WISENET X series

Wisenet 5

defining the future

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 - up to150dB* @ 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

*Does not apply to all models

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, bullet style and stainless steel.

|	BOX	BULLET	INDOOR DOME	OUTDOOR VANDAL DOME	PTZ	FISHEYE
5MP	XNB-8000	XNO-8020R/8030R/8040R/8080R	XND-8020R/8030R/8040R/8080RV XND-8020F XND-8081VZ XND-8081FZ	XNV-8020R/8030R/8040R/8080R XNV-8080RS XNV-8081Z		XNF-8010R/8010RV/8010RVM
2MP	XNB-6000/6005 XNB-6001 SLA-T4680/T4680V/T2480/T2480V/T1080F XNB-H6241A / XNB-H6461H XNB-H6280B / SHD-46VDB / SHD-46VDE / XNB-H6241A SLA-T4680D	XNO-6010R/6020R XNO-6080R XNO-6085R XNO-6120R XNO-L6080R	XND-6010/6020R/6080V/6080RV/6085V XND-6011F/8020F XND-L6080RV/L6080V XND-6081VZ XND-6081FZ	XNV-6010/6020R/6120/6120R/6120RS/6080/6080R/6080RS/6085 XNV-L6080/L6080R XNV-6022R/6022RM/6012M/6012 XNV-6011/6013M XNV-6081Z	XNP-6370RH/6550RH XNP-6320RH XNP-6320/6321/6321H/6320H/6320HS XNP-6120H /XNP-6040H	
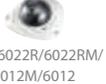
Best-in-Class 150dB Wide Dynamic Range (WDR)

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.
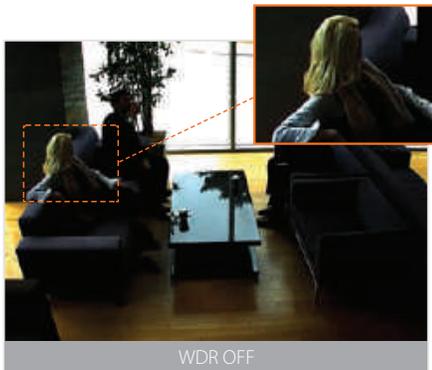
WDR OFF
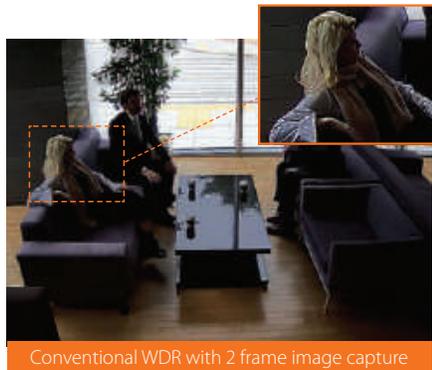
Conventional WDR with 2 frame image capture

Wisenet X WDR (150dB) with 4 frame image capture

※ Actual images from XNV-6080R
Please check camera specification

Monitor Color Images Even in Low-Light Environments

With the new, powerful Wisenet 5 chipset and processing technology, combined with Hanwha Vision'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.

Conventional camera

Actual footage from XNO-8080R

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
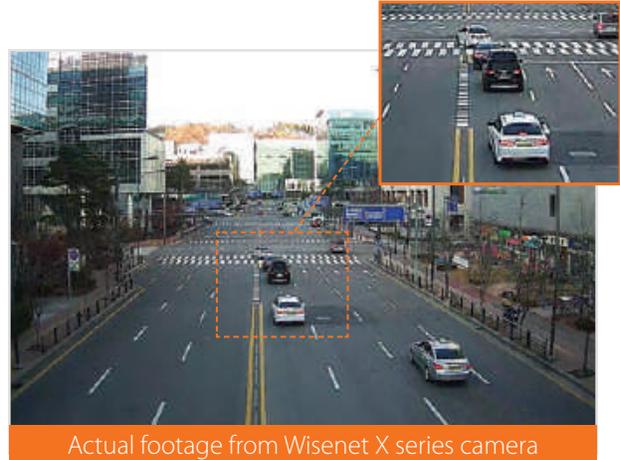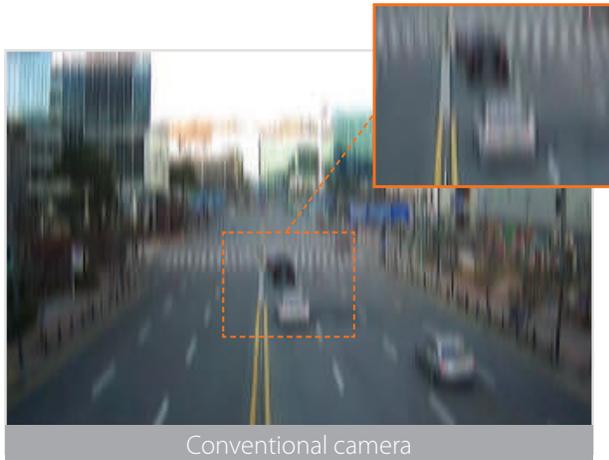
※ Equipped only on certain models

Advanced Compression with WiseStreamII

Using WiseStream II, Hanwha Vision'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.

7168kbps

WiseStream II off

72kbps

WiseStream II on
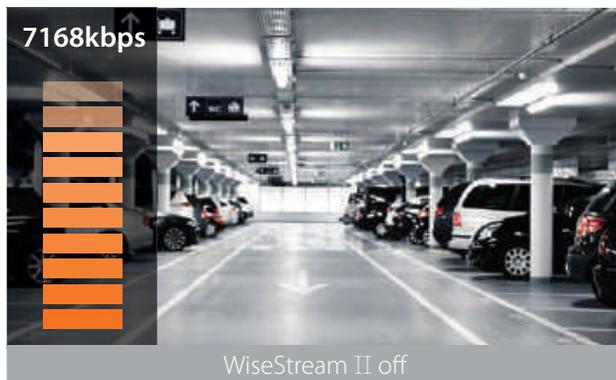
More Convenient Installation with USB

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.

512 GB

256 GB + 256 GB
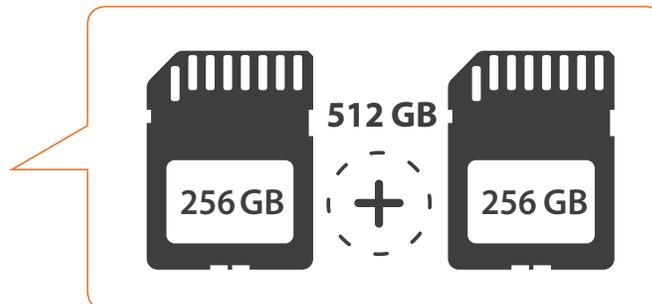
※ Equipped only on certain models

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.

Conventional camera

Wisenet X series camera

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, intrusion
Passing	Virtual line, enter/exit
Image Quality Enhancement	Defocus detection, fog detection
Detection	Motion detection, tampering, face detection, audio detection, shock detection
Statistics for Market Intelligence	Heat map, people counting, queue management, audio playback on event [X Plus] [Fixed lens camera models only]
Audio Analytics Sound Classification	**Explosion** **Glass breakage** **Gun shot** **Scream**

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.

Detect fog

Activate defog (Auto/manual)

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.

Motion detected

Alarm notification to PTZ

PTZ moves to preset location

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.

Without HLC

With HLC

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 Surface Mount Technology (SMT) IR LEDs that provide a wide angle of uniform IR light across a scene for a wider image capture area.

Conventional camera

Wisenet X series camera

Defocus Detection

If a camera goes out of focus, an alarm notification will be sent to users, allowing them to adjust camera focus. Vari-focal models can automatically refocus or the user can manually initiate a simple focus via the network.

1 Detect Defocus   **2** Alarm Out   **3** Focus Control

People Counting & Heatmap Function

Our Wisenet X Plus and fixed lens cameras support license-free people counting business analytics. This feature supports data search, report and graph functions.

People counting

Heatmap

Sound Classification

Wisenet X series camera help user respond immediately in case of situation in danger, so that can classify sound such as gunshot, glass breakage, scream and explosion.

Gunshot   Glass breakage   Scream   Explosion

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.
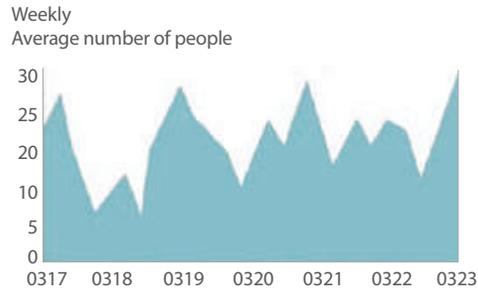
Legend:
- ■ Orange1-high □ Orange1-medium ■ Yellow2-high
- ■ Yellow2-medium ■ Green3-high ■ Green3-medium

Weekly
Average number of people

Total time

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 ~27° in horizontal viewing angle.

Wisenet X - 2.4mm (139°)

Wisenet III - 2.8mm (112°)

WISENET X PLUS

2MP/5MP NW Modular Camera

Wisenet X series Plus
cameras combine the power
of Hanwha's Wisenet 5 chipset with
an innovative modular design that
lowers overall cost of installation, configuration,
and maintenance while increasing the performance,
feature-set, and survivability of our X series product line.

Innovative Modular Design

Mounting Plate
Can be installed on site without other camera parts

Camera Case
Vandal Resistant Housing

Camera Module
This magnetically mounted 2 or 5 megapixel camera module can be installed without extra tools or hardware

Dome Cover
Polycarbonate dome cover

Paintable Ivory Skin Cover Included
Can be painted to blend into your environment

Easy Installation with Modular Structure and Motorized PTRZ

When combined, the unique modular design of the Wisenet X series Plus camera and motorized PTRZ camera module make on-site installation simple and pain free.*
Additionally, the product package has been reformulated to allow technicians quick access to the camera's network port for easy staging of product, saving time (and money) during installation and maintenance.

*Varies by model

Magnet embedded camera module

Motorized PTRZ

Installer friendly package allows access to a camera's network port while still in the box.

Extended Tilt Range for Greater Flexibility

Extended tilt angle has been added for greater flexibility in placement and use cases of Wisenet X Plus cameras.

X PLUS
Tilt 85°

Conventional
Tilt 67°
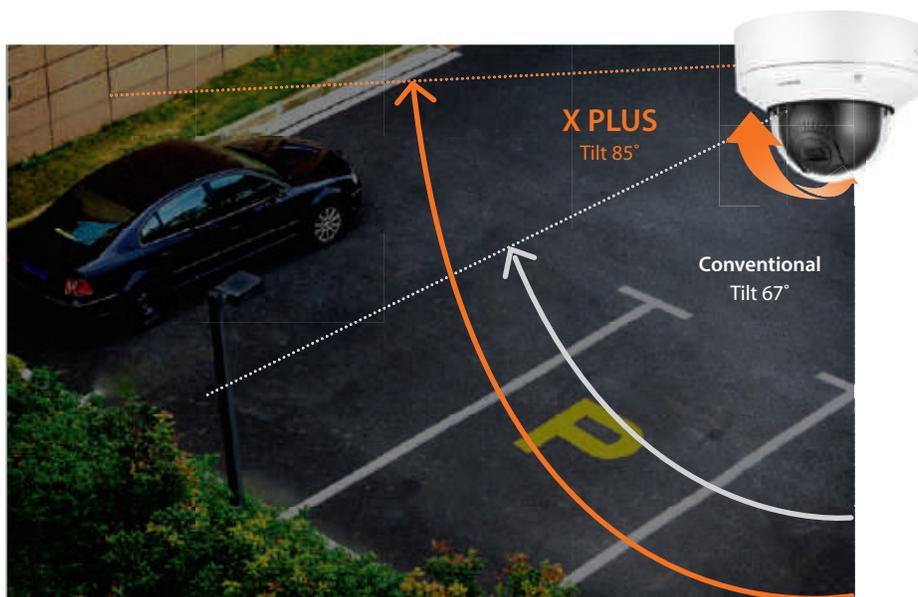
Advanced DIS and Shock Detection with Built-in Gyro Sensors

Wisenet X Plus cameras have built-in gyro sensors to enable advanced DIS with reduced motion blur and shock detection which detects when the camera is hit.

Advanced DIS - Conventional

Advanced DIS - Wisenet X PLUS

Shock Detection
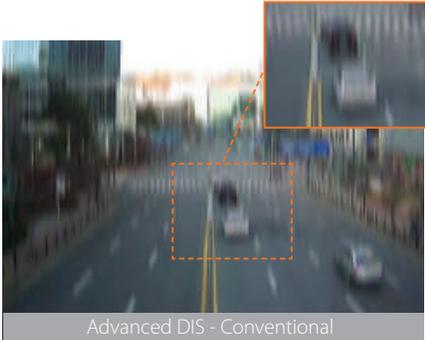
High Reliability in Challenging Environments

One of the most important features of a security camera is reliability in challenging environments. Wisenet X PLUS cameras offer high reliability by providing resistance to weather and impact with IP67, IP66, IP6K9K, IK10+ ratings, and NEMA 4X rating.

IP67, IP66, IP6K9K

IK10+

-50℃ ~ 60℃

Audio Playback on Event

Wisenet X series Plus cameras allow system operators to communicate with the public by using audio playback as a response to user-defined events.

"Please step behind the line."

Wisenet X series Plus Configurations

Category	Outdoor Vandal Dome			Indoor Vandal Dome			Flush Mount Dome		
Feature	Non-IR	IR	PTRZ	Non-IR	IR	PTRZ	Non-IR	IR	PTRZ
2MP Model	XNV-6081	XNV-6081R	XNV-6081Z	XND-6081V	XND-6081RV	XND-6081VZ	XNV-6081F	XNV-6081RF	XNV-6081FZ
5MP Model		XNV-8081R	XNV-8081Z		XND-8081RV	XND-8081VZ		XNV-8081RF	XNV-8081FZ
	• IP67/IP66/IP6K9K • IK10+ • NEMA 4X • -58°F ~ +140°F			• IP52/IK10 • -13°F ~ +140°F			• IP52/Plenum Rated (UL2820) • -13°F ~ +140°F		

Optional Accessories for Various Applications

Included with each camera is a paintable ivory skin cover along with a weather cap for all outdoor models. Other optional accessories include black colored skin covers, an AC24V power module, and a plethora of mounting options to suit your environment.

Weather cap

Ivory & Black skin cover

Weather cap (XNV only) and ivory skin cover (XNV and XND) are included in product package.
The weather cap can not be applied with the skin cover on.

SBC-180B

Skin cover
Compatible with XNV-6081Z/8081Z

SBC-160B

Skin cover
Compatible with XND-6081Z/8081Z

SPC-100AC

AC24V power module
Compatible with XNV-6081Z/8081Z

SBP-187HMW / 187HM

Hanging mount
Compatible with XNV-6081Z/8081Z

SBP-167HMW / 167HM

Hanging mount
Compatible with XND-6081Z/8081Z

SBP-300WMW1 / WM1

Wall mount
Compatible with SBP-180HMW/160HMW

SBP-300KMW / 300KM

Corner mount
Compatible with SBP-300WMW1

SBP-300PMW / 300PM

Pole mount
Compatible with SBP-300WMW1

SBP-300CMW / 300CM

Celling mount
Compatible with SBP-180HMW/160HMW

NEW

		Wisenet X XNB-8000	Wisenet X XNO-8080R	Wisenet X XNO-8020R / 8030R / 8040R	Wisenet X XND-8081VZ / 8081FZ
	Resolution	5MP	5MP	5MP	5MP
VIDEO	Imaging Device	1/1.8" 6M CMOS	1/1.8" 6M 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	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 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 : 0.07Lux B/W : 0Lux (IR LED on)	Color : 0.16Lux B/W : 0Lux (IR LED on)	Color : 0.07Lux B/W : 0.007Lux
	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) 7.0mm fixed (F1.6) (XNO-8040R)	3.9 ~ 9.4mm (2.6x) motorized V/F (F1.2)
	Angular Field of View	-	H : 100.2°(Wide) ~ 38.7°(Tele) / V : 72.7°(Wide) ~ 29.0°(Tele) / D : 132.0°(Wide) ~ 48.6°(Tele)	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)	H : 100.2°(Wide) ~ 38.7°(Tele) / V : 72.7°(Wide) ~ 29.0°(Tele) / D : 132.0°(Wide) ~ 48.6°(Tele)
	Focus Control	Simple focus / Manual	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual
OPERATIONAL	IR Viewable Length	-	50m (164.04ft)	30m (98.43ft)	-
	Pan / Tilt / Rotate	-	-	-	±175° / 0~85° / ±175° (XND-8081VZ) ±175° / 0~90° / ±175° (XND-8081FZ)
	Day & Night	True (ICR)	True (ICR)	True (ICR)	Auto (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	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 (Built in Gyro sensor)	Support	Support	Support (Built in Gyro sensor)
	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, 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, Shock detection, Heatmap, People counting, Queue management, Audio Playback on event
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	IP52, IK10 (XND-8081VZ) IP52, Plenum rated (XND-8081FZ)
	Operating Temperature	-10°C ~ +55°C (+14°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)	-10°C ~ +55°C (+14°F ~ +131°F)
	Power	Max. 8.5W (24V AC) Max. 7.5W (12V DC) Max. 8.5W (PoE)	Max. 14.5W (24V AC) Max. 12.5W (12V DC) Max. 12.95W (PoE)	Max. 9.3W (12V DC) Max. 10.3W (PoE)	Max 9W, typical 3.75W (12V DC) Max 11W, typical 5.4W (PoE)
	Dimensions (WxHxD) / Weight	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	Ø91.0 x 368.6.mm (Ø3.58" x 14.51") (Without Sunshield) 2.18Kg (4.81 lb)	Ø70.0 x 296.0mm (Ø2.76" x 11.65") (Without Sunshield) 1.22Kg (2.69 lb)	Ø160 x 125mm (Ø6.30" x 4.9") / 1.45kg (3.2lb) (XND-8081VZ) Ø205 x 150mm (Ø8.07" x 6.10") / 1.85kg (4.08lb) (XND-8081FZ)
	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	Motorized Pan / Tilt / Rotate, Modular design, Anti dust

※ Design and specifications are subject to change without notice.

Wisenet X XND-8080RV	Wisenet X XND-8020R / 8030R / 8040R	Wisenet X XND-8020F	Wisenet X XNV-8081Z (NEW)	Wisenet X XNV-8080R
5MP	5MP	5MP	5MP	5MP
1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M 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
5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
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 : 0.07Lux B/W : 0Lux (IR LED on)	Color : 0.16Lux B/W : 0Lux (IR LED on)	Color : 0.16Lux B/W : 0.16Lux	Color : 0.07Lux B/W : 0.007Lux	Color : 0.07Lux B/W : 0Lux (IR LED on)
CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
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) 7.0mm fixed (F1.6) (XND-8040R)	3.7mm fixed (F1.6)	3.6 ~ 9.4mm (2.6x) motorized V/F (F1.2)	3.9 ~ 9.4mm (2.4x) motorized V/F (F1.3)
H : 92.1°(Wide) ~ 38.7°(Tele) / V : 67.2°(Wide) ~ 29.0°(Tele) / D : 119.9°(Wide) ~ 48.6°(Tele)	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 : 97.5° / V :71.9° / D : 126.2°	H : 100.2°(Wide) ~ 38.7°(Tele) / V : 72.7°(Wide) ~ 29.0°(Tele) / D : 132.0°(Wide) ~ 48.6°(Tele)	H : 92.1°(Wide) ~ 38.7°(Tele) / V : 67.2°(Wide) ~ 29.0°(Tele) / D : 119.9°(Wide) ~ 48.6°(Tele)
Simple focus (motorized V/F) / Manual	-	Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual
30m (98.43ft)	30m (98.43ft)	-	-	50m (164.04ft)
0° ~ 354° / 0° ~ 67°/ 0° ~ 355°	0° ~ 354° / 0° ~ 67°/ 0° ~ 355°	0° ~ 355° / 0° ~ 47°/ 0° ~ 353°	±175° / 0~85° / ±175°	0° ~ 354° / 0° ~ 67°/ 0° ~ 355°
True (ICR)	True (ICR)	Auto (Electrical)	Auto (ICR)	True (ICR)
WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
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 (Built in Gyro sensor)	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, 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, Shock detection, Heatmap, People counting, Queue management, Audio Playback on event	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
Bi-Directional	Bi-Directional	Uni-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
IK08	IK08	-	IP67, IP66, IP6K9K, NEMA 4x, IK10+	IP67, IP66, NEMA 4X, IK10
-10℃ ~ +55℃ (+14℉ ~ +131℉)	-10℃ ~ +55℃ (+14℉ ~ +131℉)	-10℃ ~ +55℃ (+14℉ ~ +131℉)	-50℃ ~ +60℃ (-58℉ ~ +140℉) * Start up above -35℃ (-31℉)	-40℃ ~ +55℃ (-40℉ ~ +131℉)
Max. 9W (12V DC) Max. 10W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	Max. 4.7W (PoE)	Max. 11W, typical 4.97W (24V AC) (Optional) Max. 9.5W, typical 3.71W (12V DC) Max. 11W, typical 4.80W (PoE)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)
Ø140.8 x 113.0mm (Ø5.54" x 4.45") 732g (1.61lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84 lb)	Ø98.9 x 129.1mm (Ø3.89" x 5.08") 275g (0.61 lb)	Ø180.0 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 1.01Kg (2.23 lb)
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, Motorized Pan / Tilt / Rotate, Modular design	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View

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		Wisenet X **XNV-8080RS**	Wisenet X **XND-8020R / 8030R / 8040R**	Wisenet X **XNF-8010R / 8010RV / 8010RVM / 8010RW**
	Resolution	5MP	5MP	6MP
VIDEO	Imaging Device	1/1.8" 6M 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
	Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	2048 x 2048 / 30fps
	Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
	Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	Color : 0.07Lux B/W : 0Lux (IR LED on)	Color : 0.16Lux B/W : 0Lux (IR LED on)	Color : 0.1Lux 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, DIP connector type
	Lens	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) 7.0mm fixed (F1.6) (XND-8040R)	1.6mm fixed (F1.6)
	Angular Field of View	H : 92.1°(Wide) ~ 38.7°(Tele) / V : 67.2°(Wide) ~ 29.0°(Tele) / D : 119.9°(Wide) ~ 48.6°(Tele)	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 : 192° / V : 192° / D : 192°
	Focus Control	Simple focus (motorized V/F) / Manual	-	Simple focus
OPERATIONAL	IR Viewable Length	50m (164.04ft)	30m (98.43ft)	15m (49.21ft)
	Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	-
	Day & Night	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
	Digital Image Stabilization	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, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Heatmap, People counting, Queue management
FEATURES	Protocol	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
	Alarm I/O	1 / 1	1 / 1	1 / 1
	Audio	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
	Environment Protection	IP67, IP66, NEMA 4X, IK10+	IK08	IP66, IK10 (XNF-8010RV/8010RVM)
	Operating Temperature	-40℃ ~ +55℃ (-40°F ~ +131°F)	-10℃ ~ +55℃ (+14°F ~ +131°F)	-10℃ ~ +55℃ (+14°F ~ +131°F) (XNF-8010R) -40℃ ~ +55℃ (-40°F ~ +131°F) (XNF-8010RV/8010RVM)
	Power	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	Max. 11W (12V DC), Max. 12W (PoE) (XNF-8010R) Max. 12W (12V DC), Max. 12.95W (PoE) (XNF-8010RV, XNF-8010RVM)
	Dimensions (WxHxD) / Weight	Ø162 X 120.5mm (Ø6.38" x 4.74") 2.68kg (5.91lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84 lb)	Ø146 x 54.8mm (Ø5.75" x 2.16") 730g (1.61 lb) (XNF-8010R) Ø146 x 65.8mm (Ø5.75" x 2.59") 785g (1.73 lb) (XNF-8010RV) 790g (1.74 lb) (XNF-8010RVM)
	Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View, SUS316L	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarpping, Handover, WiseStream II, Heatmap, People counting, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc)

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Wisenet X XNZ-6320 NEW	Wisenet X XNB-6005	Wisenet X XNB-6000	Wisenet X XNZ-L6320
2MP	2MP	2MP	2MP
1.28"" 2.4M CMOS	1/2" 2.17M CMOS	1/2.8" 2M CMOS	1.28"" 2.4M CMOS
H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
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)
Color : 0.05Lux B/W : 0.005Lux	Color : 0.006Lux B/W : 0.0006Lux	Color : 0.01Lux B/W : 0.001Lux	Color : 0.05Lux B/W : 0.005Lux
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
4.44 ~ 142.6mm (Optical 32x) (F1.6)	-	-	4.44 ~ 142.6mm (Optical 32x) (F1.6)
H : 61.8°(Wide) ~ 2.19°(Tele) / V : 36.2°(Wide) ~ 1.24°(Tele)	-	-	H : 61.8°(Wide) ~ 2.19°(Tele) / V : 36.2°(Wide) ~ 1.24°(Tele)
Auto / Manual / One shot AF	Simple focus / Manual	Simple focus / Manual	Auto / Manual / One shot AF
-	-	-	-
-	-	-	-
True (ICR)	True (ICR)	True (ICR)	True (ICR)
WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (120dB)
SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)
Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Sound classification, Shock detection	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, Sound classification, Shock detection
ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G/T, SUNAPI
1 / 1	1 / 1	1 / 1	1 / 1
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
-	-	-	-
-10℃ ~ +55℃ (+14°F ~ +131°F)	-10℃ ~ +55℃ (+14°F ~ +131°F)	-10℃ ~ +55℃ (+14°F ~ +131°F)	-10℃ ~ +55℃ (+14°F ~ +131°F)
Max 6.7W (12VDC) Max 7W (PoE)	Max. 9W (24V AC) Max. 8W (12V DC) Max. 8.5W (PoE)	Max. 8W (24V AC) Max. 6.5W (12V DC) Max. 7.5W (PoE)	Max 6.7W (12VDC) Max 7W (PoE)
73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)
SFP Slot, RS-485/RS-422, extraLUX, Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	extraLUX, 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	SFP Slot, RS-485/RS-422, extraLUX, Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View

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WISENET X

	Wisenet X XNB-6001 Main unit	**Wisenet X** SLA-T4680/V 4.6mm Pinhole lens	**Wisenet X** SLA-T2480/V 2.4mm Pinhole lens	**Wisenet X** SLA-T1080F Fisheye Lens	**Wisenet X** XNB-H6241A ATM Camera Kit	**Wisenet X** XNB-H6461H Height Strip	**Wisenet X** XNB-H6280B Bandit Barrier	**Wisenet X** SLA-T4680D / T4680DW / T4680DS Door Jamb Lens	**Wisenet X** SHD-46VDB / SHD-46VDE Flush Mount Door Mullion
Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP	2MP	2MP

VIDEO

	XNB-6001	SLA-T4680/V	SLA-T2480/V	SLA-T1080F	XNB-H6241A	XNB-H6461H	XNB-H6280B	SLA-T4680D...	SHD-46VDB/E
Imaging Device	-	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M 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	2MP / 60fps	-	-	-	2MP / 60fps	2MP / 60fps	2MP / 60fps	-	-
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	-	0.06Lux	0.45Lux	0.03Lux	Color : 0.45Lux B/W : 0.45Lux	0.06Lux	Color : 0.03 Lux (F1.6, 1/30sec)	0.06Lux	0.06Lux
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	-	4.6mm Pinhole (F2.5)	2.4mm fixed (F2.0)	1.6mm fixed (F1.6)	2.4mm Fixed focal	4.6mm Fixed focal	2.8mm Fixed focal	4.6mm Pinhole (F2.5)	4.6mm Pinhole (F2.5)
Angular Field of View	-	H : 73° / V : 39° / D : 85°	H : 138° / V : 73° / D : 168°	H : 187° / V : 113.9°	H : 138° /V : 73° / D : 168°	H : 73° / V : 39° / D : 85°	H : 107.4° / V : 62.2° / D : 122.0°	H : 73° / V : 39° / D : 85°	H : 73° / V : 39° / D : 85°
Focus Control	-	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
Day & Night	-	Electrical	Electrical	Electrical	Electrical	Electrical	Electrical	Electrical	Electrical
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	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	-	-	-	Off / On	Off / On	Off / On	-	-
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection, Face detection, Digital auto tracking, Heatmap, People counting, Queue management	-	-	-	Tampering, Loitering, Directional detection, Defocus detection, Fog & Dust detection, Virtual line, Enter/ Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, People counting, Heatmap, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog & Dust detection, Virtual line, Enter/ Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, People counting, Heatmap, Queue management	Tampering, Loitering, Directional / Virtual Line detection, Defocus detection, Fog detection, Enter / Exit, (Dis) Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification, People counting, Heatmap, Queue management	-	-

FEATURES

	XNB-6001	SLA-T4680/V	SLA-T2480/V	SLA-T1080F	XNB-H6241A	XNB-H6461H	XNB-H6280B	SLA-T4680D...	SHD-46VDB/E
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	-	-
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)	-10°C ~ +55°C (+14°F ~ +131°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)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Power	Max. 6.5W (12V DC) Max. 6W (PoE)	-	-	-	Max. 6.5W (12V DC) Max. 6W (PoE)	Max. 6.5W (12V DC) Max. 6W (PoE)	Max. 6.5W (12V DC) Max. 6W (PoE)	-	-
Dimensions (WxHxD) / Weight	131.1 x 28 x 86mm (5.16" x 1.10" x 3.39") 245g (0.54 lb)	Ø24 x 42mm (Ø0.94" x 1.65") (Lens) 8m (314.96") (Cable) 310g (0.68 lb)	Ø24 x 49.8mm (Ø0.94" x 1.96") (Lens) 8m (314.96") (Cable) 318g (0.70 lb)	Ø68.9 x 35mm (Ø2.71" x 1.38") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)	131.1 X 28 X 86MM (5.16" X 1.10" X 3.39") 245G (0.54 LB)	866.1 X 43.7 X 35.1MM (1.72" X 34.10" X 1.38")	66.5X46X175~737MM (2.6X1.8X6.9~29.0")	Ø24 X 42MM (Ø0.94" X 1.65") (LENS) 8M (314.96") (CABLE) 310G (0.68 LB)	1.76" X 4.01" X 1.11" (44.7 X 101.9 X 28.2MM)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Lens module for XNB-6001	Lens module for XNB-6001	Lens module for XNB-6001	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	Lens module for XNB-6001 SLA-T4680D (Black color) SLA-T4680DW (White color) SLA-T4680DS (Silver color) Requires XNB-6001 main unit	Requires XNB-6001 main unit & SLA-T4680V lens

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| Wisenet X | Wisenet X | Wisenet X | Wisenet X | Wisenet X |
XNO-6120R / XNO-6120R/LPR	XNO-6085R	XNO-6080R	XNO-L6080R	XNO-6010R / 6020R
2MP	2MP	2MP	2MP	2MP
1/2.8" 2M CMOS	1/2" 2.17M 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
2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 5 Profiles)	Multiple (Up to 10 Profiles)
20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Color : 0.03Lux B/W : 0Lux (IR LED on)	Color : 0.004Lux B/W : 0Lux (IR LED on)	Color : 0.015Lux B/W : 0Lux (IR LED on)	Color : 0.1Lux B/W : 0Lux (IR LED on)	Color : 0.055Lux (XNO-6010R), 0.015Lux (XNO-6020R) 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
5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	4.1 ~ 16.4mm (Optical 4x) motorized V/F F0.94(Wide) / F2.4(Tele)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	3.2 ~ 10mm (3.1x) motorized V/F F1.6(Wide) / F2.9(Tele)	2.4mm fixed (F2.0) (XNO-6010R) 4mm fixed (F1.4) (XNO-6020R)
H : 54.58°(Wide) ~ 5.30°(Tele) / V : 32.19°(Wide) ~ 3.00°(Tele) / D : 61.40°(Wide) ~ 6.06°(Tele)	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9°(Tele) / V : 62.8° (Wide) ~ 15.7°(Tele) / D : 142.1° (Wide) ~ 32.0°(Tele)	H : 109.0° (Wide) ~ 33.2°(Tele) / V : 57.4° (Wide) ~ 18.7°(Tele) / D : 132.0° (Wide) ~ 38.0°(Tele)	H : 139.0° / V : 73.0° / D : 167.0° (XNO-6010R) H : 88.6° / V : 47.5° / D : 104.8° (XNO-6020R)
Auto / Manual / One shot AF	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	-
70m (229.66ft)	70m (229.66ft)	50m (164.04ft)	30m (98.43ft)	20m (65.61ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)
-	-	-	-	-
True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
WDR (150dB)	WDR (150dB)	WDR (150dB)	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 (Built in Gyro sensor)	Support	Support	Support
Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, 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, Motion detection, Defocus detection	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
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	IP67, IP66, NEMA 4X, IK10	IP66, IK10	IP67, IP66, NEMA 4X, IK10
-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°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)
Max. 14.5W (24V AC) Max. 12.5W (12V DC) Max. 12.95W (PoE)	Max. 14.5W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 15W (24V AC) Max. 12W (12V DC) Max. 12.95W (PoE)	Max. 11W, typical 5W (PoE)	Max. 8.8W (12V DC) Max. 9.7W (PoE)
Ø91.0 x 368.6mm (Ø3.58" x 14.51") 2.18Kg (4.81 lb)	Ø91.0 x 388.6mm (Ø3.58" x 15.30") 2.35Kg (5.18 lb)	Ø91.0 x 368.6mm (Ø3.58" x 14.51") (Without Sunshield) 2.18Kg (4.81 lb)	Ø91.0 x 322.9mm (Ø3.58" x 12.71") 1.298Kg (4.25 lb)	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 (2.69 lb)
Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View, Low Speed LPR solution (for LPR model only)	extraLUX, 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	WiseStream II, Lens distortion correction, Defog, 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-6085V	Wisenet X XND-6081VZ / 6081FZ	Wisenet X XND-6080V	Wisenet X XND-6080RV
	Resolution	2MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/2" 2.17M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M 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	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
	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 : 0.004Lux B/W : 0.0004Lux	Color : 0.015Lux B/W : 0.0015Lux	Color : 0.015Lux B/W : 0.0015Lux	Color : 0.015Lux 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	4.1 ~ 16.4mm (Optical 4x) F0.94(Wide) / F2.4(Tele)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)
	Angular Field of View	H : 100°(Wide) ~ 26.2°(Tele) / V : 54°(Wide) ~ 14.8°(Tele) / D : 116°(Wide) ~ 30.0° (Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0° (Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0° (Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0° (Tele)
	Focus Control	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual
OPERATIONAL	IR Viewable Length	-	-	-	30m (98.43ft)
	Pan / Tilt / Rotate	±175° / ±73° / ±175°	±175° / 0~85° / ±175° (XND-6081VZ) ±175° / 0~90° / ±175° (XND-6081FZ)	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
	Day & Night	True (ICR)	Auto (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
	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 (Built in Gyro sensor)	Support (Built in Gyro sensor)	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, Shock detection, 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
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	IP52, IK10 (XND-6081VZ) IP52, Plenum rated (XND-6081FZ)	IK08	IK08
	Operating Temperature	-30°C ~ +55°C (+22°F ~ +131°F) *Start up avoce -10°C (+14°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)
	Power	Max. 8.6W (12V DC) Max. 10.2W (PoE)	Max. 8.5W, typical 3.71W (12V DC) Max. 10W, typical 4.8W (PoE)	Max. 6W (12V DC) Max. 6.5W (PoE)	Max. 9W (12V DC) Max. 10W (PoE)
	Dimensions (WxHxD) / Weight	Ø160 x 140.0mm (Ø6.30" x 5.51") 1.25 kg (2.76 lb)	Ø160 x 125mm (6.30" x 4.92") 1.45kg (3.2lb) (XND-6081VZ) Ø205 x 150mm (8.07" x 5.91") 1.85kg (4.08lb) (XND-6081FZ)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 714g (1.57lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 724g (1.60 lb)
	Additional Features	extraLUX, Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View, Motorized Pan / Tilt / Rotate	Motorized Pan / Tilt / Rotate, Modular design, Anti dust	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-L6080RV	Wisenet X XND-L6080V	Wisenet X XND-6010	Wisenet X XND-6020R	Wisenet X XND-6011F
2MP	2MP	2MP	2MP	2MP
1/2.8" 2M 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
2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
Multiple (Up to 5 Profiles)	Multiple (Up to 5 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 : 0.1Lux B/W : 0Lux (IR LED on)	Color : 0.1Lux B/W : 0.01Lux	Color : 0.055Lux (F2.0, 1/30sec) B/W : 0.0055Lux (F2.0, 1/30sec)	Color : 0.015Lux (F1.4, 1/30 sec) B/W : 0Lux (IR LED on)	Color : 0.055Lux (F2.0, 1/30 sec) B/W : 0.055Lux (F2.0, 1/30 sec)
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 US B type B
3.2 ~ 10mm (3.1x) motorized varifocal F1.6 (Wide) ~ F2.9 (Tele)	3.2 ~ 10mm (3.1x) motorized varifocal F1.6 (Wide) ~ F2.9 (Tele)	2.4mm fixed (F2.0)	4mm fixed (F1.4)	2.8mm fixed (F2.0)
H : 109.0°(Wide) ~ 33.0° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)	H : 109.0°(Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)	H : 139.0° / V : 73.0° / D : 167.0°	H : 88.6° / V : 47.5° / D : 104.8°	H : 112° / V : 62° / D : 130°
Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	-	-	-
30m (98.43ft)	-	-	-	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° ~ 355° / 0° ~ 47°/ 0° ~ 353°
True (ICR)	True (ICR)	True (ICR)	True (ICR)	Electrical
WDR (120dB)	WDR (120dB)	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, Motion detection, Defocus detection	Tampering, Motion detection	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, 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
-	-	Bi-Directional	Bi-Directional	Uni-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
IK08	IK08	IK08	IK08	-
-10°C ~ +55°C (+14°F ~ +131°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)	-10°C ~ +55°C (+14°F ~ +131°F)
Max. 8W, typical 4W (PoE)	Max. 6W, typical 4W (PoE)	Max. 5.5W (12V DC) Max. 6W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	Max. 4.7W
Ø140.8 x 113.0mm (Ø5.54" x 4.45") 714g (1.60 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 714g (1.60 lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 365g (0.80 lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84 lb)	Ø98.9 x 129.1mm (Ø3.89" x 5.08") * Use a 83 ~ 86mm (3.25" ~ 3.4") diameter hole saw
WiseStream II, Lens distortion correction, Defog, Hallway View	WiseStream II, Lens distortion correction, Defog, 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

		Wisenet X XNV-6120 / 6120R / XNV-6120R/LPR	Wisenet X XNV-6120RS	Wisenet X XNV-6085
	Resolution	2MP	2MP	2MP
VIDEO	Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2" 2.17M CMOS
	Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps
	Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
	Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	Color : 0.03Lux B/W : 0.003Lux (XNV-6120) Color : 0.03Lux B/W : 0Lux (IR LED on) (XNV-6120R)	Color : 0.03Lux B/W : 0Lux (IR LED on)	Color : 0.004Lux B/W : 0.0004Lux
	Video Output	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
	Lens	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	4.1 ~ 16.4mm (Optical 4x) F0.94(Wide) / F2.4(Tele)
	Angular Field of View	H : 54.58°(Wide) ~ 5.30°(Tele) / V : 32.19°(Wide) ~ 3.00°(Tele) / D : 61.40°(Wide) ~ 6.06°(Tele)	H : 54.58°(Wide) ~ 5.30°(Tele) / V : 32.19°(Wide) ~ 3.00°(Tele) / D : 61.40°(Wide) ~ 6.06°(Tele)	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)
	Focus Control	Auto / Manual / One shot AF	Auto / Manual / One shot AF	Simple focus (motorized V/F) / Manual
OPERATIONAL	IR Viewable Length	70m (229.66ft) (XNV-6120R)	70m (229.66ft)	-
	Pan / Tilt / Rotate	0° ~ 354° / 0°~ 75° / 0°~ 355°	0° ~ 354° / 0°~ 75° / 0°~ 355°	±175° / ±73° / ±175°
	Day & Night	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (150dB)	WDR (150dB)	WDR (150dB)
	Digital Noise Reduction	SSNR**V** (2D+3D Noise filter)	SSNR**V** (2D+3D Noise filter)	SSNR**V** (2D+3D Noise filter)
	Digital Image Stabilization	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)
	Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/ Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, 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
FEATURES	Protocol	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
	Alarm I/O	1 / 1	1 / 1	1 / 1
	Audio	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
	Environment Protection	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10+	IP67, IP66, NEMA 4X, IK10
	Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)
	Power	Max. 8.2W (24V AC), Max. 7W (12V DC), Max. 7.8W (PoE) (XNV-6120) Max. 14W (24V AC), Max. 11.5W (12V DC), Max. 12.95W (PoE) (XNV-6120R)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 13.5W (24V AC), Max. 11.1W (12V DC), Max. 12.1W (PoE)
	Dimensions (WxHxD) / Weight	Ø160.0 x 128.5mm (Ø6.30" x 5.06") 985g (2.17 lb) (XNV-6120) 995g (2.19 lb) (XNV-6120R)	Ø162 x 130.5mm (Ø6.38" x 5.14") 2.92kg (6.44lb)	Ø160.0 x 140.0mm (Ø6.30" x 5.51") 1.40kg (3.09 lb)
	Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View, Low Speed LPR solution (for LPR model only)	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View, SUS316L	extraLUX, Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc) Hallway View, Motorized Pan / Tilt / Rotate

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	Wisenet X **XNV-6081Z** NEW	Wisenet X **XNV-6080**	Wisenet X **XNV-6080R**	Wisenet X **XNV-6080RS**	Wisenet X **XNV-L6080**
	2MP	2MP	2MP	2MP	2MP
	1/2.8" 2M 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
	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 5 Profiles)
	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Color : 0.015Lux B/W : 0.0015Lux	Color : 0.015Lux B/W : 0.0015Lux	Color : 0.015Lux B/W : 0Lux (IR LED on)	Color : 0.015Lux B/W : 0Lux (IR LED on)	Color : 0.1 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
	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	3.2 ~ 10mm motorized V/F F1.6(Wide) / F2.9(Tele)
	H : 119.5°(Wide) ~ 27.9° (Tele) / V : 62.8°(Wide) ~ 15.7° (Tele) / D : 142.1°(Wide) ~ 32.0° (Tele)	H : 119.5°(Wide) ~ 27.9° (Tele) / V : 62.8°(Wide) ~ 15.7° (Tele) / D : 142.1°(Wide) ~ 32.0° (Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0°(Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0°(Tele)	H : 109.0°(Wide) ~ 33.2°(Tele) / V : 57.4°(Wide) ~ 18.7°(Tele) / D : 132.0°(Wide) ~ 38.0°(Tele)
	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual
	-	-	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)
	±175° / ±85° / ±175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
	AUTO (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (120dB)
	SSNR**V** (2D+3D Noise filter)	SSNR**V** (2D+3D Noise filter)	SSNR**V** (2D+3D Noise filter)	SSNR**V** (2D+3D Noise filter)	SSNR**V** (2D+3D Noise filter)
	-	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, Shock detection, 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	Tampering, Motion detection, Defocus detection
	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	-
	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, IP6K9K, NEMA 4x, IK10+	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10+	IP66, IK10
	-50℃ ~ +60℃ (-58°F ~ +140°F) * Start up above -35℃ (-31°F)	-40℃ ~ +55℃ (-40°F ~ +131°F)	-40℃ ~ +55℃ (-40°F ~ +131°F)	-40℃ ~ +55℃ (-40°F ~ +131°F)	-40℃ ~ +55℃ (-40°F ~ +131°F)
	Optional	Max. 8.2W (24V AC) Max. 7W (12V DC) Max. 7.8W (PoE)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 8W, Typical 5W
	Ø180 x 125mm (7.09" x 4.92") 1.75kg (3.86lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 985g (2.17 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 995g (2.19 lb)	Ø162 x 120.5mm (Ø6.38" x 4.74") 2.68kg (5.91lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 995g (2.19 lb)
	Motorized Pan / Tilt / Rotate, Modular design	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, SUS316L	WiseStream II, Lens distortion correction, Defog, Hallway View

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		Wisenet X XNV-L6080R	Wisenet X XNV-6022R / 6022RM	Wisenet X XNV-6020R	Wisenet X XNV-6013M
	Resolution	2MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M 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	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
	Streaming Capacity	Multiple (Up to 5 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 : 0.1 Lux, B/W : 0Lux (IR LED on)	Color : 0.04Lux B/W : 0Lux (IR LED on)	Color : 0.015Lux B/W : 0Lux (IR LED on)	Color : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)
	Video Output	CVBS 1.0Vpp, Micro USB type B	Micro USB type B	CVBS 1.0Vpp, Micro USB type B	Micro USB type B
	Lens	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	3.6mm fixed (F2.0)	4mm fixed (F1.4)	2.8mm fixed (F2.0)
	Angular Field of View	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)	H : 94.8° / V : 49.3° / D : 114.3°	H : 88.6° / V : 47.5° / D : 104.8°	H : 110.2° / V : 62.7° / D : 125.4°
	Focus Control	Simple focus (motorized V/F) / Manual	-	-	-
OPERATIONAL	IR Viewable Length	30m (98.43ft)	15m (49.21ft)	30m (98.43ft)	-
	Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / 0 ~ 67° / ±90°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / 12° / ±90°
	Day & Night	True (ICR)	True (ICR)	True (ICR)	Electrical
	Backlight Compensation	WDR (120dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
	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, Defocus detection, Motion detection	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
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	-
	Audio	-	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	IP66, IK10	IP66, NEMA 4X, IK10	IP67, IP66, IK10	IP67, IK10, NEMA4X, IP6K9K
	Operating Temperature	-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)	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)
	Power	Max. 11W (PoE)	Max. 6.7W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	7.2W (PoE)
	Dimensions (WxHxD) / Weight	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 940g (2.07 lb)	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65 lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36 lb)	105 x 74 x 128mm (4.13" x 2.91" x 5.04") 478g (1.04 lb)
	Additional Features	WiseStream II, Lens distortion correction, Defog, Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View M12 Connector (XNV-6022RM)	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classifiaction, (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View, M12 Connector

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	Wisenet X XNV-6012M / 6012	Wisenet X XNV-6011W / 6011	Wisenet X XNV-6010	Wisenet X XNP-6550RH	Wisenet X XNP-6370RH	Wisenet X XNP-6320RH (NEW)
	2MP	2MP	2MP	2MP	2MP	2MP
	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2.16M CMOS	1/1.9" 2M CMOS	1/2.8" 2MP 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	H.265, H.264, MJPEG
	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Up to 10 Profiles
	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	15 (Unicast)	20 (Unicast)
	Color : 0.04Lux B/W : 0.04Lux	Color : 0.055Lux B/W : 0.055Lux	Color : 0.055Lux B/W : 0.0055Lux	Color : 0.02Lux (1/30sec, F1.6) B/W : 0.002Lux (1/30sec, F1.6) 0Lux (IR LED on)	Color : 0.05Lux B/W : 0Lux (IR LED on)	Color : 0.05Lux(F1.6) B/W : 0Lux (IR LED on)
	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	CVBS 1.0Vp-p
	2.4mm fixed (F2.0)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)	4.75mm ~ 261.4mm (IR Corrected Optical 55x) F1.6(Wide) / F6.5(Tele)	6mm ~ 222mm (IR Corrected Optical 37x) F1.5 (Wide) / F4.6 (Tele)	4.44 ~ 142.6mm (32x) zoom
	H : 135.4° / V : 71.2° / D : 161.6°	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°	H : 58.6°(Wide) ~ 1.23°(Tele) / V : 34.8°(Wide) ~ 0.71°(Tele)	H : 59.3°(Wide) ~ 1.9°(Tele) / V : 35.8°(Wide) ~ 1.1°(Tele)	H : 58.6° (Wide) ~ 1.23˚ (Tele) / V : 34.8° (Wide) ~ 0.71˚ (Tele)
	-	-	-	AF / One-shot AF / Manual	AF / One-shot AF / Manual	One-shot AF
				500m (1,640ft)	350m (1,148.29ft)	200m (656.17ft)
	±5° / 0 ~ 67°/ ±90°	0° ~ 353° / 0° ~ 59° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 95° (-5° ~ 90°) / -
	Auto (Electrical)	Auto (Electrical)	True (ICR)	True (ICR)	True (ICR)	Auto (ICR)
	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (120dB)	WDR (120dB)	150dB
	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNR (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV
	Support	Support	Support	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)
	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, Motion detection, Face detection, Digital auto tracking, People counting, Heatmap, 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, Fog detection,Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification	Tampering, Crossing, Enter/Exit, (Dis)Appear, Audio detection	Tampering, Loitering, Directional detection, Fog detection,Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, 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	ONVIF profile S/G/T, SUNAPI
	-	-	1 / 1	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)
	Bi-directional	-	Bi-Directional	Bi-Directional	Bi-Directional	Selectable (mic in/line in) / Line out
	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	Micro SD/SDHC/SDXC
	IP66, IK10, NEMA4X	IP66, NEMA4X, IK10	IP67, IP66, NEMA4X, IK10	IP66, IK10	IP66, IK10	IP66, IK10
	-30℃ ~ +55℃ (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30℃ ~ +55℃ (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30℃ ~ +55℃ (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-50℃ ~ +55℃ (-58°F ~ +131°F) (24V AC) -40℃ ~ +55℃ (-22°F ~ +131°F) * Start up above -30°C (-22°F) (HPoE)	-50℃ ~ +55℃ (-58°F ~ +131°F)	HPoE : -40℃ ~ +55℃ (-40°F ~ +131°F) * Start up above -35°C 24VAC : -50℃ ~ +55℃ (-58°F ~ +131°F)
	Max. 6.5W (PoE)	Max. 6.5W (PoE)	Max. 5.5W (12V DC) Max. 6W (PoE)	Max. 90W (24VAC) 60W (HPoE) Injector included	Max. 60.0W / 90.0W - Heater off / on, IR on (24V AC)	HPoE : Max 51W, typical 30W 24VAC : Max 83W, typical 30W Injector included
	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65 lb)	Ø112.8 x 63.7mm (Ø4.44" x 2.51") 420g (0.93 lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 625g (1.38 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.2kg (15.87 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)	Ø236.9x407.7mm (9.33x16.05"), 6.8Kg (14.99 lb)
	Handover, WiseStream II, Advanced video analytics, Sound classification, (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View, M12 Connector (XNV-6012M)	Handover, WiseStream II, Advanced video analytics, Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Optical Defog, WiseStream II, Advanced video analytics, Auto tracking	Defog, WiseStream, Auto tracking	Azimuth display, Defog, WiseStreamII, Auto Tracking

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WISENET X

		Wisenet X	Wisenet X	Wisenet X	Wisenet X
		XNP-6320H / 6320	XNP-6320HS	XNP-6120H	XNP-6040H
	Resolution	2MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/2.8" 2.4M CMOS	1/2.8" 2.4M CMOS	1/2.8" 2M CMOS	1/2.8" 2M 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	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
	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 : 0.05Lux B/W : 0.005Lux	Color : 0.05Lux B/W : 0.005Lux	Color : 0.03Lux B/W : 0.003Lux	Color : 0.015Lux B/W : 0.0015Lux
	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	4.44 ~ 142.6mm (Optical 32x) F1.6 (Wide) / F4.4 (Tele)	4.44 ~ 142.6mm (Optical 32x) F1.6 (Wide) / F4.4 (Tele)	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	2.8 ~ 12mm (Optical 4.3x) (F1.4)
	Angular Field of View	H : 61.8°(Wide) ~ 2.19°(Tele) / V : 36.2°(Wide) ~ 1.24°(Tele)	H : 61.8°(Wide) ~ 2.19°(Tele) / V : 36.2°(Wide) ~ 1.24°(Tele)	H : 54.58°(Wide) ~ 5.30°(Tele) / V : 32.19°(Wide) ~ 3.00°(Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0°(Tele)
	Focus Control	Auto / Manual / One shot AF	Auto / Manual / One shot AF	Auto / Manual / One shot AF	Auto / Manual / One shot AF
OPERATIONAL	IR Viewable Length	-	-	-	-
	Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°)	360° Endless / 210° (-15° ~ 195°)	360° Endless / 190° (-5° ~ 185°)	0° ~ 355° / 0° ~ 90°
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
	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 (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)
	Video & Audio Analytics	Tampering, Loitering, Directional detection, Fog detection,Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification	Tampering, Loitering, Directional detection, Fog detection,Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification	Tampering, Loitering, Directional detection, Fog detection,Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion 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	4 / 2 (Relay)	4 / 2 (Relay)	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	IK10 (with XNP-6320H)	IP67, IP66, NEMA4X, IK10	IP66, IK10	IP66, IK10
	Operating Temperature	(XNP-6320H) -50℃ ~ +55℃ (-58°F ~ +131°F) (24V AC) * Less than 90% RH -35℃ ~ +55℃ (-31°F ~ +131°F) (PoE+) * Start up should be done at above -30℃ (-22°F) (XNP-6320) -10℃ ~ +55℃ (+14°F ~ +131°F)	-50℃ ~ +55℃ (-58°F ~ +131°F) (24V AC) * Start up above -40℃ (-40°F) -35℃ ~ +55℃ (-31°F ~ +131°F) (PoE+) * Start up above -25℃ (-13°F)	-30℃ ~ +55℃ (-22°F ~ +131°F)	-30℃ ~ +55℃ (-22°F ~ +131°F)
	Power	(XNP-6320H) Max. 24.0W - Heater off (24V AC, PoE+) Max. 65.0W - Heater on (24V AC) (XNP-6320) Max. 20.0W (24V AC, PoE+)	Max. 24.0W - Heater off (24V AC, PoE+) Max. 65.0W - Heater on (24V AC)	Max. 12W (12V DC, PoE)	Max. 8.6W (12V DC) Max. 9.6W (PoE)
	Dimensions (WxHxD) / Weight	Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb)	Ø227 x 296mm (Ø8.94" x 11.65") 5.3Kg (11.68 lb)	Ø168.0 x 161.5mm (Ø6.61" x 6.36") 1.9kg (4.19 lb)	Ø136.1 x 106.1mm (Ø5.36" x 4.18") 0.78 kg (1.72 lb)
	Additional Features	WiseStream II, Advanced video analytics, Auto Tracking, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc)	WiseStream II, Advanced video analytics, Auto Tracking, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), SUS316L	WiseStream II, Advanced video analytics, Auto Tracking, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc)	WiseStream II, Advanced video analytics, Auto Tracking, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc)

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	Wisenet X PLUS **XND-8081VZ**	Wisenet X PLUS **XND-8081FZ**	Wisenet X PLUS **XNV-8081Z**
Type	Indoor vandal dome	Indoor flush mount	Outdoor vandal dome
Imaging Device	1/1.8" 6M CMOS		
Video Compression Format	H.265, H.264, MJPEG		
Resolution / Max. Frame Rate	5MP/30fps		
Streaming Capacity	Multiple (Up to 10 Profiles)		
Max. User Access	20 (Unicast)		
Min. Illumination	Color : 0.07Lux B/W : 0.007Lux		
Video Output	CVBS 1.0Vpp, Micro USB type B		
Lens	3.6~9.4mm (2.6x) motorized V/F (F1.2)		
Angular Field of View	H : 102.5°(Wide) ~ 38.7°(Tele) / V : 74.2°(Wide) ~ 29.0°(Tele)/ D : 135.5°(Wide) ~ 48.6°(Tele)		
Focus Control	Simple focus (motorized V/F) / Manual		
Pan / Tilt / Rotate	±175° / 0~85° / ±175°		
Day & Night	True (ICR)		
Backlight Compensation	WDR (120dB)		
Digital Noise Reduction	SSNR**V** (2D+3D Noise filter)		
Digital Image Stabilization	Support (Built in Gyro sensor)		
Video & Audio Analytics	Tampering, Loitering, Directional detection, Fog detection,Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification, Shock detection, Heatmap, Peaple counting, Queue management, Audio Playback on event		
Protocol	ONVIF profile S/G, SUNAPI		
	1/1		
Audio	Bi-Directional		
Edge Storage	SD/SDHC/SDXC, NAS, Local PC		
Environment Protection	IP52, IK10	IP52, Plenum rated(UL2820)	IP67, IP66, IP6K9K, NEMA 4X, IK10+
Operating Temperature	-25℃ ~ +60℃ (-13°F ~ +140°F) Max. 8.5W (12V DC) Max. 10W (PoE)		-50℃ ~ +60℃ (-58°F ~ +140°F) *Start up above -35℃ (-31°F)
Power			Max. 11W (24V AC) Max. 9.5W (12V DC) Max. 11W (PoE)
Dimensions (WxHxD) / Weight	Ø160 x 125mm (6.30" x 4.92") 1.45Kg (3.2 lb)	Ø205 x 155mm (8.07" x 6.10") 1.85Kg (4.08 lb)	Ø180 x 125mm (7.09" x 4.92") 1.75kg (3.86 lb)
Additional Features	Motorized Pan / Tilt / Rotate, Modular design		

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WISENET X PLUS

| Type	Wisenet X PLUS XND-6081VZ	Wisenet X PLUS XND-6081FZ	Wisenet X PLUS XNV-6081Z
Type	Indoor vandal dome	Indoor flush mount	Outdoor vandal dome
Imaging Device	1/2.8" 2M CMOS		
Video Compression Format	H.265, H.264, MJPEG		
Resolution / Max. Frame Rate	2MP/60fps		
Streaming Capacity	Multiple (Up to 10 Profiles)		
Max. User Access	20 (Unicast)		
Min. Illumination	Color : 0.15Lux B/W : 0.0015Lux		
Video Output	CVBS 1.0Vpp, Micro USB type B		
Lens	2.8~12mm (4.3x) motorized V/F (F1.4)		
Angular Field of View	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele)/ D : 142.1°(Wide) ~ 32.0°(Tele)		
Focus Control	Simple focus (motorized V/F) / Manual		
Pan / Tilt / Rotate	±175° / 0~85° / ±175°		
Day & Night	True (ICR)		
Backlight Compensation	WDR (150dB)		
Digital Noise Reduction	SSNRV (2D+3D Noise filter)		
Digital Image Stabilization	Support (Built in Gyro sensor)		
Video & Audio Analytics	Tampering, Loitering, Directional detection, Fog detection,Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification, Shock detection, Heatmap, Peaple counting, Queue management, Audio Playback on event		
Protocol	ONVIF profile S/G, SUNAPI		
	1/1		
Audio	Bi-Directional		
Edge Storage	SD/SDHC/SDXC, NAS, Local PC		
Environment Protection	IP52, IK10	IP52, Plenum rated(UL2820)	IP67, IP66, IP6K9K, NEMA 4X, IK10+
Operating Temperature	-25℃ ~ +60℃ (-13°F ~ +140°F)		-50℃ ~ +60℃ (-58°F ~ +140°F) *Start up above -35℃ (-31°F)
Power	Max. 8.5W (12V DC) Max.10W (PoE)		Max. 11W (24V AC) Max. 9.5W (12V DC) Max. 11W (PoE)
Dimensions (WxHxD) / Weight	Ø160 x 125mm (6.30" x 4.92") 1.45Kg (3.2 lb)	Ø205 x 155mm (8.07" x 6.10") 1.85Kg (4.08 lb)	Ø180 x 125mm (7.09" x 4.92") 1.75kg (3.86 lb)
Additional Features	Motorized Pan / Tilt / Rotate, Modular design		

※ Design and specifications are subject to change without notice.

Accessory Configuration

XNV-6081Z / 8081Z

White Acc

SBP-187HMW
Hanging Mount

SBP-167HMW
Hanging Mount

SBP-300CMW
Ceiling Mount

SBP-300WMW1
Wall Mount

SBP-300WMW
Wall Mount (swan-neck)

SBP-300PMW
Pole mount

SBP-300KMW
Corner mount

XND-6081VZ / 8081VZ

Ivory Acc

SBP-187HM
Hanging Mount

SBP-167HM
Hanging Mount

SBP-300LM
Parapet Mount

SBP-300CM
Ceiling Mount

SBP-300WM1
Wall Mount

SBP-300WM
Wall Mount (Swan-neck)

SBP-300NB
Installation Box

SBP-300B
Wall Mount Base

SBP-300PM
Pole Mount

SBP-300KM
Corner Mount

Notes

www.HanwhaVisionAmerica.com

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For more information visit us at

HanwhaVisionAmerica.com

Hanwha Vision America

500 Frank W. Burr Blvd. Suite 43 Teaneck, NJ 07666
Toll Free : +1.877.213.1222
Direct : +1.201.325.6920
Fax : +1.201.373.0124
www.HanwhaVisionAmerica.com