5 lb) | Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb) |
| Additional Features | 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 QNO-6070R | Wisenet Q QNO-6010R/6020R/6030R | Wisenet Q QND-6070R | Wisenet Q QND-6010R/6020R/6030R | Wisenet Q QNV-6070R | Wisenet Q QNV-6010R/6020R/6030R |
|------------------------------|--|--|--|--|---|--|
| Resolution | 2MP | 2MP | 2MP | 2MP | 2MP | 2MP |
| Imaging Device | 1/2.9" 2.19M CMOS | 1/2.9" 2.19M CMOS | 1/2.9" 2.19M CMOS | 1/2.9" 2.19M CMOS | 1/2.9" 2.19M CMOS | 1/2.9" 2.19M CMOS |
| Video Compression Format | 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 |
| Resolution / Max. Frame Rate | 2M / 30fps | 2M / 30fps | 2M / 30fps | 2M / 30fps | 2M / 30fps | 2M / 30fps |
| Streaming Capacity | 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) |
| Max. User Access | 6 (Unicast) | 6 (Unicast) | 6 (Unicast) | 6 (Unicast) | 6 (Unicast) | 6 (Unicast) |
| Min. Illumination (30 IRE) | Color: 0.095Lux, B/W: 0Lux (IR LED on) | Color: 0.15Lux B/W: 0Lux (IR LED on) | Color: 0.095Lux, B/W: 0Lux (IR LED on) | Color: 0.15Lux B/W: 0Lux (IR LED on) | Color: 0.095Lux, B/W: 0Lux (IR LED on) | Color: 0.15Lux B/W: 0Lux (IR LED on) |
| Lens | 2.8 ~ 12mm (4.3x) Manual V/F | 2.8mm fixed (F2.0) (6010R) 3.6mm fixed (F1.8) (6020R) 6mm fixed (F1.8) (6030R) | 2.8 ~ 12mm (4.3x) Manual V/F | 2.8mm fixed (F1.8) (6010R) 3.6mm fixed (F1.8) (6020R) 6mm fixed (F1.8) (6030R) | 2.8 ~ 12mm (4.3x) Manual V/F | 2.8mm fixed (F1.8) (6010R) 3.6mm fixed (F1.8) (6020R) 6mm fixed (F1.8) (6030R) |
| Angular Field of View | H: 103.8° ~ 32.4° / V: 53.7° ~ 18.4° / D: 121.9° ~ 37.1° | H: 116.0° / V: 62.0° / D: 137.0° (6010R) H: 86.48° / V: 46.22° / D: 102.44° (6020R) H: 52.54° / V: 28.86° / D: 61.14° (6030R) | H: 103.8° ~ 32.4° / V: 53.7° ~ 18.4° / D: 121.9° ~ 37.1° | 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: 103.8° ~ 32.4° / V: 53.7° ~ 18.4° / D: 121.9° ~ 37.1° | 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) |
| Focus Control | Manual | - | Manual | - | Manual | - |
| IR Viewable Length | 30m (98.43ft) | 20m (65.62ft) (6010R) 25m (82.02ft) (6020R) 30m (98.43ft) (6030R) | 20m (65.62ft) | 20m (65.62ft) | 30m (98.43ft) | 20m (65.62ft) (6010R) 25m (82.02ft) (6020R) 30m (98.43ft) (6030R) |
| Pan / Tilt / Rotate | - | - | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| Day & Night | True (ICR) | True (ICR) | True (ICR) | True (ICR) | True (ICR) | True (ICR) |
| Backlight Compensation | WDR (120dB) | WDR (120dB) | WDR (120dB) | WDR (120dB) | WDR (120dB) | WDR (120dB) |
| Digital Noise Reduction | SSNR | SSNR | SSNR | SSNR | SSNR | SSNR |
| Intelligent Video Analytics | 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 |
| Protocol | 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) |
| Alarm I/O | 1 / 1 | 1 / 1 | 1 / 1 | 1 / 1 | 1 / 1 | 1 / 1 |
| Audio | Uni-directional | Uni-directional | Uni-directional | Uni-directional | Uni-directional | Uni-directional |
| Edge Storage | 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 |
| Environment Protection | IP66, IK10 | IP66, IK10 | - | IK8 | IP66, IK10 | IP66, IK10 |
| Operating Temperature | -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) | -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) |
| Power | Max. 8W (PoE), Max. 7W (12V DC) | Max. 7W (PoE), Max. 6W (12V DC) | Max. 6.7W (PoE), Max. 5.5W (12V DC) | Max. 7W (PoE), Max. 5.8W (12V DC) (6010R) Max. 6.5W (PoE), Max. 5.43W (12V DC) (6020R/6030R) | Max. 6.7W (PoE), Max. 5.5W (12V DC) | Max. 7W (PoE), Max. 5.8W (12V DC) (6010R) Max. 6.5W (PoE), Max. 5.7W (12V DC) (6020R/6030R) |
| Dimensions (WxHxD) / Weight | Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 730g (1.61 lb) | Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 730g (1.61 lb) | Ø119.8 x 98.8mm (Ø4.72" x 3.89") 325g (0.72 lb) | Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64 lb) | Ø137.0 x 106.1mm (Ø5.39" x 4.18") 660g (1.46 lb) | Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb) |
| Additional Features | 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

The newly launched professional Q series is an affordable product line that offers simple and essential features that are ideal in securing small to medium sized applications.

Quality compact cameras with essential features

- 2Megapixel and 4Megapixel resolution
- H.265, H.264, MJPEG
- 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



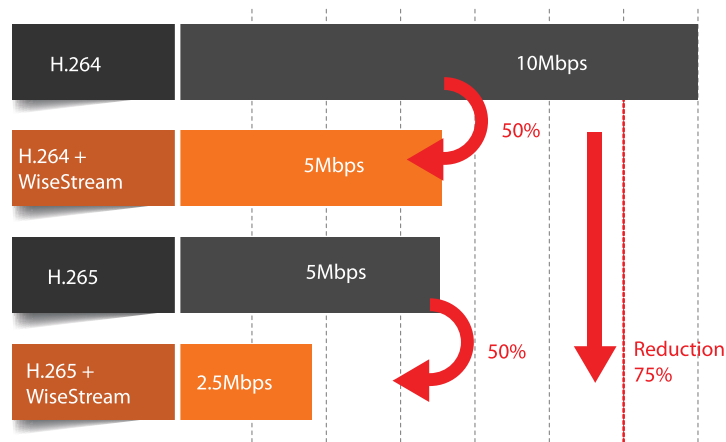
Complete line-up of indoor and outdoor cameras

Wisenet Q series offers a wide range of indoor and outdoor Bullet / Dome / Vandal cameras that cover multiple applications such as retail, banking, offices, transportation and more while delivering sharp and clear image quality.

| | 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 efficiency with WiseStream with H.265

Wisenet Q 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 technology, and when combined with high efficiency video coding (H.265), the bandwidth efficiency can be improved by up to 75% compared to current H.264 technology.



Defocus detection

The entire Wisenet Q series support defocus detection, which helps to recognise when an image is out of focus and significantly improves efficiency. The user can also adjust the optimal focus remotely via the network (4MP Varifocal product), reducing the installation / optimisation time of the camera.

1 Detect Defocus



2 Alarm Out

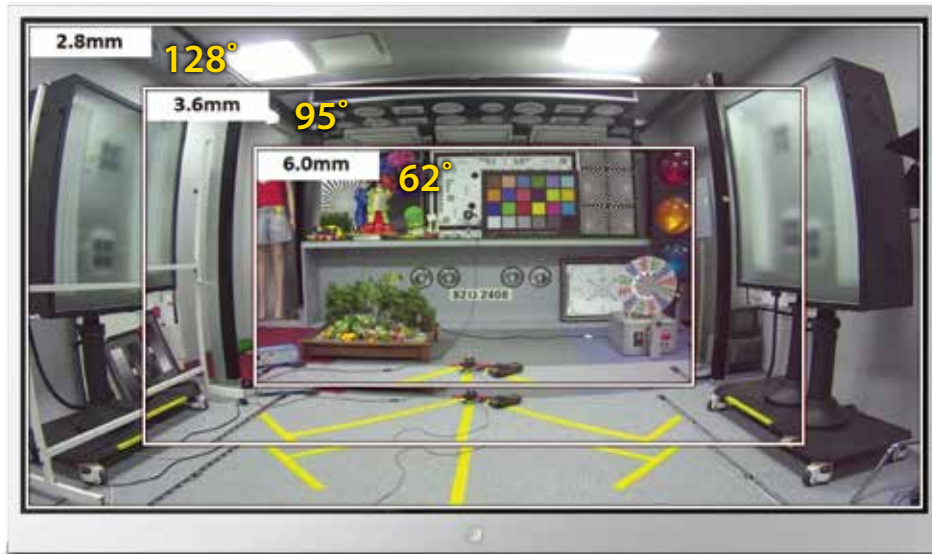


3 Focus Control



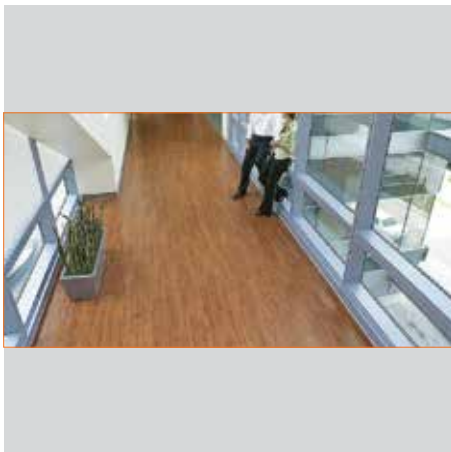
Lens options

The Wisenet Q series come with a fixed 2.8mm, 3.6mm and 6.0mm lens. If you prefer a wider surveillance range, you can use the 2.8mm lens option and if the object is smaller or located further away from the camera there is a 6.0mm option as well.

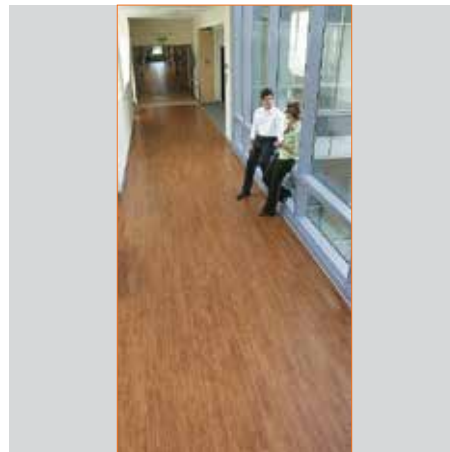


Hallway view for monitoring vertical shaped areas

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. The Hallway view, 3 : 4 and 9 : 16 aspect ratio image is created : a vertically oriented video that maximizes image quality in narrow locations.



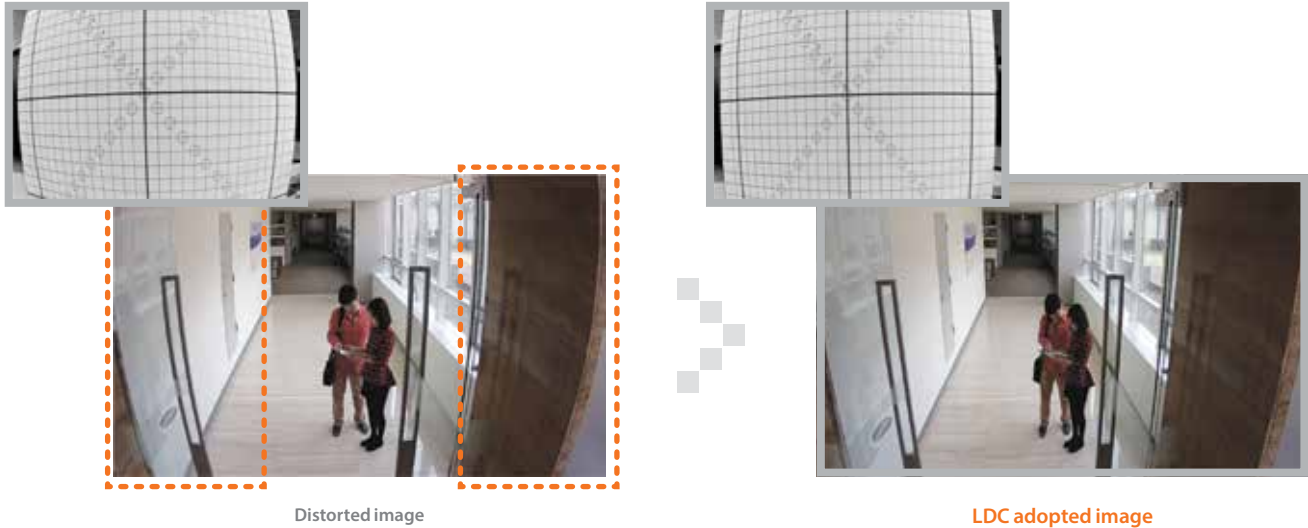
Conventional



Hallway view

Minimize image distortion by Lens distortion correction

Lens Distortion typically appears in videos causing straight lines close to the edge to curve outwards. With Lens distortion correction technology, available on the Wisenet Q series, imperfections in images are easily repaired.



Perfect for small to medium sized applications

The complete line of Wisenet Q series has the ability to solve small to medium sized application challenges.

- Save both installation costs and time by using the Wisenet Q series together with our PoE NVRs to create a suitable solution for small to medium sized applications.
- Install cameras on entrances / lobbies, parking lots, elevators, hallways, aisles and more.

This professional line of surveillance cameras will enable you to create a secure environment to meet your needs.

The advertisement features the Wisenet Q series logo and a row of five camera models. Below the cameras is a large image of a PoE NVR SRN-1673S/873S/473S. Surrounding the NVR are several small 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

4M Network IR Bullet Camera

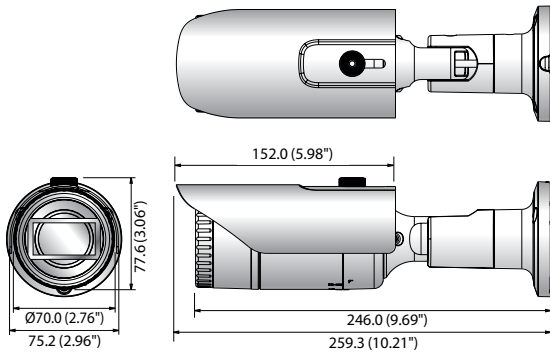


Key Features

- Max. 4megapixel resolution
- 2.8 ~ 12mm (4.3x) motorized varifocal lens
- Max. 20fps@4M, Max.30fps@2M all resolutions
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Day & Night (ICR), WDR (120dB)
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), PoE / 12V DC
- IR viewable length 30m, IP66, IK10
- Hallway view support
- LDC support (Lens distortion correction)

Dimensions

Unit : mm (inch)



Accessories (Optional)



SBO-100B1



SBP-302RPM

QNO-7080R

| | |
|-----------------------------------|--|
| VIDEO | |
| 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 : 0.15Lux (30IRE), B/W : 0Lux (IR LED on) |
| S / N Ratio | 50dB |
| LENS | |
| Focal Length (Zoom Ratio) | 2.8 ~ 12mm (4.3x) motorized varifocal |
| Max. Aperture Ratio | F1.4 |
| Angular Field of View | H : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1° |
| Focus Control | Simple focus (Motorized V/F) / Manual, Remote control via network |
| Lens Type | DC auto iris |
| Mount Type | Board type |
| OPERATIONAL | |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| 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 448, 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 |
| 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/TLS, 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. 128GB), 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, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungary, Greek |
| Web Viewer | Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 8W (PoE), Max. 7W (12V DC) |
| MECHANICAL | |
| Color / Material | Dark gray / Metal |
| Dimensions (WxH) | Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) |
| Weight | 750g (1.65 lb) |

* The latest product information / sepecification can be found at hanwha-security.com

QNO-7010R/7020R/7030R

4M Network IR Bullet Camera

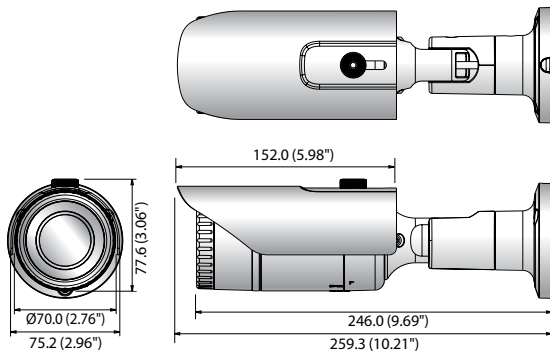


Key Features

- Max. 4megapixel resolution
- Built-in 2.8mm fixed lens (QNO-7010R)
3.6mm fixed lens (QNO-7020R)
6mm fixed lens (QNO-7030R)
- Max. 20fps@4M, Max. 30fps@under 2M (H.265/H.264)
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), PoE / 12V DC
- IR viewable length 20m (QNO-7010R), 25m (QNO-7020R)
30m (QNO-7030R)
- Hallway view, WiseStream support, IP66, IK10
- LDC support (Lens distortion correction)

Dimensions

Unit : mm (inch)



Accessories (Optional)



SBO-100B1



SBP-302RPM

QNO-7010R/7020R/7030R

| | |
|-----------------------------------|--|
| VIDEO | |
| 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) |
| S / N Ratio | 50dB |
| LENS | |
| 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 |
| OPERATIONAL | |
| IR Viewable Length | 20m (65.62ft) : QNO-7010R, 25m (82.02ft) : QNO-7020R, 30m (98.43ft) : QNO-7030R |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| 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 448, 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 under 2M MJPEG : Max. 15fps |
| 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/TLS, 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. 128GB), 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 |
| Supported OS | Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 |
| Web Viewer | Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 7W (PoE), Max. 6W (12V DC) |
| MECHANICAL | |
| 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 / specification can be found at hanwha-security.com

QND-7080R

4M Network IR Dome Camera

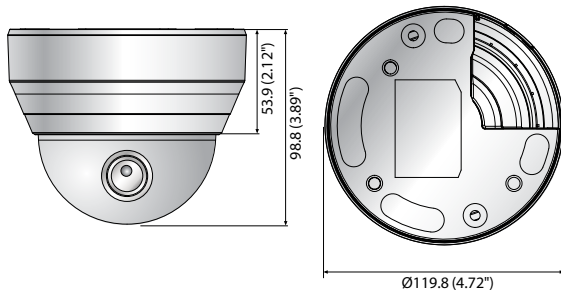


Key Features

- Max. 4megapixel resolution
- 2.8 ~ 12mm (4.3x) motorized varifocal lens
- Max. 20fps@4M, Max.30fps@2M all resolutions
- H.265, H.264, MJPEG codec supported
- Day & Night (ICR), WDR (120dB)
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), PoE / 12V DC
- IR viewable length 20m
- Hallway view support
- LDC support (Lens distortion correction)

Dimensions

Unit : mm (inch)



Accessories (Optional)



QND-7080R

| | |
|-----------------------------------|--|
| VIDEO | |
| 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 : 0.15Lux (30IRE), B/W : 0Lux (IR LED on) |
| S / N Ratio | 50dB |
| LENS | |
| Focal Length (Zoom Ratio) | 2.8 ~ 12mm (4.3x) motorized varifocal |
| Max. Aperture Ratio | F1.4 |
| Angular Field of View | H : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1° |
| Focus Control | Simple focus (Motorized V/F) / Manual, Remote control via network |
| Lens Type | DC auto iris |
| Mount Type | Board type |
| PAN / TILT / ROTATE | |
| Pan / Tilt / Rotate Range | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| OPERATIONAL | |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| 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 448, 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 |
| 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/TLS, 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. 128GB), 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, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungarian, Greek |
| Web Viewer | Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 7.2W (PoE), Max. 6.4W (12V DC) |
| MECHANICAL | |
| Color / Material | Ivory / Plastic |
| Dimensions (WxH) | Ø119.8 x 98.8mm (Ø4.72" x 3.89") |
| Weight | 355g (0.78 lb) |

* The latest product information / sepecification can be found at hanwha-security.com

QND-7010R/7020R/7030R

4M Network IR Dome Camera



QND-7010R

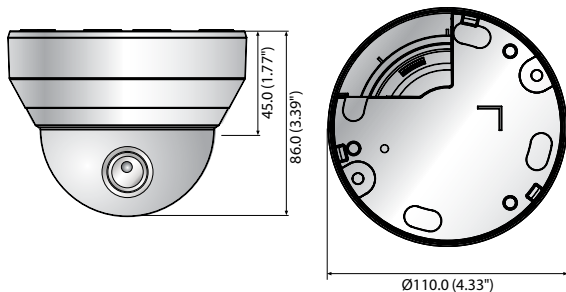
QND-7020R/7030R

Key Features

- Max. 4megapixel resolution
- Built-in 2.8mm fixed lens (QND-7010R)
3.6mm fixed lens (QND-7020R)
6mm fixed lens (QND-7030R)
- Max. 20fps@4M, Max. 30fps@under 2M (H.265/H.264)
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), PoE / 12V DC
- IR viewable length 20m, IK08
- Hallway view, WiseStream support
- LDC support (Lens distortion correction)

Dimensions

Unit : mm (inch)



Accessories (Optional)



QND-7010R/7020R/7030R

| | |
|-----------------------------------|---|
| VIDEO | |
| 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) |
| S / N Ratio | 50dB |
| LENS | |
| 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 |
| PAN / TILT / ROTATE | |
| Pan / Tilt / Rotate Range | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| OPERATIONAL | |
| IR Viewable Length | 20m (65.62ft) 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 |
| Camera Title | |
| Day & Night | True Day & Night |
| Backlight Compensation | Off / BLC / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| 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 448, 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 under 2M MJPEG : Max. 15fps |
| 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/TLS, 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. 128GB), 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 Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Web Viewer | |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| Vandal Resistance | IK08 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 7W (PoE), Max. 5.8W (12V DC) : QND-7010R Max. 6.5W (PoE), Max. 5.43W (12V DC) : QND-7020R/7030R |
| MECHANICAL | |
| 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 hanwha-security.com

QNV-7080R

4M Vandal-Resistant Network IR Dome Camera

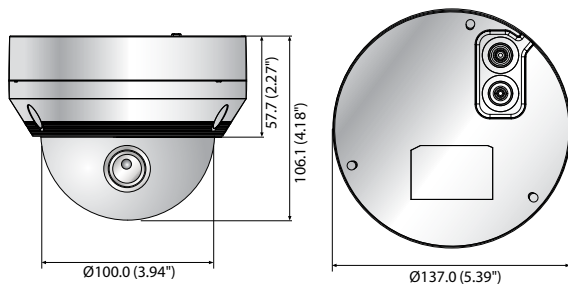


Key Features

- Max. 4megapixel 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
- Day & Night (ICR), WDR (120dB)
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), 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

| | |
|--|--|
| VIDEO | |
| 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 : 0.15Lux (30IRE), B/W : 0Lux (IR LED on) |
| S / N Ratio | 50dB |
| LENS | |
| Focal Length (Zoom Ratio) | 2.8 ~ 12mm (4.3x) motorized varifocal |
| Max. Aperture Ratio | F1.4 |
| Angular Field of View | H : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1° |
| Focus Control | Simple focus (Motorized V/F) / Manual, Remote control via network |
| Lens Type | DC auto iris |
| Mount Type | Board type |
| PAN / TILT / ROTATE | |
| Pan / Tilt / Rotate Range | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| OPERATIONAL | |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| 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 448, 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 |
| 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/TLS, 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. 128GB), 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, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungary, Greek |
| Web Viewer | Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 7.2W (PoE), Max. 6.4W (12V DC) |
| MECHANICAL | |
| Color / Material | Ivory / Metal |
| Dimensions (WxH) | Ø137.0 x 106.1mm (Ø5.39" x 4.18") |
| Weight | 680g (1.5 lb) |

* The latest product information / specification can be found at hanwha-security.com

QNV-7010R/7020R/7030R

4M Vandal-Resistant Network IR Dome Camera



QNV-7010R

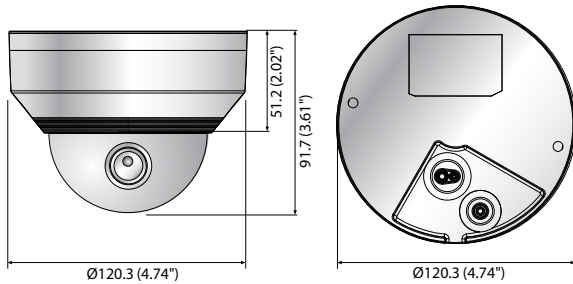
QNV-7020R/7030R

Key Features

- Max. 4megapixel resolution
- Built-in 2.8mm fixed lens (QNV-7010R)
3.6mm fixed lens (QNV-7020R)
6mm fixed lens (QNV-7030R)
- Max. 20fps@4M, Max. 30fps@under 2M (H.265/H.264)
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), PoE / 12V DC
- IR viewable length 20m (QNV-7010R), 25m (QNV-7020R)
30m (QNV-7030R)
- Hallway view, WiseStream support, IP66, IK10
- LDC support (Lens distortion correction)

Dimensions

Unit : mm (inch)



Accessories (Optional)



| QNV-7010R/7020R/7030R | |
|------------------------------------|---|
| VIDEO | |
| 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) |
| S / N Ratio | 50dB |
| LENS | |
| Focal Length (Zoom Ratio) | 2.8mm fixed (QNV-7010R), 3.6mm fixed (QNV-7020R), 6mm fixed (QNV-7030R) |
| Max. Aperture Ratio | F2.0 (QNV-7010R), F2.2 (QNV-7020R/7030R) |
| Angular Field of View | H : 111.0° / V : 63.0° / D : 133.0° (QNV-7010R) H : 81.0° / V : 45.0° / D : 95.0° (QNV-7020R) H : 53.0° / V : 31.0° / D : 62.0° (QNV-7030R) |
| Lens Type | Fixed |
| Mount Type | Board type |
| PAN / TILT / ROTATE | |
| Pan / Tilt / Rotate Range | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| OPERATIONAL | |
| IR Viewable Length | 20m (65.62ft) : QNV-7010R, 25m (82.02ft) : QNV-7020R, 30m (98.43ft) : QNV-7030R |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| 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 448, 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 under 2M MJPEG : Max. 15fps |
| 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/TLS, 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. 128GB), 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 Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Web Viewer | SmartViewer |
| Central Management Software | |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC Max. 7W (PoE), Max. 5.8W (12V DC) : QNV-7010R Max. 6.8W (PoE), Max. 5.7W (12V DC) : QNV-7020R/7030R |
| Power Consumption | |
| MECHANICAL | |
| 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 hanwha-security.com

QNO-6070R

2M Network IR Bullet Camera

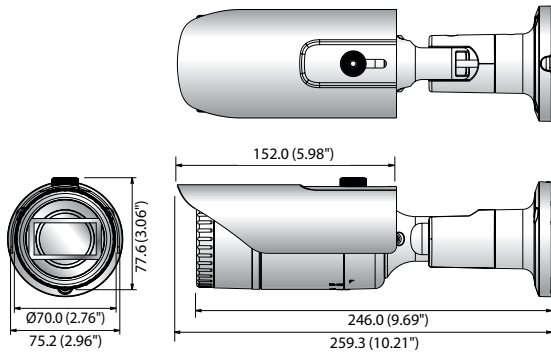


Key Features

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

Dimensions

Unit : mm (inch)



Accessories (Optional)



SBO-100B1



SBP-302RPM

QNO-6070RN/P

| VIDEO | |
|-----------------------------------|--|
| Imaging Device | 1/2.9" 2.19M CMOS |
| Total Pixels | 2,000(H) x 1,121(V) |
| Effective Pixels | 1,984(H) x 1,105(V) |
| Scanning System | Progressive |
| Min. Illumination | Color : 0.095Lux (30IRE), B/W : 0Lux (IR LED on) |
| S / N Ratio | 50dB |
| LENS | |
| Focal Length (Zoom Ratio) | 2.8 ~ 12mm (4.3x) manual |
| Max. Aperture Ratio | F1.4 |
| Angular Field of View | H : 103.8° ~ 32.4° / V : 53.7° ~ 18.4° / D : 121.9° ~ 37.1° |
| Focus Control | Manual |
| Lens Type | DC auto iris |
| Mount Type | Board type |
| OPERATIONAL | |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| Ethernet | RJ-45 (10/100BASE-T) |
| Video Compression Format | H.265, H.264, MJPEG |
| Resolution | 1920 x 1080, 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 : 15fps |
| 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/TLS, 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. 128GB), 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, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungary, Greek |
| Web Viewer | Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 8W (PoE), Max. 7W (12V DC) |
| MECHANICAL | |
| 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 / specification can be found at hanwha-security.com

QNO-6010R/6020R/6030R

2M Network IR Bullet Camera

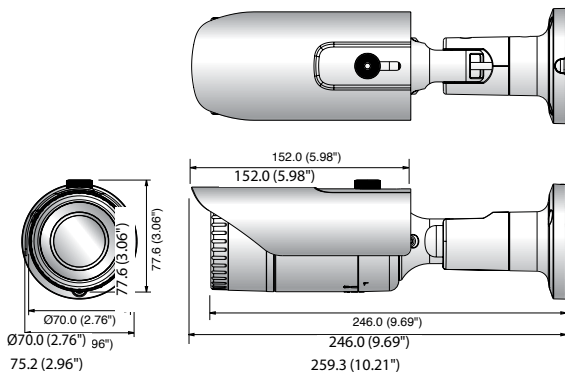


Key Features

- Max. 2megapixel (1920 x 1080) resolution
- Built-in 2.8mm fixed lens (QNO-6010R)
3.6mm fixed lens (QNO-6020R)
6mm fixed lens (QNO-6030R)
- Max. 30fps@all resolutions (H.265/H.264)
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), PoE / 12V DC
- IR viewable length 20m (QNO-6010R), 25m (QNO-6020R)
30m (QNO-6030R)
- Hallway view, WiseStream support, IP66, IK10
- LDC support (Lens distortion correction)

Dimensions

Unit: mm (inch)



Accessories (Optional)



SBO-100B1



SBP-302RPM

QNO-6010R/6020R/6030R

| | |
|-----------------------------------|---|
| VIDEO | |
| Imaging Device | 1/2.9" 2.19M CMOS |
| Total Pixels | 2,000(H) x 1,121(V) |
| Effective Pixels | 1,984(H) x 1,105(V) |
| Scanning System | Progressive |
| Min. Illumination | Color: 0.15Lux, B/W: 0Lux (IR LED on) |
| S / N Ratio | 50dB |
| LENS | |
| Focal Length (Zoom Ratio) | 2.8mm fixed (QNO-6010R), 3.6mm fixed (QNO-6020R), 6mm fixed (QNO-6030R) |
| Max. Aperture Ratio | F2.0 (QNO-6010R), F1.8 (QNO-6020R/6030R) |
| Angular Field of View | H: 116.0° / V: 62.0° / D: 137.0° (QNO-6010R) H: 86.48° / V: 46.22° / D: 102.44° (QNO-6020R) H: 52.54° / V: 28.86° / D: 61.14° (QNO-6030R) |
| Lens Type | Fixed |
| Mount Type | Board type |
| OPERATIONAL | |
| IR Viewable Length | 20m (65.62ft): QNO-6010R, 25m (82.02ft): QNO-6020R, 30m (98.43ft): QNO-6030R |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| Ethernet | RJ-45 (10/100BASE-T) |
| Video Compression Format | H.265, H.264, MJPEG |
| Resolution | 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 |
| Max. Framerate | H.265/H.264: Max. 30fps at all resolutions, MJPEG: Max. 15fps |
| 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), RTSP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, 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. 128GB), 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, Hungary, Greek |
| Web Viewer | Supported OS: Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser: Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser: MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 7W (PoE), Max. 6W (12V DC) |
| MECHANICAL | |
| 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 hanwha-security.com

QND-6070R

2M Network IR Dome Camera

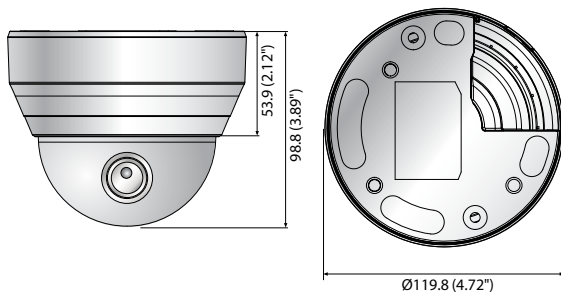


Key Features

- Max. 2megapixel (1920 x 1080) resolution
- 2.8 ~ 12mm (4.3x) varifocal lens
- Max. 30fps@2M all resolutions (H.265/H.264)
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), 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

| | |
|-----------------------------------|--|
| VIDEO | |
| Imaging Device | 1/2.9" 2.19M CMOS |
| Total Pixels | 2,000(H) x 1,121(V) |
| Effective Pixels | 1,984(H) x 1,105(V) |
| Scanning System | Progressive |
| Min. Illumination | Color : 0.095Lux (30IRE), B/W : 0Lux (IR LED on) |
| S/N Ratio | 50dB |
| LENS | |
| Focal Length (Zoom Ratio) | 2.8 ~ 12mm (4.3x) manual |
| Max. Aperture Ratio | F1.4 |
| Angular Field of View | H : 103.8° ~ 32.4° / V : 53.7° ~ 18.4° / D : 121.9° ~ 37.1° |
| Focus Control | Manual |
| Lens Type | DC auto iris |
| Mount Type | Board type |
| PAN / TILT / ROTATE | |
| Pan / Tilt / Rotate Range | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| OPERATIONAL | |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| Ethernet | RJ-45 (10/100BASE-T) |
| Video Compression Format | H.265, H.264, MJPEG |
| Resolution | 1920 x 1080, 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 : 15fps |
| 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/TLS, 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. 128GB), 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, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungary, Greek |
| Web Viewer | Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 6.7W (PoE), Max. 5.5W (12V DC) |
| MECHANICAL | |
| Color / Material | Ivory / Plastic |
| Dimensions (WxH) | Ø119.8 x 98.8mm (Ø4.72" x 3.89") |
| Weight | 325g (0.72 lb) |

* The latest product information / sepecification can be found at hanwha-security.com

QND-6010R/6020R/6030R

2M Network IR Dome Camera



QND-6010R

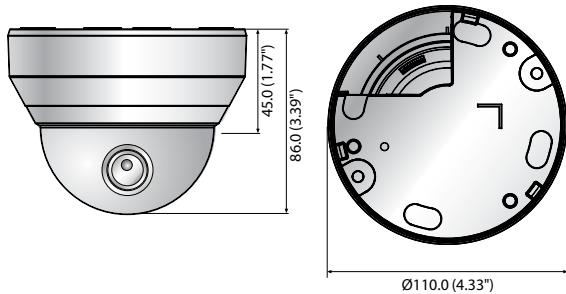
QND-6020R/6030R

Key Features

- Max. 2megapixel (1920 x 1080) resolution
- Built-in 2.8mm fixed lens (QND-6010R)
3.6mm fixed lens (QND-6020R)
6mm fixed lens (QND-6030R)
- Max. 30fps@all resolutions (H.265/H.264)
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), PoE / 12V DC
- IR viewable length 20m, IK08
- Hallway view, WiseStream support
- LDC support (Lens distortion correction)

Dimensions

Unit : mm (inch)



Accessories (Optional)



| QND-6010R/6020R/6030R | |
|-----------------------------------|--|
| VIDEO | |
| Imaging Device | 1/2.9" 2.19M CMOS |
| Total Pixels | 2,000(H) x 1,121(V) |
| Effective Pixels | 1,984(H) x 1,105(V) |
| Scanning System | Progressive |
| Min. Illumination | Color : 0.15Lux, B/W : 0Lux (IR LED on) |
| S / N Ratio | 50dB |
| LENS | |
| 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 : 110.0° / V : 61.0° / D : 125.0° (QND-6010R) H : 86.48° / V : 46.22° / D : 102.44° (QND-6020R) H : 52.54° / V : 28.86° / D : 61.14° (QND-6030R) |
| Lens Type | Fixed |
| Mount Type | Board type |
| PAN / TILT / ROTATE | |
| Pan / Tilt / Rotate Range | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| OPERATIONAL | |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| Ethernet | RJ-45 (10/100BASE-T) |
| Video Compression Format | H.265, H.264, MJPEG |
| Resolution | 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 |
| Max. Framerate | H.265/H.264 : Max. 30fps at all resolutions, MJPEG : Max. 15fps |
| 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/TLS, 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. 128GB), 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, Hungary, Greek |
| Web Viewer | Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| Vandal Resistance | IK08 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 7W (PoE), Max. 5.8W (12V DC) : QND-6010R Max. 6.5W (PoE), Max. 5.43W (12V DC) : QND-6020R/6030R |
| MECHANICAL | |
| 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 hanwha-security.com

QNV-6070R

2M Vandal-Resistant Network IR Dome Camera

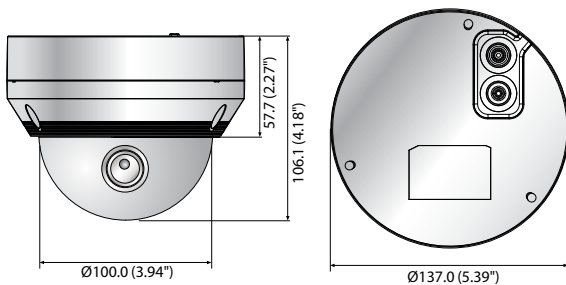


Key Features

- Max. 2megapixel (1920 x 1080) resolution
- 2.8 ~ 12mm (4.3x) varifocal lens
- Max. 30fps@2M all resolutions (H.265/H.264)
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), 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 | |
|-----------------------------------|--|
| VIDEO | |
| Imaging Device | 1/2.9" 2.19M CMOS |
| Total Pixels | 2,000(H) x 1,121(V) |
| Effective Pixels | 1,984(H) x 1,105(V) |
| Scanning System | Progressive |
| Min. Illumination | Color : 0.095Lux (30IRE), B/W : 0Lux (IR LED on) |
| S / N Ratio | 50dB |
| LENS | |
| Focal Length (Zoom Ratio) | 2.8 ~ 12mm (4.3x) manual |
| Max. Aperture Ratio | F1.4 |
| Angular Field of View | H : 103.8° ~ 32.4° / V : 53.7° ~ 18.4° / D : 121.9° ~ 37.1° |
| Focus Control | Manual |
| Lens Type | DC auto iris |
| Mount Type | Board type |
| PAN / TILT / ROTATE | |
| Pan / Tilt / Rotate Range | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| OPERATIONAL | |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| Ethernet | RJ-45 (10/100BASE-T) |
| Video Compression Format | H.265, H.264, MJPEG |
| Resolution | 1920 x 1080, 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 : 15fps |
| 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/TLS, 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. 128GB), 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, Korean, Chinese, French, Italian, Spanish, German, Japanese, Russian, Swedish, Portuguese, Czech, Polish, Turkish, Dutch, Hungary, Greek |
| Web Viewer | Supported OS : Windows 7, 8.1, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 6.7W (PoE), Max. 5.5W (12V DC) |
| MECHANICAL | |
| Color / Material | Ivory / Metal |
| Dimensions (WxH) | Ø137.0 x 106.1mm (Ø5.39" x 4.18") |
| Weight | 660g (1.46 lb) |

* The latest product information / sepecification can be found at hanwha-security.com

QNV-6010R/6020R/6030R

2M Vandal-Resistant Network IR Dome Camera



QNV-6010R

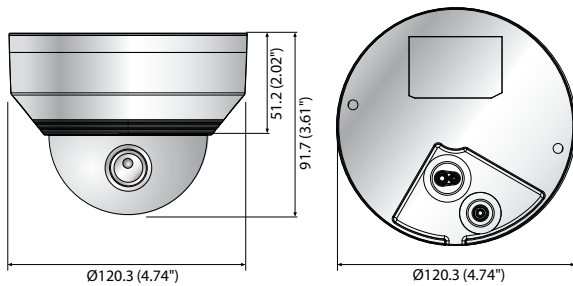
QNV-6020R/6030R

Key Features

- Max. 2megapixel (1920 x 1080) resolution
- Built-in 2.8mm fixed lens (QNV-6010R)
3.6mm fixed lens (QNV-6020R)
6mm fixed lens (QNV-6030R)
- Max. 30fps@all resolutions (H.265/H.264)
- H.265, H.264, MJPEG codec supported, Multiple streaming
- Motion detection, Tampering, Defocus detection
- micro SD/SDHC/SDXC memory slot (Max. 128GB), PoE / 12V DC
- IR viewable length 20m (QNV-6010R), 25m (QNV-6020R)
30m (QNV-6030R)
- Hallway view, WiseStream support, IP66, IK10
- LDC support (Lens distortion correction)

Dimensions

Unit : mm (inch)



Accessories (Optional)



| QNV-6010R/6020R/6030R | |
|--|--|
| VIDEO | |
| Imaging Device | 1/2.9" 2.19M CMOS |
| Total Pixels | 2,000(H) x 1,121(V) |
| Effective Pixels | 1,984(H) x 1,105(V) |
| Scanning System | Progressive |
| Min. Illumination | Color : 0.15Lux, B/W : 0Lux (IR LED on) |
| S / N Ratio | 50dB |
| LENS | |
| Focal Length (Zoom Ratio) | 2.8mm fixed (QNV-6010R), 3.6mm fixed (QNV-6020R), 6mm fixed (QNV-6030R) |
| Max. Aperture Ratio | F1.8 |
| Angular Field of View | H : 110.0° / V : 61.0° / D : 125.0° (QNV-6010R) H : 86.48° / V : 46.22° / D : 102.44° (QNV-6020R) H : 52.54° / V : 28.86° / D : 61.14° (QNV-6030R) |
| Lens Type | Fixed |
| Mount Type | Board type |
| PAN / TILT / ROTATE | |
| Pan / Tilt / Rotate Range | 0° ~ 350° / 0° ~ 67° / 0° ~ 355° |
| OPERATIONAL | |
| IR Viewable Length | 20m (65.62ft) : QNV-6010R, 25m (82.02ft) : QNV-6020R, 30m (98.43ft) : QNV-6030R |
| 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 / WDR |
| 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 |
| Pixel Counter | Support (Plug-in viewer only) |
| NETWORK | |
| Ethernet | RJ-45 (10/100BASE-T) |
| Video Compression Format | H.265, H.264, MJPEG |
| Resolution | 1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 |
| Max. Framerate | H.265/H.264 : Max. 30fps at all resolutions, MJPEG : Max. 15fps |
| 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/TLS, 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. 128GB), 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, Hungary, Greek |
| Web Viewer | Supported OS : Windows 7, 8, 10, Mac OS X 10.9, 10.10, 10.11 Plug-in free Webviewer - Supported Browser : Google Chrome 47, MS Edge 20 Plug-in Webviewer - Supported Browser : MS Explore 11, Mozilla Firefox 43, Apple Safari 9 * Mac OS X only |
| Central Management Software | SmartViewer |
| ENVIRONMENTAL | |
| 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 |
| ELECTRICAL | |
| Input Voltage / Current | PoE (IEEE802.3af, Class3) / 12V DC |
| Power Consumption | Max. 7W (PoE), Max. 5.8W (12V DC) : QNV-6010R Max. 6.8W (PoE), Max. 5.7W (12V DC) : QNV-6020R/6030R |
| MECHANICAL | |
| 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 hanhwa-security.com

HEAD OFFICE

6, Pangyo-ro 319 beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, 463-400 Rep. of KOREA
Tel: +82.70.7147.8753 Fax: +82.31.8018.3740
<http://hanwha-security.com>

Hanwha Techwin America

500 Frank W. Burr Blvd. Suite 43 Teaneck, NJ 07666
Toll Free: +1.877.213.1222
www.hanwhasecurity.com

Hanwha Techwin Europe

Heriot House, Heriot Road, Chertsey, Surrey, KT16 9DT. UK
Tel: +44.1932.578.100
www.hanwha-security.eu

Hanwha Techwin Tianjin

No.11 Weiliu Rd., Micro-electronic Industrial Park,
Jingang Road Tianjin 300385, China
Tel: +86-22-2388-7788 (8700)
www.hanwha-security.cn

Hanwha Techwin Middle East FZE

JAFZA View 18, 20th floor, office 2001, 2002, 2003, Downtown Jebel Ali,
Dubai, United Arab Emirates
<http://hanwha-security.com>