

WISeNeT
SAMSUNG



WISeNeT X series

WISeNeT 5

The power of innovation



Wisenet X series features the most powerful chipset ever incorporated into a full camera range. Hanwha's self-developed Wisenet 5 chip uses an all-new architecture that enables faster processing. This means the highest quality video performance with essential features suited to a wide range of video surveillance applications.

Best-in-class 150dB WDR ▶ WiseStream II Compression Technology ▶ Advanced Analytics

Wisenet X series

Wisenet X series premium line of network cameras feature Hanwha's self-developed proprietary Wisenet 5 chipset. The full line of network cameras and NVRs make Wisenet X ideal for virtually any security and surveillance application.

Superb Features with Hanwha's Core Technology

- 5MP@30 fps, 2MP@60 fps
- WDR - 150dB @ 2MP / 120dB @ 5MP
- Low light noise reduction technology
- WiseStream II
- USB port
- Dual SD card slot
- Sound classification
- Enhanced Video Analytics
- Fog Detection
- PTZ Hand-over
- Highlight Compensation (HLC)
- High Power IR LEDs



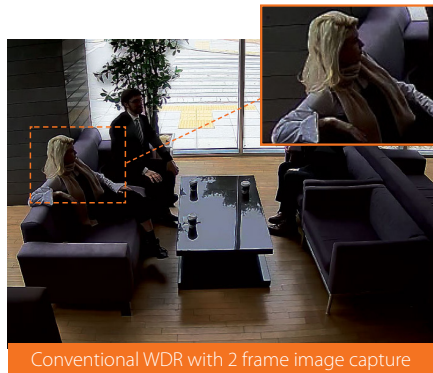
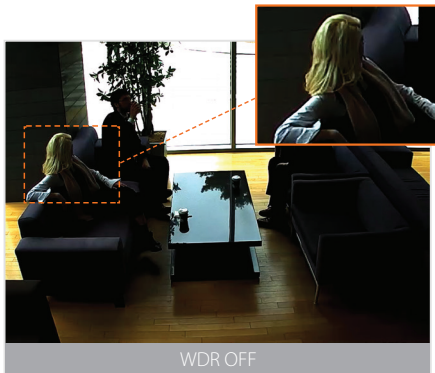
Complete Line-up of Indoor and Outdoor Cameras

Wisenet X series cameras are available in a wide range of form factors including indoor dome, outdoor vandal dome, box and bullet style.

	BOX	BULLET	INDOOR DOME	OUTDOOR VANDAL DOME	PTZ DOME
5MP	 XNB-8000	 XNO-8020R/8030R/8040R/8080R	 XND-8020R/8030R/ 8040R/8080RV	 XNV-8020R/8030R/8040R/8080R	
2MP	 XNB-6000	 XNO-6010R/6020R/6080R	 XND-6010/6020R/ 6080V/6080RV	 XNV-6010/6020R/6080/6080R	 XNP-6370RH

Best-in-Class 150dB Wide Dynamic Range (WDR)

Conventional WDR captures images by taking 2 frames taken at different exposures, whereas Wisenet X series cameras utilize 4 frame capture at different exposure levels to create a combined image. With the development of cutting-edge WDR technology, Wisenet X series cameras address a limitation found in conventional WDR cameras while producing clear and vivid images.



※ Actual images from XNV-6080R
150dB WDR only available in 2MP X Series

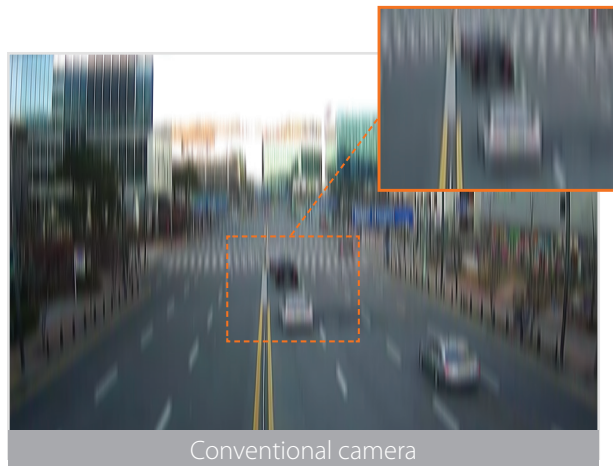
Monitor Color Images Even in Low-Light Environments

With the new, powerful Wisenet 5 chipset and processing technology, combined with Hanwha Techwin's outstanding lens technology, Wisenet X series achieves optimal performance in low-light conditions by capturing and producing crystal-clear images including true-color images without IR LEDs, regardless of the environment or time of day.



Improved Digital Image Stabilization (DIS) with Gyro Sensor

Advances in Hanwha's image stabilization technology allow for the reduction of motion blur caused by wind or vibration. A gyroscopic sensor plus DIS technology is specifically designed and engineered into select Wisenet X-series cameras resulting in sharp, stable images.



Conventional camera



Actual footage from Wisenet X series camera

※XNB-8000/6000 supported

Advanced Compression with WiseStreamII

Using WiseStreamII, Hanwha Techwin's video compression technology, Wisenet X series reduces data by up to 99% compared to the previous version of WiseStream when combined with H.265 compression. The costs of configuring and maintaining the system are also greatly reduced, while still maintaining the same pixels and high quality.



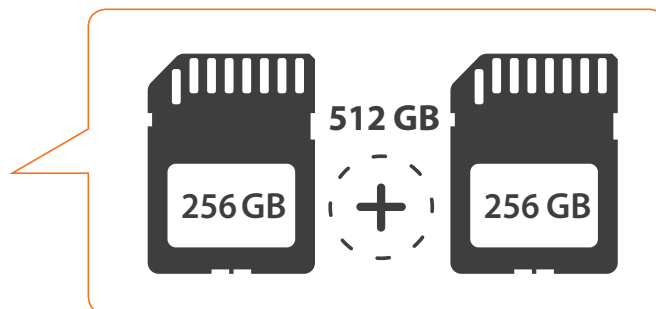
More Convenient Installation with USB

Using a compatible USB adapter and the free Wisenet installation app on a mobile device, adjusting the camera angle and focus is simpler. Additional devices are not required for installation, reducing installation time and costs.



Dual SD Card Slots

Dual SD card slots support up to 512 GB of storage at the edge, preserving stored data in the event of an unstable network connection.



Minimize Lens Distortion

Lens distortion typically causes the straight lines near the edge to curve outwards from the center of the image. With Lens Distortion Correction technology integrated into the Wisenet X series, image imperfections can be easily corrected.



Enhanced Video Analytics and Sound Classification

Wisenet X series features a variety of new, exclusive Video and Audio Analytics, providing enhanced monitoring solutions and market intelligence.

Behavior Analytics	Appear, Disappear, Loitering
Passing	Virtual line, Enter/Exit, Directional Detection
Image quality enhancement	Defocus Detection, Fog detection
Detection	Motion Detection, Tampering, Face Detection, Audio detection
Statistics for Market Intelligence	Heat map, People counting, Queue management [Fixed lense camera models only]
Audio Analytics Sound Classification	Explosion  Glass breakage  Gun shot  Scream 

※bold: new added

Fog Detection

Wisenet X series delivers outstanding image quality in foggy weather conditions with the Fog Detection feature. Images covered by fog are automatically fine-tuned with the defog feature to provide crystal clear images.



PTZ Hand-Over

Hanwha's unique PTZ hand-over feature allows a PTZ camera to receive alarm notifications (motion detection) from other Wisenet X series cameras connected to the same IP video surveillance system. Once the notification is received, the PTZ camera will move to the assigned preset camera location. The hand-over feature enhances the surveillance system efficiency by reducing reliability on the system operator to track events while maximizing the likelihood of capturing and recording critical events for areas under surveillance.



Highlight Compensation (HLC)

Camera detects areas of an image that are overexposed and reduces the brightness of these areas, improving the overall quality and usability of the image.



Powerful IR LEDs

Conventional IR illumination provides intense light at the center of an image, degrading quickly as it moves away from the center. Wisenet X series cameras use powerful IR LEDs that provide a wide angle of uniform IR light across a scene for a wider image capture area.



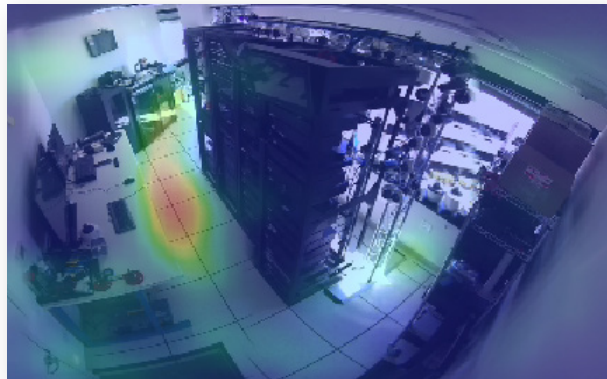
Defocus Detection

If a camera goes out of focus, an alarm notification will be sent to users, allowing them to adjust camera focus. Users can also adjust the focus via the network for 4MP cameras equipped with vari-focal lens.

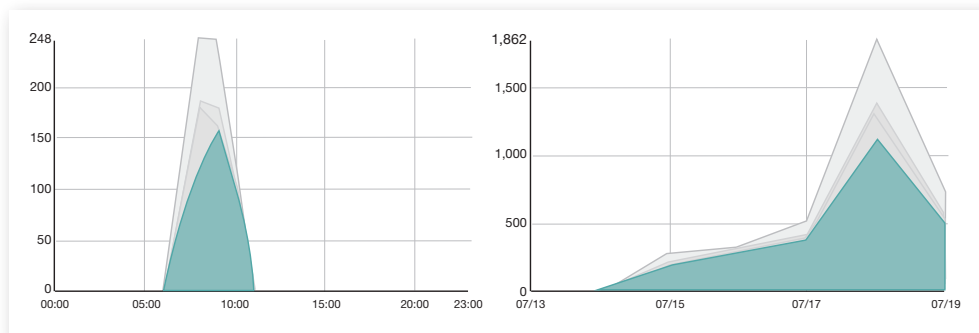


People Counting & Heatmap Function

Our X series fisheye cameras supports license-free People Counting business analytics. This feature supports data search, report and graph functions.



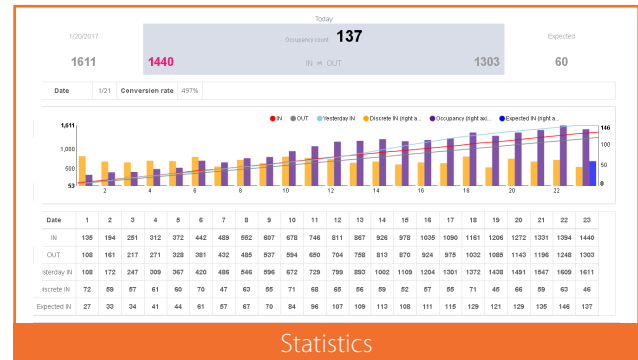
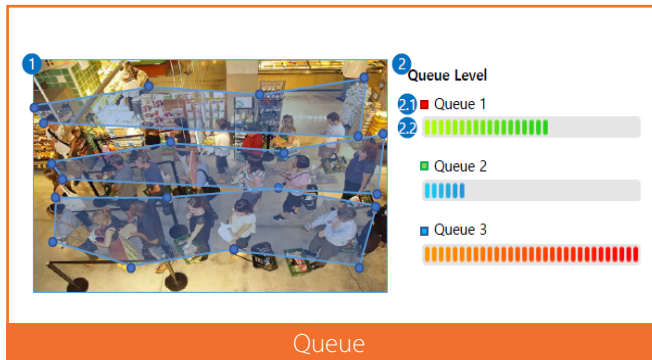
※ Actual footage from XND-6010



※ Fixed lenses only

Queue Line Management

Provides statistical analysis and measurement for average dwell time and number of people in queues. This insight is critical for business to manage their operations more efficiently, while providing the insight necessary to manage campaigns, displays and promotions throughout retail locations.



※ Fixed lenses only

Fixed Lens Coverage

The 2.4mm fixed focal lens in the Wisenet X series provides a wider area of coverage compared with the 2.8mm lens in our Wisenet III camera line. This results in an effective increase of $\sim 27^\circ$ in horizontal viewing angle.





wisenet X
XNB-8000



wisenet X
XNB-6000



wisenet X
XNO-8080R



wisenet X
XNO-8020R/8030R/8040R

Resolution		5MP	2MP	5MP	5MP
VIDEO	Imaging Device	1/1.8" 6M CMOS	1/2.8" 2M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS
	Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	5M / 30fps	2M / 60fps	5M / 30fps	5M / 30fps
	Streaming Capacity	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)
	Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	Color : 0.07Lux B/W : 0.007Lux	Color : 0.01Lux B/W : 0.001Lux	Color : 0.07Lux B/W : 0Lux (IR LED on)	Color : 0.16Lux B/W : 0Lux (IR LED on)
	Video Output	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B
	Lens	-	-	3.7 ~ 9.4mm (2.5x) Motorized V/F (F1.2)	3.7mm fixed (F1.6) (XNO-8020R) 4.6mm fixed (F1.6) (XNO-8030R) 7mm fixed (F1.6) (XNO-8040R)
	Angular Field of View	-	-	H : 100.2° ~ 38.7° / V : 72.7° ~ 29.0° / D : 132.0° ~ 48.6°	H : 97.5° / V : 71.9° / D : 126.2° (XNO-8020R) H : 77.9° / V : 57.9° / D : 98.7° (XNO-8030R) H : 50.7° / V : 37.8° / D : 63.8° (XNO-8040R)
Focus Control		Simple focus / Manual	Simple focus / Manual	Simple focus (Motorized V/F) / Manual	-
OPERATIONAL	IR Viewable Length	-	-	50m (164.04ft)	30m (98.43ft)
	Pan / Tilt / Rotate	-	-	-	-
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (150dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)
	Digital Image Stabilization	Support	Support	Support	Support
	Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management
FEATURES	Protocol	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
	Audio	Bi-directional	Bi-directional	Bi-directional	Bi-directional
	Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
	Environment Protection	-	-	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10
	Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°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	AC 24V (Max. 8.5W) DC 12V (Max. 7.5W) PoE (Max. 8.5W)	AC 24V (Max. 8W) DC 12V (Max. 6.5W) PoE (Max. 7.5W)	AC 24V (Max. 14.5W) DC 12V (Max. 12.5W) PoE (Max. 12.95W)	DC 12V (Max. 9.3W) PoE (Max. 10.3W)
	Dimensions (WxHxD) / Weight	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)	Ø91.0 x 368.6mm (Ø3.58" x 14.51") (Without sunshield) 2.18Kg (4.81lb)	Ø70.0 x 296.0mm (Ø2.72" x 11.65") (Without sunshield) 1.22kg (2.69lb)
	Additional Features	DIS with Gyro sensor, Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	DIS with Gyro sensor, Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view

※ Design and specifications are subject to change without notice.



wisenet X
XNO-6080R



wisenet X
XNO-6010R/6020R



wisenet X
XND-8080RV



wisenet X
XND-8020R/8030R/8040R



wisenet X
XND-6080V

2MP	2MP	5MP	5MP	2MP
1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/2.8" 2M CMOS
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
2M / 60fps	2M / 60fps	5M / 30fps	5M / 30fps	2M / 60fps
Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)
20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Color: 0.015Lux B/W: 0Lux (IR LED on)	Color: 0.055Lux (XNO-6010R), 0.015 (XNO-6020R) B/W: 0Lux (IR LED on)	Color: 0.07Lux B/W: 0Lux (IR LED on)	Color: 0.16Lux B/W: 0Lux (IR LED on)	Color: 0.015Lux B/W: 0.0015Lux
CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B
2.8 ~ 12mm (4.3x) Motorized V/F (F1.4)	2.4mm fixed (F2.0) (XNO-6010R) 4mm fixed (F1.4) (XNO-6020R)	3.9 ~ 9.4mm (2.4x) Motorized V/F (F1.3)	3.7mm fixed (F1.6) (XND-8020R) 4.6mm fixed (F1.6) (XND-8030R) 7mm fixed (F1.6) (XND-8040R)	2.8 ~ 12mm (4.3x) Motorized V/F (F1.4)
H: 119.5° ~ 27.9° / V: 62.8° ~ 15.7° / D: 142.1° ~ 32.0°	H: 139.0° / V: 73.0° / D: 167.0° (XNO-6010R) H: 88.6° / V: 47.5° / D: 104.8° (XNO-6020R)	H: 92.1° ~ 38.7° / V: 67.2° ~ 29.0° / D: 119.9° ~ 48.6°	H: 97.5° / V: 71.9° / D: 126.2° (XND-8020R) H: 77.9° / V: 57.9° / D: 98.7° (XND-8030R) H: 50.7° / V: 37.8° / D: 63.8° (XND-8040R)	H: 119.5° ~ 27.9° / V: 62.8° ~ 15.7° / D: 142.1° ~ 32.0°
Simple focus (Motorized V/F) / Manual	-	Simple focus (Motorized V/F) / Manual	-	Simple focus (Motorized V/F) / Manual
50m (164.04ft)	20m (65.61ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)	30m (98.43ft)	30m (98.43ft)	-
-	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
WDR (150dB)	WDR (150dB)	WDR (120dB)	WDR (120dB)	WDR (150dB)
SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)
Support	Support	Support	Support	Support
Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification
ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI
1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Bi-directional	Bi-directional	Bi-directional	Bi-directional	Bi-directional
SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IK08	IK08	IK08
-40°C ~ +55°C (-40°F ~ +131°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)	-10°C ~ +55°C (+14°F ~ +131°F)
AC 24V (Max. 15W) DC 12V (Max. 12W) PoE (Max. 12.95W)	DC 12V (Max. 8.8W) PoE (Max. 9.7W)	DC 12V (Max. 9W) PoE (Max. 10W)	DC 12V (Max. 8W) PoE (Max. 9W)	DC 12V (Max. 6W) PoE (Max. 6.5W)
Ø91.0 x 368.6mm (Ø3.58" x 14.51") (Without sunshield) 2.18Kg (4.81lb)	Ø70 x 301.5mm (Ø2.76" x 11.87") XNO-6010R Ø70 x 296mm (Ø2.76" x 11.65") XNO-6020R (Without sunshield) 1.22Kg (2.69lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 732g (1.61lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 714g (1.57lb)
Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view

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WISENET X
XND-6080RV



WISENET X
XND-6010



WISENET X
XND-6020R



WISENET X
XNV-8080R

		2MP	2MP	2MP	5MP
VIDEO	Resolution	2MP	2MP	2MP	5MP
	Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/1.8" 6M CMOS
	Video Compression Format	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 / 60fps	2M / 60fps	2M / 60fps	5M / 30fps
	Streaming Capacity	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)
	Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	Color: 0.015Lux B/W: 0Lux (IR LED on)	Color: 0.055Lux B/W: 0.0055Lux	Color: 0.015 lux B/W: 0Lux (IR LED On)	Color: 0.07Lux B/W: 0Lux (IR LED on)
	Video Output	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B
	Lens	2.8 ~ 12mm (4.3x) Motorized V/F (F1.4)	2.4mm fixed (F2.0)	4mm fixed (F1.4)	3.9 ~ 9.4mm (2.4x) Motorized V/F (F1.3)
OPERATIONAL	Angular Field of View	H: 119.5° ~ 27.9° / V: 62.8° ~ 15.7° / D: 142.1° ~ 32.0°	H: 139.0° / V: 73.0° / D: 167.0°	H: 88.6° / V: 47.5° / D: 104.8°	H: 92.1° ~ 38.7° / V: 67.2° ~ 29.0° / D: 119.9° ~ 48.6°
	Focus Control	Simple focus (Motorized V/F) / Manual	-	-	Simple focus (Motorized V/F) / Manual
	IR Viewable Length	30m (98.43ft)	-	30m (98.43ft)	50m (164.04ft)
	Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (120dB)
	Digital Noise Reduction	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)
	Digital Image Stabilization	Support	Support	Support	Support
	Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification
FEATURES	Protocol	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
	Audio	Bi-directional	Bi-directional	Bi-directional	Bi-directional
	Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
	Environment Protection	IK08	IK08	IK08	IP67, IP66, NEMA 4X, IK10
	Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)
	Power	DC 12V (Max. 9W) PoE (Max. 10W)	DC 12V (Max. 5.5W) PoE (Max. 6W)	DC 12V (Max. 8W) PoE (Max. 9W)	AC 24V (Max. 14W) DC 12V (Max. 11.5W) PoE (Max. 12.95W)
	Dimensions (WxHxD) / Weight	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 724g (1.60lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 365g (0.80lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 1.01Kg (2.23lb)
	Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view

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WISENET X
XNV-8020R/8030R/8040R



WISENET X
XNV-6080



WISENET X
XNV-6080R



WISENET X
XNV-6010



WISENET X
XNV-6020R

5MP	2MP	2MP	2MP	2MP
1/1.8" 6M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
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
5M / 30fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps
Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)	Multiple (Up to 10 profiles)
20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Color: 0.16Lux B/W: 0Lux (IR LED on)	Color: 0.015Lux B/W: 0.0015Lux	Color: 0.015Lux B/W: 0Lux (IR LED on)	Color: 0.055Lux B/W: 0.0055Lux	Color: 0.015 lux B/W: 0Lux (IR LED On)
CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B	CVBS 1.0Vpp, micro USB type B
3.7mm fixed (F1.6) (XNV-8020R) 4.6mm fixed (F1.6) (XNV-8030R) 7mm fixed (F1.6) (XNV-8040R)	2.8 ~ 12mm (4.3x) Motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) Motorized V/F (F1.4)	2.4mm fixed (F2.0)	4mm fixed (F1.4)
H: 97.5° / V: 71.9° / D: 126.2° (XNV-8020R) H: 77.9° / V: 57.9° / D: 98.7° (XNV-8030R) H: 50.7° / V: 37.8° / D: 63.8° (XNV-8040R)	H: 119.5° ~ 27.9° / V: 62.8° ~ 15.7° / D: 142.1° ~ 32.0°	H: 119.5° ~ 27.9° / V: 62.8° ~ 15.7° / D: 142.1° ~ 32.0°	H: 139.0° / V: 73.0° / D: 167.0°	H: 88.6° / V: 47.5° / D: 104.8°
-	Simple focus (Motorized V/F) / Manual	Simple focus (Motorized V/F) / Manual	-	-
30m (98.43ft)	-	50m (164.04ft)	-	30m (98.43ft)
0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
WDR (120dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)	SSNRV (2D+3D noise filter)
Support	Support	Support	Support	Support
Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management
ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI	ONVIF profile S & G, SUNAPI
1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Bi-directional	Bi-directional	Bi-directional	Bi-directional	Bi-directional
SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
IP67, IP66, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10
-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -20°C (-4°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°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)
DC 12V (Max. 8W) PoE (Max. 9W)	AC 24V (Max. 8.2W) DC 12V (Max. 7W) PoE (Max. 7.8W)	AC 24V (Max. 14W) DC 12V (Max. 11.5W) PoE (Max. 12.95W)	DC 12V (Max. 5.5W) PoE (Max. 6W)	DC 12V (Max. 8W) PoE (Max. 9W)
Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 985g (2.17lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 995g (2.19lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 625g (1.38lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)
Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway view

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