

WISENET



Product line-up

1st Quarter 2018



Security Solutions

1977 Established the company

1991 Initiation of video surveillance business

1993 Development of nation's first iris lens for CCTV

2008 Release of world's first 37x PTZ camera

2010 Samsung Techwin acquires Samsung's video surveillance business

2012 Release of world's first 37x zoom interworking IR PTZ camera

2013 Release of Wisenet3 camera

2015 Hanwha group acquires Samsung Techwin and Hanwha Techwin is established

2016 Development of WISENET5 ISP Chip (SoC)

Wisenet is the signature brand of Hanwha Techwin's security business.
It embodies the spirit of building a safe, secure, and connected world.

Based on world class optical image processing technology, Wisenet provides high-resolution cameras, recording devices and enterprise management software. For a complete security solution including intelligent video analytics, Hanwha offers a full lineup of video surveillance solutions.





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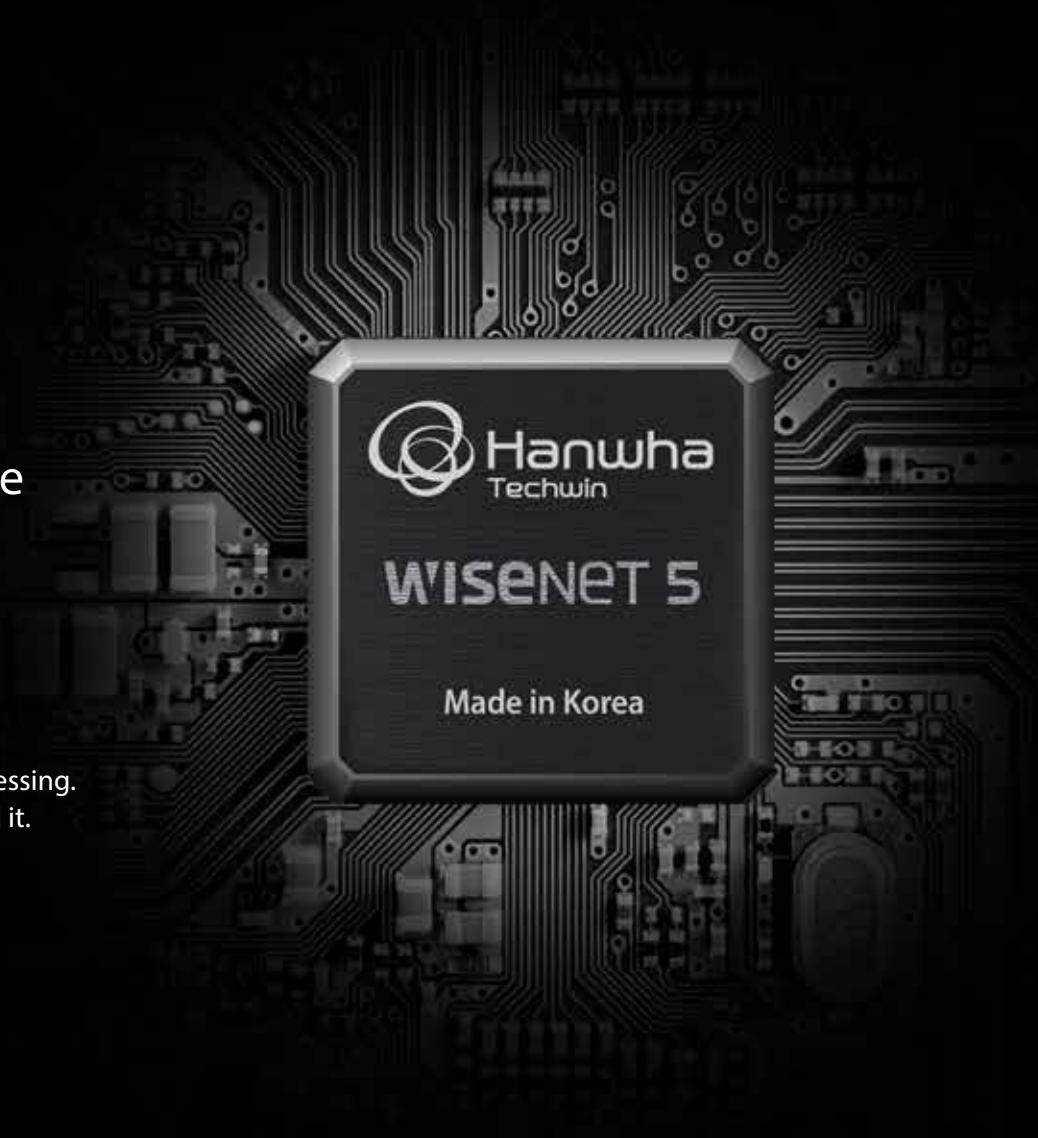
WISEnET X series

Defining the new standard of excellence

The Most Powerful Chipset Wisenet 5

Wisenet X series is supercharged by the most powerful chipset ever incorporated into a full camera range.

The Wisenet 5 chip uses an all-new architecture that enables faster processing. That means you get the best video performance just when you need it.



The world's best WDR (150dB)

Improve bandwidth by up to 99% using WiseStream II

Digital image stabilization with Built-in Gyro sensor

Clearer and colored image even in low light environments

Enhanced video / audio analytics

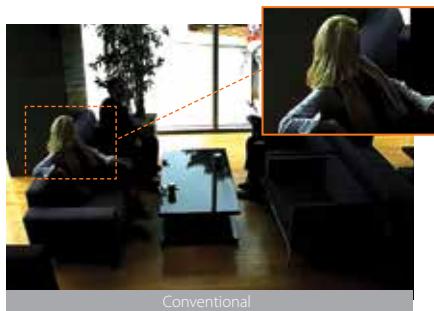


WISENET X series

The world's best WDR performance(150dB)



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.



Conventional



Wisenet X series

※ 150dB WDR only available in 2MP X series

extraLUX provides clear and colored images, even in low-light environments



Wisenet X series achieves optimal performance in low-light conditions by producing crystal-clear and true-color images without IR LEDs, regardless of the environment or time of day. The extraLUX series (XNO-6085R, XND/XNV-6085(V)) feature outstanding F0.94 lens with the 1/2" CMOS sensor, capturing vivid color images even in low-light environments.



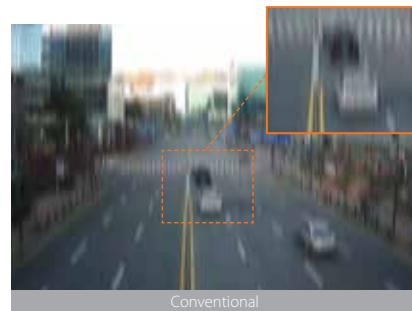
Conventional



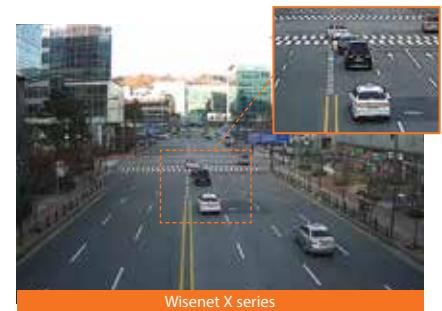
extraLUX(XNV-6085)

Digital Image Stabilization(DIS) with built-in Gyro sensor

Advances in Wisenet image stabilization technology allows the reduction of motion blur caused by wind or vibration. A gyroscopic sensor plus DIS technology is specifically added to the Wisenet X series cameras for more accurate stabilization.



Conventional



Wisenet X series

Improve bandwidth by up to 99% using WiseStream II

Using WiseStream II, Hanwha Techwin's original video compression technology, the Wisenet X series reduces data by up to 99% compared to current H.264 technology, when combined with H.265 compression. System costs are also greatly reduced without comprising image quality.



Low movement

WiseStream II OFF : 7160kbps WiseStream II ON : 74kbps



Medium movement

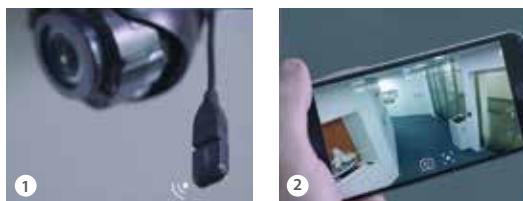


High Compression
Low Compression

WiseStream II OFF : 7260kbps WiseStream II ON : 1817kbps

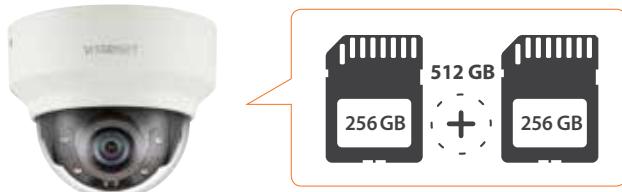
More convenient installation with USB

Using the USB port, the installer can easily connect Wisenet X series cameras and mobile devices through Wi-Fi. Viewing and adjusting camera angles can be done immediately after installation by using a smartphone. No additional devices are required, saving both time and money.



Dual SD slots

Dual SD slots allow up to 512 GB to be saved automatically to the camera, keeping data safe in the event of an unstable network. Obviously this allows to record more video footage than single SD slot.



Handover to PTZ

The handover feature allows a PTZ camera* to receive an alarm(motion detection) from Wisenet X series camera operating on the same IP video surveillance system. Once the notification is received, the PTZ camera will zoom into the assigned camera pre-set location. This feature improves the efficiency of the surveillance system by decreasing the reliance on the system operator on tracking events, and by increasing the likelihood that critical events in a surveillance area will be captured and recorded. ✪PNP-9200RH / XNP-6370RH



Fog Detection

Wisenet X series delivers outstanding image quality in foggy weather with Fog Detection. Any change in an image is automatically deleted with the defog function to provide a clear image.



Enhanced Video / Audio Analytics

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

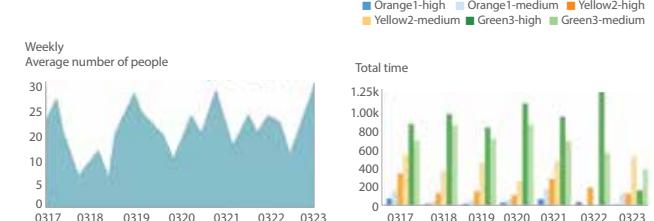


Loitering detection

This feature detects when an object remains in a designated area longer than the time threshold set by the user.

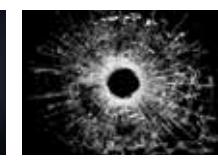
Queue management

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



Sound classification

Wisenet X series cameras help users respond immediately in dangerous situations, by classifying sounds such as gunshot, glass breakage, scream and explosion.



WISENET P series



Premium cameras with the most advanced technology

Wisenet P series, the ultimate premium cameras are designed with the most advanced technology, delivering users an outstanding video surveillance solution. From bullet cameras to multi-sensor cameras, P series have a wide range of products optimized for applications which require extreme detail and wide area coverage.



Exceptional image quality of 4K Ultra HD

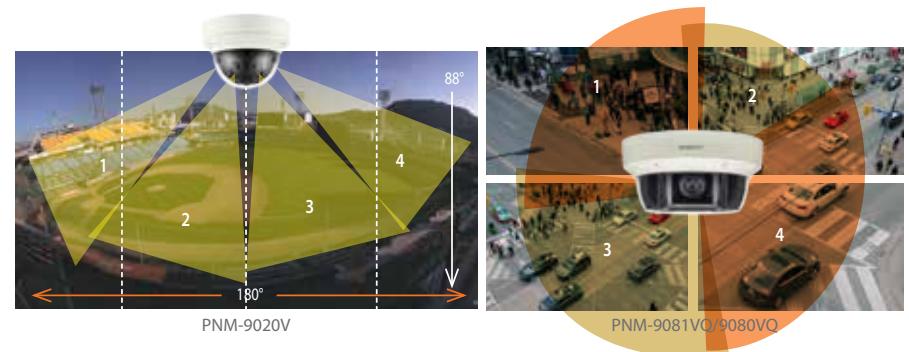
The Wisenet P series provides an enhanced surveillance system by producing superior 4K Ultra HD image quality. 4K Ultra HD has four times the resolution of standard 1080p, which means it is able to show more detail.



PNO/PND/PNV-9080R, PNP-9200RH

Four cameras in one

Wisenet P series multi-sensor cameras have four sensors which is ideal for wide areas. 180° panoramic camera delivers a super wide angle 7.3megapixel image within a single camera by merging the four images from each sensor. And multi-directional cameras can cover the full 360° range with no blind spots, ideal for wide areas such as shopping mall entrances, lobbies, and airports.



WISENET Q series



Compact cameras with essential qualities

This affordable product line delivers professional quality, ideal for securing small to medium sized applications. The Q series has the ability to create a secure environment with its complete lineup, saving both installation costs and time.



Complete line-up of indoor and outdoor cameras

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

	BULLET		DOME		IR VANDAL		PTZ
	Fixed IR	V/FIR	Fixed IR	V/FIR	Fixed IR	V/FIR	
4MP	QNO-7010R/7020R/7030R	QNO-7080R	QND-7010R/7020R/7030R	QND-7080R	QNV-7010R/7020R/7030R	QNV-7080R	
2MP	QNO-6010R/6020R/6030R	QNO-6070R	QND-6010R/6020R/6030R	QND-6070R	QNV-6010R/6020R/6030R	QNV-6070R	QNP-6230H/6230

Perfect for small to medium sized applications

The complete line-up of Wisenet Q series has the ability to solve small to medium sized application challenges. Save both installation costs and time by using the Wisenet Q series together with NVRS to create a suitable solution for small to medium sized applications.



VRN-410/810

WISENET T series



Specialized cameras for challenging conditions

T series offers explosion proof and thermal cameras which ensure a reliable video surveillance system even in the most challenging conditions. Explosion proof cameras can be used in heavy industrial facilities where a single spark may cause an explosion and thermal cameras are suitable for detecting people and objects in difficult weather conditions.



Explosion proof cameras for hazardous environments

Heavy industrial facilities such as gas pipelines or oil refineries are potentially explosive because of flammable gases and dust emitted. T series explosion proof cameras are designed to be safely operated in hazardous areas with the special enclosure made of stainless steel 316L housing. The ATEX certified enclosure has the ability to contain any internal sparks or explosions which may lead to a disaster.



TNO-6320E TNU-6320E

Detect people and objects 24/7 with thermal cameras

When challenging weather or lighting conditions occur, it may be hard to distinguish human or objects in a complex background. Wisenet thermal cameras are essential in these situations : they provide clear images based on temperature differences between objects so that users can detect incidents more easily.



TNO-4051T/4041T TNO-4050T/4040T/4030T

Camera



	Wisenet X XNB-8000	Wisenet X XNO-8080R	Wisenet X XNO-8020R/8030R/8040R	Wisenet X XND-8080R/8080RV	Wisenet X XND-8020R/8030R/8040R	Wisenet X XND-8020F
VIDEO	Resolution	5MP	5MP	5MP	5MP	5MP
	Imaging Device	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
	Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	5M / 30fps	5M / 30fps	5M / 30fps	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)	Multiple (Up to 10 Profiles)
	Max. User Access	20 (Unicast)	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: 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	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 (2.4x) 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)
	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: 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)
OPERATIONAL	Focus Control	Simple focus / Manual	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual	-
	IR Viewable Length	-	50m (164.04ft)	30m (98.43ft)	30m (98.43ft)	-
	Pan / Tilt / Rotate	-	-	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	Auto (Electrical)
	Backlight Compensation	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)	SSNRV (2D+3D Noise filter)
	Digital Image Stabilization	Support (Built in Gyro sensor)	Support	Support	Support	Support
FEATURES	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, 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
	Protocol	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
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
	Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Uni-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	SD/SDHC/SDXC, NAS, Local PC
	Environment Protection	-	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IK08	IK08
	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)	-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 (12V DC) Max. 10W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)
Additional Features	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 368.6mm (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)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 628g (1.39 lb) (XND-8080R) 732g (1.61 lb) (XND-8080RV)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84 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	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)

Wisenet X
XNV-8080RWisenet X
XNV-8080RSWisenet X
XNV-8020R/8030R/8040RWisenet X
XNF-8010R/8010RV/8010RVMWisenet X
XNB-6005Wisenet X
XNB-6000Wisenet X
XNB-6001

	Resolution	5MP	5MP	5MP	6MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/2" 2.17M 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	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	5M / 30fps	5M / 30fps	5M / 30fps	2048 x 2048 / 30fps	2M / 60fps	2M / 60fps	2M / 60fps
	Streaming Capacity	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)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
	Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	Color : 0.07Lux 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 : 0.1 Lux B/W: 0Lux (IR LED on)	Color : 0.006Lux B/W: 0.0006Lux	Color : 0.01Lux B/W: 0.001Lux	-
	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, DIP connector type	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
	Lens	3.9 ~ 9.4mm (2.4x) motorized V/F (F1.3)	3.9 ~ 9.4mm (2.4x) motorized V/F (F1.3)	3.7mm fixed (F1.6) (XNV-8020R) 4.6mm fixed (F1.6) (XNV-8030R) 7.0mm fixed (F1.6) (XNV-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: 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° (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: 192° / V: 192° / D: 192°	-	-	-
	Focus Control	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	-	Simple focus / Manual	Simple focus / Manual	Simple focus / Manual	-
OPERATIONAL	IR Viewable Length	50m (164.0ft)	50m (164.0ft)	30m (98.43ft)	15m (49.21ft)	-	-	-
	Pan / Tilt / Rotate	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)	True (ICR)	True (ICR)	-
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (150dB)	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)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
	Digital Image Stabilization	Support	Support	Support	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, 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	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Heatmap, People counting, Queue management	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 detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection, Face detection, Digital auto tracking, Heatmap, People counting, Queue management
	Protocol	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, SUNAPI	ONVIF profile S/G, SUNAPI
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
	Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional
FEATURES	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	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, IK10	IP66, IK10 (XNF-8010RV/8010RVM)	-	-	-
	Operating Temperature	-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)	-10°C ~ +55°C (+14°F ~ +131°F) (XNF-8010R) -40°C ~ +55°C (-40°F ~ +131°F) (XNF-8010RV/8010RVM)	-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. 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 (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)	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. 6.5W (12V DC) Max. 6W (PoE)
	Dimensions (WxHxD) / Weight	Ø16.0 x 118.5mm (Ø6.30" x 4.67") 1.01kg (2.23lb)	Ø16.2 x 120.5mm (Ø6.38" x 4.74") TBD	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36 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)	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)	131.1 x 28 x 86mm (5.16" x 1.10" x 3.39") 245g (0.54 lb)
	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, 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 dewarping, Handover, WiseStream II, Heatmap, People counting	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	Handover, WiseStream II, Advanced video analytics

Wisenet X
SLA-T4680Wisenet X
SLA-T4680VWisenet X
SLA-T2480Wisenet X
SLA-T2480VWisenet X
SLA-T1080FWisenet X
XNO-6120RWisenet X
XNO-6085R

New

	Wisenet X SLA-T4680	Wisenet X SLA-T4680V	Wisenet X SLA-T2480	Wisenet X SLA-T2480V	Wisenet X SLA-T1080F	Wisenet X XNO-6120R	Wisenet X XNO-6085R	
VIDEO	Resolution	2MP	2MP	2MP	2MP	2MP	2MP	
	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" 2.17M CMOS	
	Video Compression Format	-	-	-	-	H.265, H.264, MJPEG	H.265, H.264, MJPEG	
	Resolution / Max. Frame Rate	-	-	-	-	2M / 60fps	2M / 60fps	
	Streaming Capacity	-	-	-	-	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	
	Max. User Access	-	-	-	-	20 (Unicast)	20 (Unicast)	
	Min. Illumination	0.06Lux	0.06Lux	0.45Lux	0.45Lux	0.03Lux	Color: 0.03Lux B/W: 0Lux (IR LED on)	
	Video Output	-	-	-	-	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	
	Lens	4.6mm Pinhole (F2.5)	4.6mm Pinhole (F2.5)	2.4mm fixed (F2.0)	2.4mm fixed (F2.0)	1.6mm fixed (F1.6)	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	
	Angular Field of View	H: 73° / V: 39° / D: 85°	H: 73° / V: 39° / D: 85°	H: 138° / V: 73° / D: 168°	H: 138° / V: 73° / D: 168°	H: 187° / V: 113.9°	H: 54.58°(Wide) ~ 5.30°(Tele) / V: 32.19°(Wide) ~ 3.00°(Tele) / D: 61.40°(Wide) ~ 6.06°(Tele)	
OPERATIONAL	Focus Control	Fixed	Fixed	Fixed	Fixed	Fixed	Auto / Manual / One shot AF	
	IR Viewable Length	-	-	-	-	-	70m (229.66ft)	
	Pan / Tilt / Rotate	-	-	-	-	-	70m (229.66ft)	
	Day & Night	Electrical	Electrical	Electrical	Electrical	True (ICR)	True (ICR)	
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (150dB)	WDR (150dB)	
	Digital Noise Reduction	-	-	-	-	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	
	Digital Image Stabilization	-	-	-	-	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, 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	
	Protocol	-	-	-	-	ONVIF profile S/G, SUNAPI	ONVIF Profile S&G, SUNAPI	
	Alarm I/O	-	-	-	-	1 / 1	1 / 1	
FEATURES	Audio	-	-	-	-	Bi-Directional	Bi-Directional	
	Edge Storage	-	-	-	-	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)	-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)	
							* Start up above -35°C (-31°F)	
	Power	-	-	-	-	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)	
	Dimensions (WxHxD) / Weight	Ø24 x 42mm (Ø0.94" x 1.65") (Lens) 8m (314.96") (Cable) 310g (0.68 lb)	30 x 20.2 x 45mm (1.18" x 0.80" x 1.77") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)	Ø24 x 49.8mm (Ø0.94" x 1.96") (Lens) 8m (314.96") (Cable) 318g (0.70 lb)	30 x 27.9 x 45mm (1.18" x 1.01" x 1.77") (Lens) 8m (314.96") (Cable) 328g (0.72 lb)	Ø68.9 x 35mm (Ø2.71" x 1.38") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)	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)
	Additional Features	Lens module for XNB-6001	Lens module for XNB-6001	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	
							extraLUX, Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	



Preliminary

New

Wisenet X
XNO-6080RWisenet X
XNO-L6080RWisenet X
XNO-6010R/6020RWisenet X
XND-6085/6085VWisenet X
XND-6080Wisenet X
XND-6080RWisenet X
XND-6080V

	Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	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
	Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps
	Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 5 Profiles)	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)
	Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	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)	Color : 0.004Lux B/W : 0.0004Lux	Color : 0.015Lux B/W : 0.0015Lux	Color : 0.015Lux B/W : 0Lux (IR LED on)	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	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)	3.2 ~ 10mm motorized V/F (TBD)	2.4mm fixed (F2.0) (XNO-6010R) 4mm fixed (F1.4) (XNO-6020R)	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: 119.5°(Wide) ~ 27.9°(Tele) / V: 62.8°(Wide) ~ 15.7°(Tele) / D: 142.1°(Wide) ~ 32.0°(Tele)	TBD	H: 139.0° / V: 73.0° / D: 167.0° (XNO-6010R) H: 88.6° / V: 47.5° / D: 104.8° (XNO-6020R)	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			
OPERATIONAL	IR Viewable Length	50m (164.04ft)	30m (98.43ft)	20m (65.61ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)	-	-	30m (98.43ft)	-
	Pan / Tilt / Rotate	-	-	-	±175° / ±73° / ±175°	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)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (150dB)	WDR (120dB)	WDR (150dB)	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)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
	Digital Image Stabilization	Support	Support	Support (Built in Gyro sensor)	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, 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	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
FEATURES	Protocol	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, SUNAPI	ONVIF profile S/G, SUNAPI
	Alarm I/O	1 / 1	-	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
	Audio	Bi-Directional	-	Bi-Directional	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	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	IP51, IK08	IK08	IK08	IK08
	Operating Temperature	-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 -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. 15W (24V AC) Max. 12W (12V DC) Max. 12.95W (PoE)	TBD (PoE)	Max. 8.8W (12V DC) Max. 9.7W (PoE)	Max. 8.6W (12V DC) Max. 10.2W (PoE)	Max. 6W (12V DC) Max. 6.5W (PoE)	Max. 9W (12V DC) Max. 10W (PoE)	Max. 6W (12V DC) Max. 6.5W (PoE)
	Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (Ø3.58" x 14.51") (Without Sunshield) 2.18Kg (4.81 lb)	TBD	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)	Ø160.0 x 140.0mm (Ø6.30" x 5.51") 1.10 kg (2.43 lb) (XND-6085) 1.25 kg (2.76 lb) (XND-6085V)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 624g (1.38 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 714g (1.57 lb)
	Additional Features	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	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	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



	Wisenet X XND-6080RV	Wisenet X XND-L6080R/L6080RV	Wisenet X XND-L6080V	Wisenet X XND-6020R	Wisenet X XND-6011F	Wisenet X XND-6010	Wisenet X XNV-6120/6120R	
Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP	
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	
Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	
Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	
Streaming Capacity	Multiple (Up to 10 Profiles)	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)	Multiple (Up to 10 Profiles)	
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	
VIDEO	Min. Illumination	Color: 0.015Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux B/W: 0.01Lux	Color: 0.015Lux B/W: 0Lux (IR LED on)	Color: 0.055Lux B/W: 0.055Lux	Color: 0.03Lux B/W: 0.003Lux (XNV-6120) Color: 0.03Lux B/W: 0Lux (IR LED on) (XNV-6120R)	
	Video Output	CVBS 1.0Vpp, Micro USB type B	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	
	Lens	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	3.2 ~ 10mm motorized V/F (TBD)	3.2 ~ 10mm motorized V/F (TBD)	4mm fixed (F1.4)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)	
	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)	TBD	TBD	H: 88.6° / V: 47.5° / D: 104.8°	H: 112° / V: 62° / D: 130°	H: 139.0° / V: 73.0° / D: 167.0°	
	Focus Control	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	-	Manual	-	
	IR Viewable Length	30m (98.43ft)	30m (98.43ft)	-	30m (98.43ft)	-	-	
	Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 75° / 0° ~ 355°	
OPERATIONAL	Day & Night	True (ICR)	True (ICR)	True (ICR)	Auto (Electrical)	True (ICR)	True (ICR)	
	Backlight Compensation	WDR (150dB)	WDR (120dB)	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)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	
	Digital Image Stabilization	Support	Support	Support	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, Motion 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	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Sound classification
	Protocol	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, SUNAPI	
	Alarm I/O	1 / 1	-	-	1 / 1	-	1 / 1	
	Audio	Bi-Directional	-	-	Bi-Directional	Uni-Directional	Bi-Directional	
FEATURES	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	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	
	Environment Protection	IK08	IK08	IK08	IK08	-	IK08	
	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)	
	Power	Max. 9W (12V DC) Max. 10W (PoE)	TBD (PoE)	TBD (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	Max. 4.7W	Max. 5.5W (12V DC) Max. 6W (PoE)	
	Dimensions (WxHxD) / Weight	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 624g (1.38 lb) (XND-L6080R) 714g (1.60 lb) (XND-L6080RV)	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") 380g (0.84 lb)	Ø98.9 x 129mm (Ø3.89" x 5.08") 275g (0.61 lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 365g (0.80 lb)	
	Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc.), Hallway View	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	



New

Wisenet X
XNV-6085Wisenet X
XNV-6080Wisenet X
XNV-6080R

New



Preliminary New



Preliminary New

	Wisenet X XNV-6120RS	Wisenet X XNV-6085	Wisenet X XNV-6080	Wisenet X XNV-6080R	Wisenet X XNV-6080RS	Wisenet X XNV-L6080	Wisenet X XNV-L6080R
Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	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	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	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	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps
Streaming Capacity	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)	Multiple (Up to 5 Profiles)	Multiple (Up to 5 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
VIDEO	Min. Illumination	Color: 0.03Lux B/W: 0Lux (IR LED on)	Color: 0.004Lux B/W: 0.0004Lux	Color: 0.015Lux B/W: 0.015Lux	Color: 0.015Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux B/W: 0.01Lux	Color: 0.1 Lux, 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			
	Lens	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F2.0(Tele)	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)	3.2 ~ 10mm motorized V/F (TBD)	3.2 ~ 10mm motorized V/F (TBD)
	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: 100°(Wide) ~ 26.7°(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)	TBD	TBD
	Focus Control	Auto / Manual / One shot AF	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
	IR Viewable Length	70m (229.66ft)	-	-	50m (164.04ft)	50m (164.04ft)	-
	Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 75° / 0° ~ 355°	±175° / ±73° / ±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°
OPERATIONAL	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	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 (Built in Gyro sensor)	Support (Built in Gyro sensor)	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	Tampering, Motion detection	Tampering, Motion detection
	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	1 / 1	-	-
FEATURES	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			
	Environment Protection	IP67, IP66, NEMA 4X, IK10+	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	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)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)
	Power	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)	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)	TBD (PoE)	TBD (PoE)
	Dimensions (WxHxD) / Weight	Ø162 x 134.5mm (Ø6.38" x 5.3") TBD	TBD	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 (2.17 lb)	Ø162 x 120.5mm (Ø6.38" x 4.74") TBD	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 985g (2.17 lb)
	Additional Features	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	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

	 Wisenet X XNV-6022R	 Wisenet X XNV-6022RM	 Wisenet X XNV-6020R	 Wisenet X XNV-6013M	 Wisenet X XNV-6012M/6012	 Wisenet X XNV-6011	 Wisenet X XNV-6010
Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP
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
Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps
Streaming Capacity	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)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
VIDEO	Min. Illumination	Color: 0.055Lux B/W: 0Lux (IR LED on)	Color: 0.055Lux B/W: 0Lux (IR LED on)	Color: 0.015Lux B/W: 0Lux (IR LED on)	Color: 0.055Lux B/W: 0.0055Lux	Color: 0.055Lux B/W: 0.055Lux	Color: 0.055Lux B/W: 0.0055Lux
	Video Output	Micro USB type B	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
	Lens	3.6mm fixed (F2.0)	3.6mm fixed (F2.0)	4mm fixed (F1.4)	2.8mm fixed (F2.0)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)
	Angular Field of View	H:96.4°/V:50.5°/D:116°	H:96.4°/V:50.5°/D:116°	H:88.6°/V:47.5°/D:104.8°	H:110.2°/V:62.7°/D:125.4°	H:139°/V:73°/D:167°	H:112°/V:62°/D:130°
	Focus Control	Manual	Manual	Manual	Manual	Manual	Manual
	IR Viewable Length	15m (49.21ft)	15m (49.21ft)	30m (98.43ft)	-	-	-
	Pan / Tilt / Rotate	±5° / 0 ~ 67° / ±90°	±5° / 0 ~ 67° / ±90°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / 12° / ±90°	±5° / 0 ~ 67° / ±90°	0° ~ 353° / 0° ~ 59° / 0° ~ 353°
OPERATIONAL	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	Auto (Electrical)	True (ICR)
	Backlight Compensation	WDR (150dB)	WDR (150dB)	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)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
	Digital Image Stabilization	Support	Support	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, Face detection, Digital auto tracking, Digital auto tracking, Sound classification, Sound classification, 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	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
	Protocol	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, SUNAPI
	Alarm I/O	-	-	1 / 1	-	-	1 / 1
FEATURES	Audio	Bi-Directional	Bi-Directional	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	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
	Environment Protection	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP67, IP66, IK10	IP67, IK10, NEMA4X, IP6K9K	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
	Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
	Power	TBD (PoE)	TBD (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	TBD (PoE)	TBD (PoE)	Max. 5.5W (12V DC) Max. 6W (PoE)
	Dimensions (WxHxD) / Weight	99.0 x 52.0 x 100.0mm (3.9" x 2.05" x 3.94") TBD	99.0 x 52.0 x 100.0mm (3.9" x 2.05" x 3.94") TBD	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") (TBD)	99.0 x 52.0 x 100.0mm (3.9" x 2.05" x 3.94") (TBD)	Ø120.8 x 63.7mm (Ø4.44" x 2.51") 420g (0.93 lb)
	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, M12 Connector	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, M12 Connector	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, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View


Wisenet X
XNP-6370RH

Wisenet X
XNP-6320H

Wisenet X
XNP-6320

Wisenet X
XNP-6320HS

Wisenet X
XNP-6120H

Wisenet X
XNP-6040H

Wisenet P
PNO-9080R

	Resolution	2MP	2MP	2MP	2MP	2MP	2MP	12MP	
VIDEO	Imaging Device	1/1.9" 2M CMOS	1/2.8" 2.4M CMOS	1/2.8" 2.4M CMOS	1/2.8" 2.4M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/1.7" 12.4M CMOS	
	Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	
	Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	12M / 20fps, 8M / 30fps	
	Streaming Capacity	Multiple (Up to 3 Profiles)	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)	Multiple (Up to 3 Profiles)	
	Max. User Access	15 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	15 (Unicast)	
	Min. Illumination	Color: 0.05Lux B/W: 0Lux (IR LED on)	Color: 0.05Lux B/W: 0.005Lux	Color: 0.05Lux B/W: 0.005Lux	Color: 0.05Lux B/W: 0.003Lux	Color: 0.03Lux B/W: 0.003Lux	Color: 0.03Lux B/W: 0.0015Lux	Color: 0.3Lux B/W: 0Lux (IR LED on)	
	Video Output	CVBS 1.0Vpp	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, DIP Connector Type				
	Lens	6 ~ 22mm (IR Corrected Optical 37x) F1.5(Wide) / F4.6(Tele)	4.44 ~ 142.6mm (Optical 32x) F1.6 (Wide) / F4.4 (Tele)	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)	4.5 ~ 10mm (2.2x), motorized V/F (F1.6)	
	Angular Field of View	H: 59.3°(Wide) ~ 1.9°(Tele) / V: 35.8°(Wide) ~ 1.1°(Tele)	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: 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)	[4096 x 2160] H: 100.3°(Wide) ~ 45.6°(Tele) / V: 49.7°(Wide) ~ 24.0°(Tele) [3840 x 2160] H: 92.3°(Wide) ~ 42.6°(Tele) / V: 49.7°(Wide) ~ 24.0°(Tele)	
	Focus Control	AF / One-shot AF / Manual	Auto / Manual / One shot AF	Auto / Manual / One shot AF	Simple focus (motorized V/F) / Manual				
OPERATIONAL	IR Viewable Length	350m (1,148.29ft)	-	-	-	-	-	40m (131.23ft)	
	Pan / Tilt / Rotate	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 210° (-15° ~ 195°)	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)	True (ICR)	True (ICR)	True (ICR)	
	Backlight Compensation	WDR (120dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (120dB)	
	Digital Noise Reduction	SSNR (2D+3D Noise filter)	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)	SSNR	
	Digital Image Stabilization	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	-	
	Video & Audio Analytics	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	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 (Scene change), Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital Auto Tracking, Sound classification	Tampering (Scene change), Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital Auto tracking with Metadata	
FEATURES	Protocol	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, SUNAPI	ONVIF profile S/G, SUNAPI	
	Alarm I/O	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	1 / 1	1 / 1	1 / 1	
	Audio	Bi-Directional	Bi-Directional	Bi-Directional	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	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	
	Environment Protection	IP66, IK10	IP66, IK10	IK10 (with SHP-3701H)	IP67, IP66, NEMA4X, IK10	IP66, IK10	IP66, IK10	IP66, IK10	
	Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F) * Start up above -30°C (-22°F)	(-58°F ~ +131°F) (24V AC) -35°C ~ +55°C (-31°F ~ +131°F) (PoE+) * Start up above -30°C (-22°F)	-10°C ~ +55°C (+14°F ~ +131°F)	(-58°F ~ +131°F) (24V AC) * Start up above -40°C (-40°F) -35°C ~ +55°C (-31°F ~ +131°F) (PoE+) * Start up above -25°C (-13°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) * Start up above -40°C (-40°F) -35°C ~ +55°C (-31°F ~ +131°F) (PoE+) * Start up above -25°C (-13°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)
	Power	Max. 60.0W / 90.0W - Heater off / on, IR on (24V AC)	Max. 24.0W - Heater off (24V AC, PoE+) Max. 65.0W - Heater on (24V AC)	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)	Max. 12.43W / 14.08W - Heater on (24V AC) Max. 10.45W / 11.55W - Heater on (12V DC) Max. 11.77W / 12.95W - Heater on (PoE)	
	Dimensions (WxHxD) / Weight	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb)	Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb)	Ø227 x 296mm (Ø8.94" x 11.65") TBD	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)	82.4 x 87.0 x 348.3mm (3.24" x 3.43" x 13.71") (Without Sunshield) 1.4Kg (3.09 lb)	
	Additional Features	Defog, WiseStream, Auto tracking	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)	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)	WiseStream II, Advanced video analytics, Auto Tracking, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc)	Handover, Hallway View, P-Iris, Defog, WiseStream	



Preliminary

New

	Wisenet P PNP-9080R	Wisenet P PNV-9080R	Wisenet P PNM-9081VQ	Wisenet P PNM-9080VQ	Wisenet P PNM-9020V	Wisenet P PNM-7000VD	Wisenet P PNF-9010R/9010RV/9010RVM	Wisenet P PNP-9200RH
Resolution	12MP	12MP	20MP	8MP	7.3MP	4MP	12MP	8MP
Imaging Device	1/1.7" 12.4M CMOS	1/1.7" 12.4M CMOS	1/1.8" 6M CMOS x 4	1/2.8" 2.38M CMOS x 4	7.3M (2M x 4)	-	1/1.7" 12.4M CMOS	1/2.5" 8M CMOS
Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	12M / 20fps, 8M / 30fps	12M / 20fps, 8M / 30fps	4ea x 5M / 30fps	4ea x 2M / 60fps	7.3M / 30fps (H.265, H.264)	2ea x 2M / 60fps	12M / 20fps, 9M / 25fps	8M / 30fps
Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 40 Profiles)	Multiple (Up to 40 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
Max. User Access	15 (Unicast)	15 (Unicast)	20 (Unicast)	20 (Unicast)	15 (Unicast)	20 (Unicast)	15 (Unicast)	15 (Unicast)
Min. Illumination	Color: 0.3Lux B/W: 0Lux (IR LED on)	Color: 0.3Lux B/W: 0Lux (IR LED on)	Color: 0.07Lux B/W: 0.007Lux	Color: 0.015Lux B/W: 0.0015Lux	Color: 0.3Lux	-	Color: 0.3Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux B/W: 0Lux (IR LED on)
VIDEO	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp (selectable CVBS per channel)	CVBS 1.0Vpp (selectable CVBS per channel)	-	CVBS 1.0Vpp	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp
Lens	4.5 ~ 10mm (2.2x) motorized V/F (F1.6)	4.5 ~ 10mm (2.2x) motorized V/F (F1.6)	3.6 ~ 9.4mm (2.6x) motorized V/F (F1.2)	2.8 ~ 12mm (4.3x) motorized V/F F1.4(Wide) / F3.6(Tele)	3.6mm fixed	-	2.1mm fixed (F2.2)	4.8 ~ 96mm (Optical 20x) F1.8(Wide) / F3.6(Tele)
Angular Field of View	[4096 x 2160] H: 100.3°(Wide) ~ 45.6°(Tele) / V: 49.7°(Wide) ~ 24.0°(Tele) [3840 x 2160] H: 92.3°(Wide) ~ 42.6°(Tele) / V: 49.7°(Wide) ~ 24.0°(Tele)	[4096 x 2160] H: 100.3°(Wide) ~ 45.6°(Tele) / V: 49.7°(Wide) ~ 24.0°(Tele) [3840 x 2160] H: 92.3°(Wide) ~ 42.6°(Tele) / V: 49.7°(Wide) ~ 24.0°(Tele)	H: 102.5°(Wide) ~ 38.7°(Tele) / V: 74.2°(Wide) ~ 29.0°(Tele) / [3840 x 2160] H: 92.3°(Wide) ~ 42.6°(Tele) / V: 49.7°(Wide) ~ 24.0°(Tele)	H: 119.5°(Wide) ~ 27.9°(Tele) / V: 62.8°(Wide) ~ 15.7°(Tele) / D: 142.1°(Wide) ~ 32.0°(Tele)	[Total 4 Sensor] H: 180° / V: 84°	-	H: 180.0° / V: 180.0° / D: 180.0°	H: 65.1°(Wide) ~ 3.8°(Tele) / V: 38.4°(Wide) ~ 2.2°(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	-	-	Simple focus	AF / One-shot AF
IR Viewable Length	30m (98.43ft)	40m (131.23ft)	-	-	-	-	15m (49.21ft)	200m (656.17ft)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	Quad mode : ±30° / 10° ~ 41° / ±90°, Center mode : ±60° / 10° ~ 41°, 10° ~ 90° (CH2/Center) / ±90°	Quad mode : ±30° / 10° ~ 41° / ±90°, Center mode : ±60° / 10° ~ 41°, 10° ~ 90° (CH2/Center) / ±90°	0° ~ 355° / 0° ~ 60° / -	-	-	360° Endless / 190° (-5° ~ 185°) / -
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	Electrical	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (150dB)	WDR (120dB)	WDR (150dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNR	SSNR	SSNRV (20+3D Noise filter)	SSNRV (20+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNR	SSNR
Digital Image Stabilization	-	-	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	-	Support	-	Support
OPERATIONAL	Intelligent Video Analytics	Tampering (Scene change), Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital Auto tracking with Metadata	Tampering (Scene change), Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital Auto tracking with Metadata	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection	Tampering, Virtual line, Directional Detection, Fog Detection, Virtual Line, Enter/Exit, (Dis)Appear, Defocus detection, Digital Auto tracking, Heatmap	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection with Metadata
Protocol	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	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	1 / 1	-	1 / 1	4 / 2 (Relay)
Audio	Bi-Directional	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, Local PC	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IK08	IP66, IP67, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IK10 (PNF-9010R), IP66, IK10 (PNF-9010RV/9010RVM)	IP66, IK10
FEATURES	Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (14°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)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F) (PNF-9010R) -40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F) (PNF-9010RV/9010RVM)
Power	Max. 9.5W (12V DC) Max. 10.5W (PoE)	Max. 12.43W / 14.08W - Heater on (24V AC) Max. 10.45W / 11.55W - Heater on (12V DC) Max. 11.7W / 12.95W - Heater on (PoE)	Max. 28.8W (12V DC) Max. 33.6W (HPoE)	Max. 21.6W (12V DC) Max. 25.5W (PoE+)	Max. 21.0W - Heater on (12V DC) Max. 25.5W - Heater on (PoE+)	TBD (PoE)	Max. 11W (12V DC) Max. 12W (PoE) (PNF-9010R) Max. 12W (12V DC) Max. 12.95W (PoE) (PNF-9010RV/RVM)	Max. 60.0W / 90.0W - Heater off / on, IR on (24V AC)
Dimensions (WxHxD) / Weight	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34 lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 990g (2.18 lb)	Ø314 x 152mm (Ø12.36" x 5.98") 4.89kg (10.78 lb)	Ø314 x 152mm (Ø12.36" x 5.98") 4.83kg (10.65 lb)	Ø199.0 x 143.5mm (Ø7.83" x 5.65") 2.03kg (4.48 lb)	TBD	Ø146.0 x 63.4mm (Ø5.75" x 2.50") 805g (1.77 lb) (PNF-9010R), 810g (1.79 lb) (PNF-9010RV), 815g (1.8 lb) (PNF-9010RVM)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)
Additional Features	Handover, Hallway View, P-Iris, Defog, WiseStream	Handover, Hallway View, P-Iris, Defog, WiseStream	Multidirectional camera, Hallway View, P-Iris, Defog, WiseStream II	Multidirectional camera, Hallway View, P-Iris, Defog, WiseStream II	Handover, Multi sensor, Defog, WiseStream	Handover, WiseStream II Hallway View	M12 Connector (PNF-9010RVM), Built-in mic, On Board Dewarping, Handover, WiseStream, Heatmap, People counting	Handover, Auto tracking, Defog, WiseStream

Wisenet Q
QNO-7080RWisenet Q
QNO-7010R/7020R/7030RWisenet Q
QND-7080RWisenet Q
QND-7010R/7020R/7030RWisenet Q
QNV-7080RWisenet Q
QNV-7010R/7020R/7030RWisenet Q
QNO-6070R

	Resolution	4MP	4MP	4MP	4MP	4MP	4MP	2MP
VIDEO	Imaging Device	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/2.9" 2.19M CMOS
	Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	2M / 30fps
	Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
	Max. User Access	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
	Min. Illumination	Color: 0.15Lux B/W: 0Lux (IR LED on)	Color: 0.15Lux (QNO-7010R), 0.4Lux (QNO-7020R), 0.3Lux (QNO-7030R) B/W: 0Lux (IR LED on)	Color: 0.15Lux (QND-7010R), 0.4Lux (QND-7020R), 0.3Lux (QND-7030R) B/W: 0Lux (IR LED on)	Color: 0.15Lux (QND-7010R), 0.4Lux (QND-7020R), 0.3Lux (QND-7030R) B/W: 0Lux (IR LED on)	Color: 0.15Lux (QNV-7010R), 0.4Lux (QNV-7020R), 0.3Lux (QNV-7030R) B/W: 0Lux (IR LED on)	Color: 0.15Lux (QNV-7010R), 0.4Lux (QNV-7020R), 0.3Lux (QNV-7030R) B/W: 0Lux (IR LED on)	Color: 0.095Lux B/W: 0Lux (IR LED on)
	Lens	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8mm fixed (F2.2) (QNO-7010R) 3.6mm fixed (F2.2) (QNO-7020R) 6.0mm fixed (F2.2) (QNO-7030R)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8mm fixed (F2.2) (QND-7010R) 3.6mm fixed (F2.2) (QND-7020R) 6.0mm fixed (F2.2) (QND-7030R)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8mm fixed (F2.0) (QNV-7010R) 3.6mm fixed (F2.2) (QNV-7020R) 6.0mm fixed (F2.2) (QNV-7030R)	2.8 ~ 12mm (4.3x) Manual V/F (F1.4)
	Angular Field of View	H: 109.7°(Wide) ~ 26.0°(Tele) / V: 60.8°(Wide) ~ 15.2°(Tele) / D: 131.3°(Wide) ~ 30.1°(Tele)	H: 111.0° / V: 63.0° / D: 128.0° (QNO-7010R) H: 81.0° / V: 45.0° / D: 95.0° (QNO-7020R) H: 53.0° / V: 31.0° / D: 62.0° (QNO-7030R)	H: 109.7°(Wide) ~ 26.0°(Tele) / V: 60.8°(Wide) ~ 15.2°(Tele) / D: 131.3°(Wide) ~ 30.1°(Tele)	H: 111.0° / V: 63.0° / D: 128.0° (QND-7010R) H: 81.0° / V: 45.0° / D: 95.0° (QND-7020R) H: 53.0° / V: 31.0° / D: 62.0° (QND-7030R)	H: 109.7°(Wide) ~ 26.0°(Tele) / V: 60.8°(Wide) ~ 15.2°(Tele) / D: 131.3°(Wide) ~ 30.1°(Tele)	H: 110.0° / V: 63.0° / D: 133.0° (QNV-7010R) H: 81.0° / V: 45.0° / D: 95.0° (QNV-7020R) H: 53.0° / V: 31.0° / D: 62.0° (QNV-7030R)	H: 103.8°(Wide) ~ 32.4°(Tele) / V: 53.7°(Wide) ~ 18.4°(Tele) / D: 121.9°(Wide) ~ 37.1°(Tele)
	Focus Control	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual	-	Manual
OPERATIONAL	IR Viewable Length	30m (98.43ft)	20m (65.62ft) (QNO-7010R), 25m (82.02ft) (QNO-7020R), 30m (98.43ft) (QNO-7030R)	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)	20m (65.62ft) (QNV-7010R), 25m (82.02ft) (QNV-7020R), 30m (98.43ft) (QNV-7030R)	30m (98.43ft)
	Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR	SSNR	SSNR
	Digital Image Stabilization	-	-	-	-	-	-	-
FEATURES	Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection
	Protocol	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, SUNAPI	ONVIF profile S/G, SUNAPI
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
	Audio	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional
	Edge Storage	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS
	Environment Protection	IP66, IK10	IP66, IK10	-	IK08	IP66, IK10	IP66, IK10	IP66, IK10
	Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
	Power	Max. 7.0W (12V DC) Max. 8.0W (PoE)	Max. 6.0W (12V DC) Max. 7.0W (PoE)	Max. 6.4W (12V DC) Max. 7.2W (PoE)	Max. 5.8W (12V DC) Max. 7.0W (PoE) (QND-7010R) Max. 5.43W (12V DC) Max. 6.5W (PoE) (QND-7020R/7030R)	Max. 6.4W (12V DC) Max. 7.2W (PoE)	Max. 5.8W (12V DC) Max. 7.0W (PoE) (QNV-7010R) Max. 5.7W (12V DC) Max. 6.8W (PoE) (QNV-7020R/7030R)	Max. 7.0W (12V DC) Max. 8.0W (PoE)
	Dimensions (WxHxD) / Weight	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 750g (1.61 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 730g (1.61 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 355g (0.78 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 680g (1.5 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 730g (1.61 lb)
	Additional Features	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream



New

New

	Wisenet Q QNO-6010R/6020R/6030R	Wisenet Q QND-6070R	Wisenet Q QND-6010R/6020R/6030R	Wisenet Q QNV-6070R	Wisenet Q QNV-6010R/6020R/6030R	Wisenet Q QNP-6230H	Wisenet Q QNP-6230	
VIDEO	Resolution	2MP	2MP	2MP	2MP	2MP	2MP	
	Imaging Device	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.8" 2.4M CMOS	1/2.8" 2.4M CMOS	
	Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	
	Resolution / Max. Frame Rate	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	
	Streaming Capacity (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	
	Max. User Access	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	10 (Unicast)	10 (Unicast)	
	Min. Illumination	Color: 0.15Lux B/W: 0Lux (IR LED on)	Color: 0.095Lux B/W: 0Lux (IR LED on)	Color: 0.15Lux B/W: 0Lux (IR LED on)	Color: 0.095Lux B/W: 0Lux (IR LED on)	Color: 0.15Lux B/W: 0Lux (IR LED on)	Color: 0.2Lux B/W: 0.01Lux	
	Video Output	-	-	-	-	CVBS 1.0Vpp	CVBS 1.0Vpp	
	Lens	2.8mm fixed (F2.0) (QNO-6010R) 3.6mm fixed (F1.8) (QNO-6020R) 6.0mm fixed (F1.8) (QNO-6030R)	2.8 ~ 12mm (4.3x) Manual V/F (F1.4)	2.8mm fixed (F1.8) (QND-6010R) 3.6mm fixed (F1.8) (QND-6020R) 6.0mm fixed (F1.8) (QND-6030R)	2.8 ~ 12mm (4.3x) Manual V/F (F1.4)	2.8mm fixed (F1.8) (QNV-6010R) 3.6mm fixed (F1.8) (QNV-6020R) 6.0mm fixed (F1.8) (QNV-6030R)	4.44 ~ 102.2mm (Optical 23x) F1.6(Wide) / F3.6(Tele)	
	Angular Field of View	H: 116.0° / V: 62.0° / D: 137.0° (QNO-6010R) H: 86.48° / V: 46.22° / D: 102.44° (QNO-6020R) H: 52.54° / V: 28.86° / D: 61.14° (QNO-6030R)	H: 103.8°(Wide) ~ 32.4°(Tele) / V: 53.7°(Wide) ~ 18.4°(Tele) / D: 121.9°(Wide) ~ 37.1°(Tele)	H: 111.0° / V: 61.0° / D: 125.0° (QND-6010R) H: 86.48° / V: 46.22° / D: 102.44° (QND-6020R) H: 52.54° / V: 28.86° / D: 61.14° (QND-6030R)	H: 103.8°(Wide) ~ 32.4°(Tele) / V: 53.7°(Wide) ~ 18.4°(Tele) / D: 121.9°(Wide) ~ 37.1°(Tele)	H: 110.0° / V: 61.0° / D: 125.0° (QNV-6010R) H: 86.48° / V: 46.22° / D: 102.44° (QNV-6020R) H: 52.54° / V: 28.86° / D: 61.14° (QNV-6030R)	H: 61.8°(Wide) ~ 3.08°(Tele) / V: 36.2°(Wide) ~ 1.73°(Tele)	H: 61.8°(Wide) ~ 3.08°(Tele) / V: 36.2°(Wide) ~ 1.73°(Tele)
OPERATIONAL	Focus Control	-	Manual	-	Manual	-	Auto / Manual / One shot AF	
	IR Viewable Length	20m (65.62ft): QNO-6010R, 25m (82.02ft): QNO-6020R, 30m (98.43ft): QNO-6030R	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)	20m (65.62ft) (QNV-6010R), 25m (82.02ft) (QNV-6020R), 30m (98.43ft) (QNV-6030R)	-	
	Pan / Tilt / Rotate	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	360° Endless / 210° (-15° ~ 195°)	
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	
	Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	
	Digital Image Stabilization	-	-	-	-	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	
FEATURES	Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Tampering, Motion detection	
	Protocol	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, SUNAPI	
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	4 / 2 (Relay)	4 / 2 (Relay)	
	Audio	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional	Bi-directional	Bi-directional	
	Edge Storage	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	
	Environment Protection	IP66, IK10	-	IK08	IP66, IK10	IP66, IK10	IK10 (with SHP-3701H)	
	Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -30°C ~ +55°C (-22°F ~ +131°F) (PoE+)	
	Power	Max. 6.0W (12V DC) Max. 7.0W (PoE)	Max. 5.5W (12V DC) Max. 6.7W (PoE)	Max. 5.8W (12V DC) Max. 7.0W (PoE) (QND-6010R) Max. 5.43W (12V DC) Max. 6.5W (PoE) (QND-6020R/6030R)	Max. 5.5W (12V DC) Max. 6.7W (PoE)	Max. 5.8W (12V DC) Max. 7.0W (PoE) (QNV-6010R) Max. 5.7W (12V DC) Max. 6.8W (PoE) (QNV-6020R/6030R)	Max. 24.0W - Heater Off (24V AC, PoE+), Max. 65.0W - Heater On (24V AC)	Max. 20.0W (24V AC, PoE+)
	Dimensions (WxHxD) / Weight	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 730g (1.61 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 325g (0.72 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 660g (1.46 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb)	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3kg (7.28 lb)	Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb)
	Additional Features	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Defog, WiseStream II	
							Defog, WiseStream II	



Wisenet T
TNO-6320E



Wisenet T
TNU-6320E



Preliminary
New



New



New



New



New



New



New

Resolution	2MP	2MP	2MP	VGA	VGA	VGA	VGA	VGA
VIDEO	Imaging Device	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	Uncooled Microbolometer	Uncooled Microbolometer	Uncooled Microbolometer	Uncooled Microbolometer
	Video Compression Format	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	640 x 480 / 30fps			
	Streaming Capacity	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)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
	Max. User Access	10 (Unicast)	10 (Unicast)	10 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	Color : 0.15Lux B/W: 0.015Lux	Color : 0.15Lux B/W: 0.015Lux	Color : 0.3Lux B/W: 0.03Lux	-	-	-	-
	Video Output	-	-	CVBS 1.0Vpp	CVBS 1.0Vpp	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)	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide)/F4.4(Tele)	35mm fixed (F1.0)	35mm fixed (F1.0)	19mm fixed (F1.0)	19mm fixed (F1.0)
	Angular Field of View	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 17.2° / V: 13° / D: 22°	H: 17.2° / V: 13° / D: 22°	H: 32° / V: 24.3° / D: 39.2°	H: 32° / V: 24.3° / D: 39.2°
	Focus Control	Auto / Manual / One push	Auto / Manual / One push	Auto / Manual / One push	Fixed	Fixed	Fixed	Fixed
OPERATIONAL	IR Viewable Length	-	-	-	-	-	-	-
	Pan / Tilt / Rotate	-	360° Endless / 180° (-90° ~ 90°) / -	360° Endless / -90° ~ 40° / -	-	-	-	-
	Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	-	-	-	-
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	-	-	-	-
	Digital Noise Reduction	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	-	-	-	-
	Digital Image Stabilization	Support	Support	Support	Support (Built in Gyro sensor)			
	Intelligent Video Analytics	Motion detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Motion detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Face detection	Tampering, Loitering, Directional detection, Virtual line, Fence detection, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, Fence detection, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, Fence detection, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, Fence detection, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection
	Protocol	ONVIF Profile S, SUNAPI	ONVIF Profile S, SUNAPI	ONVIF Profile S, SUNAPI	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 (Relay)	1 / 1 (Relay)	1 / 1 (Relay)	1 / 2	1 / 2	1 / 2	1 / 2
	Audio	-	-	Bi-directional	Bi-directional	Bi-directional	Bi-directional	Bi-directional
FEATURES	Edge Storage	NAS	NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS, Local PC			
	Environment Protection	IP67, IK10	IP67, IK10	IP66	IP66, NEMA4X	IP66, NEMA4X	IP66, NEMA4X, IK10	IP66, NEMA4X, IK10
	Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)	-40°C ~ +50°C (-40°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +140°F)			
	Power	Max. 28.0W - Heater on (24V AC)	Max. 49.0W - Heater on (24V AC)	100W - Heater on, 25W - Heater off (24V AC)	Max. 10.5W (24V AC), Max. 9W (12V DC), Max. 10W (PoE)	Max. 10.5W (24V AC), Max. 9W (12V DC), Max. 10W (PoE)	Max. 10.5W (24V AC), Max. 9W (12V DC), Max. 10W (PoE)	Max. 10.5W (24V AC), Max. 9W (12V DC), Max. 10W (PoE)
	Dimensions (WxHxD) / Weight	Ø162.0 x 244.0mm (Ø6.38" x 9.61") 7Kg (15.43lb)	384.0 x 402.0 x 250.0mm (15.12" x 15.83" x 9.84") 35Kg (77.16lb)	219.0 x 460.0 x 528.0mm (8.62" x 18.11" x 20.79") TBD	Ø101.97 x 309mm (Ø4.01" x 12.17") 2,501g (5.51 lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3,175g (7.0 lb)	Ø101.97 x 309mm (Ø4.01" x 12.17") 2,501g (5.51 lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3,175g (7.0 lb)
	Additional Features	Explosion certification : CE2460 EX II 2 GD Ex d IIC T6 Gb IP67 Ex tb IIIC T85°C Db, Built in wiper	Explosion certification : CE2460 EX II 2 GD Ex d IIC T6 Gb IP67 Ex tb IIIC T80°C Db, Built in wiper	Defog, Built in wiper	Handover, WiseStream II, Advanced video analytics, Sound classification, 7 Color palettes	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway view, 7 Color palettes	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway view, 7 Color palettes	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway view, 7 Color palettes

NETWORK



	LNO-6070R	LNO-6010R/6020R/6030R	LND-6070R	LND-6010R/6020R/6030R	LNV-6070R	LNV-6010R/6020R/6030R
VIDEO	Resolution	2MP	2MP	2MP	2MP	2MP
	Imaging Device	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS
	Video Compression Format	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps
	Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
	Max. User Access	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
	Min. Illumination	Color: 0.95Lux B/W: 0Lux (IR LED on)	Color: 0.15Lux B/W: 0Lux (IR LED on)	Color: 0.95Lux B/W: 0Lux (IR LED on)	Color: 0.95Lux B/W: 0Lux (IR LED on)	Color: 0.15Lux B/W: 0Lux (IR LED on)
	Lens	3.2 ~ 10mm (3.1x) V/F (F1.4)	3mm fixed (F1.8) (LNO-6010R) 4mm fixed (F1.8) (LNO-6020R) 6mm fixed (F1.8) (LNO-6030R)	3.2 ~ 10mm (3.1x) V/F (F1.4)	3mm fixed (F1.8) (LND-6010R) 4mm fixed (F1.8) (LND-6020R) 6mm fixed (F1.8) (LND-6030R)	3.2 ~ 10mm (3.1x) V/F (F1.4)
	Angular Field of View	H: 101.6°(Wide) ~ 31.3°(Tele) / V: 54.1°(Wide) ~ 17.8°(Tele) / D: 120.6°(Wide) ~ 36.0°(Tele)	H: 105° / V: 58° / D: 123° (LNO-6010R) H: 80° / V: 43° / D: 94° (LNO-6020R) H: 51° / V: 29° / D: 58° (LNO-6030R)	H: 101.6°(Wide) ~ 31.3°(Tele) / V: 54.1°(Wide) ~ 17.8°(Tele) / D: 120.6°(Wide) ~ 36.0°(Tele)	H: 105° / V: 58° / D: 123° (LND-6010R) H: 80° / V: 43° / D: 94° (LND-6020R) H: 51° / V: 29° / D: 58° (LND-6030R)	H: 101.6°(Wide) ~ 31.3°(Tele) / V: 54.1°(Wide) ~ 17.8°(Tele) / D: 120.6°(Wide) ~ 36.0°(Tele)
	Focus Control	Manual	-	Manual	-	Manual
OPERATIONAL	IR Viewable Length	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)
	Pan / Tilt / Rotate	-	-	0°~350° / 0°~67° / 0°~355°	0°~350° / 0°~67° / 0°~355°	0~350° / 0~67° / 0~355°
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
	Digital Image Stabilization	-	-	-	-	-
	Intelligent Video Analytics	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering
FEATURES	Protocol	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
	Alarm I/O	-	-	-	-	-
	Audio	-	-	-	-	-
	Edge Storage	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, Local PC
	Environment Protection	IP66	IP66	-	-	IP66, IK10
	Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
	Power	TBD (PoE)	TBD (PoE)	TBD (PoE)	TBD (PoE)	TBD (PoE)
	Dimensions (WxHxD) / Weight	Ø78.0 x 262.0mm (Ø3.07" x 10.32") TBD	Ø58.6 x 182.0mm (Ø2.31" x 7.17") TBD	Ø119.8 x 98.8mm (Ø4.72" x 3.89") TBD	Ø110.0 x 86.0mm (Ø4.33" x 3.39") TBD	Ø137.8 x 106.1mm (Ø5.43" x 4.18") TBD
	Additional Features	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View



**Wisenet III
SNZ-6320**

**Wisenet III
SNO-6084R**

**Wisenet III
SNO-6011R**

SNO-L6083R

SNO-L6013R

SNF-8010/8010VM

	Resolution	2MP	2MP	2MP	2MP	2MP	5MP
VIDEO	Imaging Device	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/1.8" 6M CMOS
	Video Compression Format	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 30fps	2M / 30fps	2M / 30fps	5M / 20fps
	Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 5 Profiles)
	Max. User Access	10 (Unicast)	15 (Unicast)	15 (Unicast)	6 (Unicast)	6 (Unicast)	10 (Unicast)
	Min. Illumination	Color : 0.15Lux B/W: 0.015Lux	Color : 0.03Lux B/W: 0Lux (IR LED on)	Color : 0.08Lux B/W: 0Lux (IR LED on)	Color: 0.095Lux B/W: 0Lux (IR LED on)	Color: 0.15Lux B/W: 0Lux (IR LED on)	Color: 0.2Lux B/W: 0.02Lux
	Video Output	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp	-	-	CVBS 1.0Vpp
	Lens	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	3.8mm fixed (F2.0)	2.8 ~ 12mm (4.3x) V/F (F1.4)	3.6mm fixed (F1.8)	1.14mm fixed (F2.5)
	Angular Field of View	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 105.5°(Wide) ~ 37.1°(Tele) / V: 57.5°(Wide) ~ 21.0°(Tele)	H: 84.5° / V: 45.8° / D: 98.8°	H: 103.8°(Wide) ~ 32.4°(Tele) / V: 53.7°(Wide) ~ 18.4°(Tele) / D: 121.9°(Wide) ~ 37.1°(Tele)	H: 86.5° / V: 47.8° / D: 101.2°	H: 187.0° / V: 187.0° / D: 187.0°
	Focus Control	Auto / Manual / One push	Simple focus (motorized V/F) / Manual	Manual	Manual	-	Manual
OPERATIONAL	IR Viewable Length	-	30m (98.43ft)	15m (49.21ft)	20m (65.62ft)	20m (65.62ft)	-
	Pan / Tilt / Rotate	-	-	-	-	-	-
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB, 15fps)	BLC, DWDR	BLC, DWDR	WDR (60dB)
	Digital Noise Reduction	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR	SSNR	SSNR III (2D+3D Noise filter)
	Digital Image Stabilization	Support	Support	Support	-	-	-
	Intelligent Video Analytics	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Face detection with Metadata	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering	Motion detection, Audio detection, Tampering
FEATURES	Protocol	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S, SUNAPI
	Alarm I/O	1 / 1 (Relay)	1 / 1	1 / 0	-	-	1 / 1
	Audio	Bi-Directional	Bi-Directional	-	Uni-Directional	Uni-Directional	Bi-Directional
	Edge Storage	SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC/SDXC, NAS
	Environment Protection	-	IP66, IK10	IP66	IP66, IK10	IP66	IP66, IK10 / EN-61373/50155 (SNF-8010VM)
	Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -20°C ~ +55°C (-4°F ~ +131°F) (12V DC, PoE) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F) (SNF-8010) -30°C ~ +55°C (-22°F ~ +131°F) * Start up above -25°C (-13°F) (SNF-8010VM)
	Power	Max. 9.0W (12V DC) Max. 10.0W (PoE)	Max. 11.0W - Heater off Max. 17.0W - Heater on (24V AC)	Max. 8.5W (PoE)	Max. 5.9W (PoE)	Max. 5.7W (PoE)	Max. 8.7W (12V DC) Max. 10.3W (PoE) mode A only (SNF-8010VM)
	Dimensions (WxHxD) / Weight	72.0 x 59.9 x 135.4mm (2.83" x 2.36" x 5.33") 540g (1.19 lb)	82.4 x 82.4 x 312.6mm (3.24" x 3.24" x 12.31") (Without Sunshield) 1.19Kg (2.62 lb)	77.1 x 83.0 x 302.4mm (3.04" x 3.27" x 11.91") 560g (1.23 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 700g (1.54 lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.5") (Without Sunshield) 250g (0.55 lb)	Ø145.9 x 49.6mm (Ø5.74" x 1.95") 780g (1.72 lb) (SNF-8010) Ø145.9 x 62.4mm (Ø5.74" x 2.46") 800g (1.76 lb) (SNF-8010VM)
	Additional Features	RS-485, Defog	P-Iris, Defog	Defog	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	Various Viewing Compositions, M12 Connector (SNF-8010VM)

NETWORK



	Wisenet III SND-6084	Wisenet III SND-L6013	Wisenet III SND-L6012	Wisenet III SND-7084R	Wisenet III SND-6084R	Wisenet III SND-L6083R	Wisenet III SND-L6013R	
VIDEO	Resolution Imaging Device Video Compression Format Resolution / Max. Frame Rate Streaming Capacity Max. User Access Min. Illumination Video Output Lens Angular Field of View Focus Control	2MP 1/2.8" 2.38M CMOS H.264, MJPEG 2M / 60fps Multiple (Up to 10 Profiles) 15 (Unicast) Color: 0.03Lux B/W: 0.002Lux CVBS 1.0Vpp DIP Connector Type	2MP 1/2.9" 2.19M CMOS H.264, MJPEG 2M / 30fps Multiple (Up to 3 Profiles) 6 (Unicast) Color: 0.15Lux B/W: 0.15Lux -	2MP 1/2.9" 2.19M CMOS H.264, MJPEG 2M / 30fps Multiple (Up to 3 Profiles) 6 (Unicast) Color: 0.15Lux B/W: 0.15Lux -	3MP 1/2.8" 3.2M CMOS H.264, MJPEG 3M / 30fps Multiple (Up to 10 Profiles) 15 (Unicast) Color: 0.06Lux B/W: 0Lux (IR LED on) CVBS 1.0Vpp DIP Connector Type	2MP 1/2.8" 2.38M CMOS H.264, MJPEG 2M / 60fps Multiple (Up to 10 Profiles) 15 (Unicast) Color: 0.03Lux B/W: 0Lux (IR LED on) CVBS 1.0Vpp DIP Connector Type	2MP 1/2.9" 2.19M CMOS H.264, MJPEG 2M / 30fps Multiple (Up to 3 Profiles) 6 (Unicast) Color: 0.095Lux B/W: 0Lux (IR LED on)	2MP 1/2.9" 2.19M CMOS H.264, MJPEG 2M / 30fps Multiple (Up to 3 Profiles) 6 (Unicast) Color: 0.15Lux B/W: 0Lux (IR LED on)
	IR Viewable Length Pan/Tilt/ Rotate Day & Night Backlight Compensation Digital Noise Reduction Digital Image Stabilization	- 0° ~ 354° / 0° ~ 67° / 0° ~ 355° True (ICR) WDR (120dB) SSNRIII (2D+3D Noise filter)	- 0° ~ 350° / 0° ~ 67° / 0° ~ 355° Electrical BLC, DWDR SSNR	- 0° ~ 350° / 0° ~ 67° / 0° ~ 355° Electrical BLC, DWDR SSNR	25m (82.02ft) 0° ~ 354° / 0° ~ 67° / 0° ~ 355° True (ICR) WDR (120dB) SSNRIII (2D+3D Noise filter)	15m (49.21ft) 0° ~ 354° / 0° ~ 67° / 0° ~ 355° True (ICR) WDR (120dB) SSNRIII (2D+3D Noise filter)	15m (49.21ft) 0° ~ 350° / 0° ~ 67° / 0° ~ 355° True (ICR) BLC, DWDR SSNR	
	Intelligent Video Analytics	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Motion detection with Metadata, Tampering	
	Protocol Alarm I/O Audio Edge Storage Environment Protection	ONVIF Profile S, SUNAPI, Open Platform 1 / 1	ONVIF Profile S & G, SUNAPI -	ONVIF Profile S & G, SUNAPI, Open Platform -	ONVIF Profile S, SUNAPI, Open Platform 1 / 1	ONVIF Profile S & G, SUNAPI -	ONVIF Profile S & G, SUNAPI -	
	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)	
	Power	Max. 8.79W (12V DC) Max. 9.57W (PoE)	Max. 2.4W (PoE)	Max. 2.4W (PoE)	Max. 10.0W (12V DC) Max. 11.0W (PoE)	Max. 9.0W (12V DC, PoE)	Max. 5.4W (PoE)	
	Dimensions (WxHxD) / Weight	Ø132.1 x 107.6mm (Ø5.20" x 4.24") 505g (1.11 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 250g (0.55 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 240g (0.53 lb)	Ø132.1 x 107.6mm (Ø5.20" x 4.24") 575g (1.27 lb)	Ø132.1 x 107.6mm (Ø5.20" x 4.24") 525g (1.16 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 290g (0.64 lb)	
	Additional Features	P-Iris, Defog	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	P-Iris, Defog	P-Iris, Defog	Lens distortion correction, Hallway View	

NETWORK



	Wisenet III SNV-7084	Wisenet III SNV-6084	Wisenet III SNV-6013	Wisenet III SNV-7084R	Wisenet III SNV-6084R	SNV-L6083R	SNV-L6013R	SNV-L6014RM/L6014RBM
VIDEO	Resolution	3MP	2MP	2MP	3MP	2MP	2MP	2MP
	Imaging Device	1/2.8" 3.2M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 3.2M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS
	Video Compression Format	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
	Resolution / Max. Frame Rate	3M / 30fps	2M / 60fps	2M / 60fps	3M / 30fps	2M / 60fps	2M / 30fps	2M / 30fps
	Streaming Capacity	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)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
	Max. User Access	15 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
	Min. Illumination	Color: 0.06Lux B/W: 0.006Lux	Color: 0.03Lux B/W: 0.002Lux	Color: 0.15Lux B/W: 0.15Lux	Color: 0.06Lux B/W: 0Lux (IR LED on)	Color: 0.03Lux B/W: 0Lux (IR LED on)	Color: 0.095Lux B/W: 0Lux (IR LED on)	Color: 0.15Lux B/W: 0Lux (IR LED on)
	Video Output	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	-	-
	Lens	3~8.5mm (2.8x) motorized V/F (F1.2)	3~8.5mm (2.8x) motorized V/F (F1.2)	2.8mm fixed (F1.8)	3~8.5mm (2.8x) motorized V/F (F1.2)	3~8.5mm (2.8x) motorized V/F (F1.2)	2.8~12mm (4.3x) V/F (F1.4)	3.6mm fixed (F1.8)
	Angular Field of View	H: 100.12°(Wide) ~ 35.38°(Tele) / V: 73.76°(Wide) ~ 26.58°(Tele)	H: 105.5°(Wide) ~ 37.1°(Tele) / V: 57.5°(Wide) ~ 21.0°(Tele)	H: 112.0° / V: 62.0°	H: 100.12°(Wide) ~ 35.38°(Tele) / V: 73.76°(Wide) ~ 26.58°(Tele)	H: 105.5°(Wide) ~ 37.1°(Tele) / V: 57.5°(Wide) ~ 21.0°(Tele)	H: 103.8°(Wide) ~ 32.4°(Tele) / V: 53.7°(Wide) ~ 18.4°(Tele) / D: 121.9°(Wide) ~ 37.1°(Tele)	H: 86.5° / V: 47.8° / D: 101.2°
	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	Manual	-
OPERATIONAL	IR Viewable Length	-	-	-	25m (82.0ft)	15m (49.21ft)	20m (65.62ft)	15m (49.21ft)
	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°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-5° ~ 5° / 0° ~ 67° / 90°
	Day & Night	True (ICR)	True (ICR)	Electrical	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	BLC, DWDR	BLC, DWDR
	Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNR	SSNR
	Digital Image Stabilization	Support	Support	Support	Support	Support	-	-
	Intelligent Video Analytics	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Face detection, People counting, Zone analyzing	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering
	Protocol	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S & G, SUNAPI	ONVIF Profile S, SUNAPI	ONVIF Profile S, SUNAPI
FEATURES	Alarm I/O	1 / 1	1 / 1	-	1 / 1	1 / 1	-	-
	Audio	Bi-Directional	Bi-Directional	-	Bi-Directional	Bi-Directional	Uni-Directional	Uni-Directional
	Edge Storage	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS
	Environment Protection	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, 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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-40°C ~ +55°C (-40°F ~ +131°F) (24V AC) -20°C ~ +55°C (-4°F ~ +131°F) (12V DC, PoE) * Start up above -10°C (+14°F)	-40°C ~ +55°C (-40°F ~ +131°F) (24V AC) -20°C ~ +55°C (-4°F ~ +131°F) (12V DC, PoE) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
	Power	Max. 11.0W / 13.0W - Heater on (24V AC) Max. 9.0W / 11.5W - Heater on (12V DC) Max. 10.0W / 12.5W - Heater on (PoE)	Max. 14.0W - Heater on (24V AC, 12V DC) Max. 12.95W - Heater on (PoE)	Max. 7.5W (PoE)	Max. 12.0W / 15.0W - Heater on (24V AC) Max. 10.5W (12V DC) Max. 11.5W (PoE)	Max. 9.5W / Max. 13.5W - Heater on (24V AC)	Max. 5.8W (PoE)	PoE
	Dimensions (WxHxD) / Weight	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 960g (2.12 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 985g (2.17 lb)	Ø112.8 x 63.7mm (Ø4.44" x 2.51") 550g (1.21 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 975g (2.15 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 960g (2.12 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 670g (1.48 lb)	99.0 x 52.0 x 100.0mm (3.90" x 2.05" x 3.94") 300g (0.66 lb)
	Additional Features	P-Iris, Defog	P-Iris, Defog	Defog	P-Iris, Defog	P-Iris, Defog	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View
							M12 connector, Lens distortion correction, Hallway View, Built-in mic	

NETWORK



	Wisenet III SNP-6321H	Wisenet III SNP-6321	Wisenet III plus SNP-6320H	Wisenet III plus SNP-6320	SNP-L6233H/L6233	Wisenet III plus SNP-6320RH	Wisenet III plus SNP-6230RH	SNP-L6233RH	
VIDEO	Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP	
	Imaging Device	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	
	Video Compression Format	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	
	Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 30fps	2M / 60fps	2M / 60fps	2M / 30fps	
	Streaming Capacity	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)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	
	Max. User Access	10 (Unicast)	10 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	
	Min. Illumination	Color: 0.1Lux B/W: 0.015Lux	Color: 0.15Lux B/W: 0.015Lux	Color: 0.2Lux B/W: 0.01Lux	Color: 0.2Lux B/W: 0.01Lux	Color: 0.1Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux B/W: 0.015Lux	
	Video Output	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	
	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)	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide)/F4.4(Tele)	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide)/F4.4(Tele)	4.4 ~ 102.1mm (Optical 23x) (IR Corrected Optical 32x) F1.6(Wide)/F4.9(Tele)	4.4 ~ 101.2mm (IR Corrected Optical 23x) F1.6(Wide)/F4.5(Tele)	4.4 ~ 101.2mm (IR Corrected Optical 23x) F1.6(Wide)/F4.5(Tele)	
	Angular Field of View	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 63.68°(Wide) ~ 2.24°(Tele) / V: 37.52°(Wide) ~ 1.28°(Tele)	H: 63.68°(Wide) ~ 3.1°(Tele) / V: 37.52°(Wide) ~ 1.76°(Tele)	H: 63.68°(Wide) ~ 3.1°(Tele) / V: 37.52°(Wide) ~ 1.76°(Tele)	
OPERATIONAL	Focus Control	Auto / Manual / One push	Auto / Manual / One push	Auto / Manual / One push	Auto / Manual / One push	AF / One-shot AF / Manual	AF / One-shot AF / Manual	AF / One-shot AF / Manual	
	IR Viewable Length	-	-	-	-	150m (492.13ft)	100m (328.08ft)	100m (328.08ft)	
	Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 190° (-5° ~ 185°) / -	
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (100dB)	WDR (120dB)	WDR (120dB)	WDR (100dB)	
	Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNR	
	Digital Image Stabilization	Support	Support	Support	Support	Support	Support	Support	
FEATURES	Intelligent Video Analytics	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	
	Protocol	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI	
	Alarm I/O	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	4 / 3 (Relay)	4 / 3 (Relay)	
	Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	
	Edge Storage	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	
	Environment Protection	IP66, IK10	IK10 (With SHP-3701H)	IP66, IK10	IK10 (With SHP-3701H) (SNP-L6233)	IP66, IK10 (SNP-L6233H) IK10 (With SHP-3701H) (SNP-L6233)	IP66, IK10	IP66, IK10	
	Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -30°C ~ +55°C (-22°F ~ +131°F) (PoE+)	-10°C ~ +55°C (+14°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -30°C ~ +55°C (-22°F ~ +131°F) (PoE+)	-10°C ~ +55°C (+14°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -30°C ~ +55°C (-22°F ~ +131°F) (PoE+) (SNP-L6233H) -10°C ~ +55°C (-14°F ~ +131°F) (SNP-L6233)	-50°C ~ +55°C (-58°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F)
	Power	Max. 65.0W - AC & PoE Heater on (24V AC) Max. 25.0W - 24V AC Heater off / PoE Heater on (PoE+)	Max. 20.0W (24V AC, PoE+)	Max. 24.0W (24V AC, PoE+) Max. 65.0W - Heater on (24V AC)	Max. 20.0W (24V AC, PoE+)	Max. 65.0W - AC & PoE Heater on (24V AC) Max. 25.0W - PoE Heater on (PoE+) (SNP-L6233H) Max. 20.0W (24V AC, PoE+) (SNP-L6233)	Max. 30.0W - Heater off Max. 35.0W / 90.0W - Heater off / on, IR on (24V AC)	Max. 30.0W - Heater off Max. 35.0W / 90.0W - Heater off / on, IR on (24V AC)	Max. 30.0W - Heater off Max. 35.0W / 90.0W - Heater off / on, IR on (24V AC)
	Dimensions (WxHxD) / Weight	Ø223.4 x 293.6mm (Ø8.80" x 11.56") 3.2Kg (7.05 lb)	Ø152.0 x 218.0mm (Ø5.98" x 8.58") 1.8Kg (3.97 lb)	Ø223.4 x 293.6mm (Ø8.80" x 11.56") 3.3Kg (7.28 lb)	Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb)	Ø223.4 x 293.6mm (Ø8.80" x 11.56") 3.2Kg (7.05 lb) (SNP-L6233H) Ø152.0 x 218.0mm (Ø5.98" x 8.58") 1.8Kg (3.97 lb) (SNP-L6233)	Ø248.0 x 399.5mm (Ø9.76" x 15.73") 7.1Kg (15.65 lb)	Ø248.0 x 399.5mm (Ø9.76" x 15.73") 7.1Kg (15.65 lb)	Ø248.0 x 399.5mm (Ø9.76" x 15.73") 7.1Kg (15.65 lb)
	Additional Features	RS-485, Defog	RS-485, Defog	Auto tracking, RS-485, Defog	Auto tracking, RS-485, Defog	RS-485, Defog	Auto tracking, RS-485/422, Defog	Auto tracking, RS-485/422, Defog	RS-485/422, Defog

NVR

Wisenet X
XRN-3010Wisenet X
XRN-2011Wisenet X
XRN-2010Wisenet X
XRN-1610S/1610Wisenet X
XRN-810S

OS	Linux	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	300Mbps	256Mbps 100Mbps (RAID 5 mode)	256Mbps	180Mbps	100Mbps
Max # of Cameras	64	32	32	16	8
Internal Storage	Up to 8 SATA (Max. 64TB)	Up to 8 SATA (Hot swap) Max. 48TB (Non RAID), Max.36TB (RAID 5)	Up to 8 SATA (Max. 48TB)	Up to 4 SATA (Max. 24TB) (XRN-1610S) Up to 8 SATA (Max. 48TB) (XRN-1610)	Up to 2 SATA (Max. 12TB)
External Storage	1 e-SATA	iSCSI	iSCSI, 1 e-SATA	iSCSI, 1 e-SATA	-
RAID	-	RAID 5	-	-	-
Hot Swap	-	Yes	-	-	-
Network Viewer Software	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI (Up to 4K), VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	<ul style="list-style-type: none"> • N+1 failover supported • ARB redundancy supported • WiseStream support • Defocus event trigger 	<ul style="list-style-type: none"> • N+1 failover supported • ARB redundancy supported • WiseStream support 	<ul style="list-style-type: none"> • N+1 failover supported • ARB redundancy supported • WiseStream support 	<ul style="list-style-type: none"> • Plug & play by 16 PoE / PoE+ Ports • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps • Defocus event trigger 	<ul style="list-style-type: none"> • Plug & play by 8 PoE / PoE+ Ports • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps • Defocus event trigger

Wisenet X
XRN-410SWisenet P
PRN-4011Wisenet Q
QRN-810Wisenet Q
QRN-410Wisenet T
TRM-1610M/1610S

OS	Linux	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	50Mbps	400Mbps	100Mbps	50Mbps	128Mbps
Max # of Cameras	4	64	8	4	16 (4PoE, M12:TRM-1610M / RJ-45 : TRM-1610S)
Internal Storage	Up to 1 SATA (Max. 6TB)	Up to 12 SATA (Max. 96TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)	Up to 2 SATA (Front-Swap) Max. 4TB (HDD, SSD)
External Storage	-	iSCSI	-	-	-
RAID	-	RAID 5/6	-	-	RAID 1
Hot Swap	-	Yes	-	-	Yes (RAID 1)
Network Viewer Software	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM Transportation, WebViewer, Wisenet Mobile
Local Monitor	HDMI (Up to 4K), VGA	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI (Up to 4K), VGA	HDMI (Up to 4K), VGA	HDMI (Up to 4K), VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	<ul style="list-style-type: none"> • Plug & play by 4 PoE / PoE+ Ports • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 64Mbps • Defocus event trigger 	<ul style="list-style-type: none"> • N+1 failover supported • ARB redundancy supported • WiseStream support • Defocus event trigger 	<ul style="list-style-type: none"> • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps • Defocus event trigger 	<ul style="list-style-type: none"> • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 64Mbps • Defocus event trigger 	<ul style="list-style-type: none"> • GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -40°C ~ +70°C (-40°F ~ +158°F)

NETWORK

Decoder



	SRN-1673S	SRN-873S	SRN-473S
OS	Linux	Linux	Linux
Supported Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Max. Recording Bit Rate	80Mbps	64Mbps	32Mbps
Max # of Cameras	16	8	4
Internal Storage	Up to 4 SATA	Up to 2 SATA	Up to 1 SATA
External Storage	1 e-SATA	1 e-SATA	-
RAID	-	-	-
Hot Swap	-	-	-
Network Viewer Software	SSM, SmartViewer, Wisenet Mobile	SSM, SmartViewer, Wisenet Mobile	SSM, SmartViewer, Wisenet Mobile
Local Monitor	HDMI / VGA	HDMI / VGA	HDMI / VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	<ul style="list-style-type: none"> • Plug & play by 16 PoE / PoE+ Ports • WebViewer supported • HDD removable (Easy install) 	<ul style="list-style-type: none"> • Plug & play by 8 PoE / PoE+ Ports • WebViewer supported 	<ul style="list-style-type: none"> • Plug & play by 4 PoE / PoE+ Ports • WebViewer supported

	SPD-1660R	SPD-260B	SPD-150
Video Out	HDMI (16ea), VGA (16ea)	HDMI (2ea), VGA (2ea)	HDMI, VGA, CVBS
Resolution	HDMI up to 4K, VGA up to 1080p	HDMI up to 4K, VGA up to 1080p	HDMI up to 4K, VGA up to 1080p
Display	1/4/6/8/9/13/16/2V/3V/2H Hallway View mode (Up to 20 layouts and sequence)	1/4/6/8/9/13/16/2V/3V/2H Hallway View mode (Up to 20 layouts and sequence)	(HDMI) 1 / 4 / 6 / 8 / 9 / 13 / 16 / 25 / 36(32) / 2V / 3V (VGA) 1 / 4 / 6 / 8 / 9 / 13 / 16 / 2V / 3V (VGA)
Power	220V AC	-	12V DC, PoE
Additional Features	Monitor merge - 1 x 2, 2 x 1, 2 x 2, 2 x 3, 3 x 2, 2 x 4, 2 x 5, 4 x 2, 3 x 3, 3 x 4, 4 x 3, 4 x 4, 3 x 5, 5 x 3, 5 x 2 SSM, WebViewer supported	Blade card of SPD-1660R	Up to 49CH, H.265 / H.264 / MJPEG codec, Layout sequence support

Encoder



SPE-1610

SPE-410

SPE-400

SPE-101

SPE-100

Max. # of Cameras	16	4	4	1	1
Supported Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG, MPEG-4	H.264, MJPEG, MPEG-4	H.264, MJPEG, MPEG-4
Max. Resolution	4M, 1920 x 1080 704 x 480 / 704 x 576 (NTSC / PAL)	4M, 1920 x 1080 704 x 480 / 704 x 576 (NTSC / PAL)	704 x 480 / 704 x 576 (NTSC / PAL)	704 x 480 / 704 x 576 (NTSC / PAL)	704 x 480 / 704 x 576 (NTSC / PAL)
Max. Frame Rate per Channel	4M@15fps 1920 x 1080, 704 x 480, 704 x 576@30fps	4M@15fps 1920 x 1080, 704 x 480, 704 x 576@30fps	30/25fps (NTSC / PAL)	30/25fps (NTSC / PAL)	30/25fps (NTSC / PAL)
Bi-Directional Audio	Yes	Yes	Yes	-	Yes
RS-485	1	1	4	1	1
Alarm I/O	4 / 1	4 / 1	4 / 4	-	1 / 1
SD Card	-	-	SD/SDHC	-	SD/SDHC
ONVIF	Yes	Yes	Yes	Yes	Yes
Power	12V DC	12V DC	12V DC	12V DC / PoE	12V DC / PoE

iSCSI External Storage



SRB-160S

OS	Linux
Max. recording bandwidth	800Mbps
Internal HDD	Max. 16 Hot swappable HDDs (Max. 128TB) * RAID 0 mode
RAID	0 / 10 / 5 / 6, RAID5 + Hotstandby
iSCSI volume	Max. 8 NVRs can be connected
Setup	One-touch setup of RAID volume Setup via webpage & remote storage management S/W
Redundancy	Network failover, Load balancing
Mechanical	4 Gigabit ethernet ports 3U chassis with front key-lock
Features	Dual SMPS for high reliability

Wisenet SSM

Wisenet SSM is video management software with features for both traditional and contemporary surveillance operations. It mainly consists of two parts; server and client software giving users a simple and easy to expand architecture. Server software includes core server for system management, plugins for intelligent business reports, transaction server to link your system to other surveillance areas such as access control, video decoder for wall display, and more. On the other hand, client software provides PC console for operators in security room and mobile viewer for guards on the move.

What's New in Wisenet SSM



Free Trial License

Users are given 45 days of trial period before activating license. During this period full features including recording are available. After trial periods, features will be limited and SSM will generate a warning message.



Single Core Server with Clustering

Basic servers such as MG, RS, SM, HA have been put in a single "Core Server" for new launched Wisenet SSM. In addition, these "Core Servers" can be clustered together providing higher level of reliability. From Wisenet SSM, a group of clustered core servers will be named 'Domain' and in the same domain, core servers will synchronize data.



New Client User Interface

You can play back recorded video during live streaming and easily control playback up to 32x as well as reverse playback. Also Wisenet SSM displays the events in the same area as thumbnails making it easier to carry out a detailed search.



Live Streaming

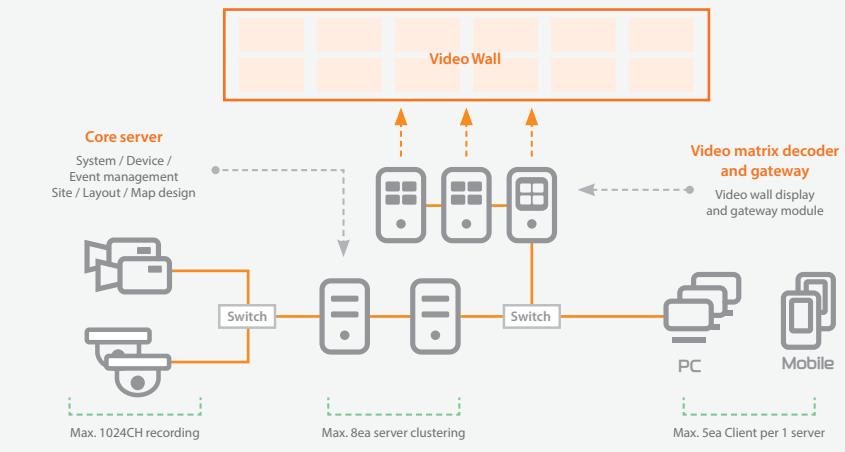


Display Events as Thumbnails



Location of Events for Google Map

System configuration



	General	Wisenet SSM (v2.0)
	System	
	Maximum Number of Monitoring Channel	Up to 10,000channel / domain
	Maximum Number of Recording Channel	Up to 10,000channel / domain
	Architecture	Server / Client
	Clients	Console Client, Mobile Viewer
	Supported Devices	Network camera / encoder / decoder, DVR / NVR, Controller
	Basic Component	
Core Server	Centralized License Management	45 days free trial
	Server Clustering	Data sharing
	System Dashboard	Real-time system status monitoring
	User Management	Device access authority, Feature level authority
	Federation	Multi-tier domain federation, Max. 100 domains
	Centralized Device Configuration	Auto / Manual Device and add-on server registration
	Device Connection	Up to 3,000 channel
	Event Configuration	4 levels event priority, Configurable event color
	Event Action	Rule based event and triggering action setup
	Layout & Pattern	User defined layout and tile pattern
Console Client	Tab Based Window	Live, Advanced search, Event, Configuration, Retail
	Number of Channels	Max. 100 channels, Max. 64 channels per tab
	Decoding	Hardware accelerator supported (NVIDIA CUDA)
	Playback	Multi channel playback, Bookmark
	Real-time Event	Event filtering by status, type, and priority
	Event Search	Event acknowledgement history
	Smart Search	Search by virtual area and virtual line

Reader



Wisenet ACS

R10/R10 Elite/R10 Elite Mobile



Wisenet ACS

R40/R40 Elite/R40 Elite Mobile



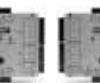
Wisenet ACS

RK40/RK40 Elite/RK40 Elite Mobile

Wisenet ACS
BioEntry W2Wisenet ACS
5427CKWisenet ACS
BioMini

Frequency	13.56MHz	13.56MHz	13.56MHz	13.56MHz	13.56MHz	-
Communication	Wiegand	Wiegand	Wiegand / Clock & Data	Wiegand	USB 2.0	USB 2.0
Compatible Access Cards	R10 : iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN R10 Elite : iCLASS SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN R10 Elite Mobile : Mobile ID, MIFARE (Classic) / DESFire EV1 CSN	R40 : iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN R40 Elite : iCLASS SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN R40 Elite Mobile : Mobile ID, MIFARE (Classic) / DESFire EV1 CSN	RK40 : iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN RK40 Elite : iCLASS SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN RK40 Elite Mobile : Mobile ID, MIFARE (Classic) / DESFire EV1 CSN	iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN	iCLASS SE / SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN	-
Keypad	-	-	Yes (4 x 3)	-	-	-
Operating Voltage Range	5~16V DC	5~16V DC	5~16V DC	12V DC	USB 2.0	USB 2.0
Operating Temperature	-35°C ~ +65°C (-31°F ~ +150°F)	-35°C ~ +65°C (-31°F ~ +150°F)	-35°C ~ +65°C (-31°F ~ +150°F)	-20°C ~ +50°C (-4°F ~ +122°F)	0°C ~ +70°C (+32°F ~ +158°F)	-10°C ~ +50°C (+14°F ~ +122°F)
Ingress Protection	IP55	IP55	IP55	IP67	IP54	-
Impact Protection	-	-	-	IK08	-	-
Panel Connection	Pigtail	Pigtail	Pigtail	Pigtail	-	-
Color	Black	Black	Black	Dark Gray	Black	Dark Gray
Max. User	-	-	-	500,000 (1 : 1), 100,000 (1 : N)	-	-
Max. Fingerprint Template	-	-	-	1,000,000 (1 : 1), 200,000 (1 : N)	-	-
Ethernet	-	-	-	10/100Mbps	-	-

Controller

Wisenet ACS
V2000Wisenet ACS
EH400KWisenet ACS
V100Wisenet ACS
V100/V200/V300

Card



iCLASS SE

iCLASS SEOS Elite

Mobile ID

- 13.56Mhz
- Compatible with R10 / R40 / RK40

- 13.56Mhz
- Compatible with R10 Elite / R40 Elite / RK40 Elite
- Encoded by Hanwha Techwin unique format

- Bluetooth / NFC via mobile device (Android, IOS)
- Compatible with R10 Elite mobile / R40 Elite mobile / RK40 Elite mobile

Peripheral

Wisenet ACS
SSA-X300

Controller/Interface On Board	Max. 2ea Boards in enclosure
Input Power	100 ~ 240V AC (50Hz/60Hz) / 2.0A
Power Consumption	13.5V ±5%, 4.7A (Strobe, Horn 12.5V DC ±5%)
Charging Current	700mA
Back up Battery	12V, 18Ah, rechargeable
SMPS Status Transmission	AC loss, Battery fail (Non battery)
AC Input Protection	by Fuse in input port
Operation Temperature	0°C ~ +45°C (+32°F ~ +113°F)
Case Lock	Lock on front door with keys
Dimension (mm)	410 x 410 x 97mm (16.14" x 16.14" x 3.82")

Appliance

Wisenet ACS
SSA-A100

Supported Platform	Windows 10 IoT 2016 Enterprise entry
Installed S/W	SSA-M1000 (up to 32doors)
Processor	Intel celeron J3455 quad core 1.5 GHz to 2.3 GHz burst
RAM	SODIMM 8GB
Storage	120GB SSD
USB Storage	2x Front USB 3.0, 2x Rear USB 3.0
Graphics	Intel HD graphics 500
Power Supply	19V, 65W
Ethernet	10/100/1000 Mbps ethernet
Connectivity	Wireless-AC 3168, IEEE 802.11ac 1 x 1 + Bluetooth v4.2
Dimension (WxHxD)	115 x 51 x 111mm (4.53" x 2.01" x 4.37")

Wisenet ACS Control Software

Wisenet ACS Control Software is access control management software and can be integrated with Wisenet SSM for integrated Monitoring solution.

It is highly scalable up to unlimited doors system and has robust software architecture.

Key Features



Configuration



Mustering Report



Monitoring



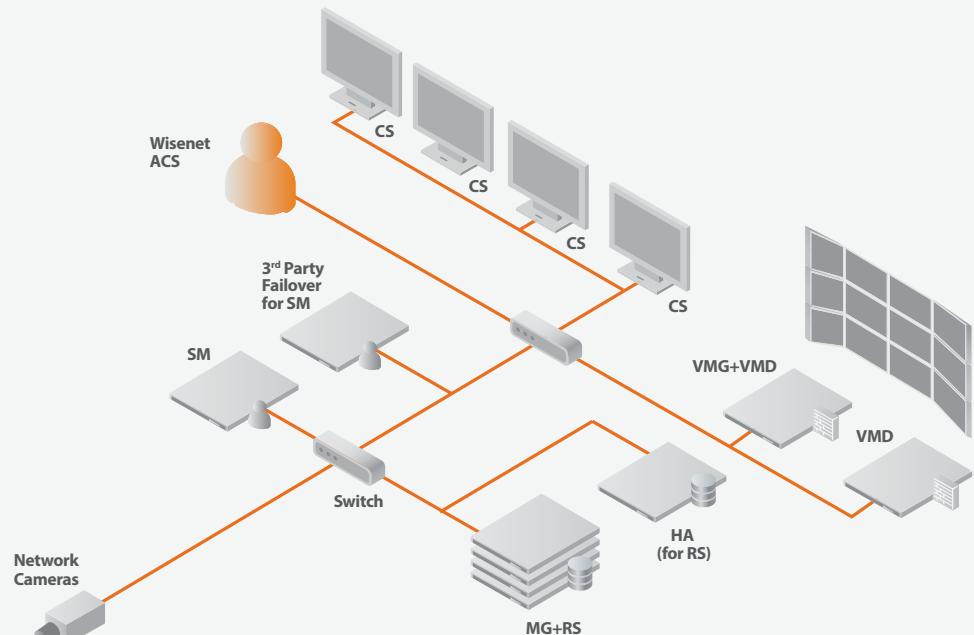
Lift Control

Access Control	<ul style="list-style-type: none"> Device auto discovery Cardholder management Batch uploads Card(s) pre-registration Device maintenance Unlimited access groups, Time schedules Area / Zone management Biometric readers (FP) Lift Control (with V300)
Monitoring	<ul style="list-style-type: none"> Real time access events & alarm monitoring Graphic maps Remote door management (Close / Open) I/O monitoring Mustering Event filtering for monitoring Control door monitoring / Management permissions per user group Create multiple design templates
Card Design and Printing	<ul style="list-style-type: none"> Auto-fill card holder data from system database Print cards
Fire Groups	<ul style="list-style-type: none"> Create firegroups for each fire sensor input
Advanced Reporting	<ul style="list-style-type: none"> Extensive reporting options Export to multiple formats (excel, pdf, word etc.) Full Integration with Hanwha Techwin's VMS, SSM
Video Integration with SSM	<ul style="list-style-type: none"> Review video of the access events & alarms Real-time event & alarm notification to SSM
Maintenance	<ul style="list-style-type: none"> User group & user privileges Manual & scheduled database backup Database restore Data export & import Custom fields Auditing & user activity logs
System	<ul style="list-style-type: none"> Up to 32doors (standard), 256doors (professional), Unlimited doors (enterprise) Very simple and intuitive user interface Highly scalable

Wisenet ACS



Integration with Wisenet SSM



Camera



	Wisenet HD+ HCB-7000	Wisenet HD+ HCO-7070R	Wisenet HD+ HCO-7010R/20R/30R	Wisenet HD+ HCD-7070R	Wisenet HD+ HCD-7010R/20R/30R	Wisenet HD+ HCV-7070R	Wisenet HD+ HCV-7010R/20R/30R
TV Lines / Resolutions	4MP	4MP	4MP	4MP	4MP	4MP	4MP
Imaging Device	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS
Horizontal Resolution	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440
Min. Illumination	Color : 0.16Lux B/W : 0.009Lux	Color : 0.16Lux B/W : 0Lux (IR LED on)	Color : 0.26Lux (HCO-7010R) 0.27Lux (HCO-7020R/7030R) B/W : 0Lux (IR LED on)	Color : 0.16Lux B/W : 0Lux (IR LED on)	Color : 0.26Lux (HCD-7010R) 0.27Lux (HCD-7020R/7030R) B/W : 0Lux (IR LED on)	Color : 0.16Lux B/W : 0Lux (IR LED on)	Color : 0.26Lux (HCV-7010R) 0.27Lux (HCV-7020R/7030R) B/W : 0Lux (IR LED on)
Lens	-	3.2 ~ 10mm (3.1x) V/F (F1.6)	2.8mm fixed (F1.8) (HCO-7010R) 4.0mm fixed (F2.0) (HCO-7020R) 6.0mm fixed (F2.0) (HCO-7030R)	3.2 ~ 10mm (3.1x) V/F (F1.6)	2.8mm fixed (F1.8) (HCD-7010R) 4.0mm fixed (F2.0) (HCD-7020R) 6.0mm fixed (F2.0) (HCD-7030R)	3.2 ~ 10mm (3.1x) V/F (F1.6)	2.8mm fixed (F1.8) (HCV-7010R) 4.0mm fixed (F2.0) (HCV-7020R) 6.0mm fixed (F2.0) (HCV-7030R)
VIDEO	IR Viewable Length	-	30m (98.43ft)	20m (65.62ft) (HCO-7010R) 25m (82.02ft) (HCO-7020R) 30m (98.43ft) (HCO-7030R)	20m (65.62ft) (HCD-7010R)	20m (65.62ft) (HCD-7010R) 25m (82.02ft) (HCD-7020R) 30m (98.43ft) (HCD-7030R)	30m (98.43ft)
	Angular Field of View	-	H: 93.48°(Wide) ~ 29.44°(Tele) / V: 50.47°(Wide) ~ 16.64°(Tele) / D: 112.53°(Wide) ~ 33.7°(Tele)	H: 107.48° / V: 59.67° / D: 122.01° (HCO-7010R) H: 78.22° / V: 41.21° / D: 87.91° (HCO-7020R) H: 49.01° / V: 27.61° / D: 55.6° (HCO-7030R)	H: 93.48°(Wide) ~ 29.44°(Tele) / V: 50.47°(Wide) ~ 16.64°(Tele) / D: 112.53°(Wide) ~ 33.7°(Tele)	H: 107.48° / V: 59.67° / D: 122.01° (HCD-7010R) H: 78.22° / V: 41.21° / D: 87.91° (HCD-7020R) H: 49.01° / V: 27.61° / D: 55.6° (HCD-7030R)	H: 93.48°(Wide) ~ 29.44°(Tele) / V: 50.47°(Wide) ~ 16.64°(Tele) / D: 112.53°(Wide) ~ 33.7°(Tele)
Focus Control	Manual	Manual	Fixed	Manual	Fixed	Manual	Fixed
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 63° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
OPERATIONAL	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR
	Digital Noise Reduction	2D DNR	2D DNR	2D DNR	2D DNR	2D DNR	2D DNR
	Motion detection	Support	Support	Support	Support	Support	Support
	Privacy Masking	2 Zones	2 Zones	2 Zones	2 Zones	2 Zones	2 Zones
Alarm I/O	MD Output 1	MD Output 1	-	MD Output 1	-	MD Output 1	-
Communication	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron) RS-485 : Samsung T, Pelco D/P	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)
Environment Protection	-	IP66, IK10	IP66, IK10	-	-	IP66, IK10	IP66, IK10
FEATURES	Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
	Power	Max. 3.6W (24V AC & 12V DC)	Max. 5.8W (24V AC & 12V DC)	Max. 5.0W (12V DC)	Max. 5.8W (24V AC & 12V DC)	Max. 5.0W (12V DC)	Max. 5.8W (24V AC & 12V DC)
Dimensions (WxHxD) / Weight	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 186g (0.41 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02 lb)	Ø70.0 x 246.0 mm (Ø2.76" x 9.69") (Without sunshield) 670g (1.48 lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.71 lb)	Ø110.1 x 86.1mm (Ø4.33" x 3.39") 240g (0.53 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.58 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.12 lb)
Additional Features	Video Transmission up to 500m (SC2V Coaxial Cable)	Video Transmission up to 500m (SC2V Coaxial Cable)	Video Transmission up to 500m (SC2V Coaxial Cable)	Video Transmission up to 500m (SC2V Coaxial Cable)	Video Transmission up to 500m (SC2V Coaxial Cable)	Video Transmission up to 500m (SC2V Coaxial Cable)	Video Transmission up to 500m (SC2V Coaxial Cable)


Wisenet HD+
HCB-6001
Wisenet HD+
HCB-6000
Wisenet HD+
HCZ-6320
Wisenet HD+
HCO-6080R
Wisenet HD+
HCO-6070R
Wisenet HD+
HCD-6080R

	2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	TV Lines / Resolutions	2MP	2MP	2MP	2MP	2MP
	Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
	Horizontal Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	Min. Illumination	Color: 0.09Lux B/W: 0.009Lux	Color: 0.09Lux B/W: 0.009Lux	Color: 0.2Lux B/W: 0.01Lux	Color: 0.11Lux B/W: 0Lux (IR LED on)	Color: 0.11Lux B/W: 0Lux (IR LED on)
	Lens	-	-	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	3.2 ~ 10mm (3.1x) V/F (F1.6)
	IR Viewable Length	-	-	-	30m (98.43ft)	30m (98.43ft)
	Angular Field of View	-	-	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.80°(Wide) ~ 1.26°(Tele)	H: 110.2°(Wide) ~ 32°(Tele) / V: 55.4°(Wide) ~ 18°(Tele) / D: 128.4°(Wide) ~ 36.6°(Tele)	H: 110.2°(Wide) ~ 32°(Tele) / V: 55.4°(Wide) ~ 18°(Tele) / D: 128.4°(Wide) ~ 36.6°(Tele)
	Focus Control	Simple Focus	Manual	Auto / Manual / One push	Simple focus (motorized V/F) / Manual	Manual
OPERATIONAL	Pan / Tilt / Rotate	-	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIII	SSNRIV	SSNRIV
	Motion detection	Support	Support	Support	Support	Support
FEATURES	Privacy Masking	4 Zones	8 Zones	12 Zones	8 Zones	8 Zones
	Alarm I/O	0 / 1, External D/N 1	0 / 1, External D/N 1	-	MD Output 1	MD Output 1
	Communication	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), RS-485 : Samsung T/E, Pelco D/P, Panasonic Bosch, Honeywell, Vicon, GE, AD	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol), RS-485 : Samsung T, Pelco D/P, Panasonic Bosch, Honeywell, Vicon, GE, AD	AHD : ACP (AHD Coax Protocol), RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)
FEATURES	Environment Protection	-	-	-	IP66, IK10	IP66, 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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
	Power	Max. 6W (24V AC & 12V DC)	Max. 3.5W (24V AC & 12V DC)	Max. 6W (12V DC)	Max. 6.0W (24V AC & 12V DC)	Max. 6.0W (24V AC & 12V DC)
	Dimensions (WxHxD) / Weight	73.1 x 67.2 x 123.9mm (2.88" x 2.65" x 4.88") 287g (0.63 lb)	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 186g (0.41 lb)	72.0 x 60 x 137mm (2.83" x 2.36" x 5.39") 476g (1.05 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 948g (2.09 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02 lb)
	Additional Features	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Defog	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)

Wisenet HD+
HCD-6070RWisenet HD+
HCV-6080RWisenet HD+
HCV-6070RWisenet HD+
HCM-9020VQWisenet HD+
HCP-6320HA/6320AWisenet HD+
HCP-6230H/6230

	Wisenet HD+ HCD-6070R	Wisenet HD+ HCV-6080R	Wisenet HD+ HCV-6070R	Wisenet HD+ HCM-9020VQ	Wisenet HD+ HCP-6320HA/6320A	Wisenet HD+ HCP-6230H/6230
TV Lines / Resolutions	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/3" 2M CMOS Sensor x 4	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS
Horizontal Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color: 0.1Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux (4mm) / 0.01Lux (6mm) B/W: 0.01Lux (4mm, 0.6mm)	Color: 0.2Lux B/W: 0.01Lux	Color: 0.2Lux B/W: 0.01Lux
Lens	3.2 ~ 10mm (3.1x) V/F (F1.6)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	3.2 ~ 10mm (3.1x) V/F (F1.6)	4mm x 2 (F2.6), 6mm x 2 (F2.0)	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	4.44 ~ 101.2mm (Optical 23x) F1.6(Wide) / F3.63(Tele)
VIDEO	IR Viewable Length	20m (65.62ft)	30m (98.43ft)	30m (98.43ft)	-	-
Angular Field of View	H: 110.2°(Wide) ~ 32°(Tele) / V: 55.4°(Wide) ~ 18°(Tele) / D: 128.4°(Wide) ~ 36.6°(Tele)	H: 110.2°(Wide) ~ 32°(Tele) / V: 55.4°(Wide) ~ 18°(Tele) / D: 128.4°(Wide) ~ 36.6°(Tele)	H: 110.2°(Wide) ~ 32°(Tele) / V: 55.4°(Wide) ~ 18°(Tele) / D: 128.4°(Wide) ~ 36.6°(Tele)	H: 80.20° / V: 43.50° / D: 95.24° [4mm] H: 51.66° / V: 30.46° / D: 60.78° [6mm]	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 62.8°(Wide) ~ 3.14°(Tele) / V: 36.8°(Wide) ~ 1.76°(Tele)
Focus Control	Manual	Simple focus (motorized V/F) / Manual	Manual	Fixed	Auto / Manual / One push	Auto / Manual / One push
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	20° ~ 60° / 0° / 355°	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 210° (-15° ~ 195°) / -
OPERATIONAL	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (100dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	Off / Low / Middle / High	SSNRIII	SSNRIII
Motion detection	Support	Support	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	16 Zones	32 Zones	32 Zones
Alarm I/O	MD Output 1	MD Output 1	MD Output 1	0 / 4	4 / 2 (Relay)	4 / 2 (Relay)
Communication	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	Pelco-C (Coaxitron), RS-485 : Samsung-T/E, Pelco-P/D, Sungjin, Panasonic, Honeywell, AD, Vicon, Bosch, GE	AHD : ACP (AHD Coax Protocol), RS-485 : Samsung-T/E, Pelco-P/D, Sungjin, Panasonic, Honeywell, AD, Vicon, Bosch, GE	AHD : ACP (AHD Coax Protocol), RS-485 : Samsung-T/E, Pelco-P/D, Sungjin, Panasonic, Honeywell, AD, Vicon, Bosch, GE
Environment Protection	-	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10 (HCP-6320HA), IK10 (With SHP-3701H) (HCP-6230A)	IP66, IK10 (HCP-6230H), IK10 (With SHP-3701H) (HCP-6230)
FEATURES	Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +50°C (-22°F ~ +122°F) * Start up above -10°C (+14°F)	-50°C ~ +55°C (-58°F ~ +131°F) (HCP-6320HA), -10°C ~ +55°C (+14°F ~ +131°F) (HCP-6230A)
Power	Max. 4.2W (24V AC & 12V DC)	Max. 4.2W (24V AC & 12V DC)	Max. 4.2W (24V AC & 12V DC)	Max. 7.3W, TDN On (24V AC) Max. 6.7W, TDN On (12V DC)	Max. 24.0W / 65.0W - Heater off / on (24V AC) (HCP-6320HA) Max. 20.0W (24V AC) (HCP-6230A)	Max. 24.0W / 65.0W - Heater off / on (24V AC) (HCP-6230H) Max. 20.0W (24V AC) (HCP-6230)
Dimensions (WxHxD) / Weight	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.71 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 725g (1.60 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.58 lb)	Ø199 x 89.5mm (7.83" x 3.52") 2Kg (4.41 lb)	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb) (SNP-6320HA), Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb) (SNP-6320A)	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb) (SNP-6230H), Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb) (SNP-6230)
Additional Features	Video transmission up to 500m (SC2V Coaxial Cable)	Video transmission up to 500m (SC2V Coaxial Cable)	Video transmission up to 500m (SC2V Coaxial Cable)	Multi-directional camera	Defog	Defog



Wisenet HD+
SCB-6003



Wisenet HD+
SCO-6083R



Wisenet HD+
SCO-6023R



Wisenet HD+
SCD-6083R



Wisenet HD+
SCD-6023R



Wisenet HD+
SCD-6013



Wisenet HD+
SCV-6083R



Wisenet HD+
SCV-6023R

	2MP	2MP	2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	TV Lines / Resolutions	2MP	2MP	2MP	2MP	2MP	2MP	2MP
	Imaging Device	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS
	Horizontal Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
	Min. Illumination	Color: 0.04Lux B/W: 0.004Lux	Color: 0.11Lux B/W: 0Lux (IR LED on)	Color: 0.25Lux B/W: 0Lux (IR LED on)	Color: 0.11Lux B/W: 0Lux (IR LED on)	Color: 0.25Lux B/W: 0Lux (IR LED on)	Color: 0.1Lux B/W: 0.01Lux	Color: 0.25Lux B/W: 0Lux (IR LED on)
	Lens	-	2.8 ~ 12mm (4.3x) V/F (F1.4)	4mm fixed (F 2.1)	2.8 ~ 12mm (4.3x) V/F (F1.4)	4mm fixed (F 2.1)	2.8mm fixed (F1.8)	2.8 ~ 12mm (4.3x) V/F (F1.4)
	IR Viewable Length	-	30m (98.43ft)	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)	-	30m (98.43ft)
	Angular Field of View	-	H: 102°(Wide) ~ 32.2°(Tele) / V: 54°(Wide) ~ 18.2°(Tele) / D: 121°(Wide) ~ 38°(Tele)	H: 80.7° / V: 43.5° / D: 95.8°	H: 102°(Wide) ~ 32.2°(Tele) / V: 54°(Wide) ~ 18.2°(Tele) / D: 121°(Wide) ~ 38°(Tele)	H: 80.7° / V: 43.5° / D: 95.8°	H: 108.7° / V: 60.6° / D: 125.4°	H: 102°(Wide) ~ 32.2°(Tele) / V: 54°(Wide) ~ 18.2°(Tele) / D: 121°(Wide) ~ 38°(Tele)
	Focus Control	-	Manual	Fixed	Manual	Fixed	Fixed	Manual
OPERATIONAL	Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR
	Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV
	Motion detection	Support	Support	Support	Support	Support	Support	Support
FEATURES	Privacy Masking	4 Zones	4 Zones	4 Zones	4 Zones	4 Zones	4 Zones	4 Zones
	Alarm I/O	0 / 1, External D/N 1	0 / 1	-	0 / 1	-	-	0 / 1
	Communication	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), RS-485	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)
FEATURES	Environment Protection	-	IP66, IK10	IP66	-	-	-	IP66, IK10
	Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
	Power	Max. 4.2W (24V AC & 12V DC)	Max. 6.0W (24V AC & 12V DC)	Max. 4.2W (12V DC)	Max. 4.2W (24V AC & 12V DC)	Max. 4.2W (12V DC)	Max. 2.5w (12V DC)	Max. 4.2W (24V AC & 12V DC)
Dimensions (WxHxD) / Weight	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 175.5g (0.39 lb)	Ø78.0 x 260.0mm (Ø3.07" x 10.24") (Without sunshield) 922g (2.03 lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.50") (Without Sunshield) 208g (0.46 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 304g (0.67 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 242g (0.53 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 231g (0.51 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 716g (1.58 lb)	Ø137.0 x 94.0mm (Ø5.39" x 3.70") 560g (1.23 lb)
	Additional Features	Defog	Defog	Defog	Defog	Defog	Defog	Defog

DVR



**Wisenet HD+
HRD-1642** **Wisenet HD+
HRD-1641** **Wisenet HD+
HRD-842** **Wisenet HD+
HRD-841** **Wisenet HD+
HRD-840** **Wisenet HD+
HRD-442** **Wisenet HD+
HRD-440**

Channel		16CH	16CH	8CH	8CH	8CH	4CH	4CH
OS	Embedded	Linux						
Live	Frame Rate (NTSC / PAL)	480fps / 400fps	480fps / 400fps	240fps / 200fps	240fps / 200fps	240fps / 200fps	120fps / 100fps	120fps / 100fps
Recording	Max. Record Rate / NTSC	240fps@2560 x 1440 480fps@1920 x 1080	240fps@2560 x 1440 480fps@1920 x 1080	120fps@2560 x 1440 240fps@1920 x 1080	120fps@2560 x 1440 240fps@1920 x 1080	120fps@2560 x 1440 240fps@1920 x 1080	60fps@2560 x 1440 120fps@1920 x 1080	60fps@2560 x 1440 120fps@1920 x 1080
	Max. Record Rate / PAL	200fps@2560 x 1440 400fps@1920 x 1080	200fps@2560 x 1440 400fps@1920 x 1080	100fps@2560 x 1440 200fps@1920 x 1080	100fps@2560 x 1440 200fps@1920 x 1080	100fps@2560 x 1440 200fps@1920 x 1080	50fps@2560 x 1440 100fps@1920 x 1080	50fps@2560 x 1440 100fps@1920 x 1080
	Compression	H.264						
Video	Inputs	16CH : AHD, NTSC, PAL TVI, CVI	16CH : AHD, NTSC, PAL TVI, CVI	8CH : AHD, NTSC, PAL TVI, CVI	8CH : AHD, NTSC, PAL TVI, CVI	8CH : AHD, NTSC, PAL TVI, CVI	4CH : AHD, NTSC, PAL HDTV, HDCVI	4CH : AHD, NTSC, PAL TVI, CVI
Audio	Inputs	16CH (Built-in 4CH)	4CH	8CH (Built-in 4CH)	4CH	1CH	4CH	1CH
Storage	Internal HDD	Up to 8 SATA HDDs	Up to 2 SATA HDDs	Up to 4 SATA HDDs	Up to 2 SATA HDDs	Up to 1 SATA HDD	Up to 2 SATA HDDs	Up to 1 SATA HDD
	External HDD	Up to 2 Expansion Bays	Up to 1 Expansion Bays	Up to 2 Expansion Bays	Up to 1 Expansion Bays	-	-	-
Monitors	VGA	Yes						
	HDMI	Yes						
	Spot Composite	1CH (BNC)						
Connections	USB	2 ports						
	e-SATA	2 External SATA ports	1 External SATA port	2 External SATA Ports	1 External SATA port	-	-	-
	Mouse	Yes						
Network	Remote Users	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20
	Transmission	4MP, 1080p, 720p, WD1, 4CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, 2CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, CIF	4MP, 1080P, 720P, WD1, 4CIF, CIF	4MP, 1080P, 720P, WD1, 4CIF, CIF
	Monitoring	SSM, WebViewer, SmartViewer, Mobile Viewer						
PTZ Control	Coax Protocol	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron), AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron), AHD : ACP (AHD Coax Protocol)
	RS-485 Protocol	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE

MONITOR / CONTROLLER

LED Monitor



New



New



SMT-2233



SMT-1935



SMT-1931



SMT-1914

Screen Size	40"	32"	22"	19"	19"	19"
Resolution (pixels HxV)	1,920 x 1,080	1,920 x 1,080	1,920 x 1,080	1,280 x 1,024	1,366 x 768	1,280 x 1,024
Video In/Out	1	1	2/2	2/2	2/2	-
VGA	1	1	1	1	1	1
DVI / HDMI	1/1	1/1	0/1	0/1	0/1	-
USB	-	-	-	-	-	-
Audio In (Stereo)	1	1	2	2	2	-
Contrast Ratio	5,000 : 1	5,000 : 1	1,000 : 1	1,000 : 1	1,000 : 1	1,000 : 1
Aspect Ratio	16:9	16:9	16:9	4:3	16:9	4:3
Response Time	8ms	8ms	5ms	5ms	5ms	5ms
Brightness	350cd/m ²	350cd/m ²	250cd/m ²	250cd/m ²	250cd/m ²	250cd/m ²
Tempered Glass Screen	-	-	Yes	Yes	Yes	Yes
Picture In Picture	-	-	-	-	-	Yes
Built-in Speakers	Yes	Yes	Yes	Yes	Yes	-
Stand	General (Optional)	General (Optional)	Standard	Standard	Standard	Standard
Power	100V ~ 240V AC					
Additional Features	Remote Controller	Remote Controller	-	-	-	-

Controller / PoE Extender



SPC-7000



SPC-2000



SPC-2010



SPC-1010



SPO-100

Features	Network/Analog Cameras / NVR / DVR / SSM Controller <ul style="list-style-type: none"> • 5" TFT Touch LCD • Network Camera / SSM / Analog Camera / DVR Control • User-Friendly Design and Easy-to-Use Keypad • 3 Axis Joystick to Control PTZ Function • Detachable Joystick / Jogshuttle for Universe Use (Right / Left Hand Use) • USB Interface Support (1ea for SSM, 1ea for Image Snapshot / Upgrade) • Fast Camera-Tile Mapping, Config Import / Export 	Network Controller <ul style="list-style-type: none"> • Superior System Compatibility • 3D Joystick Control • Quick and Easy Installation • SSM Support 	PTZ / DVR System Controller <ul style="list-style-type: none"> • Control up to 255 PTZ Cameras / DVRs • Built-in 3 Axis Twist Zoom Joystick • Built-in Jog Shuttle • 16 x 2 Character LCD Display • RS-485 and RS-422 Interface 	PTZ Control Keyboard <ul style="list-style-type: none"> • Control up to 255 PTZ Cameras • Multi Protocols Supports • OSD Menu, 3D Joystick Control • RS-485 and RS-422 Interface 	PoE Extender <ul style="list-style-type: none"> • Simultaneous Transmission of Power and IP Data with the cat 5 Cable • Supporting TCP Speed of 100Mbps Full Duplex • The Maximum Transmission Distance for Ethernet Data Can be Extended More than 100m Depending on the Camera and Power Source • A Camera with up to 11.7W Power Consumption Can be Connected as Power is Supplied Through the PoE Hub • Built-in Surge Protection Circuit for Safety

LENS

Lens Description	Model	Image	Mount	Image Format	Resolution	Focal Length	Back Focal Length	Zoom Ratio	F. No	Angle of View	Operation			Dimensions WxHxD (mm/inch)	Weight (g/lb)	
											Iris	Focus	Zoom			
Varifocal Lens	SLA-M8550D		CS	1/2.8"	3Megapixel	8.5~50mm (0.33"~1.97")	9.4~10.7mm (0.37"~0.42")	5.9	F1.6	42.3°~7.5°	DC	P-Iris	Manual	46 x 60 x 58.2mm (1.81" x 2.36" x 2.29")	80g (0.17 lb)	
	SLA-M2890DN					2.8~9mm (0.11"~0.35")	7.5~15.9mm (0.30"~0.63")	3.2	1.2	134.2°~42.7°		P-Iris	Manual	45.0 x 51.5 x 54.3mm (1.77" x 2.03" x 2.14")	84.0g (0.19 lb)	
	SLA-M2890PN					2.8~9mm (0.11"~0.35")	7.5~15.9mm (0.30"~0.63")							45.0 x 51.5 x 54.3mm (1.77" x 2.03" x 2.14")	82.1g (0.18 lb)	
	SLA-2812DN			1/3"	520K pixel	2.8~12mm (0.11"~0.47")	20.2~8.1mm (0.80"~0.32")	4.2	1.3	133.0°~29.7°	DC	P-Iris	Manual	37.5 x 48.0 x 56.0mm (1.48" x 1.89" x 2.20")	71g (0.16 lb)	
	SLA-550DV					5~50mm (0.20"~1.97")	10.5~10.6mm (0.41"~0.42")							45.0 x 56.2 x 57.8mm (1.77" x 2.21" x 2.28")	100g (0.22 lb)	

PERIPHERALS



SHP-1680F



SHP-3701H



SHP-3701F



SHD-3000F1



SHD-3000F2



SHD-3000F3

In-Ceiling Housing for PTZ & Dome	Outdoor Housing for PTZ Dome	In-Ceiling Housing for Dome	In-Ceiling Housing for PTZ Dome	In Ceiling Housing for Dome	In Ceiling Housing for Dome
<ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with XNP-6120H XNV-6120/6120R/6085 XND-6085/6085V 	<ul style="list-style-type: none"> For outdoor applications Weatherproof rated to IP66 Aluminium + Polycarbonate IK10 vandal resistant Can be used with HCP-6320A/6320/6230 XNP-6320, QNP-6230 SNP-3300A/3301/3302/3350/3370/3371/3750/5200/5300/5320/5321/5430/6200/6201/6320/6321/L5233/L6233 SCP-2250/2251/2270/2271/2273/2330/2370/2371/2373/2430/3250/3370/3371/3430 	<ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with HCP-6320A/6320/6230 XNP-6320, QNP-6230 SNP-3300A/3301/3302/3350/3370/3371/3750/5200/5300/5320/5321/5430/6200/6201/6320/6321/L5233/L6233 SCP-2250/2251/2270/2271/2273/2330/2370/2371/2373/2430/3250/3370/3371/3430 	<ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with PNV-9080R XNV-6080/6080R/L6080/L6080V/6080V/8080R/8080RV 	<ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with QND-6070R/7080R SND-6011R/L5083R/L6083R SCD-5080/5082/5083/5083R/6021/6083R SUD-5082 HCD-7070R/6080R/6070R 	<ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with XNV-8040R/8030R/8020R/6020R/6010 XNP-6040H QNV-6070R/7080R/7030R/7020R/7010R/6030R/6020R/6010R SNV-5083R/L6083R SCV-5082/5082R/5083/5083R/5085/6023R/6083R HCV-7070R/7010R/7020R/7030R/6080R/6070R



SHD-3000F4



SHF-1500F



SBP-300HM1



SBP-301HM2



SBP-301HM3



SBP-301HM4/300HM5

In Ceiling Housing for Dome	In-Ceiling Housing for Dome	Hanging Mount	Hanging Mount	Hanging Mount	Hanging Mount for 3M / 5M Fisheye Cameras
<ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with PND-9080R XND-6080/6080R/6080RV/6080V/L6080R/L6080RV/6080V/8080R/8080RV 	<ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with PNF-9010R XNF-8010R 	<ul style="list-style-type: none"> Aluminum Can be used with SNP-3300A/3301/3302/3350/3370/3371/3750/5200/5300/5320/5321/5430/5201/5320/5321/5430/6200/6201/6320/6321/L5233/L6233 SCP-2250/2251/2430/3250/3430/2120/3120/2270/2330/2370/3370 SBP-300CM/300LM/300WM/300WM1 	<ul style="list-style-type: none"> Aluminum Can be used with XNP-6040H QNV-6070R/7080R SNV-1080/1080R/L5083R/L6083R SND-5083/5084R/5084R/6083/6084R/6084R/7084R SCV-2081/2081R/2082R/3081/3082/3083/5082/5083/5083R/5085/6023R/6083R SCD-6081R HCV-7070R/6080R/6070R SBP-300CM/300LM/300WM/300WM1 	<ul style="list-style-type: none"> Aluminum Can be used with SNV-3080/3082/3120/5080/5080R/7080/7080R/7082 SNP-5300/5320/5321/5430/6201/6320/6321/L5233/L6233 SCV-2060/2080/3080/3120 SCP-2271/2273/2371/2373/3371 SBP-300CM/300LM/300WM/300WM1 HCP-6320A/6230 	<ul style="list-style-type: none"> Aluminum Can be used with PNF-9010R/9010RV/9010RVM SNF-7010/7010V/7010VM SBP-300CM/300LM/300WM/300WM1 SCD-6083R (SBP-301HM4) Can be used with XNF-8010R/8010RV/8010RVM SNF-8010/8010VM SBP-300CM/300LM/300WM/300WM1 (SBP-301HM5)



SBP-300HM6



SBP-300HM7



SBP-300HM8



SBP-122HM



SBP-168HM



SBP-329HM

Hanging Mount	Hanging Mount	Hanging Mount	Hanging Mount	Hanging Mount	Hanging Mount
<ul style="list-style-type: none"> Aluminum Can be used with PNV-9080R XND-6085/6085V XNV-6080/6080R/6120/6120R/L6080R/L6080RV/6080V/8080R/8080RV SNV-5084R/6084R/6084R/6085R/7084R/8080R/8081R SCV-6081R SBP-300CM/300LM/300WM/300WM1 	<ul style="list-style-type: none"> Aluminum Can be used with XND-6010/6020/8020R/8030R/8040R XNV-6011 QND-6010R/6020R/6030R/7010R/7020R/7030R QND-6070R/7080R SCD-5080/5082/5083/5083R/6021/6083R SUD-5082 HCD-7010R/7020R/7030R HCV-7010R/7020R/7030R SBP-300CM/300LM/300WM/300WM1 	<ul style="list-style-type: none"> Aluminum Can be used with PND-9080R XND-6080/6080R/6080RV/6080V/8080R/8080RV SNV-5084R/6084R/6084R/6085R/7084R/8080R/8081R SCV-6081R SCD-6023R HCD-7010R/7020R/7030R SBP-300CM/300LM/300WM/300WM1 	<ul style="list-style-type: none"> Aluminum Can be used with XNP-6040H QNV-6070R/7080R SNV-1080/1080R/L5083R/L6083R SCV-2081/2081R/2082R/3081/3082/3083/5082/5083/5083R/5085/6023R/6083R SCD-6081R HCV-7070R/6080R/6070R SBP-300CM/300LM/300WM/300WM1 	<ul style="list-style-type: none"> Aluminum Can be used with XNP-6120H 	<ul style="list-style-type: none"> Aluminum Can be used with PNM-9080VQ/9081VQ/7000VD

PERIPHERALS



SBP-201HM/317HM



SBP-300HF/301HF/302HF



SBP-300TM1



SBP-160TM



SBP-300WM1/300WM



SBP-300CM/300LM

Hanging Mount	Built-in SFP Install Base for PTZ Cameras	Tilt Mount for 5M Fisheye Cameras	Tilt Mount	Wall Mount	Ceiling Mount / Parapet Mount
<ul style="list-style-type: none"> • Aluminum • Can be used with PNP-9020V (SBP-201HM) • Can be used with PNP-9080VQ/9081VQ/7000VD (SBP-317HM) 	<ul style="list-style-type: none"> • Aluminum • LC SFP port type • 100Mbps Ethernet speed (Default speed : 1000Mbps) • IEEE 802.3u, IEEE 802.3z Support • Audio input/output, 3.5mm type • 24V AC, IP66, IK10, -50°C to +55°C • Can use with SNP-6320H/5430H (SBP-300HF) • Can use with SNP-6321H/5321H/L6233H/L5233H (SBP-301HF) • Can use with PNP-9200RH/XNP-6370RH (SBP-302HF) 	<ul style="list-style-type: none"> • Poly Carbonate • Can be used with PNP-9010R/9010RV/9010RVM XNF-8010R/8010RV/8010RVM XNV-L6080R/L6080R SNF-8010/8010VM 	<ul style="list-style-type: none"> • Aluminum • Can be used with PNP-9080R XND-5085/6085V XNV-6012/6012R/6080/6080R/6085R/8080R SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R SCV-6081R 	<ul style="list-style-type: none"> • Aluminum + SECC • Can be used with SBP-300NB/300B/300PM/300KM 	<ul style="list-style-type: none"> • Aluminum + SECC • Can be used with hanging mount and outdoor PTZ



SBP-137WM



SBP-300WM0/120WM



SBP-390WM



SBP-300PM/302PM



SBP-300KM



SBP-300PMS

Wall Mount	Wall Mount	Wall Mount	Pole Mount	Corner Mount Base	Pole Mount
<ul style="list-style-type: none"> • Alluminum and Poly Carbonate • Can be used with QNV-6010R/6020R/6030R/6070R/7010R/7020R/7030R/7080R XNV-6010/602/8020R/8030R/8040R HCV-6070R/6080R/7010R/7020R/7030R/7070R/SCV-6023R/6083R SNV-L5083R/L6083R 	<ul style="list-style-type: none"> • Poly Carbonate • Can be used with SCD-2060E/2080/2080R/2081/2082/3080/3081/3082/3083/2020/2022R/2022R/5020/5030 SND-5061/7061/5011 SUD-5020 (SBP-300WM0) • Plastic • Can be used with QND-7080R/7030R/7020R/7010R/6070R/6030R/6020R/6010R,XND-6010/6020 SND-6082R/L6014R/L6013R/L6013/L6012/L5083R/L5013 SCD-6083R/6023R/6021/5083R/5083/5082/5080 (SBP-120WM) 	<ul style="list-style-type: none"> • Aluminum • Can be used with PNM-9081VQ/9080VQ 	<ul style="list-style-type: none"> • SECC • Can be used with SBP-300B/300WM1/300WM/300LM (SBP-300P) • Can be used with PNO-9080R/5NO-8081R/SBO-100B1 QNO-7080R/6070R/7010R/7020R/7030R/6010R/6020R/6030R (SBP-302PM) 	<ul style="list-style-type: none"> • SECC • Can be used with SBP-300B/300WM1/300WM/300LM 	<ul style="list-style-type: none"> • Stainless Steel 316 • Can be used with SBP-300B/300WM1/300WM/300LM



SBP-300KMS



SBP-300B



SBP-300NB



SBV-160WC



SBV-120WC



SBV-136B/158G

Corner Mount Base	Wall Mount Base	Installation Box	Weather Cap	Weather Cap	Back Box
<ul style="list-style-type: none"> • Stainless Steel 316 • Can be used with SBP-300B/300WM1/300WM/300LM 	<ul style="list-style-type: none"> • Aluminum + SECC • Can be used with SBP-300PM/300KM 	<ul style="list-style-type: none"> • Steel • Can be used with SBP-300WM/300WM1/300KM/300PM 	<ul style="list-style-type: none"> • Alluminum and Poly Carbonate • Can be used with PNV-9080R XNV-6080/6080R/L6080/L6080R/8080R SCV-6081R/5084/5084R SNV-6084/6084R/6085R/7084/7084R/8080/8081R 	<ul style="list-style-type: none"> • Alluminum and Poly Carbonate • Can be used with XNV-6010/6020/8020R/8030R/8040R QNV-6010R/6020R/6030R/7010R/7020R/7030R 	<ul style="list-style-type: none"> • Aluminum • Can be used with XNP-6040H SCV-5082R/5083R/5083R/5085R/6083R SNV-5083R/L6083R QNV-6070R/7080R (SBV-136B) HCV-6070R/6080R/7010/7020/7030R/7070R • Can be used with PNV-9080R XNV-6080R/6080R/L6080/L6080R/8080R SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R SCV-6081R (SBV-158G)

PERIPHERALS



SBF-100B1/SBO-100B1	SHB-4300H/4300H1/4300H2/4300HP	SHB-4200/4200H	STH-200	STB-400	STB-4150V
<p>Back Box</p> <ul style="list-style-type: none"> • Aluminum • Can be used with PNF-9010R/9010RV/9010RVM • SNF-8010/8010VM (SBF-100B1) • Can be used with QNO-7080R/6070R/7010R/7020R/7030R/6010R/6020R/6030R • SNO-L6083R/L5083R • SCO-6083R (SBO-100B1) • HCO-7070R/7010R/7020R/7030R/6080R/6070R 	<p>Fixed Housing</p> <ul style="list-style-type: none"> • Aluminum diecasting construction • Fully cable managed bracket • Built-in fan & heater • Support three cable glands, IP66 	<p>Fixed Housing</p> <ul style="list-style-type: none"> • Support two cable glands • Built-in fan & heater: SHB-4200H 	<p>Fixed Housing</p> <ul style="list-style-type: none"> • For fixed camera application • Wall/ceiling installations • Easy to install side open type 	<p>Fixed Mount</p> <ul style="list-style-type: none"> • Bracket for STH-500/200 • Aluminum and Steel material 	<p>Fixed Mount</p> <ul style="list-style-type: none"> • Bracket for box cameras • Aluminum and Steel material



SPB-IND5	SPB-IND6	SPB-IND11	SPB-IND12	SPB-IND72	SPB-IND81
<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Poly Carbonate + Poly Carbonate • Can be used with SCD-6081R • SND-5083/5084/6083/6084/6084R/7084 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Poly Carbonate + Poly Carbonate • Can be used with SCD-5080/5082/5083/5083R/6021/6083R • SND-6011R • SUD-5082 • QND-6070R/7080R 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Poly Carbonate + Poly Carbonate • Can be used with XND-6010/6020/8020R/8030R/8040R 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Poly Carbonate + Poly Carbonate • Can be used with QND-6010R/6020R/6030R/7010R/7020R/7030R 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Poly Carbonate + Poly Carbonate • Can be used with QND-6070R/7080R 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Poly Carbonate + Poly Carbonate • Can be used with XND-6080/6080R/L6080R/8080R



SPB-IND81V	SPB-VAN3	SPB-VAN4	SPB-VAN11	SPB-VAN12	SPB-VAN72
<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Aluminium + Poly Carbonate • Can be used with XND-6080V/6080RV/L6080RV/L6080V/8080RV 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Aluminium + Poly Carbonate • Can be used with PNV-9080R • SCV-6081R • SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R • XNV-6080/6080R/L6080/L6080R/8080R 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Aluminium + Poly Carbonate • Can be used with SCV-5082/5082R/5083/5083R/5085/6023R/6083R • SNV-L5083R/L6083R 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Aluminium + Poly Carbonate • Can be used with XNV-6010/6020/8020R/8030R/8040R 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Aluminium + Poly Carbonate • Can be used with QNV-6010R/6020R/6030R/7010R/7020R/7030R 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Aluminium + Poly Carbonate • Can be used with QNV-6070R/7080R

PERIPHERALS

PTZ Cameras

Type	Outdoor PTZ							Indoor PTZ			
Shape	PH1	PH2	PH3	PH4	PH5	PH6	PH7	P1	P2	P3	P4
Color	Ivory										
Model	SCP-2270H/2330H/ 2370H/2370TH/ 3370H/3370TH/ SNP-3301H/3302H/ 3370TH/3371H/ 3371TH/ 5200H/5200TH/ 6200H/6200TH	SCP-2250H/2251H/ 2430H/3250H/ 3430H	SCP-3120VH SNP-3120VH	SCP-2271H/2273H/ 2371H/2373H/ 3371H SNP-5300H/5320H/ 5321H/5430H/ 6201H/6320H/ 6321H/L5233H/ L6233H HCP-6320 XNP-6320H QNP-6230H	SCP-2370RH SNP-6200RH/6230RH/ L6233RH/6320RH	XNP-6370RH PNP-9200RH	XNP-6120H	SCP-2270/2330/ 2370/3370 SNP-3300A/3301/ 3302/3350/ 3370/3371/ 3750/5200/ 6200	SCP-2250/2251/2430/ 3250/3430	SCP-3120/2120 SNP-3120	SCP-2271/2273/ 2371/2373/ 3371 SNP-5300/5320/ 5321/5430/ 6201/6320/ 6321/L5233/ L6233 HCP-6230/6320A XNP-6320 QNP-6230

Dome Cameras

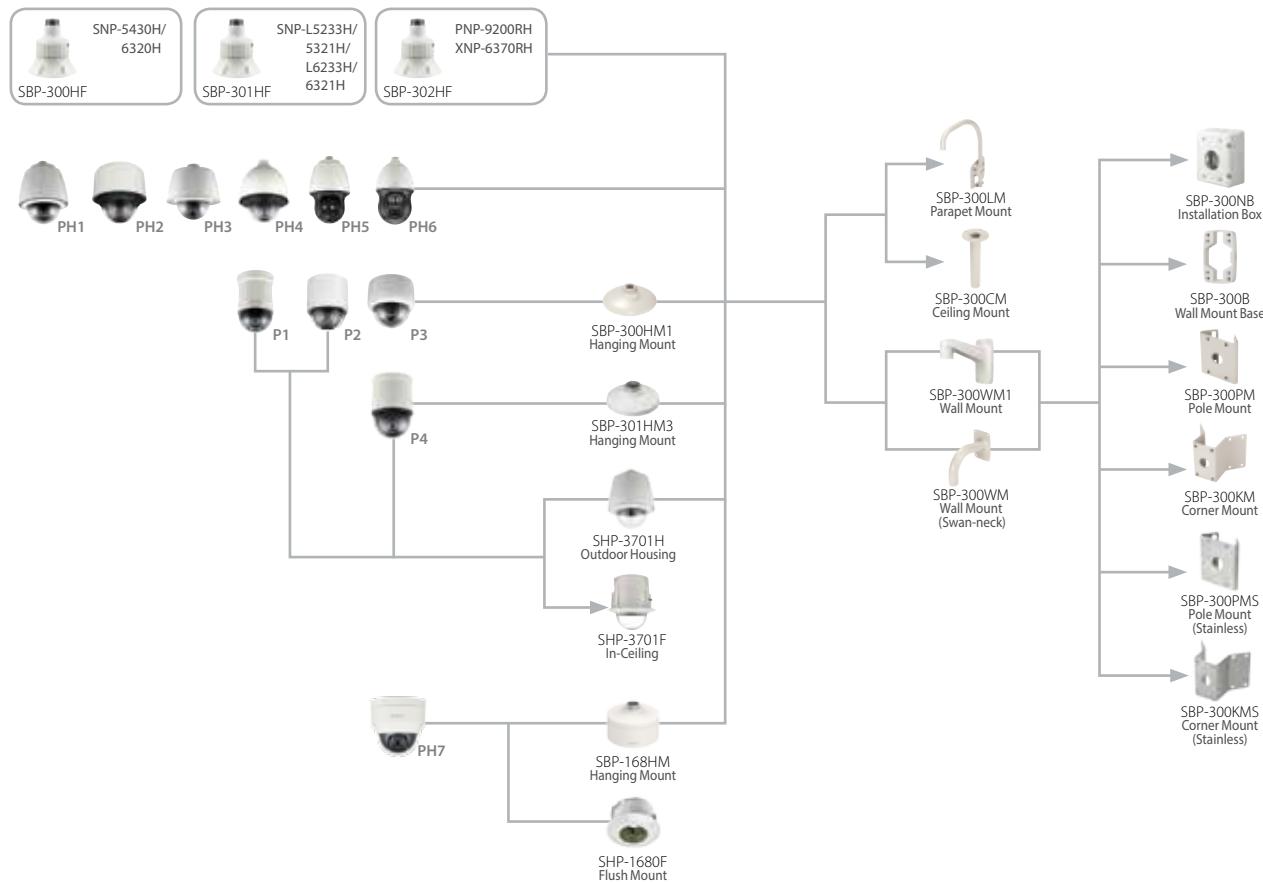
Type	Vandal-Resistant						Indoor Dome					
Shape	V1	V2	V3	V4	V5	V6	D1	D2	D3	D4	D5	D6
Color	Ivory											
Model	SCV-2060/2080/ 3080/3120 SNV-3080/3082/ 3120/5080/ 5080R/7080/ 7080R/7082	SCV-2081/2081R/ 2082R/3081/ 3082/3083 SNV-1080/1080R	PNV-9080R XNV-6080/6080R/ L6080/L6080R 6085R/6120/ 6120R/8080R SCV-6081R SNV-5084/5084R/ 6084/6084R/ 6085R/7084/ 7084R/8080/ 8081R	SNV-6013 XNV-6011	QNV-6070R/7080R XNP-6040H SCV-5082/5082R/ 5083/5083R/ 5085/6023R/ 6083R SNV-L5083R/L6083R HCV-6080R/6070R/ 7070R/7030R/ 7020/7010	QNV-6010R/6020R/ 6030R/7010R/ 7020R/7030R XNV-6010/6020/ 8020R/8030R/ 8040R HCV-7010R/7020R/ 7030R	SCD-2060E/2080/ 6030R/7010R/ 7020R/2081/ 2082/3080/ 3081/3082/ 3083 SND-1080/5061/ 7061	SCD-2020/2020R/ 2021/2022/ 2022R/2040/ 3081/3082/ 3083 SND-1011/5011/ 7011	SCD-6081R SND-5083/5084/ 5084R/6083/ 6084/6084R/ 7084/7084R	QND-6070R/7080R SND-L5083R/6011R/ L6083R SCD-5080/5081R/ 5082/6021/ 6083R SUD-5082 HCD-6070R/6080R/ 7070R	QND-6010R/6020R/6030R/ 7010R/7020R/7030R/ L6023R SND-L5013/L6012/ L6013/L6013R/ L6014R/ XND-6010/6020R/ 8020R/8030R/8040R/ HCD-7010R/7020R/7030R	PND-9080R XND-6080R/6080R/ 6080RV/6080V/ L6080R/L6080RV/ L6080V/8080R/ 8080RV

Fisheye / Panoramic Cameras

Type	Fisheye				Multi Imager	
Shape	F1	F2	FV1	FV2	M1	M2
Color	Ivory					
Model	SNF-7010	SNF-8010	SNF-7010V/ 7010VM	PNF-9010R/ 9010RV/ 9010RVM SNF-8010VM	PNM-9020V HCM-9020VQ	PNM-9081VQ/ 9080VQ

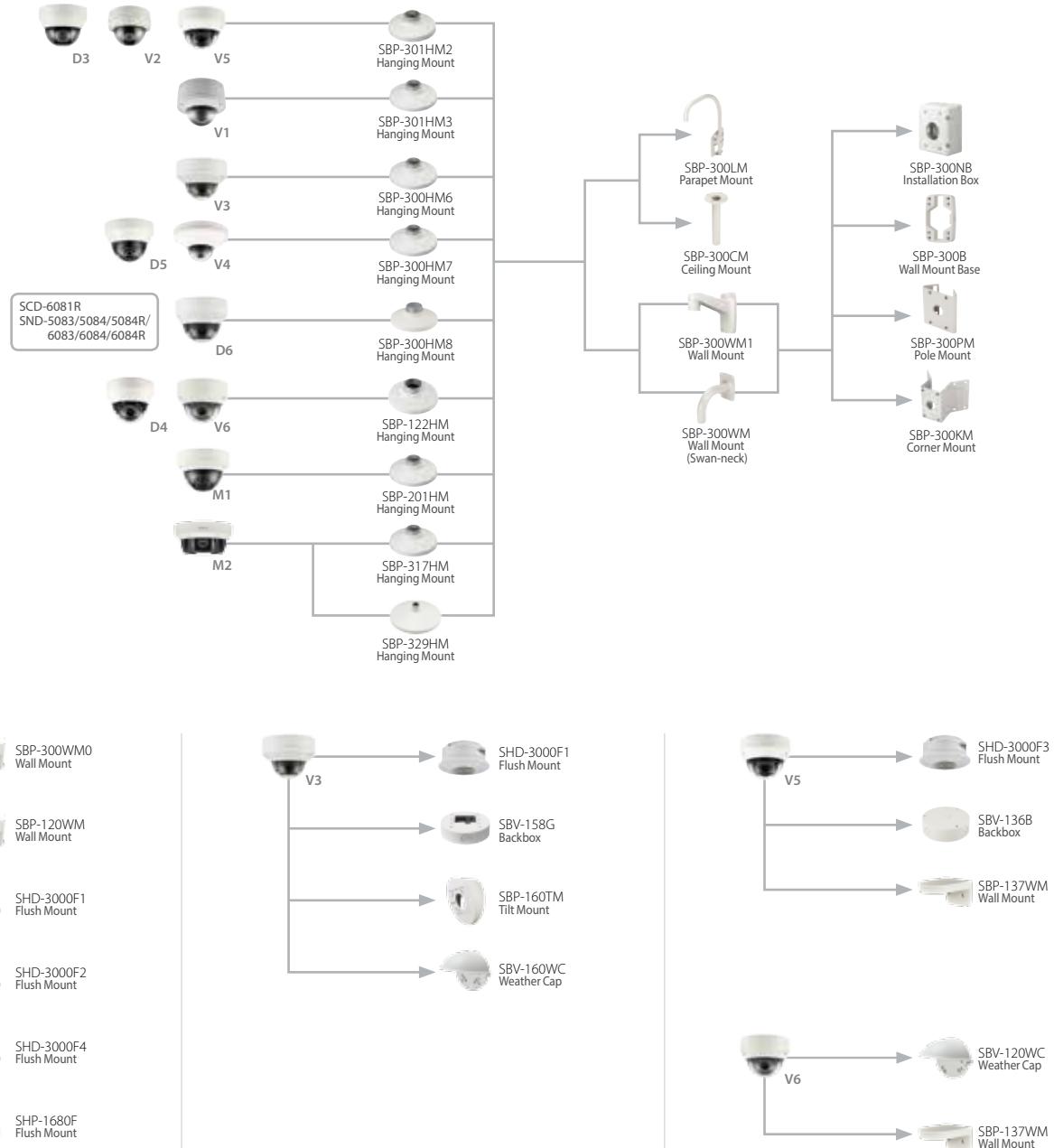
ACCESSORIES CONFIGURATION

PTZ
ACC



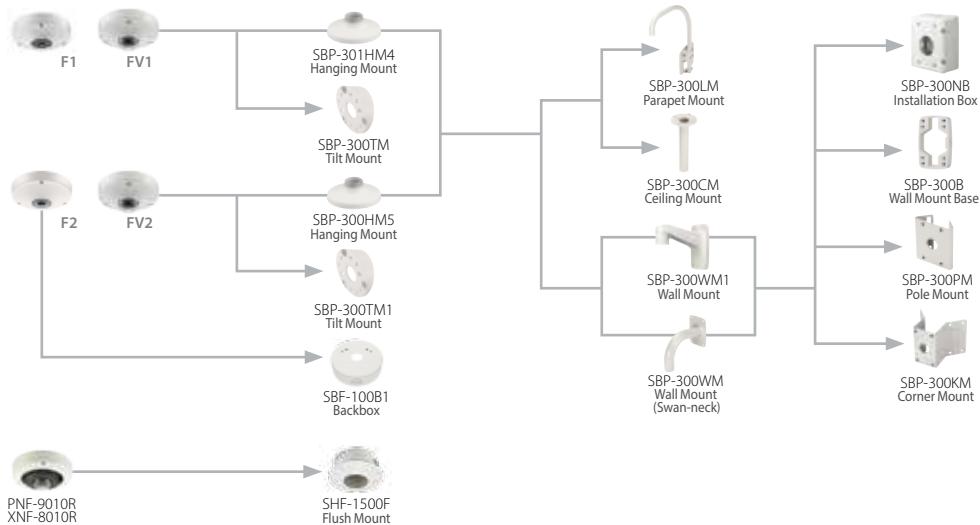
ACCESSORIES CONFIGURATION

DOME ACC



ACCESSORIES CONFIGURATION

FISHEYE ACC

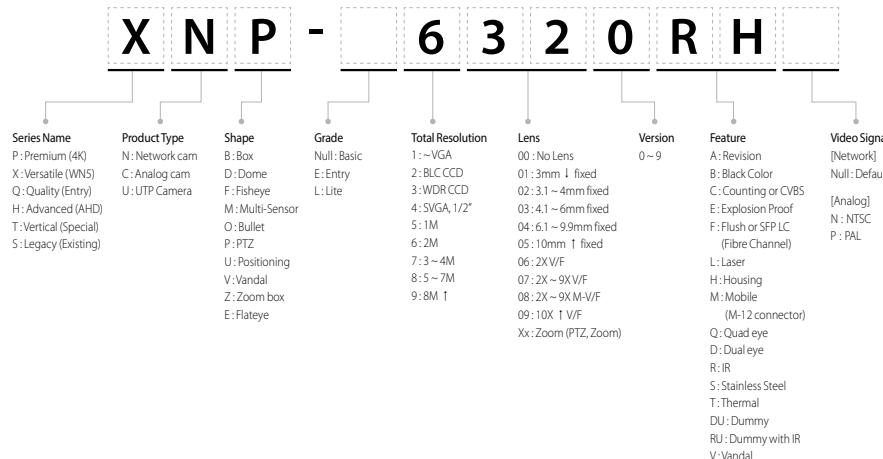


BULLET ACC

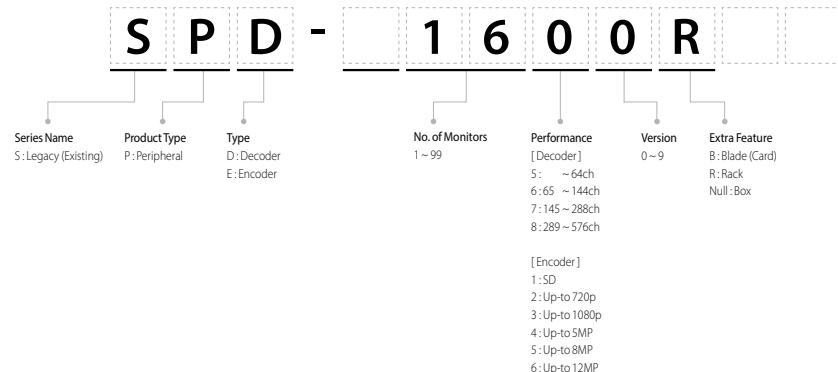


PRODUCT NAMING RULE

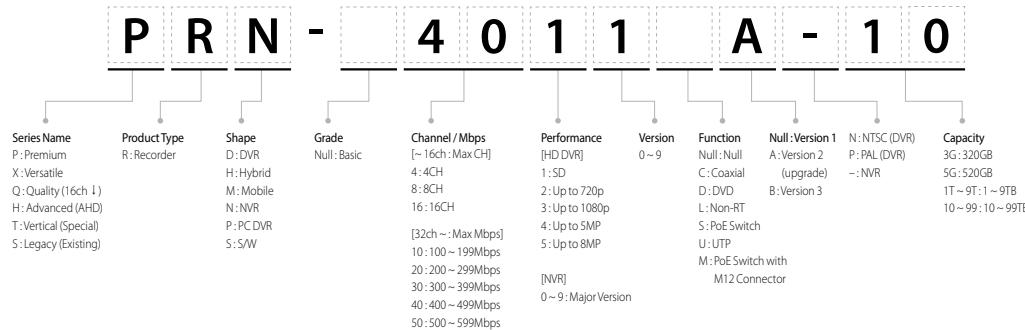
Camera



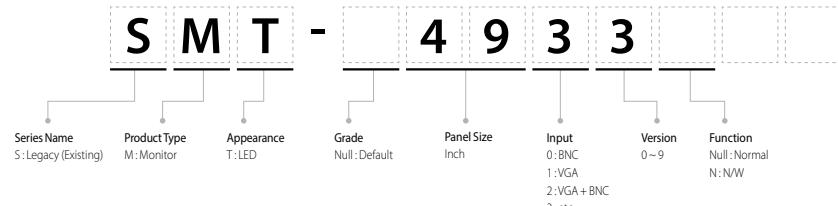
Decoder/Encoder



Recorder

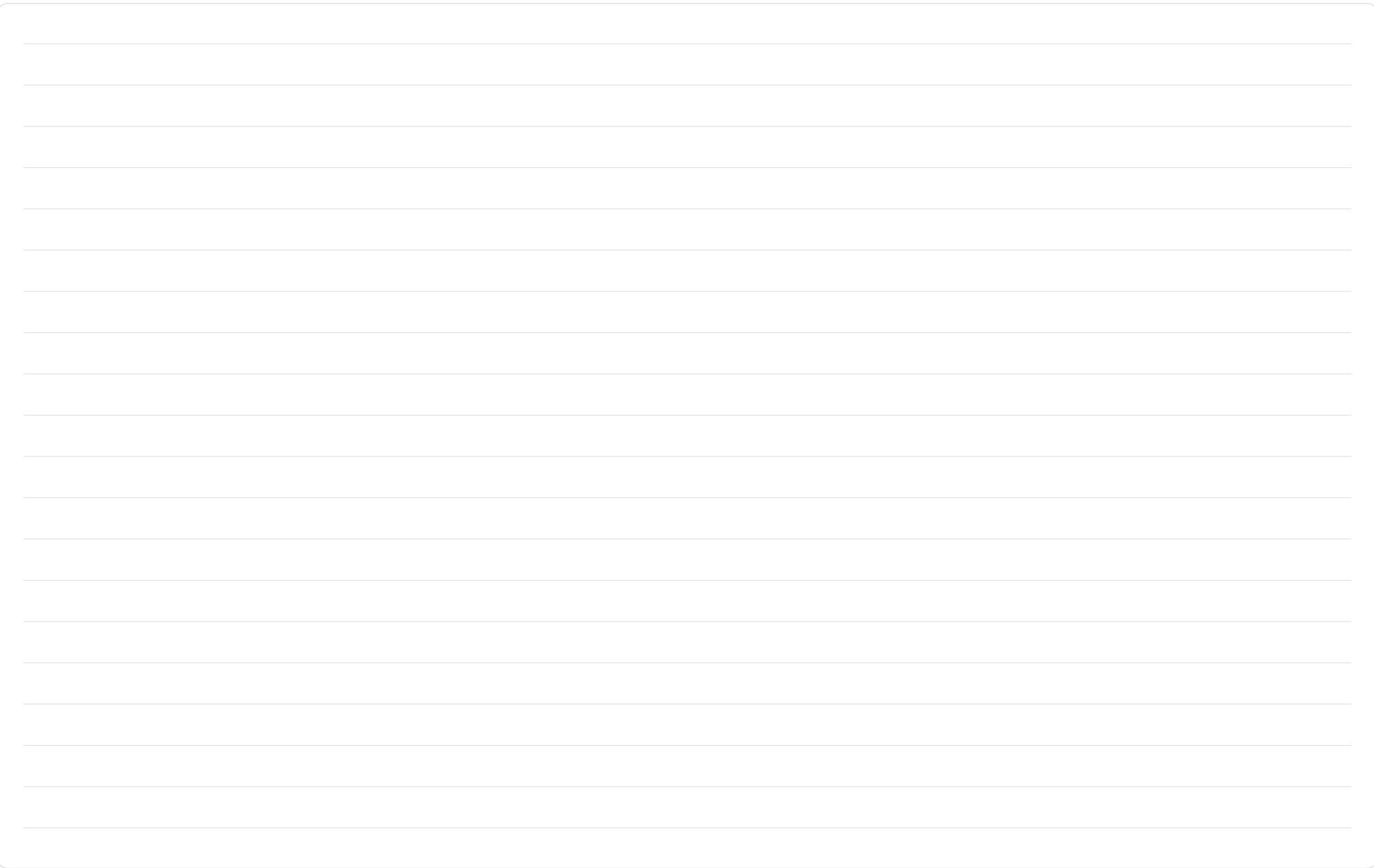


Monitor





MEMO



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