Product line-up

3rd Quarter 2018

Hanwha Techwin

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)
2017 Release of Wisenet X camera

WISENET

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

Core value

Complete

- Seamless Security
- Dependable Quality
- Comprehensive Solutions

Assured

- Partner-assured
- Buyer-assured
- User-assured

Value-added

- Added Usability
- Added Flexibility
- Added Possibility

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.

CONTENTS

NETWORK 4 _ 41

Camera ..... 4 _ 33
Wisenet X series ..... 4 _ 16
Wisenet P series ..... 17 _ 23
Wisenet Q series ..... 24 _ 27
Wisenet T series ..... 28 _ 30
Wisenet III / Wisenet Lite series ..... 31 _ 35
NVR ..... 36 _ 37
Wisenet X / P / Q / T series ..... 36 _ 37
Encoder / Decoder / Storage 38
Software 39
Access Control ..... 40 _ 41

ANALOG 42 _ 47

Camera ..... 42 _ 46
Wisenet HD+ series ..... 42 _ 46
DVR 47
Wisenet HD+ series 47

PERIPHERAL 48 _ 49

Monitor 48
Controller 48
Lens 49

ACCESSORY 50 _ 58

Accessory ..... 50 _ 53
Accessory Configuration ..... 54 _ 58

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.

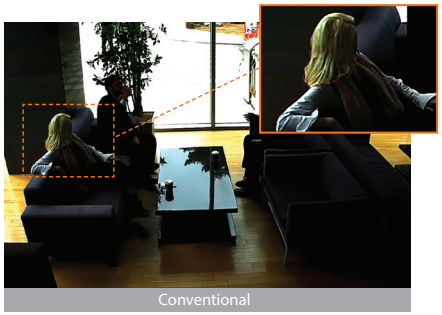
The world's best WDR (150dB)
Improve bandwidth by up to 99% using WiseStream II
Digital image stabilization with Built-in Gyro sensor
Clearer and colored image even in low light environments
Enhanced video / audio analytics

wisenet X series

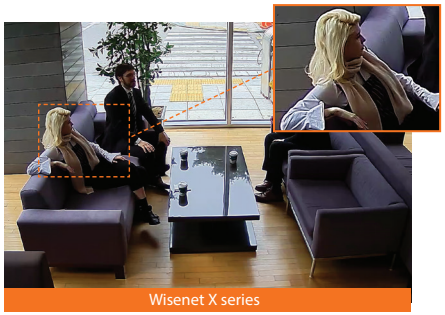
The world's best WDR performance(150dB)

WORLD BEST

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

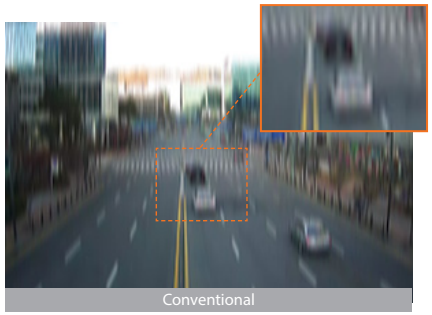


Wisenet X series

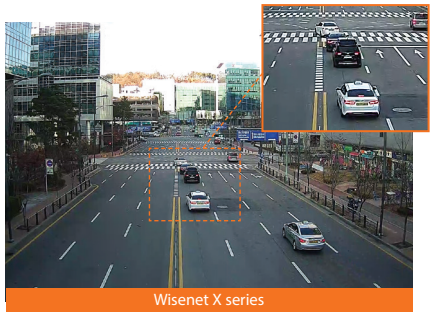
※150dB WDR only available in 2MP X series

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



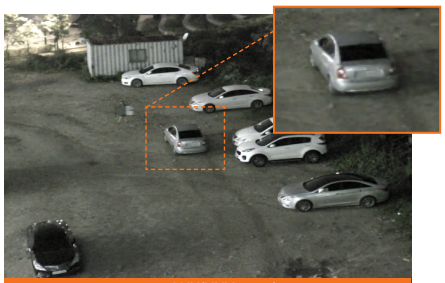
Wisenet X series

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

WORLD BEST

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)

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 movemnet

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

Medium movement

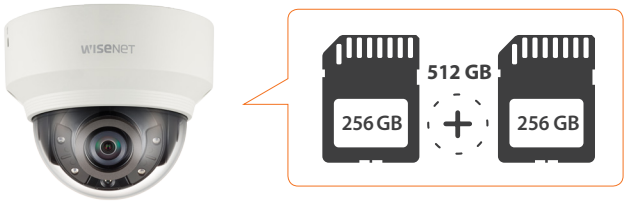
WiseStream Ⅱ OFF : 7260kbps **WiseStream Ⅱ ON : 1817kbps**

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

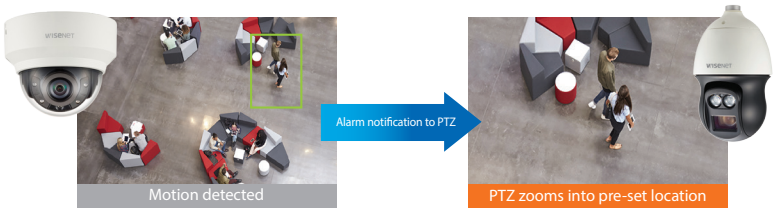
Dual SD slots allow up to 512 GB to be saved automatically to the camera, keeping data safe in the event of an unstable network. Obviously this allows to record more video footage than single SD slot.



Handover to PTZ

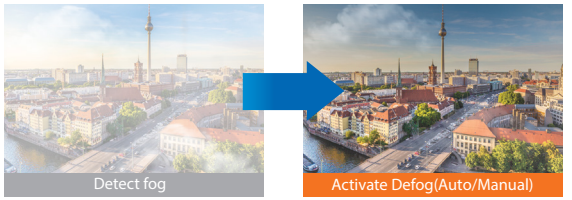
The handover feature allows a PTZ camera* to receive an alarm(motion detection) from Wisenet X series camera operating on the same IP video surveillance system. Once the notification is received, the PTZ camera will zoom into the assigned camera pre-set location.

※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 detected with the defog function to provide a clear image.

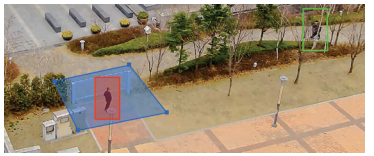


Enhanced Video / Audio Analytics

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

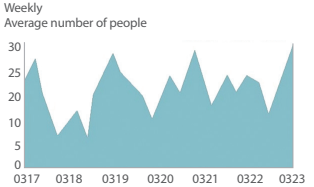
Loitering detection

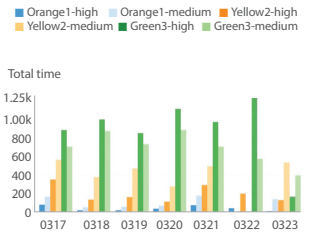
This feature detects when an object remains in a designated area longer than the time threshold set by the user.



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.

Gunshot

Glass breakage

Scream

Explosion

	XNB-8000	XNO-8080R	XNO-8020R/8030R/8040R	XND-8080R/8080RV
Resolution	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
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Frame Rate	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)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.07Lux B/W : 0.007Lux	Color : 0.07Lux B/W : 0Lux (IR LED on)	Color : 0.16Lux B/W : 0Lux (IR LED on)	Color : 0.07Lux B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Lens	-	3.7 ~ 9.4mm (2.5x) motorized V/F (F1.2)	3.7mm fixed (F1.6) (XNO-8020R) 4.6mm fixed (F1.6) (XNO-8030R) 7.0mm fixed (F1.6) (XNO-8040R)	3.9 ~ 9.4mm (2.4x) motorized V/F (F1.3)
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)
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°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support (Built in Gyro sensor)	Support	Support	Support
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification
Protocol	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	-	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	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)
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)
Dimensions (WxHxD) / Weight	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	Ø91.0 x 368.6.mm (Ø3.58" x 14.51") (Without Sunshield) 2.18Kg (4.81 lb)	Ø70.0 x 296.0mm (Ø2.76" x 11.65") (Without Sunshield) 1.22Kg (2.69 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 628g (1.39 lb) (XND-8080R) 732g (1.61 lb) (XND-8080RV)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion,Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View

	XND-8020R/8030R/8040R	XND-8020F	XNV-8080R	XNV-8080RS
Resolution	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
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Frame Rate	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)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.16Lux B/W : 0Lux (IR LED on)	Color : 0.16Lux B/W : 0.16Lux	Color : 0.07Lux B/W : 0Lux (IR LED on)	Color : 0.07Lux B/W : 0Lux (IR LED on)
Video Output	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	3.7mm fixed (F1.6) (XND-8020R) 4.6mm fixed (F1.6) (XND-8030R) 7.0mm fixed (F1.6) (XND-8040R)	3.7mm fixed (F1.6)	3.9 ~ 9.4mm (2.4x) motorized V/F (F1.3)	3.9 ~ 9.4mm (2.4x) motorized V/F (F1.3)
Angular Field of View	H : 97.5° / V : 71.9° / D : 126.2° (XND-8020R) H : 77.9° / V : 57.9° / D : 98.7° (XND-8030R) H : 50.7° / V : 37.8° / D : 63.8° (XND-8040R)	H : 97.5° / V :71.9° / D : 126.2°	H : 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)
Focus Control	-	Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual
IR Viewable Length	30m (98.43ft)	-	50m (164.04ft)	50m (164.04ft)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67°/ 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	Auto (Electrical)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support	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, 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, Sound classification
Protocol	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
Alarm I/O	1 / 1	-	1 / 1	1 / 1
Audio	Bi-Directional	Uni-Directional	Bi-Directional	Bi-Directional
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IK08	-	IP67, IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10+
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)
Power	Max. 8W (12V DC) Max. 9W (PoE)	Max. 4.7W (PoE)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 11.5W(12V DC), Max. 12.95W(PoE), Max. 14W(24V AC)
Dimensions (WxHxD) / Weight	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84 lb)	Ø98.9 x 129.1mm (Ø3.89" x 5.08") 275g (0.61 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 1.01Kg (2.23 lb)	Ø 162 X 120.5mm (Ø6.38" x 4.74") 2.68kg(5.91lb)
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)	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

	XNV-8020R/8030R/8040R	XNF-8010R/8010RV/8010RVM	XNB-6005	XNB-6000
Resolution	5MP	6MP	2MP	2MP
Imaging Device	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/2" 2.17M CMOS	1/2.8" 2M CMOS
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Frame Rate	5M / 30fps	2048 x 2048 / 30fps	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)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.16Lux B/W : 0Lux (IR LED on)	Color : 0.1Lux 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, DIP connector type	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Lens	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 : 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 / Manual	Simple focus / Manual	Simple focus / Manual
IR Viewable Length	30m (98.43ft)	15m (49.21ft)	-	-
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67°/ 0° ~ 355°	-	-	-
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (150dB)	WDR (150dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support	-	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Heatmap, People counting, Queue management	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
Protocol	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP67, IP66, IK10	IP66, IK10 (XNF-8010RV/8010RVM)	-	-
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) (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)
Power	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)
Dimensions (WxHxD) / Weight	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)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarpping, Handover, WiseStream II, Heatmap, People counting	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

	XNB-6001	SLA-T4680	SLA-T4680V	SLA-T2480	SLA-T2480V	SLA-T1080F
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
Video Compression	H.265, H.264, MJPEG	-	-	-	-	-
Resolution / Frame Rate	2M / 60fps	-	-	-	-	-
Streaming Capacity	Multiple (Up to 10 Profiles)	-	-	-	-	-
Max. User Access	20 (Unicast)	-	-	-	-	-
Min. Illumination	-	0.06Lux	0.06Lux	0.45Lux	0.45Lux	0.03Lux
Video Output	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)
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°
Focus Control	-	Fixed	Fixed	Fixed	Fixed	Fixed
IR Viewable Length	-	-	-	-	-	-
Pan / Tilt / Rotate	-	-	-	-	-	-
Day & Night	-	Electrical	Electrical	Electrical	Electrical	Electrical
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	-	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-	-
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection, Face detection, Digital auto tracking, Heatmap, People counting, Queue management	-	-	-	-	-
Protocol	ONVIF profile S/G, SUNAPI	-	-	-	-	-
Alarm I/O	1 / 1	-	-	-	-	-
Audio	Bi-Directional	-	-	-	-	-
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	-	-	-	-	-
Environment Protection	-	-	-	-	-	-
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. 6.5W (12V DC) Max. 6W (PoE)	-	-	-	-	-
Dimensions (WxHxD) / Weight	131.1 x 28 x 86mm (5.16" x 1.10" x 3.39") 245g (0.54 lb)	Ø24 x 42mm (Ø0.94" x 1.65") (Lens) 8m (314.96") (Cable) 310g (0.68 lb)	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 0.10" 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)
Additional Features	Handover, WiseStream II, Advanced video analytics	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

	XNO-6120R	XNO-6085R	XNO-6080R	XNO-L6080R	XNO-6010R/6020R
Resolution	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
Video Compression	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 / Frame Rate	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 5 Profiles)	Multiple (Up to 10 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.03Lux B/W : 0Lux (IR LED on)	Color : 0.004Lux B/W : 0Lux (IR LED on)	Color : 0.015Lux B/W : 0Lux (IR LED on)	Color : 0.1Lux B/W : 0Lux (IR LED on)	Color : 0.055Lux (XNO-6010R), 0.015Lux (XNO-6020R) B/W : 0Lux (IR LED on)
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
Lens	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	4.1 ~ 16.4mm (Optical 4x) motorized V/F F0.94(Wide) / F2.4(Tele)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	2.4mm fixed (F2.0) (XNO-6010R) 4mm fixed (F1.4) (XNO-6020R)
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) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9°(Tele) / V : 62.8° (Wide) ~ 15.7°(Tele) / D : 142.1° (Wide) ~ 32.0°(Tele)	H : 109.0°(Wide) ~ 33.2°(Tele) / V : 57.4°(Wide) ~ 18.7°(Tele) / D : 132.0°(Wide) ~ 38.0°(Tele)	H : 139.0° / V : 73.0° / D : 167.0° (XNO-6010R) H : 88.6° / V : 47.5° / D : 104.8° (XNO-6020R)
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	-
IR Viewable Length	70m (229.66ft)	70m (229.66ft)	50m (164.04ft)	30m (98.43ft)	20m (65.61ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)
Pan / Tilt / Rotate	-	-	-	-	-
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (120dB)	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)
Digital Image Stabilization	Support	Support (Built in Gyro sensor)	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, 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, Defocus detection, Motion detection	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, 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
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	IP67, IP66, NEMA 4X, IK10	IP66, 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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°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)	Max. 15W (24V AC) Max. 12W (12V DC) Max. 12.95W (PoE)	Max. 11W (PoE)	Max. 8.8W (12V DC) Max. 9.7W (PoE)
Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (Ø3.58" x 14.51") 2.18Kg (4.81 lb)	Ø91.0 x 388.6mm (Ø3.58" x 15.30") 2.35Kg (5.18 lb)	Ø91.0 x 368.6.mm (Ø3.58" x 14.51") (Without Sunshield) 2.18Kg (4.81 lb)	Ø91 x 322.9mm (Ø3.58" x 12.71") (Without Sunshield) 1.30Kg (2.86 lb)	Ø70 x 301.5mm (Ø2.76" x 11.87") (XNO-6010R) Ø70 x 296mm (Ø2.76" x 11.65")(XNO-6020R) (Without sunshield) 1.22Kg (2.69 lb)
Additional Features	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	WiseStream II, Handover, Lens distortion correction, Defog, Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View

	XND-6085/6085V	XND-6080/6080V	XND-6080R/6080RV	XND-L6080R/L6080RV	XND-L6080V
Resolution	2MP	2MP	2MP	2MP	2MP
Imaging Device	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
Video Compression	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 / Frame Rate	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 5 Profiles)	Multiple (Up to 5 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.004Lux B/W : 0.0004Lux	Color : 0.015Lux B/W : 0.0015Lux	Color : 0.015Lux B/W : 0Lux (IR LED on)	Color : 0.1Lux B/W : 0Lux (IR LED on)	Color : 0.1Lux B/W : 0.01Lux
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
Lens	4.1 ~ 16.4mm (Optical 4x) F0.94(Wide) / F2.4(Tele)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)
Angular Field of View	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0° (Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0° (Tele)	H : 109.0°(Wide) ~ 33.2°(Tele) / V : 57.4°(Wide) ~ 18.7°(Tele) / D : 132.0°(Wide) ~ 38.0°(Tele)	H : 109.0°(Wide) ~ 33.2°(Tele) / V : 57.4°(Wide) ~ 18.7°(Tele) / D : 132.0°(Wide) ~ 38.0°(Tele)
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 (motorized V/F) / Manual
IR Viewable Length	-	-	30m (98.43ft)	20m (65.62ft)	-
Pan / Tilt / Rotate	±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°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	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)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	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, Defocus detection, Motion detection	Tampering, Defocus detection, 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
Alarm I/O	1 / 1	1 / 1	1 / 1	-	-
Audio	Bi-Directional	Bi-Directional	Bi-Directional	-	-
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IK08	IK08	IK08	IK08	IK08
Operating Temperature	-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)	-10°C ~ +55°C (+14°F ~ +131°F)
Power	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. 8W (PoE)	Max. 6W (PoE)
Dimensions (WxHxD) / Weight	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 (1.34lb) (XND-6080) 714g (1.57lb) (XND-6080V)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 624g (1.38lb) (XND-6080R) 724g (1.60lb) (XND-6080RV)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 580g (1.28 lb) (XND-L6080R) 690g (1.52 lb) (XND-L6080RV)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 675g(1.49 lb)
Additional Features	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	WiseStream II, Lens distortion correction, Defog, Hallway View	WiseStream II, Lens distortion correction, Defog, Hallway View

	XND-6020R	XND-6011F	XND-6010	XNV-6120/6120R	XNV-6120RS
Resolution	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
Video Compression	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 / Frame Rate	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)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.015Lux B/W : 0Lux (IR LED on)	Color : 0.055Lux B/W : 0.055Lux	Color : 0.055Lux B/W : 0.0055Lux	Color : 0.03Lux, B/W : 0.003Lux (XNV-6120) Color : 0.03Lux, B/W : 0Lux (IR LED on) (XNV-6120R)	Color : 0.03Lux B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vpp, Micro US B type B	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	4mm fixed (F1.4)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)
Angular Field of View	H : 88.6° / V : 47.5° / D : 104.8°	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°	H : 54.58°(Wide) ~ 5.30°(Tele) / V : 32.19°(Wide) ~ 3.00°(Tele) / D : 61.40°(Wide) ~ 6.06°(Tele)	H : 54.58°(Wide) ~ 5.30°(Tele) / V : 32.19°(Wide) ~ 3.00°(Tele) / D : 61.40°(Wide) ~ 6.06°(Tele)
Focus Control	-	Manual	-	Auto / Manual / One shot AF	Auto / Manual / One shot AF
IR Viewable Length	30m (98.43ft)	-	-	70m (229.66ft) (XNV-6120R)	70m (229.66ft)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0°~ 75° / 0°~ 355°	0° ~ 354° / 0°~ 75° / 0°~ 355°
Day & Night	True (ICR)	Auto (Electrical)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	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)
Digital Image Stabilization	Support	Support	Support	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, 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	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	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	Uni-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
Environment Protection	IK08	-	IK08	IP67, IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10+
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F)
Power	Max. 8W (12V DC) Max. 9W (PoE)	Max. 4.7W	Max. 5.5W (12V DC) Max. 6W (PoE)	Max. 8.2W (24V AC), Max. 7W (12V DC), Max. 7.8W (PoE) (XNV-6120), Max. 14W (24V AC), Max. 11.5W (12V DC), Max. 12.95W (PoE) (XNV-6120R)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)
Dimensions (WxHxD) / Weight	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)	Ø160.0 x 128.5mm (Ø6.30" x 5.06") 985g (2.17 lb) (XNV-6120) 995g (2.19 lb) (XNV-6120R)	Ø162 x 134.5mm (Ø6.38" x 5.3") 2.92Kg (6.44 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	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

	XNV-6085	XNV-6080	XNV-6080R	XNV-6080RS	XNV-L6080	XNV-L6080R
Resolution	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	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	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 / Frame Rate	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 5 Profiles)	Multiple (Up to 5 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.004Lux B/W : 0.0004Lux	Color : 0.015Lux B/W : 0.0015Lux	Color : 0.015Lux B/W : 0Lux (IR LED on)	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	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Lens	4.1 ~ 16.4mm (Optical 4x) F0.94(Wide) / F2.4(Tele)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)
Angular Field of View	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5°(Wide) ~ 27.9° (Tele) / V : 62.8°(Wide) ~ 15.7° (Tele) / D : 142.1°(Wide) ~ 32.0° (Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0°(Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0°(Tele)	H : 109.0°(Wide) ~ 33.2°(Tele) / V : 57.4°(Wide) ~ 18.7°(Tele) / D : 132.0°(Wide) ~ 38.0°(Tele)	H : 109.0°(Wide) ~ 33.2°(Tele) / V : 57.4°(Wide) ~ 18.7°(Tele) / D : 132.0°(Wide) ~ 38.0°(Tele)
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 (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual
IR Viewable Length	-	-	50m (164.04ft)	50m (164.04ft)	-	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°	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 (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)	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	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, Defocus detection, Motion detection	Tampering, Defocus detection, 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	-	-
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	-	-
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	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	IP66, NEMA 4X, 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)	-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. 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)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 8W (PoE)	Max. 11W (PoE)
Dimensions (WxHxD) / Weight	Ø160.0 x 140.0mm (Ø6.30" x 5.51") 1.40kg (3.09 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 985g (2.17 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 995g (2.19 lb)	Ø162 x 120.5mm (Ø6.38" x 4.74") 2.68kg (5.91 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 935g (2.06 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 940g (2.07 lb)
Additional Features	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	WiseStream II, Lens distortion correction, Defog, Hallway View

	XNV-6022R/6022RM	XNV-6020R	XNV-6013M	XNV-6012M/6012	XNV-6011	XNV-6010
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	1/2.8" 2M CMOS
Video Compression	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 / Frame Rate	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)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.04Lux B/W : 0Lux (IR LED on)	Color : 0.015Lux B/W : 0Lux (IR LED on)	Color : 0.04Lux B/W : 0.04Lux	Color : 0.04Lux B/W : 0.04Lux	Color : 0.055Lux B/W : 0.055Lux	Color : 0.055Lux B/W : 0.0055Lux
Video Output	Micro USB type B	CVBS 1.0Vpp, Micro USB type B	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)	4mm fixed (F1.4)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)
Angular Field of View	H : 94.8° / V : 49.3° / D : 114.3°	H : 88.6° / V : 47.5° / D : 104.8°	H : 107.4° / V : 62.2° / D : 122°	H : 135.4° / V : 71.2° / D : 161.6°	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°
Focus Control	Manual	Manual	Manual	Manual	Manual	Manual
IR Viewable Length	15m (49.21ft)	30m (98.43ft)	-	-	-	-
Pan / Tilt / Rotate	±5° / 0 ~ 67° / ±90°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / ±10° / ±90°	±5° / 0 ~ 67°/ ±90°	0° ~ 353° / 0°~ 59° / 0°~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	True (ICR)	Auto (Electrical)	Auto (Electrical)	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, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis) Appear, Face detection, Motion detection, Digital auto tracking, People counting, Heatmap, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management
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
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, 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	IP67, IP66, IK10	IP67, IK10, NEMA4X, IP6K9K	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP67, IP66, NEMA 4X, 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)	-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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Power	Max. 6.7W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	Max. 7.2W (PoE)	Max. 6.5W (PoE)	Max. 6.5W (PoE)	Max. 5.5W (12V DC) Max. 6W (PoE)
Dimensions (WxHxD) / Weight	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65 lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36 lb)	103.7 x 72.3 x 126.8mm (4.08" x 2.85" x 4.99") 478g (1.04 lb)	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65 lb)	Ø112.8 x 63.7mm (Ø4.44" x 2.51") 420g (0.93 lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 625g (1.38 lb)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View M12 Connector(XNV-6022RM)	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classifiaction, (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View, M12 Connector	Handover, WiseStream II, Advanced video analytics, Sound classifiaction, (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View, M12 Connector (XNV-6012M)	Handover, WiseStream II, Advanced video analytics, Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View

	XNP-6550RH	**XNP-6370RH**	**XNP-6320H/6320**	**XNP-6320HS**	**XNP-6120H**	**XNP-6040H**
Resolution	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.8" 2.16M CMOS	1/1.9" 2M CMOS	1/2.8" 2.4M CMOS	1/2.8" 2.4M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
Video Compression	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 / Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps
Streaming Capacity	Multiple (Up to 10 Profiles)	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)
Max. User Access	20 (Unicast)	15 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.03Lux B/W : 0Lux (IR LED on)	Color : 0.05Lux B/W : 0Lux (IR LED on)	Color : 0.05Lux B/W : 0.005Lux	Color : 0.05Lux B/W : 0.005Lux	Color : 0.03Lux B/W : 0.003Lux	Color : 0.015Lux B/W : 0.0015Lux
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	CVBS 1.0Vpp, Micro USB type B
Lens	4.75mm ~ 261.4mm (IR Corrected Optical 55x) F1.6(Wide) / F6.5(Tele)	6 ~ 222mm (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)	5.2 ~ 62.4mm(Optical 12x) F1.6(Wide) / F3.0(Tele)	2.8 ~ 12mm(Optical 4.3x) (F1.4)
Angular Field of View	H : 58.6˚(Wide) ~ 1.23˚(Tele) / V : 34.8˚(Wide) ~ 0.71˚(Tele)	H : 59.3°(Wide) ~ 1.9°(Tele) / V : 35.8°(Wide) ~ 1.1°(Tele)	H : 61.8°(Wide) ~ 2.19°(Tele) / V : 36.2°(Wide) ~ 1.24°(Tele)	H : 61.8°(Wide) ~ 2.19°(Tele) / V : 36.2°(Wide) ~ 1.24°(Tele)	H : 54.58°(Wide) ~ 5.30°(Tele) / V : 32.19°(Wide) ~ 3.00°(Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) / V : 62.8°(Wide) ~ 15.7°(Tele) / D : 142.1°(Wide) ~ 32.0°(Tele)
Focus Control	AF / One-shot AF / Manual	AF / One-shot AF / Manual	Auto / Manual / One shot AF	Auto / Manual / One shot AF	Auto / Manual / One shot AF	Auto / Manual / One shot AF
IR Viewable Length	350m (1,148.29ft)	350m (1,148.29ft)	-	-	-	-
Pan / Tilt / Rotate	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 190° (-5° ~ 185°) / -	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)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	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)
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, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio Detection, Motion detection, Face detection, Sound Classification	Tampering, Crossing, Enter/Exit, (Dis)Appear, Audio detection	Tampering, Loitering, Directional detection, Fog detection,Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification	Tampering, Loitering, Directional detection, Fog detection,Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification	Tampering, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification
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	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	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
Environment Protection	IP66, IK10	IP66, IK10	IP66, IK10 (XNP-6320H) IK10 (With SHP-3701H)(XNP-6320)	IP67, IP66, NEMA4X, IK10	IP66, IK10	IP66, IK10
Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -40°C ~ +55°C (-22°F ~ +131°F) * Start up above -30°C (-22°F) (HPoE)	-50°C ~ +55°C (-58°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -35°C ~ +55°C (-31°F ~ +131°F) (PoE+) * Start up above -30°C (-22°F) (XNP-6320H) -10 C ~ +55 C(+14°F ~+131°F) (XNP-6320)	-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)
Power	Max. 90.0W (24V AC) TBD (HPoE)	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) (XNP-6320H) Max. 20.0W(24V AC, PoE+)(XNP-6320)	Max. 24.0W - Heater off (24V AC, PoE+) Max. 65.0W - Heater on (24V AC)	Max. 12W (12V DC, PoE)	Max. 8.6W (12V DC) Max. 9.6W (PoE)
Dimensions (WxHxD) / Weight	Ø236.9 x 407.7mm (Ø9.33"" x 16.05"") TBD	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)	Ø223.4 x 293.6mm(Ø8.8" x 11.56") 3.3Kg (7.28 lb)(XNP-6320H) Ø152.0 x 218.0mm(Ø5.98" x 8.58") 1.7Kg (3.75 lb)(XNP-6320)	Ø227 x 295.5mm (Ø8.94" x 11.63") 5.3Kg (11.68 lb)	Ø168.0 x 161.5mm (Ø6.61" x 6.36") 1.9kg (4.19 lb)	Ø136.1 x 106.1mm (Ø5.36" x 4.18") 0.78 kg (1.72 lb)
Additional Features	Defog, WiseStream II, Advanced video analytics, Auto tracking	Defog, WiseStream, Auto tracking	WiseStream II, Advanced video analytics, Auto Tracking	WiseStream II, Advanced video analytics, Auto Tracking, SUS316L	WiseStream II, Advanced video analytics, Auto Tracking	WiseStream II, Advanced video analytics, Auto Tracking

wisenet P series

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.

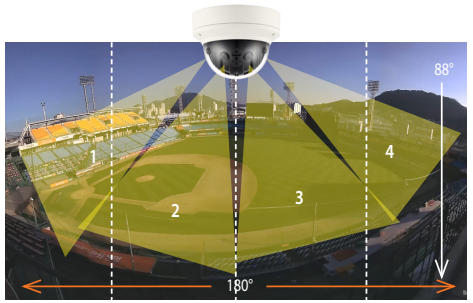
PNO/PND/PNV-9080R, PNP-9200RH

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.

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.



PNM-9020V

PNM-9081VQ/9080VQ

				NEW	NEW	NEW
	PNO-9080R	**PND-9080R**	**PNV-9080R**	**PNM-9320VQP**	**SLA-5M7000P**	**SLA-5M4600P**
Resolution	12MP	12MP	12MP	Max. 22MP (2MP 32x PTZ + 2M/5M x 4ea)	5MP	5MP
Imaging Device	1/1.7" 12.4M CMOS	1/1.7" 12.4M CMOS	1/1.7" 12.4M CMOS	1/2.8" 2.38M CMOS	1 / 1.8" 5M CMOS	1 / 1.8" 5M CMOS
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	-	-
Resolution / Frame Rate	12M / 20fps, 8M / 30fps	12M / 20fps, 8M / 30fps	12M / 20fps, 8M / 30fps	5M / 30fps, 2M / 60fps	-	-
Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	-	-
Max. User Access	15 (Unicast)	15 (Unicast)	15 (Unicast)	20 (Unicast)	-	-
Min. Illumination	Color : 0.3Lux B/W : 0Lux (IR LED on)	Color : 0.3Lux B/W : 0Lux (IR LED on)	Color : 0.3Lux B/W : 0Lux (IR LED on)	Color : 0.2Lux, B/W : 0.01Lux	Color : 0.16Lux, B/W : 0.16Lux	Color : 0.16Lux, B/W : 0.16Lux
Video Output	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0 Vpp	-	-
Lens	4.5 ~ 10mm (2.2x) motorized V/F (F1.6)	4.5 ~ 10mm (2.2x) motorized V/F (F1.6)	4.5 ~ 10mm (2.2x) motorized V/F (F1.6)	4.44 ~ 142.6mm (Optical 32x) F1.6 (Wide) / F4.4 (Tele)	7.0mm fixed (F1.6)	4.6mm fixed (F1.6)
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)	[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 : 62.8° (Wide) ~ 2.23° (Tele) / V : 36.8° (Wide) ~ 1.26° (Tele)	H : 50.7° / V : 37.8° / D : 63.8°	H : 77.9° / V : 57.9° / D : 98.7°
Focus Control	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Auto / Manual / One push	Fixed	Fixed
IR Viewable Length	40m (131.23ft)	30m (98.43ft)	40m (131.23ft)	-	-	-
Pan / Tilt / Rotate	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / 210° (-15°~195°)	-	-
Day & Night	True (ICR)	True (ICR)	True (ICR)	Electrical	Electrical	Electrical
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR 150dB (2MP), 120dB (5MP)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNRV (2D+3D Noise filter)	-	-
Digital Image Stabilization	-	-	-	Support	-	-
Video & Audio 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 (Scene change), Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital Auto tracking with Metadata	Tampering, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection, Face detection	-	-
Protocol	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF Profile S, SUNAPI	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 2	-	-
Audio	Bi-Directional	Bi-Directional	Bi-Directional	-	-	-
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, Local PC	-	-
Environment Protection	IP66, IK10	IK08	IP66, IP67, IK10	IP66, IK10	-	-
Operating Temperature	-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) * Start up above -35°C (-31°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-	-
Power	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)	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. 11.77W / 12.95W - Heater on (PoE)	TBD (PoE+)	-	-
Dimensions (WxHxD) / Weight	82.4 x 87.0 x 348.3mm (3.24" x 3.43" x 13.71") (Without Sunshield), 1.4Kg (3.09 lb)	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)	Ø199x122mm (Ø7.83" x 4.80") TBD	Ø35.4 x 34.9mm (Ø1.39"x1.37") TBD	Ø35.4 x 34.9mm (Ø1.39"x1.37") TBD
Additional Features	Handover, Hallway View, P-Iris, Defog, WiseStream	Handover, Hallway View, P-Iris, Defog, WiseStream	Handover, Hallway View, P-Iris, Defog, WiseStream	Multi directional camera, Defog, WiseStream II Hallway View, Auto tracking	Lens module for PNM-9320VQP	Lens module for PNM-9320VQP

	NEW SLA-5M3700P	NEW SLA-2M6000P	NEW SLA-2M3600P	NEW SLA-2M2800P	NEW SLA-2M2400P	NEW SLA-2M1200P
Resolution	5MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1 / 1.8" 5M 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	-	-	-	-	-	-
Resolution / Frame Rate	-	-	-	-	-	-
Streaming Capacity	-	-	-	-	-	-
Max. User Access	-	-	-	-	-	-
Min. Illumination	Color : 0.16Lux, B/W : 0.16Lux	Color : 0.055Lux, B/W : 0.055Lux	Color : 0.055Lux, B/W : 0.055Lux	Color : 0.055Lux, B/W : 0.055Lux	Color : 0.055Lux, B/W : 0.055Lux	Color : 0.055Lux, B/W : 0.055Lux
Video Output	-	-	-	-	-	-
Lens	3.7mm fixed (F1.6)	6.0mm Pinhole (F2.0)	3.6mm fixed (F2.0)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)	12mm Pinhole (F2.0)
Angular Field of View	H : 97.5˚ / V : 71.9˚ / D : 126.2˚	H : 51.9˚ / V : 29.4˚ / D : 59.7˚	H : 95.9˚ / V : 50.2˚ / D : 115˚	H : 109.8˚ / V : 62.5˚ / D : 125˚	H : 139.0˚ / V : 73.0˚ / D : 167.0˚	H : 26.3˚ / V : 14.9˚ / D : 30.0˚
Focus Control	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
IR Viewable Length	-	-	-	-	-	-
Pan / Tilt / Rotate	-	-	-	-	-	-
Day & Night	Electrical	Electrical	Electrical	Electrical	Electrical	Electrical
Backlight Compensation	WDR (120dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
Digital Noise Reduction	-	-	-	-	-	-
Digital Image Stabilization	-	-	-	-	-	-
Video & Audio Analytics	-	-	-	-	-	-
Protocol	-	-	-	-	-	-
Alarm I/O	-	-	-	-	-	-
Audio	-	-	-	-	-	-
Edge Storage	-	-	-	-	-	-
Environment Protection	-	-	-	-	-	-
Operating Temperature	-	-	-	-	-	-
Power	-	-	-	-	-	-
Dimensions (WxHxD) / Weight	Ø35.4 x 34.9mm (Ø1.39""x1.37"") TBD	Ø35.4 x 34.9mm (Ø1.39""x1.37"") TBD	Ø35.4 x 34.9mm (Ø1.39""x1.37"") TBD	Ø35.4 x 34.9mm (Ø1.39""x1.37"") TBD	Ø35.4 x 34.9mm (Ø1.39""x1.37"") TBD	Ø35.4 x 34.9mm (Ø1.39""x1.37"") TBD
Additional Features	Lens module for PNM-9320VQP	Lens module for PNM-9320VQP	Lens module for PNM-9320VQP	Lens module for PNM-9320VQP	Lens module for PNM-9320VQP	Lens module for PNM-9320VQP

	PNM-9081VQ	PNM-9080VQ	NEW PNM-9000VQ	NEW SLA-5M7000Q	NEW SLA-5M4600Q
Resolution	20MP (5M x 4ea)	8MP (2M x 4ea)	Max. 20MP (2M/5M x 4ea)	5MP	5MP
Imaging Device	1/1.8" 6M CMOS x 4	1/2.8" 2.38M CMOS x 4	-	1/1.8" 5M CMOS	1/1.8" 5M CMOS
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	-	-
Resolution / Frame Rate	5M / 30fps	2M / 60fps	5M / 30fps, 2M / 60fps	-	-
Streaming Capacity	Multiple (Up to 40 Profiles)	Multiple (Up to 40 Profiles)	Multiple (Up to 10 Profiles)	-	-
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	-	-
Min. Illumination	Color : 0.07Lux B/W : 0.007Lux	Color : 0.015Lux B/W : 0.0015Lux	-	Color : 0.16Lux, B/W : 0.16Lux	Color : 0.16Lux, B/W : 0.16Lux
Video Output	CVBS 1.0Vpp (selectable CVBS per channel)	CVBS 1.0Vpp (selectable CVBS per channel)	CVBS 1.0 Vpp	-	-
Lens	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)	-	7.0mm fixed (F1.6)	4.6mm fixed (F1.6)
Angular Field of View	H : 102.5° (Wide) ~ 38.7° (Tele) / V : 74.2° (Wide) ~ 29.0° (Tele) / D : 135.5° (Wide) ~ 48.6° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	-	H : 50.7° / V : 37.8° / D : 63.8°	H : 77.9° / V : 57.9° / D : 98.7°
Focus Control	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	-	Fixed	Fixed
IR Viewable Length	-	-	-	-	-
Pan / Tilt / Rotate	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°	-	-	-
Day & Night	True (ICR)	True (ICR)	Electrical	Electrical	Electrical
Backlight Compensation	WDR (120dB)	WDR (150dB)	WDR	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	-	-
Video & Audio Analytics	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, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection, Face detection	-	-
Protocol	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF Profile S, SUNAPI	-	-
Alarm I/O	1 / 1	1 / 1	-	-	-
Audio	-	-	-	-	-
Edge Storage	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, Local PC	-	-
Environment Protection	IP66, IK10	IP66, IK10	IP66, IK10	-	-
Operating Temperature	-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. 28.8W (12V DC) Max. 33.6W (HPoE)	Max. 21.6W (12V DC) Max. 25.5W (PoE+)	Max.12.95W (PoE)	-	-
Dimensions (WxHxD) / Weight	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)	Ø253x130mm (Ø9.96" x 5.11") TBD	TBD	TBD
Additional Features	Multil directional camera, Hallway View, P-Iris, Defog, WiseStream II	Multil directional camera, Hallway View, P-Iris, Defog, WiseStream II	Multi directional camera, Defog, WiseStream II Hallway View	Lens module for PNM-9000VQ	Lens module for PNM-9000VQ

	SLA-5M3700Q	SLA-2M6000Q	SLA-2M3600Q	SLA-2M2800Q	SLA-2M2400Q
Resolution	5MP	2MP	2MP	2MP	2MP
Imaging Device	1/1.8" 5M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
Video Compression	-	-	-	-	-
Resolution / Frame Rate	-	-	-	-	-
Streaming Capacity	-	-	-	-	-
Max. User Access	-	-	-	-	-
Min. Illumination	Color : 0.16Lux, B/W : 0.16Lux	Color : 0.055Lux, B/W : 0.055Lux	Color : 0.055Lux, B/W : 0.055Lux	Color : 0.055Lux, B/W : 0.055Lux	Color : 0.055Lux, B/W : 0.055Lux
Video Output	-	-	-	-	-
Lens	3.7mm fixed (F1.6)	6.0mm fixed (F2.0)	3.6mm fixed (F2.0)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)
Angular Field of View	H : 97.5˚ / V : 71.9˚ / D : 126.2˚	H : 50.4˚ / V : 28.8˚ / D : 58.1˚	H : 94.8˚ / V : 49.3˚ / D : 114.3˚	H : 107.4˚ / V : 62.2˚ / D : 122.0˚	H : 139˚ / V : 73˚ / D : 167˚
Focus Control	Fixed	Fixed	Fixed	Fixed	Fixed
IR Viewable Length	-	-	-	-	-
Pan / Tilt / Rotate	-	-	-	-	-
Day & Night	Electrical	Electrical	Electrical	Electrical	Electrical
Backlight Compensation	WDR (120dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
Digital Noise Reduction	-	-	-	-	-
Digital Image Stabilization	-	-	-	-	-
Video & Audio Analytics	-	-	-	-	-
Protocol	-	-	-	-	-
Alarm I/O	-	-	-	-	-
Audio	-	-	-	-	-
Edge Storage	-	-	-	-	-
Environment Protection	-	-	-	-	-
Operating Temperature	-	-	-	-	-
Power	-	-	-	-	-
Dimensions (WxHxD) / Weight	TBD	TBD	TBD	TBD	Ø35.5 x 27.9mm (Ø1.39" x 1.09") 27g (0.05 lb)
Additional Features	Lens module for PNM-9000VQ	Lens module for PNM-9000VQ	Lens module for PNM-9000VQ	Lens module for PNM-9000VQ	Lens module for PNM-9000VQ

	PNM-9030V	**PNM-9020V**	**PNF-9010R/9010RV/9010RVM**	**PNP-9200RH**
Resolution	20M (5M x 4ea)	7.3MP (2M x 4ea)	12MP	8MP
Imaging Device	20M (5M x 4ea)	7.3M (2M x 4)	1/1.7" 12.4M CMOS	1/2.5" 8M CMOS
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Frame Rate	20M / 30fps (H.265, H.264)	7.3M / 30fps (H.265, H.264)	12M / 20fps, 9M / 25fps	8M / 30fps
Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
Max. User Access	20 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)
Min. Illumination	TBD	Color : 0.3Lux	Color : 0.3Lux B/W : 0Lux (IR LED on)	Color : 0.1Lux B/W : 0Lux (IR LED on)
Video Output	Micro USB type B	-	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp
Lens	TBD	3.6mm fixed	2.1mm fixed (F2.2)	4.8 ~ 96mm (Optical 20x) F1.8(Wide) / F3.6(Tele)
Angular Field of View	[Total 4 Sensor] H : 180˚ / V : 220˚	[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	Fixed	-	Simple focus	AF / One-shot AF
IR Viewable Length	-	-	15m (49.21ft)	200m (656.17ft)
Pan / Tilt / Rotate	TBD	0° ~ 355° / 0° ~ 60° / -	-	360° Endless / 190° (-5° ~ 185°) / -
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNR	SSNR
Digital Image Stabilization	-	-	-	Support
Video & Audio Analytics	Tampering, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Digital Auto tracking, Heatmap, Sound classification	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, 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 with Metadata
Protocol	ONVIF Profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
Alarm I/O	1 / 1	1 / 1	1 / 1	4 / 2 (Relay)
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP66, IK10	IP66, IK10	IK10 (PNF-9010R), IP66, IK10 (PNF-9010RV/9010RVM)	IP66, IK10
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°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)	-50°C ~ +55°C (-58°F ~ +131°F)
Power	TBD (PoE+)	Max. 21.0W - Heater on (12V DC) Max. 25.5W - Heater on (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	TBD	Ø199.0 x 143.5mm (Ø7.83" x 5.65") 2.03Kg (4.48 lb)	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, Multi sensor camera, Defog, WiseStream II	Handover, Multi sensor camera, Defog, WiseStream	M12 Connector (PNF-9010RVM), Built-in mic, On Board Dewarping, Handover, WiseStream, Heatmap, People counting	Handover, Auto tracking, Defog, WiseStream

	PNM-7000VD	**SLA-2M6000D**	**SLA-2M3600D**	**SLA-2M2800D**	**SLA-2M2400D**
Resolution	4MP (2M x 2ea)	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
Video Compression	H.265, H.264, MJPEG	-	-	-	-
Resolution / Frame Rate	2ea x 2M / 60fps	-	-	-	-
Streaming Capacity	Multiple (Up to 10 Profiles)	-	-	-	-
Max. User Access	20 (Unicast)	-	-	-	-
Min. Illumination	-	Color : 0.055Lux B/W : 0.055Lux	Color : 0.055Lux B/W : 0.055Lux	Color : 0.055Lux B/W : 0.055Lux	Color : 0.055Lux B/W : 0.055Lux
Video Output	CVBS 1.0Vpp	-	-	-	-
Lens	-	6.0mm fixed (F2.0)	3.6mm fixed (F2.0)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)
Angular Field of View	-	H : 50.4° / V:28.8° / D : 58.1°	H : 94.8° / V : 49.3° / D : 114.3°	H : 107.4° / V : 62.2° / D : 122.0°	H : 135.4° / V : 71.2° / D : 161.6°
Focus Control	-	Fixed	Fixed	Fixed	Fixed
IR Viewable Length	-	-	-	-	-
Pan / Tilt / Rotate	-	-	-	-	-
Day & Night	Electrical	Electrical	Electrical	Electrical	Electrical
Backlight Compensation	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-
Video & Audio Analytics	Tampering, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection, Face detection	-	-	-	-
Protocol	ONVIF profile S, SUNAPI	-	-	-	-
Alarm I/O	-	-	-	-	-
Audio	-	-	-	-	-
Edge Storage	SD/SDHC/SDXC, Local PC	-	-	-	-
Environment Protection	IP66, IK10	-	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-	-	-	-
Power	Max.12.95W (PoE)	-	-	-	-
Dimensions (WxHxD) / Weight	Ø161.0 x 73.0mm (Ø6.34" x 2.87") 840g (1.85 lb)	Ø35.5 x 27.9mm (1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (1.4" x 1.1") 27g (0.06 lb)
Additional Features	Multil directional camera, Defog, WiseStream II Hallway View	Lens module for PNM-7000VD	Lens module for PNM-7000VD	Lens module for PNM-7000VD	Lens module for PNM-7000VD

WISENET Q series

Complete line-up of indoor and outdoor cameras

Wisenet Q series offers a wide range of indoor and outdoor Bullet / Dome / Vandal / Flat eye / 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		FLAT EYE	PTZ
	Fixed IR	V/F IR	Fixed IR	V/F IR	Fixed IR	V/F IR		
4MP	QNO-7010R QNO-7020R QNO-7030R	QNO-7080R	QND-7010R QND-7020R QND-7030R	QND-7080R	QNV-7010R QNV-7020R QNV-7030R	QNV-7080R	QNE-7080RV	-
2MP	QNO-6010R QNO-6020R QNO-6030R	QNO-6070R	QND-6010R QND-6020R QND-6030R	QND-6070R	QNV-6010R QNV-6020R QNV-6030R	QNV-6070R	QNE-6080RV	QNP-6230H QNP-6230

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.

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.

	QNO-7080R	QNO-7010R/7020R/7030R	QND-7080R	QND-7010R/7020R/7030R	QNV-7080R
Resolution	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
Video Compression	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 / Frame Rate	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps
Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
Max. User Access	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
Min. Illumination	Color : 0.15Lux B/W : 0Lux (IR LED on)	Color : 0.5Lux (QNO-7010R), 0.4Lux (QNO-7020R), 0.3Lux (QNO-7030R) B/W : 0Lux (IR LED on)	Color : 0.15Lux B/W : 0Lux (IR LED on)	Color : 0.5Lux (QND-7010R), 0.4Lux (QND-7020R), 0.3Lux (QND-7030R) B/W : 0Lux (IR LED on)	Color : 0.15Lux 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)
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)
Focus Control	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual
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)
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	-	-	-	-	-
Video & Audio 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
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	1 / 1
Audio	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
Environment Protection	IP66, IK10	IP66, IK10	-	IK08	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	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)
Dimensions (WxHxD) / Weight	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 750g (1.65 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 730g (1.61 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 355g (0.78 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 680g (1.5 lb)
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

	QNV-7010R/7020R/7030R	QNE-7080RVW	QNO-6070R	QNO-6010R/6020R/6030R	QND-6070R
Resolution	4MP	4MP	2MP	2MP	2MP
Imaging Device	1/3" 4M CMOS	1 / 3" 4M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS
Video Compression	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 / Frame Rate	4M / 20fps, 2M / 30fps	4M / 20fps, 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 : 0.5Lux (QNV-7010R), 0.4Lux (QNV-7020R), 0.3Lux (QNV-7030R) B/W : 0Lux (IR LED on)	Color : 0.2Lux 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)
Video Output	-	-	-	-	-
Lens	2.8mm fixed (F2.0) (QNV-7010R) 3.6mm fixed (F2.2) (QNV-7020R) 6.0mm fixed (F2.2) (QNV-7030R)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	2.8 ~ 12mm (4.3x) Manual V/F (F1.4)	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)
Angular Field of View	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 : 100.0°(Wide) ~ 30.5°(Tele) / V : 55.7°(Wide) ~ 18.3°(Tele) / D : 119.6°(Wide) ~ 35.3°(Tele)	H : 103.8°(Wide) ~ 32.4°(Tele) / V : 53.7°(Wid e) ~ 18.4°(Tele) / D : 121.9°(Wide) ~ 37.1°(Tele)	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)
Focus Control	-	Simple focus (Motorized V/F) / Manual	Manual	-	Manual
IR Viewable Length	20m (65.62ft) (QNV-7010R), 25m (82.02ft) (QNV-7020R), 30m (98.43ft) (QNV-7030R)	30m (98.43ft)	30m (98.43ft)	20m (65.62ft) : QNO-6010R, 25m (82.02ft) : QNO-6020R, 30m (98.43ft) : QNO-6030R	20m (65.62ft)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 70° / 0° ~ 360°	-	-	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	-	-	-	-	-
Video & Audio 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
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	1 / 1
Audio	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
Environment Protection	IP66, IK10	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)	-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)
Power	Max. 5.8W (12V DC) Max. 7.0W (PoE) (QNV-7010R) Max. 5.7W (12V DC) Max. 6.8W (PoE) (QNV-7020R/7030R)	Max. 7.7W (12V DC) Max. 8.6W (PoE)	Max. 7.0W (12V DC) Max. 8.0W (PoE)	Max. 6.0W (12V DC) Max. 7.0W (PoE)	Max. 5.5W (12V DC) Max. 6.7W (PoE)
Dimensions (WxHxD) / Weight	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb)	Ø144.9 x 135.5mm (Ø5.70" x 5.33") 1.3Kg (2.87lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 730g (1.61 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 730g (1.61 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 325g (0.72 lb)
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

	QND-6010R/6020R/6030R	QNV-6070R	QNV-6010R/6020R/6030R	QNE-6080RVW	QNP-6230H/6230
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	1/2.8" 2.4M CMOS
Video Compression	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 / 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 10 Profiles)
Max. User Access	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (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 : 0.2Lux B/W : 0Lux (IR LED on)	Color : 0.2Lux B/W : 0.01Lux
Video Output	-	-	-	-	CVBS 1.0Vpp
Lens	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)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	4.44 ~ 102.2mm (Optical 23x) F1.6(Wide) / F3.6(Tele)
Angular Field of View	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 : 104.2°(Wide) ~ 31.2°(Tele) / V : 55.1°(Wide) ~ 17.5°(Tele) / D : 124.3°(Wide) ~ 35.8°(Tele)	H : 61.8°(Wide) ~ 3.08°(Tele) / V : 36.2°(Wide) ~ 1.73°(Tele)
Focus Control	-	Manual	-	Simple focus (Motorized V/F) / Manual	Auto / Manual / One shot AF
IR Viewable Length	20m (65.62ft)	30m (98.43ft)	20m (65.62ft) (QNV-6010R), 25m (82.02ft) (QNV-6020R), 30m (98.43ft) (QNV-6030R)	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° ~ 70° / 0° ~ 360°	360° Endless / 210° (-15° ~195°)
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	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	-	-	-	-	Support (Built in Gyro sensor)
Video & Audio 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	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
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	4 / 2 (Relay)
Audio	Uni-Directional	Uni-Directional	Uni-Directional	Uni-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
Environment Protection	IK08	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10 (QNP-6320H) IK10 (With SHP-3701H)(QNP-6320)
Operating Temperature	-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)	-50°C ~ +55°C(-58°F ~ +131°F) (24V AC) -30°C ~ +55°C(-22°F ~ +131°F) (PoE+) (QNP-6230H) -10°C ~ +55°C(+14°F ~ +131°F)(QNP-6230)
Power	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. 7.6W (12V DC) Max. 8.3W (PoE)	Max. 24.0W - Heater Off (24V AC, PoE+), Max. 65.0W - Heater On (24V AC)(QNP-6230H) Max. 20.0W (24V AC, PoE+)(QNP-6230)
Dimensions (WxHxD) / Weight	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)	Ø144.9 x 135.5mm (Ø5.70" x 5.33") 1.3Kg (2.87lb)	Ø223.4 x 293.6mm(Ø8.8" x 11.56") 1.7Kg (3.75 lb)(QNP-6230H) Ø152.0 x 218.0mm(Ø5.98" x 8.58") 1.7Kg (3.75 lb)(QNP-6230)
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	Defog, WiseStream II

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

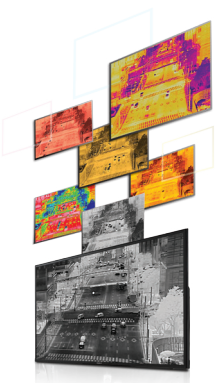
Heavy industrial facilities such as gas pipelines or oil refineries are potentially explosive because of flammable gases and dust emitted. T series explosion proof cameras are designed to be safely operated in hazardous areas with the special enclosure made of stainless steel 316L housing.
The ATEX certified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

ATEX

TNO-6320E TNU-6320E

Detect people and objects 24/7 with thermal cameras

In challenging weather(fog, smoke, rain) or lighting conditions(complete darkness, backlight), it can be difficult to distinguish people or objects in a complex background by a visible camera or a human eye. Wisenet thermal cameras are the excellent choice : they provide high contrast images based on temperature differences between the object and background, so that users can detect incidents more easily.



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

	TNO-6320E	TNU-6320E	TNU-6320	TNU-4051T/4041T	TNO-4051T	TNO-4050T
				NEW		
Resolution	2MP	2MP	2MP	VGA	VGA	VGA
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
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	640 x 480 / 30fps	640 x 480 / 30fps	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)
Max. User Access	10 (Unicast)	10 (Unicast)	10 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 015Lux B/W : 0.015Lux	Color : 015Lux B/W : 0.015Lux	Color : 0.3Lux B/W : 0.03Lux	-	-	-
Video Output	-	-	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	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) (TNU-4051T) 19mm fixed (F1.0) (TNU-4041T)	35mm fixed (F1.0)	35mm 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° (TNU-4051T) H : 32°/V : 24.3°/D : 39.2° (TNU-4041T)	H : 17.2° / V : 13° / D : 22°	H : 17.2° / V : 13° / D : 22°
Focus Control	Auto / Manual / One push	Auto / Manual / One push	Auto / Manual / One push	Fixed	Fixed	Fixed
IR Viewable Length	-	-	-	-	-	-
Pan / Tilt / Rotate	-	360° Endless / 180° (-90° ~ 90°) / -	360° Endless / -90° ~ 40° / -	360° Endless / -90° ~40° / -	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	-	-	-
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	-	-	-
Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	-	-	-
Digital Image Stabilization	Support	Support	Support	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)
Video & Audio 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, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, 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
Alarm I/O	1 / 1 (Relay)	1 / 1 (Relay)	1 / 1 (Relay)	1 / 2	1 / 2	1 / 2
Audio	-	-	Bi-directional	Bi-directional	Bi-directional	Bi-directional
Edge Storage	NAS	NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP67, IK10	IP67, IK10	IP66	IP66, NEMA4X	IP66, NEMA4X	IP66, NEMA4X
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 ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +140°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)	TBD (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)
Dimensions (WxHxD) / Weight	Ø162.0 x 244.0mm (Ø6.38" x 9.61") 7Kg (15.43 lb)	384.0 x 402.0 x 250.0mm (15.12" x 15.83" x 9.84") 35Kg (77.16 lb)	219.0 x 460.0 x 528.0mm (8.62" x 18.11" x 20.79") 14Kg (30.86 lb)	TBD	Ø101.97 x 309mm (Ø4.01" x 12.17") 2.45Kg (5.41 lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3.13Kg (6.89 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, 7 Color palettes, PT type	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway view, 7 Color palettes

	TNO-4041T	**TNO-4041TR**	**TNO-4040T**	**TNO-4040TR**	**TNO-4030T**	**TNO-4030TR**
Resolution	VGA	VGA	VGA	VGA	VGA	VGA
Imaging Device	Uncooled Microbolometer	Uncooled Microbolometer	Uncooled Microbolometer	Uncooled Microbolometer	Uncooled Microbolometer	Uncooled Microbolometer
Video Compression	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 / Frame Rate	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	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)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	-	-	-	-	-	-
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	CVBS 1.0Vpp, Micro USB type B
Lens	19mm fixed (F1.0)	19mm fixed (F1.0)	19mm fixed (F1.0)	19mm fixed (F1.0)	13mm fixed (F1.0)	13mm fixed (F1.0)
Angular Field of View	H : 32° / V : 24.3° / D : 39.2°	H : 32° / V : 24.3° / D : 39.2°	H : 32° / V : 24.3° / D : 39.2°	H : 32° / V : 24.3° / D : 39.2°	H : 48.6° / V : 36.4° / D : 61.6°	H : 48.6° / V : 36.4° / D : 61.6°
Focus Control	Fixed	Fixed	Fixed	Fixed	Fixed	Fixed
IR Viewable Length	-	-	-	-	-	-
Pan / Tilt / Rotate	-	-	-	-	-	-
Day & Night	-	-	-	-	-	-
Backlight Compensation	-	-	-	-	-	-
Digital Noise Reduction	-	-	-	-	-	-
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, Loitering, Directional detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change detection	Tampering, Loitering, Directional detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Temperature change 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 / 2	1 / 2	1 / 2	1 / 2	1 / 2	1 / 2
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, NEMA4X, IK10	IP66, NEMA4X, IK10	IP66, NEMA4X, IK10	IP66, NEMA4X, IK10	IP66, NEMA4X, IK10	IP66, NEMA4X, IK10
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Power	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)	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	Ø101.97 x 309mm (Ø4.01" x 12.17") 2.45Kg (5.40 lb)	Ø101.97 x 309mm (Ø4.01" x 12.17") 2.45Kg (5.40 lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3.13Kg (6.89 lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3.13Kg (6.89 lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3.12Kg (6.89 lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3.12Kg (6.89 lb)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification, 7 Color palettes, PT type	Handover, WiseStream II, Advanced video analytics, Sound classification, 7 Color palettes, PT type, Radiometry	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, Radiometry	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, Radiometry

NETWORK

	LNO-6070R	LNO-6010R/6020R/6030R	LND-6070R	LND-6010R/6020R/6030R	LNV-6070R	LNV-6010R/6020R/6030R
Resolution	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Frame Rate	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps
Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
Max. User Access	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
Min. Illumination	Color : 0.095Lux B/W : 0Lux (IR LED on)	Color : 0.18Lux B/W : 0Lux (IR LED on)	Color : 0.095Lux B/W : 0Lux (IR LED on)	Color : 0.18Lux B/W : 0Lux (IR LED on)	Color : 0.095Lux B/W : 0Lux (IR LED on)	Color : 0.18Lux B/W : 0Lux (IR LED on)
Lens	3.2 ~ 10mm (3.1x) V/F (F1.6)	3mm fixed (F2.0) (LNO-6010R) 4mm fixed (F2.0) (LNO-6020R) 6mm fixed (F2.0) (LNO-6030R)	3.2 ~ 10mm (3.1x) V/F (F1.6)	3mm fixed (F2.0) (LND-6010R) 4mm fixed (F2.0) (LND-6020R) 6mm fixed (F2.0) (LND-6030R)	3.2 ~ 10mm (3.1x) V/F (F1.6)	3mm fixed (F2.0) (LNV-6010R) 4mm fixed (F2.0) (LNV-6020R) 6mm fixed (F2.0) (LNV-6030R)
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 : 102° / V : 54° / D : 120° (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 : 102° / V : 54° / D : 120° (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) /	H : 102° / V : 54° / D : 120° (LNV-6010R) H : 80° / V : 43° / D : 94° (LNV-6020R) H : 51° / V : 29° / D : 58° (LNV-6030R)
Focus Control	Manual	-	Manual	-	Manual	-
IR Viewable Length	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)	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)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-	-
Video & Audio Analytics	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering	Motion detection, Tampering
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	-	-	-	-	-	-
Audio	-	-	-	-	-	-
Edge Storage	SD/SDHC, Local PC	SD/SDHC, Local PC	SD/SDHC, Local PC	SD/SDHC, Local PC	SD/SDHC, Local PC	SD/SDHC, Local PC
Environment Protection	IP66	IP66	-	-	IP66, IK10	IP66, IK10
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Power	6.5W (PoE)	6.5W (PoE)	6.5W (PoE)	6.5W (PoE)	6.5W (PoE)	6.5W (PoE)
Dimensions (WxHxD) / Weight	Ø78.0 x 262.0mm (Ø3.07" x 10.32") 380g (0.84 lb)	Ø58.6 x 182.0mm (Ø2.31" x 7.17") 240g (0.53 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 274g (0.60 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 230g (0.51 lb)	Ø137.8 x 106.1mm (Ø5.43" x 4.18") 515g (1.16 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 395g (0.87 lb)
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	Lens distortion correction, Hallway View

NETWORK

	SNZ-6320	**SNO-6084R**	**SNO-6011R**	**SNO-L6083R**	**SNO-L6013R**	**SND-6084**
Resolution	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	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.8" 2.38M CMOS
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Frame Rate	2M / 60fps	2M / 60fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 60fps
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 10 Profiles)
Max. User Access	10 (Unicast)	15 (Unicast)	15 (Unicast)	6 (Unicast)	6 (Unicast)	15 (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 : 0.03Lux B/W : 0.002Lux
Video Output	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp	-	-	CVBS 1.0Vpp DIP Connector Type
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)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)
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 : 105.5°(Wide) ~ 37.1°(Tele) / V : 57.5°(Wide) ~ 21.0°(Tele)
Focus Control	Auto / Manual / One push	Simple focus (motorized V/F) / Manual	Manual	Manual	-	Simple focus (motorized V/F) / Manual
IR Viewable Length	-	30m (98.43ft)	15m (49.21ft)	20m (65.62ft)	20m (65.62ft)	-
Pan / Tilt / Rotate	-	-	-	-	-	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, 15fps)	BLC, DWDR	BLC, DWDR	WDR (120dB)
Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNR	SSNR	SSNRIII (2D+3D Noise filter)
Digital Image Stabilization	Support	Support	Support	-	-	Support
Video & Audio 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	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 & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S, SUNAPI, Open Platform
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	SD/SDHC/SDXC, NAS
Environment Protection	-	IP66, IK10	IP66	IP66, IK10	IP66	-
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)
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. 8.79W (12V DC) Max. 9.57W (PoE)
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)	Ø132.1 x 107.6mm (Ø5.20" x 4.24") 505g (1.11 lb)
Additional Features	RS-485, Defog	P-Iris, Defog	Defog	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	P-Iris, Defog

NETWORK

	SND-L6013	SND-L6012	SND-7084R	SND-6084R	SND-L6083R	SND-L6013R
Resolution	2MP	2MP	3MP	2MP	2MP	2MP
Imaging Device	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.8" 3.2M CMOS	1/2.8" 2.38M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Frame Rate	2M / 30fps	2M / 30fps	3M / 30fps	2M / 60fps	2M / 30fps	2M / 30fps
Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
Max. User Access	6 (Unicast)	6 (Unicast)	15 (Unicast)	15 (Unicast)	6 (Unicast)	6 (Unicast)
Min. Illumination	Color : 0.15Lux B/W : 0.15Lux	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	-	-
Lens	3.6mm fixed (F1.8)	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 : 86.5° / V : 47.8° / D : 101.2°	H : 110.0° / V : 61.0° / D : 125.0°	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	Manual	-
IR Viewable Length	-	-	25m (82.02ft)	15m (49.21ft)	15m (49.21ft)	15m (49.21ft)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
Day & Night	Electrical	Electrical	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	BLC, DWDR	BLC, DWDR	WDR (120dB)	WDR (120dB)	BLC, DWDR	BLC, DWDR
Digital Noise Reduction	SSNR	SSNR	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNR	SSNR
Digital Image Stabilization	-	-	Support	Support	-	-
Video & Audio Analytics	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	Motion detection with Metadata, Tampering
Protocol	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI
Alarm I/O	-	-	1 / 1	1 / 1	-	-
Audio	Uni-Directional	Uni-Directional	Bi-Directional	Bi-Directional	Uni-Directional	Uni-Directional
Edge Storage	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS
Environment Protection	-	-	-	-	-	-
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. 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)	Max. 5.9W (PoE)
Dimensions (WxHxD) / Weight	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)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 245g (0.54 lb)
Additional Features	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	P-Iris, Defog	P-Iris, Defog	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View

NETWORK

	SNV-6084	SNV-6013	SNV-6084R	SNV-L6083R	SNV-L6013R	SNV-L6014RM/L6014RBM
Resolution	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	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 30fps	2M / 30fps	2M / 30fps
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 3 Profiles)
Max. User Access	15 (Unicast)	15 (Unicast)	15 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
Min. Illumination	Color : 0.03Lux B/W : 0.002Lux	Color : 0.15Lux B/W : 0.15Lux	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)	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	-	-	-
Lens	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)	2.8 ~ 12mm (4.3x) V/F (F1.4)	3.6mm fixed (F1.8)	3.6mm fixed (F1.8)
Angular Field of View	H : 105.5°(Wide) ~ 37.1°(Tele) / V : 57.5°(Wide) ~ 21.0°(Tele)	H : 112.0° / V : 62.0°	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°	H : 86.5° / V : 47.8° / D : 101.2°
Focus Control	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual	Manual	-	-
IR Viewable Length	-	-	15m (49.21ft)	20m (65.62ft)	15m (49.21ft)	15m (49.21ft)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-5° ~ 5° / 0 ° ~ 67 ° / 90°	-5° ~ 5° / 0 ° ~ 67 ° / 90°
Day & Night	True (ICR)	Electrical	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	BLC, DWDR	BLC, DWDR	BLC, DWDR
Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNR	SSNR	SSNR
Digital Image Stabilization	Support	Support	Support	-	-	-
Video & Audio Analytics	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	Motion detection with Metadata, Tampering	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 & G, SUNAPI	ONVIF Profile S, SUNAPI	ONVIF Profile S, SUNAPI
Alarm I/O	1 / 1	-	1 / 1	-	-	-
Audio	Bi-Directional	-	Bi-Directional	Uni-Directional	Uni-Directional	Uni-Directional
Edge Storage	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS
Environment Protection	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)	-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)	-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. 14.0W - Heater on (24V AC, 12V DC) Max. 12.95W - Heater on (PoE)	Max. 7.5W (PoE)	Max. 9.5W / Max. 13.5W - Heater on (24V AC)	Max. 5.8W (PoE)	PoE	PoE
Dimensions (WxHxD) / Weight	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") 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)	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	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

	SNP-6321H/6321	SNP-6320H/6320	SNP-L6233H/L6233	SNP-6320RH	SNP-6230RH	SNP-L6233RH
Resolution	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
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Frame Rate	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)
Max. User Access	10 (Unicast)	15 (Unicast)	10 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)
Min. Illumination	Color : 0.15Lux B/W : 0.015Lux	Color : 0.2Lux B/W : 0.01Lux	Color : 0.15Lux B/W : 0.015Lux	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)
Video Output	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 ~ 102.1mm (Optical 23x)	4.4 ~ 140.8mm (IR Corrected Optical 32x) F1.6(Wide) / F4.9(Tele)	4.4 ~ 101.2mm (IR Corrected Optical 23x) F1.6(Wide) / F 4.5(Tele)	4.4 ~ 101.2mm (IR Corrected Optical 23x) F1.6(Wide) / F 4.5(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) ~3.14°(Tele) / V : 36.8°(Wide) ~ 1.76°(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)
Focus Control	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 / 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)
Backlight Compensation	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)	SSNR
Digital Image Stabilization	Support	Support	Support	Support	Support	Support
Video & Audio 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
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
Alarm I/O	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	4 / 3 (Relay)	4 / 3 (Relay)	4 / 3 (Relay)
Audio	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	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP66, IK10 (SNP-6321H) IK10 (With SHP-3701H)(SNP-6321)	IP66, IK10 (SNP-6320H) IK10 (With SHP-3701H)(SNP-6320)	IP66, IK10（SNP-L6233H） IK10 (With SHP-3701H)（SNP-L6233）	IP66, IK10	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+) (SNP-6321H) -10°C ~ +55°C (+14°F ~ +131°F) (SNP-6321)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -30°C ~ +55°C (-22°F ~ +131°F) (PoE+) (SNP-6320H) -10°C ~ +55°C (+14°F ~ +131°F) (SNP-6320)	-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+) (SNP-6321H) Max. 20.0W (24V AC, PoE+) (SNP-6321)	Max. 24.0W (24V AC, PoE+) Max. 65.0W - Heater on (24V AC) (SNP-6320H) Max. 20.0W (24V AC, PoE+) (SNP-6320)	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 (Ø8.8" x 11.56") 3.2Kg (7.05 lb) (SNP-6321H) Ø152.0 x 218.0mm (Ø5.98" x 8.58") 1.8Kg (3.97 lb) (SNP-6321)	Ø223.4 x 293.6mm (Ø8.8" x 11.56") 3.2Kg (7.05 lb) (SNP-6320H) Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb) (SNP-6320)	Ø223.4 x 293.6mm (Ø8.8" 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	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

	XRN-3010/3010A	XRN-2011/2011A	XRN-2010/2010A	XRN-1610S/1610/1610SA/1610A
OS	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
Max. Recording Bit Rate	300Mbps	256Mbps 100Mbps (RAID 5 mode)	256Mbps	180Mbps
Max # of Cameras	64	32	32	16
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) (XRN-2010)	Up to 4 SATA (Max. 24TB) (XRN-1610S) Up to 8 SATA (Max. 48TB) (XRN-1610)
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
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
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Defocus event trigger • Easy configuration (Setup Wizard, P2P (QR Code)) (XRN-3010A)	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Easy configuration (Setup Wizard, P2P (QR Code)) (XRN-2011A)	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Easy configuration (Setup Wizard, P2P (QR Code)) (XRN-2010A)	• Plug & play by 16 PoE / PoE+ Ports (XRN-1610S) • WiseStream supported • Defocus event trigger • Easy configuration (Setup Wizard, P2P (QR Code)) (XRN-1610SA/1610A)

	XRN-810S	XRN-410S	PRN-4011/4011A	PRP-5000
OS	Linux	Linux	Linux	Windows 10 IoT Enterprise
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
Max. Recording Bit Rate	100Mbps	50Mbps	400Mbps	520Mbps
Max # of Cameras	8	4	64	128
Internal Storage	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)	Up to 12 SATA (Max. 96TB)	Up to 16 SATA (Max. 160TB)
External Storage	-	-	iSCSI	iSCSI
RAID	-	-	RAID 5/6	RAID 0/1/5/6
Hot Swap	-	-	Yes	Yes
Network Viewer Software	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM Client, SSM Mobile
Local Monitor	HDMI (Up to 4K), VGA	HDMI (Up to 4K), VGA	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI, VGA, DVI
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	• 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	• 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	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Defocus event trigger • Easy configuration (Setup Wizard, P2P (QR Code)) (PRN-4011A)	• Dual track recording • Active - Active failover supported • WiseStream supported • Server clustering supported (Max. 2048CH)

	PRP-4000	QRN-1610S	QRN-810S/810	QRN-410S/410
OS	Windows 10 IoT Enterprise	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps	128Mbps	100Mbps (QRN-810), 80Mbps (QRN-810S)	50Mbps (QRN-410), 40Mbps (QRN-410S)
Max # of Cameras	72	16	8	4
Internal Storage	Up to 8 SATA (Max. 80TB)	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
External Storage	iSCSI	-	-	-
RAID	RAID 0/1/5/6	-	-	-
Hot Swap	Yes	-	-	-
Network Viewer Software	SSM Client, SSM Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI, VGA, DP	HDMI (Up to 4K), VGA	HDMI (Up to 4K), VGA (QRN-810) HDMI (Up to 4K) (QRN-810S)	HDMI (Up to 4K), VGA (QRN-410) HDMI (Up to 4K) (QRN-410S)
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	• Dual track recording • Active - Active failover supported • WiseStream supported • Server clustering supported (Max. 2048CH)	• Plug & play by 16 PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps • Defocus event trigger	• Plug & play by 8 PoE ports (QRN-810S) • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps (QRN-810), 80Mbps (QRN-801S) • Defocus event trigger	• Plug & play by 4 PoE ports (QRN-410S) • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 64Mbps (QRN-410), 50Mbps (QRN-401S) • Defocus event trigger

	TRM-1610M/1610S	SRN-1673S	SRN-873S	SRN-473S
OS	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Max. Recording Bit Rate	128Mbps	80Mbps	64Mbps	32Mbps
Max # of Cameras	16 (4PoE, M12 : TRM-1610M / RJ-45 : TRM-1610S)	16	8	4
Internal Storage	Up to 2 SATA (Front-Swap) Max. 4TB (HDD, SSD)	Up to 4 SATA	Up to 2 SATA	Up to 1 SATA
External Storage	-	1 e-SATA	1 e-SATA	-
RAID	RAID 1	-	-	-
Hot Swap	Yes (RAID 1)	-	-	-
Network Viewer Software	SSM Transportation, WebViewer, Wisenet Mobile	SSM, SmartViewer, Wisenet Mobile	SSM, SmartViewer, Wisenet Mobile	SSM, SmartViewer, Wisenet Mobile
Local Monitor	HDMI (Up to 4K), VGA	HDMI / VGA	HDMI / VGA	HDMI / VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	• GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -40°C ~ +70°C (-40°F ~ +158°F)	• Plug & play by 16 PoE / PoE+ Ports • WebViewer supported • HDD removable (Easy install)	• Plug & play by 8 PoE / PoE+ Ports • WebViewer supported	• Plug & play by 4 PoE / PoE+ Ports • WebViewer supported

NETWORK

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	16 / 4	4 / 2	4 / 4	-	1 / 1
SD Card	-	-	SD/SDHC	-	SD/SDHC
ONVIF	Yes	Yes	Yes	Yes	Yes
Power	12V DC	12V DC, PoE	12V DC	12V DC / PoE	12V DC / PoE

Decoder

	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 (Up to 20 layouts and sequence)	1 / 4 / 6 / 8 / 9 / 13 / 16 / 2V / 3V (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 Spilt mode, Hallway View mode (Up to 20 layouts and sequence)
Power	100 ~ 240V 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	Board of SPD-1660R	Up to 49CH, H.265 / H.264 / MJPEG codec, Layout sequence support

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. 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

Monitoring Performance improvement

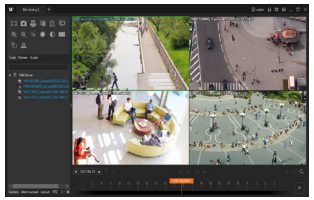
Improved video recording server and decoding feature provide simultaneous playback in more channels than before. You can now simultaneously play videos in 128 channels while also recording them in a single server.

Schedule backup support

Users can now double the safety measures for the recorded videos by using our automatic back-up feature. By setting the start time and the repeat cycle, users can safely record their valuable image data.

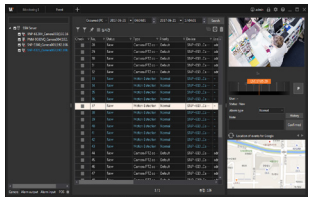
Active-Active Server failover

Videos that have failed to be recorded in the server are saved in an alternative server. This feature is supported in the domain with multi-servers.
By using this feature, users can enjoy more effective work flow than the existing queuing method. This requires additional recording disk and channel license.



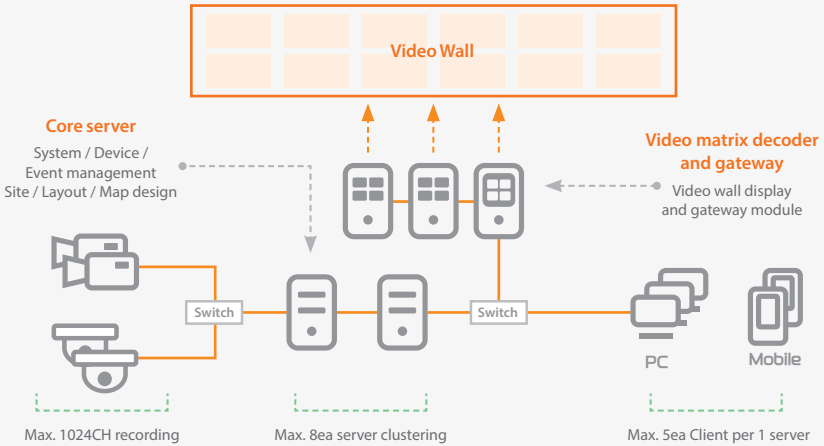
Live Streaming

Display Events as Thumbnails



Location of Events for Google Map

System configuration



General		Wisenet SSM (v2.1)
System		
Maximum Number of Monitoring Channel		Up to 10,000 channel / domain
Maximum Number of Recording Channel		Up to 10,000 channel / 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
	Number of Channels	Max. 128 channels
	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

	R10/R40/RK40 (Elite / Mobile)	U90	BioEntry W2	5427CK	BioMini
Frequency	13.56Mhz	902 ~ 928 MHz	13.56Mhz	13.56Mhz	-
Communication	Wiegand / Clock & Data(RK40/RK40 Elite/RK40 Mobile)	Wiegand	Wiegand	USB 2.0	USB 2.0
Compatible Access Cards	R10/R40/RK40 : iCLASS SEOS, MIFARE (Classic) / DESFire EV1 CSN R10/R40/RK40 Elite : iCLASS SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN R10/R40/RK40 Mobile : Mobile ID, MIFARE (Classic) / DESFire EV1 CSN	UHF Card	iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN	iCLASS SE / SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN	-
Keypad	Yes (4 x 3) (RK40/RK40 Elite/RK40 Mobile)	-	-	-	-
Operating Voltage Range	5-16V DC	12V DC or 24V 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)	-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	IP65	IP67	IP54	-
Impact Protection	-	-	IK08	-	-
Panel Connnection	Pigtail	Pigtail	Pigtail	-	-
Color	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

	V2000	EH400K	V1000	V100/V200/V300
Communication Port	Ethernet (10/100)	Ethernet (10/100)	Ethernet (10/100) / RS-485	RS-485
Reader interface	2ea	1ea	-	2ea (V100)
Max. expansion board	-	-	32ea	-
Max. card holders	250,000	125,000	250,000	-
Max. Event buffers	99,999	99,999	99,999	-
Input port	2ea	4ea	2ea	4ea/16ea/2ea
Output port	4ea	2ea	2ea	4ea/2ea/12ea
Operating Current	210mA / 12V DC	-	-	-
Operating Temperature	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)
PoE	-	802.af	-	-
Color	Gray	Black	Gray	Gray

Standalone

	Face station2
Biometric	Face
RFID Card	iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN
CPU	1.4 GHz Quad
Memory	8GB Flash + 1GB RAM
LCD	4" color TFT
IR LED	140ea
Operating Temperature	-20°C ~ 50°C (+4°F ~ +122°F)
Power	24V DC / 2.5A
Detection	LFD (Live Face detection)
Max. User	30,000 (1 : 1), 3,000 (1 : N)
Wiegand	1ea input / output
Relay	1ea

Card

iCLASS SEOS (Elite)	Mobile ID	UHF
• 13.56Mhz • Compatible with R10 / R40 / RK40 (Elite) • Encoded by Hanwha Techwin unique format (Elite)	• Bluetooth / NFC via mobile device (Android, IOS) • Compatible with R10 Elite mobile / R40 Elite mobile / RK40 Elite mobile	• 902 ~ 928 MHz • Long range card (3~5m)

Appliance

	SSA-A100
Supported Platform	Windows 10 IoT 2016 Enterprise entry
Intalled 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, 2 x Rear USB 3.0
Graphics	Intel HD graphics 500
Power Supply	19V, 65W
Ethernet	10/100/1000 Mbps ehternet
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")

Peripheral

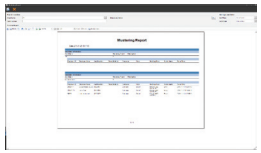
	SSA-X300
Controller/ Interface On Board	Max. 2ea Boards in enclosure
Input Power	100 ~ 240V AC (50Hz/60Hz) / 2.0A
Power Consumption	13.5V ±5%, 4.7A (Strobe, Horn 12.5V DC ±5%)
Charging Current	700mA
Back up Battery	12V, 18Ah, rechargeable
SMPS Status Transmission	AC loss, Battery fail (Non battery)
AC 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")

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.

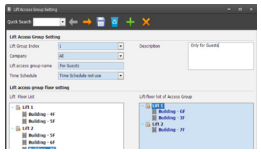
Key Features

Configuration



Mustering Report

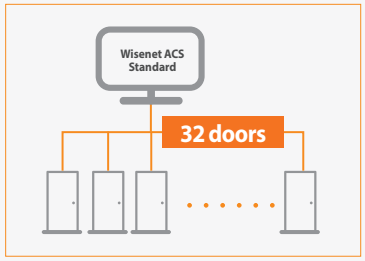
Monitoring



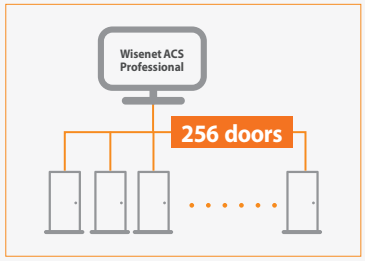
Lift Control

Access Control	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	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
Card Design and Printing	Create multiple design templates
	Auto-fill card holder data from system database
	Print cards
Fire Groups	Create firegroups for each fire sensor input
Advanced Reporting	Extensive reporting options
	Export to multiple formats (excel, pdf, word etc.)
Video Integration with SSM	Full Integration with Hanwha Techwin's VMS, SSM
	Review video of the access events & alarms
	Real-time event & alarm notification to SSM
Maintenance	User group & user privileges
	Manual & scheduled database backup
	Database restore
	Data export & import
	Custom fields
	Auditing & user activity logs
System	Up to 32doors (standard), 256doors (professional), Unlimited doors (enterprise)
	Very simple and intuitive user interface
	Highly scalable

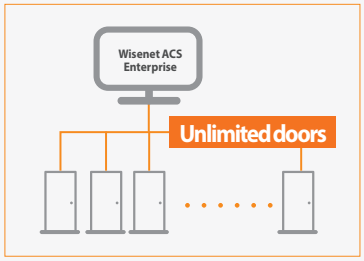
Wisenet ACS



Standard : Up to 32 doors

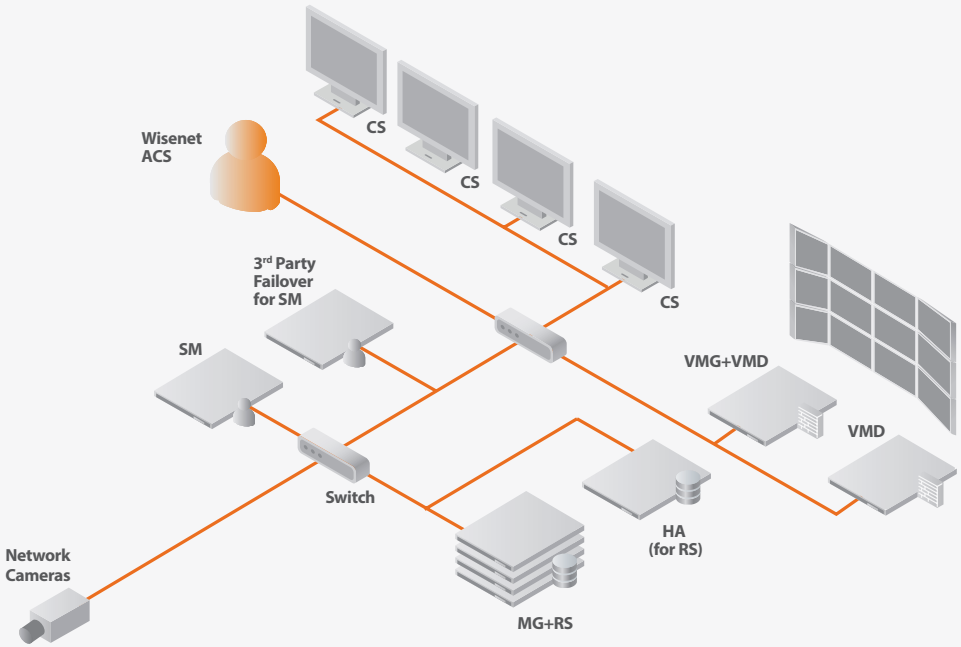


Professional : Up to 256 doors



Enterprise : Unlimited doors

Integration with Wisenet SSM



Camera

	HCB-7000	HCO-7070R	HCO-7010R/20R/30R	HCD-7070R	HCD-7010R/20R/30R
Resolution	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
Horizontal Resolution	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)
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)
IR Viewable Length	-	30m (98.43ft)	20m (65.62ft) (HCO-7010R) 25m (82.02ft) (HCO-7020R) 30m (98.43ft) (HCO-7030R)	20m (65.62ft)	20m (65.62ft) (HCD-7010R) 25m (82.02ft) (HCD-7020R) 30m (98.43ft) (HCD-7030R)
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)
Focus Control	Manual	Manual	Fixed	Manual	Fixed
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 63° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
Day & Night	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
Digital Noise Reduction	2D DNR	2D DNR	2D DNR	2D DNR	2D DNR
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	2 Zones	2 Zones	2 Zones	2 Zones
Alarm I/O	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)
Environment Protection	-	IP66, IK10	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)
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)
Dimensions (WxHxD) / Weight	68.4 × 59.6 × 92.7mm (2.69" × 2.35" × 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 × 86.1mm (Ø4.33" × 3.39") 240g (0.53 lb)
Additional Features	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)

	HCV-7070R	HCV-7010R/20R/30R	HCB-6001	HCB-6000	HCZ-6320
Resolution	4MP	4MP	2MP	2MP	2MP
Imaging Device	1/3" 4M CMOS	1/3" 4M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2.38M CMOS
Horizontal Resolution	2560 x 1440	2560 x 1440	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	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)	Color : 0.09Lux B/W : 0.009Lux	Color : 0.09Lux B/W : 0.009Lux	Color : 0.2Lux B/W : 0.01Lux
Lens	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)	-	-	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)
IR Viewable Length	30m (98.43ft)	20m (65.62ft) (HCV-7010R) 25m (82.02ft) (HCV-7020R) 30m (98.43ft) (HCV-7030R)	-	-	-
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° (HCV-7010R) H : 78.22° / V : 41.21° / D : 87.91° (HCV-7020R) H : 49.01° / V : 27.61° / D : 55.6° (HCV-7030R)	-	-	H : 62.8°(Wide) ~ 2.23°(Tele) / V : 36.80°(Wide) ~ 1.26°(Tele)
Focus Control	Manual	Fixed	Simple Focus	Manual	Auto / Manual / One push
Pan / Tilt / Rotate	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	BLC / HLC / DWDR	BLC / HLC / DWDR	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	2D DNR	2D DNR	SSNRIV	SSNRIV	SSNRIII
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	2 Zones	4 Zones	8 Zones	12 Zones
Alarm I/O	MD Output 1	-	0 / 1, External D/N 1	0 / 1, External D/N 1	-
Communication	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), 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
Environment Protection	IP66, IK10	IP66, IK10	-	-	-
Operating Temperature	-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)
Power	Max. 5.8W (24V AC & 12V DC)	Max. 5.0W (12V DC)	Max. 6W (24V AC & 12V DC)	Max. 3.5W (24V AC & 12V DC)	Max. 6W (12V DC)
Dimensions (WxHxD) / Weight	Ø137 × 106.1mm (Ø5.39" × 4.18") 715g (1.58 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.12 lb)	73.1× 67.2 × 123.9mm (2.88" × 2.65" × 4.88") 287g (0.63 lb)	68.4 × 59.6 × 92.7mm (2.69" × 2.35" × 3.65") 186g (0.41 lb)	72.0 x 60 x 137mm (2.83" x 2.36" x 5.39") 476g (1.05 lb)
Additional Features	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Defog

ANALOG

HD+

	HCO-6080R	**HCO-6070R**	**HCD-6080R/6070R**	**HCV-6080R/6070R**	**HCM-9020VQ**
Resolution	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	1/3" 2M CMOS Sensor x 4
Horizontal Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.11Lux B/W : 0Lux (IR LED on)	Color : 0.11Lux B/W : 0Lux (IR LED on)	Color : 0.11Lux B/W : 0Lux (IR LED on)	Color : 0.11Lux B/W : 0Lux (IR LED on)	Color : 0.1Lux (4mm) / 0.01Lux (6mm) B/W : 0.01Lux (4mm, 6mm)
Lens	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	3.2 ~ 10mm (3.1x) V/F (F1.6)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6) (HCD-6080R) V/F (F1.6) (HCD-6070R)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6) (HCV-6080R) V/F (F1.6) (HCV-6070R)	4mm x 2 (F2.6), 6mm x 2 (F2.0)
IR Viewable Length	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)	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 : 110.2°(Wide) ~ 32°(Tele) / V : 55.4°(Wide) ~ 18°(Tele) / D : 128.4°(Wide) ~ 36.6°(Tele)	[4mm] H : 80.20° / V : 43.50° / D : 95.24° [6mm] H : 51.66° / V : 30.46° / D : 60.78°
Focus Control	Simple focus (motorized V/F) / Manual	Manual	Simple focus (motorized V/F) / Manual (HCD-6080R) Manual (HCD-6070R)	Simple focus (motorized V/F) / Manual (HCV-6080R) Manual (HCV-6070R)	Fixed
Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	20° ~ 60° / 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 (100dB)
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV	Off / Low / Middle / High
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	8 Zones	16 Zones
Alarm I/O	MD Output 1	MD Output 1	MD Output 1	MD Output 1	0 / 4
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)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	Pelco-C (Coaxitron), RS-485 : Pelco-D
Environment Protection	IP66, IK10	IP66, IK10	-	IP66, IK10	IP66, IK10
Operating Temperature	-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)	-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)
Power	Max. 6.0W (24V AC & 12V DC)	Max. 6.0W (24V AC & 12V DC)	Max 6.0W (24V AC & 12V DC) (HCD-6080R) Max 4.2W (24V AC & 12V DC) (HCD-6070R)	Max. 4.2W (24V AC & 12V DC)	Max.7.3W, TDN On(24V AC) Max.6.7W, TDN On(12V DC)
Dimensions (WxHxD) / Weight	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)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 330g (0.73lb) (HCD-6080R) 320g (0.71lb) (HCD-6070R)	Ø137 × 106.1mm (Ø5.39" × 4.18") 725g (1.60lb) 715g (1.58lb)	Ø199 x 89.5mm (7.83" x 3.52") 2Kg (4.41 lb)
Additional Features	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Multi-directional camera

	HCP-6320HA/6320A	HCP-6230H/6230	SCB-6003	SCO-6083R	SCO-6023R
Resolution	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.8" 2.38M CMOS	1/2.8" 2.38M 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
Min. Illumination	Color : 0.2Lux B/W : 0.01Lux	Color : 0.2Lux B/W : 0.01Lux	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)
Lens	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	4.44 ~ 101.2mm (Optical 23x) F1.6 (Wide) / F3.63 (Tele)	-	2.8 ~ 12mm (4.3x) V/F (F1.4)	4mm fixed (F 2.1)
IR Viewable Length	-	-	-	30m (98.43ft)	20m (65.62ft)
Angular Field of View	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)	-	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°
Focus Control	Auto / Manual / One push	Auto / Manual / One push	-	Manual	Fixed
Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 210° (-15° ~ 195°) / -	-	-	-
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR
Digital Noise Reduction	SSNRIII	SSNRIII	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	32 Zones	32 Zones	4 Zones	4 Zones	4 Zones
Alarm I/O	4 / 2 (Relay)	4 / 2 (Relay)	0 / 1, External D/N 1	0 / 1	-
Communication	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	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)
Environment Protection	IP66, IK10 (HCP-6320HA), IK10 (With SHP-3701H) (HCP-6320A)	IP66, IK10 (HCP-6230H), IK10 (With SHP-3701H) (HCP-6230)	-	IP66, IK10	IP66
Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F) (HCP-6320HA), -10°C ~ +55°C (+14°F ~ +131°F) (HCP-6320A)	-50°C ~ +55°C (-58°F ~ +131°F) (HCP-6230H), -10°C ~ +55°C (+14°F ~ +131°F) (HCP-6230)	-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. 24.0W / 65.0W - Heater off / on (24V AC) (HCP-6320HA) Max. 20.0W (24V AC) (HCP-6320A)	Max. 24.0W / 65.0W - Heater off / on (24V AC) (HCP-6230H) Max. 20.0W (24V AC) (HCP-6230)	Max. 4.2W (24V AC & 12V DC)	Max. 6.0W (24V AC & 12V DC)	Max. 4.2W (12V DC)
Dimensions (WxHxD) / Weight	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb) (HCP-6320HA), Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb) (HCP-6320A)	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb) (HCP-6230H), Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb) (HCP-6230)	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)
Additional Features	Defog	Defog	Defog	Defog	Defog

ANALOG

HD+

	SCD-6083R	SCD-6023R	SCD-6013	SCV-6083R	SCV-6023R
Resolution	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
Horizontal Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	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 : 0.11Lux B/W : 0Lux (IR LED on)	Color : 0.25Lux B/W : 0Lux (IR LED on)
Lens	2.8 ~ 12mm (4.3x) V/F (F1.4)	4mm fixed (F 2.1)	2.8mm fixed (F1.8)	2.8 ~ 12mm (4.3x) V/F (F1.4)	4mm fixed (F 2.1)
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	-	30m (98.43ft)	20m (65.62ft)
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 : 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)	H : 80.7° / V : 43.5° / D : 95.8°
Focus Control	Manual	Fixed	Fixed	Manual	Fixed
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°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
Day & Night	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
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	4 Zones	4 Zones	4 Zones	4 Zones	4 Zones
Alarm I/O	0 / 1	-	-	0 / 1	-
Communication	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
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. 4.2W (24V AC & 12V DC)	Max. 4.2W (12V DC)	Max. 2.5w (12V DC)	Max. 4.2W (24V AC & 12V DC)	Max. 4.2W (12V DC)
Dimensions (WxHxD) / Weight	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

DVR

		HRD-1642	HRD-1641	HRD-842	HRD-841	HRD-840	HRD-442	HRD-440
Channel		16CH	16CH	8CH	8CH	8CH	4CH	4CH
Live (NTSC / PAL)		480fps / 400fps	480fps / 400fps	240fps / 200fps	240fps / 200fps	240fps / 200fps	120fps / 100fps	120fps / 100fps
Recording Compression		H.264	H.264	H.264	H.264	H.264	H.264	H.264
Max. Recording (NTSC / PAL)		240fps / 200fps@2560 x 1440 480fps / 400fps@1920 x 1080	240fps / 200fps@2560 x 1440 480fps / 400fps@1920 x 1080	120fps / 100fps@2560 x 1440 240fps / 200fps@1920 x 1080	120fps / 100fps@2560 x 1440 240fps / 200fps@1920 x 1080	120fps /1 00fps@2560 x 1440 240fps / 200fps@1920 x 1080	60fps / 50fps@2560 x 1440 120fps / 100fps@1920 x 1080	60fps / 50fps@2560 x 1440 120fps / 100fps@1920 x 1080
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 HDTVI, HDCVI	4CH : AHD, NTSC, PAL TVI, CVI
Audio I/O		16CH (Built-in 4CH) / CH	4CH / 1CH	8CH (Built-in 4CH) / 1CH	4CH / 1CH	1CH / 1CH	4CH / 1CH	1CH / 1CH
Alarm I/O		16/4	16/4	8/4	8/4	4/1	4/1	4/1
Internal Storage		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
Monitors	VGA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	HDMI	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Spot Composite	1CH (BNC)	1CH (BNC)	1CH (BNC)	1CH (BNC)	1CH (BNC)	1CH (BNC)	1CH (BNC)
USB		2 ports	2 ports	2 ports	2 ports	2 ports	2 ports	2 ports
e-SATA		2 External SATA ports	1 External SATA port	2 External SATA Ports	1 External SATA port	-	-	-
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	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer
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)
Serial Interface		RS-485(Half-duplex)	RS-485(Half-duplex)	RS-485(Half-duplex)	RS-485(Half-duplex)	RS-485(Half-duplex)	RS-485(Half-duplex)	RS-485(Half-duplex)

PERIPHERAL

LED Monitor

	SMT-4033	SMT-3233	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	1,200 : 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	9.5ms	8ms	5ms	5ms	5ms	5ms
Brightness	350cd/m²	350cd/m²	250cd/m²	250cd/m²	250cd/m²	250cd/m²
Tempered Glass Screen	-	-	Yes	Yes	Yes	Yes
Picture In Picture	-	-	-	-	-	Yes
Built-in Speakers	Yes	Yes	Yes	Yes	Yes	-
Stand	Optional	Optional	Standard	Standard	Standard	Standard
Power	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC
Additional Features	Remote Controller	Remote Controller	-	-	-	-

Controller

	SPC-7000	SPC-2000	SPC-2010	SPC-1010
Features	Network/Anlaog Cameras / NVR / DVR / SSM Controller • 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 • Superior System Compatibility • 3D Joystick Control • Quick and Easy Installation • SSM Support	PTZ / DVR System Controller • 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 • Control up to 255 PTZ Cameras • Multi Protocols Supports • OSD Menu, 3D Joystick Control • RS-485 and RS-422 Interface

Lens

Lens Description	Model	Image	Mount	Image Format	Resolution	Focal Length	Back Focal Length	Zoom Ratio	F. No	Angle of View	Operation			Dimensions W x H x D (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	Manual	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°				45.0 x 51.5 x 54.3mm (1.77" x 2.03" x 2.14")	84.0g (0.19 lb)
	SLA-M2890PN										P-Iris				82.1g (0.18 lb)

ACCESSORY

SHP-1680F

In-Ceiling Housing for PTZ & Dome

- For indoor applications
- Polycarbonate
- Can be used with
  XNP-6120H
  XNV-6120/6120R/6085
  XND-6085/6085V

SHP-3701H

Outdoor Housing for PTZ Dome

- 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

SHP-3701F

In-Ceiling Housing for Dome

- 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

SHD-3000F1

In-Ceiling Housing for PTZ Dome

- For indoor applications
- Polycarbonate
- Can be used with
  PNV-9080R
  XNV-6080/6080R/L6080/L6080R/8080R
  SND-5083/5084/5084R/6083/6084/6084R/7084/7084R
  SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R
  SCD-6081R
  SCV-6081R

SHD-3000F2

In Ceiling Housing for Dome

- For indoor applications
- Polycanonate
- Can be used with
  QND-6070R/7080R
  SND-6011R/L5083R/L6083R
  SCD-5080/5082/5083/5083R/6021/6083R
  SUD-5082
  HCD-7070R/6080R/6070R

SHD-3000F3

In Ceiling Housing for Dome

- For indoor applications
- Polycanonate
- Can be used with
  XNP-6040H
  QNV-6070R/7080R
  SNV-L5083R/L6083R
  SCV-5082/5082R/5083/5083R/5085/6023R/6083R
  HCV-7070R/6080R/6070R

SHD-3000F4

In Ceiling Housing for Dome

- For indoor applications
- Polycanonate
- Can be used with
  PND-9080R
  XND-6080/6080R/6080RV/6080V/L6080R/L6080RV/L6080V/8080R/8080RV

SHF-1500F

In-Ceiling Housing for Dome

- For indoor applications
- Polycarbonate
- Can be used with
  PNF-9010R
  XNF-8010R

SBP-301HM2

Hanging Mount

- Aluminum
- Can be used with
  XNP-6040H
  QNV-6070R/7080R
  SNV-1080/1080R/L5083R/L6083R
  SND-5083/5084/5084R/6083/6084/6084R/7084/7084R
  SCV-2081/2081R/2082R/3081/3082/3083/5082/5082R/5083/5083R/5085/6023R/6083R
  SCD-6081R
  HCV-7070R/6080R/6070R
  SBP-300CM/300LM/300WM/300WM1

SBP-301HMW2

Hanging Mount

- Aluminum
- Can be used with
  LNV-6070R

SBP-301HM3

Hanging Mount

- 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

SBP-301HM4/300HM5/300HMW5

Hanging Mount for 3M / 5M Fisheye Cameras

- 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
  QNE-7080R/6080R (SBP-301HM5)
- Can be used with QNE-7080RVW/6080RVW (SBP-300HMW5)

SBP-300HM6

Hanging Mount

- Aluminum
- Can be used with
  PNV-9080R
  XND-6085/6085V
  XNV-6080/6080R/6120/6120R/L6080/L6080R/8080R
  SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R
  SCV-6081R
  SBP-300CM/300LM/300WM/300WM1

SBP-300HM7

Hanging Mount

- Aluminum
- Can be used with
  XND-6010/6020/8020R/8030R/8040R
  XNV-6011
  QND-6010R/6020R/6030R/7010R/7020R/7030R
  SND-L5013/L6012/L6013/L6013R/L6014R
  SNV-6013
  SCD-6023R
  HCD-7010R/7020R/7030R
  SBP-300CM/300LM/300WM/300WM1

SBP-300HMW7

Hanging Mount

- Aluminum
- Can be used with
  LND-6010R/6020R/6030R

ACCESSORY

SBP-300HM8

Hanging Mount

- Aluminum
- Can be used with
  PND-9080R
  XND-6080/6080R/6080RV/6080V/6085/6085V/L6080R/L6080RV/L6080V 8080R/8080RV
  SND-6084R/6084/6083/5084R/5084/5083
  SCD-6081R
  SBP-300CM/300LM/300WM/300WM1

SBP-300HMS6

Wall Mount

- Stainless steel (SUS316L)
- Can be used with
  XNV-8080RS/6120RS/6080RS

SBP-122HM

Hanging Mount

- Aluminum
- Can be used with
  XNV-6010/6020/8020R/8030R/8040R
  QNV-6010R/6020R/6030R/7010R/7020R/7030R
  QND-6070R/7080R
  SCD-5080/5082/5083/5083R/6021
  SND-6011R/L5083R/L6083R
  SUD-5082
  HCD-7070R/6080R/6070R
  HCV-7010R/7020R/7030R
  SBP-300CM/300LM/300WM/300WM1

SBP-122HMW

Wall Mount

- Aluminum
- Can be used with
  LNV-6010R/6020R/6030R
  LND-6070R

SBP-168HM

Hanging Mount

- Aluminum
- Can be used with
  XNP-6120H

SBP-276HM/329HM/317HM

Hanging Mount

- Aluminum
- Can be used with
  PNM-9080VQ/9081VQ/7000VD
  (SBP-329HM : Outdoor, SBP-317HM : Indoor)
- Can be used with PNM-9000VQ/9030V
  (SBP-276HM)

SBP-201HM

Hanging Mount

- Aluminum
- Can be used with
  PNM-9020V

SBP-300HF/301HF/302HF

Built-in SFP Install Base for PTZ Cameras

- 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 be used with SNP-6320H/5430H (SBP-300HF)
  Can be used with SNP-6321H/5321H/L6233H/L5233H (SBP-301HF)
  Can be used with PNP-9200RH/XNP-6370RH
  (SBP-302HF)

SBP-300TM1

Tilt Mount for 5M Fisheye Cameras

- Poly Carbonate
- Can be used with
  PNF-9010R/9010RV/9010RVM
  XNF-8010R/8010RV/8010RVM
  XNV-L6080/L6080R
  SNF-8010/8010VM

SBP-160TM

Tilt Mount

- Aluminum
- Can be used with
  PNV-9080R
  XND-6085/6085V
  XNV-6012/6012R/6080/6080R/6085R/8080R
  SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R
  SCV-6081R

SBP-300WM1/300WM

Wall Mount

- Aluminum + SECC
- Can be used with
  SBP-300NB/300B/300PM/300KM

SBP-300WMW1

Wall Mount

- Aluminum
- Can be used with
  SBP-300HMW7/122HMW/301HMW2

SBP-300CM/300LM

Ceiling Mount / Parapet Mount

- Aluminum + SECC
- Can be used with hanging Mount and outdoor PTZ

SBP-300CMW

Ceiling Mount

- Aluminum
- Can be used with
  SBP-300WMW1

SBP-137WM

Wall Mount

- Alluminum and Poly Carbonate
- Can be used with
  QNV-6010R/6020R/6030R/6070R/7010R/7020R/7030R/7080R
  XNV-6010/6020R/8020R/8030R/8040R
  HCV-6070R/6080R/7010R/7020R/7030R/7070R/
  SCV-5082/5082R/5083/5083R/5085/6023R/6083R
  SNV-L5083R/L6083R

ACCESSORY

SBP-300WM0/120WM

Wall Mount

- Poly Carbonate
- Can be used with
  SCD-2060E/2080/2080R/2081/2082/3080/3081/3082/3083/2020/2022/2022R/5020/5030 (SBP-300WM0)
- Plastic
- Can be used with
  QND-7080R/7030R/7020R/7010R/6070R/6030R/6020R/6010R
  XND-6010/6020R
  SND-L6083R/L6014R/L6013R/L6013/L6012/L5083R/L5013
  SCD-6083R/6023R/6021/5083R/5083/5082/5080 (SBP-120WM)

SBP-300WMS1/300WMS

Wall Mount

- Stainless steel (SUS316L)
- Can be used with
  XNP-6320HS
  SBP-300HMS6/300PMS/300KMS

SBP-390WM1

Wall Mount

- Aluminum
- Can be used with
  PNM-9081VQ/9080VQ/9020V/9320VQP
  all Wisenet PTZ cameras

SBP-300PM

Pole Mount

- SECC
- Can be used with
  SBP-300B/300WM1/300WM/300LM

SBP-302PM

Pole Mount

- SECC
- Can be used with
  PNO-9080R/SNO-8081R/SBO-100B1
  QNO-7080R/6070R/7010R/7020R/7030R/6010R/6020R/6030R

SBP-300KM/300KMS

Corner Mount Base

- SECC
- Can be used with
  SBP-300B/300WM1/300WM/300LM (SBP-300KM)
- Stainless steel (SUS316L)
- Can be used with
  SBP-300WMS1/300WMS (SBP-300KMS)

SBP-300PMS

Pole Mount

- Stainless steel (SUS316L)
- Can be used with
  SBP-300WMS1/300WMS

SBP-300B

Wall Mount Base

- Aluminum + SECC
- Can be used with
  SBP-300PM/300KM

SBP-300NB

Installation Box

- Steel
- Can be used with
  SBP-300WM/300WM1/300KM/300PM

SBV-160WC/120WC

Weather Cap

- 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(SBV-160WC)
- Can be used with
  XNV-6010/6020R/8020R/8030R/8040R
  QNV-6010R/6020R/6030R/7010R/7020R/7030R (SBV-120WC)

SPV-116B

Back Box

- Aluminum
- Can be used with XNV-6011

SBV-136B/158G

Back Box

- Aluminum
- Can be used with
  XNP-6040H
  SCV-5082/5082R/5083/5083R/5085/6023R/6083R
  SNV-L5083R/L6083R
  QNV-6070R/7080R
  HCV-6070R/6080R/7010/7020/7030R/7070R (SBV-136B)
- Can be used with
  PNV-9080R
  XNV-6080/6080R/L6080/L6080R/8080R
  SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R
  SCV-6081R (SBV-158G)

SBF-100B1/SBO-100B1

Back Box

- 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

SHB-4300H/4300H1/4300H2/4300HP

Fixed Housing

- Aluminum diecasting construction
- Fully cable managed bracket
- Built-in fan & heater
- Support three cable glands, IP66

SHB-4200/4200H

Fixed Housing

- Support two cable glands
- Built-in fan & heater : SHB-4200H

ACCESSORY

STH-200

Fixed Housing

- For fixed camera application
- Wall/ceiling installations
- Easy to install side open type

STB-400/4150V

Fixed Mount

- Bracket for STH-500/200
- Alluminum and Steel material (STB-400)
- Bracket for box cameras
- Alluminum and Steel material (STB-4150V)

SPB-IND5/IND6

Smoked Dome Cover

- Poly Carbonate + Poly Carbonate
- Can be used with
  SCD-6081R
  SND-5083/5084/6083/6084/6084R/7084
  (SPB-IND5)
- Can be used with
  SCD-5080/5082/5083/5083R/6021/6083R
  SND-6011R
  SUD-5082
  QND-6070R/7080R
  (SPB-IND6)

SPB-IND11/IND81/IND81V

Smoked Dome Cover

- Poly Carbonate + Poly Carbonate
- Can be used with
  XND-6010/6020R/8020R/8030R/8040R
  (SPB-IND11)
- Can be used with
  XND-6080/6080R/L6080R/8080R
  (SPB-IND81)
- Can be used with
  XND-6080V/6080RV/L6080RV/L6080V/8080RV
  (SPB-IND81V)

SPB-IND12/IND72

Smoked Dome Cover

- Poly Carbonate + Poly Carbonate
- Can be used with
  QND- 6010R/6020R/6030R/7010R/7020R/7030R
  (SPB-IND12)
- Can be used with
  QND-6070R/7080R
  (SPB-IND72)

SPB-IND83/IND83V

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with
  XND-6085
  (SPB-IND83)
- Can be used with
  XND-6085V
  (SPB-IND83V)

SPB-VAN3/VAN4

Smoked Dome Cover

- 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
  (SPB-VAN3)
- Can be used with
  SCV-5082/5082R/5083/5083R/5085/6023R/6083R
  SNV-L5083R/L6083R
  (SPB-VAN4)

SPB-VAN11/VAN71 /VAN81

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with
  XNV-6010/6020/8020R/8030R/8040R
  (SPB-VAN11)
- Can be used with XNV-6120/6120R
  (SPB-VAN71)
- Can be used with XNV-6085
  (SPB-VAN81)

SPB-VAN12/VAN72

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with
  QNV-6010R/6020R/6030R/7010R/7020R/7030R
  (SPB-VAN12)
- Can be used with
  QNV-6070R/7080R
  (SPB-VAN72)

SPB-PTZ71

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with
  XNP-6040H

SPB-PTZ73

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with
  XNP-6120H

ACCESSORY CONFIGURATION

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/6320HS QNP-6230H	SCP-2370RH SNP-6200RH/6230RH/L6233RH/6320RH	XNP-6370RH PNP-9200RH XNP-6550RH	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

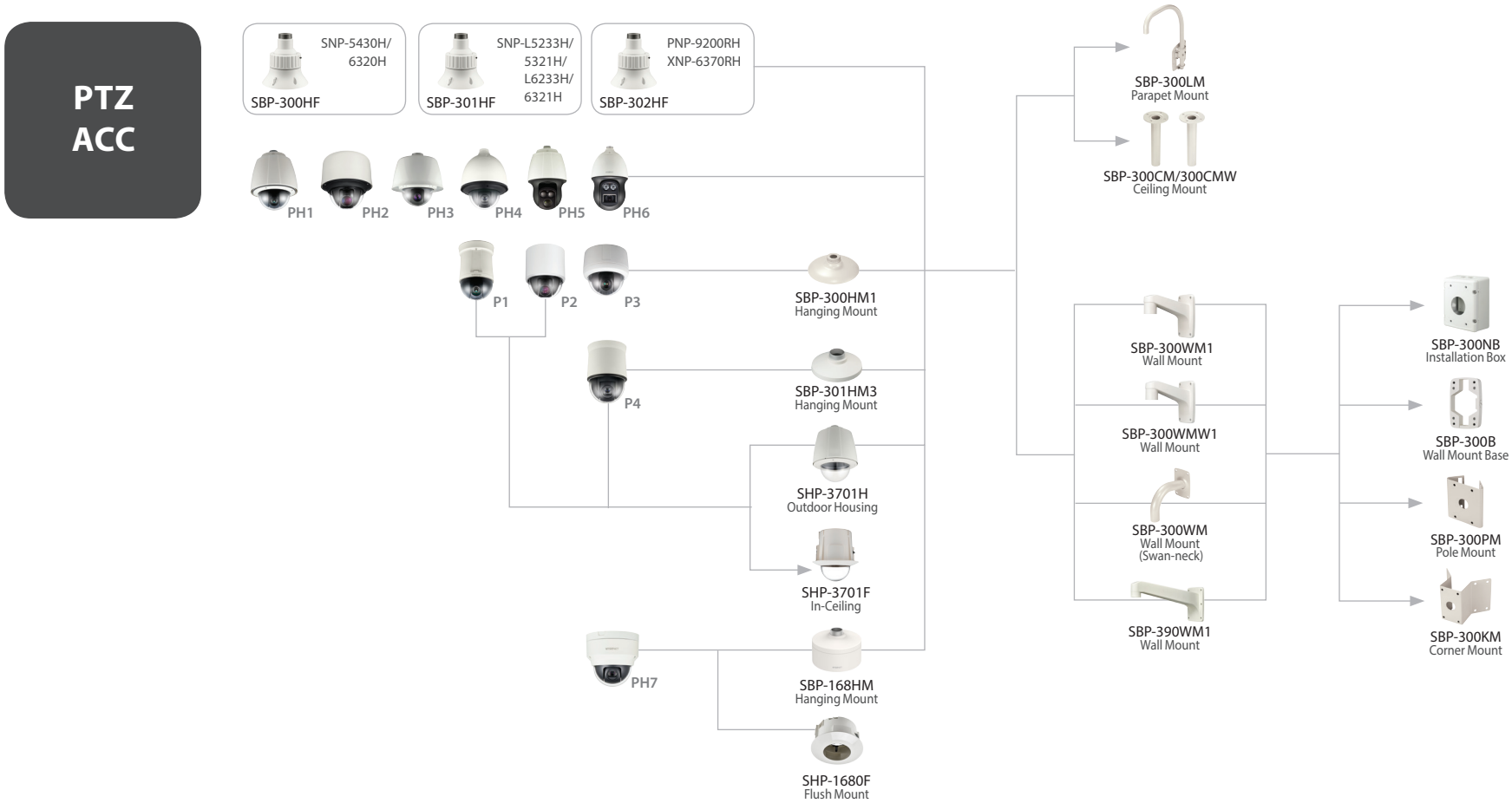
Dome Cameras

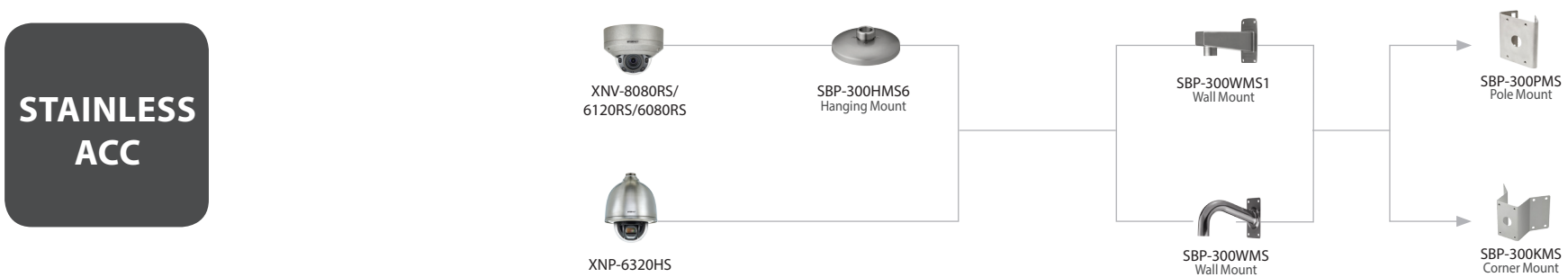
Type	Vandal-Resistant						Indoor Dome						Flat Eye
Shape	V1	V2	V3	V4	V5	V6	D1	D2	D3	D4	D5	D6	DF1
Color	Ivory												
Model	SCV-2060/2080/3080/3120 SNV-3080/3082/3120/5080/5080R/7080/7080R/7082	SCV-2081/2081R/2082R/3081/3082/3083 SNV-1080/1080R	PNV-9080R XNV-8080RS/8080R/6120RS/6080RS/6080R/6080/L6080R/L6080/6085R/6120R 6120 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/2080/2080R/2081/2082/3080/3081/3082/3083 SND-1080/5061/7061	SCD-2020/2020R/2021/2022/2022R/2040/2042R/5010/5020/5030 SND-1011/5011/7011 SUD-2020/2022/5020	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/ SCD-6023R SND-L5013/L6012/L6013/L6013R/L6014R XND-6010/6020R/8020R/8030R/8040R HCD-7010R/7020R/7030R	PND-9080R XND-6080/6080R/6080RV/6080V/L6080RL/L6080RV L6080V/8080R/8080RV	QNE-7080RV/7080RVW QNE-6080RV/6080RVW

Fisheye / Multi Imager Cameras

Type	Fisheye				Multi Imager			
Shape	F1	F2	FV1	FV2	M1	M2	M3	M4
Color	Ivory							
Model	SNF-7010	SNF-8010	SNF-7010V/7010VM	PNF-9010R/9010RV/9010RVM SNF-8010VM	PNM-9020V HCM-9020VQ	PNM-9081VQ/9080VQ	PNM-9320VQP 9000VQ	PNM-9030V

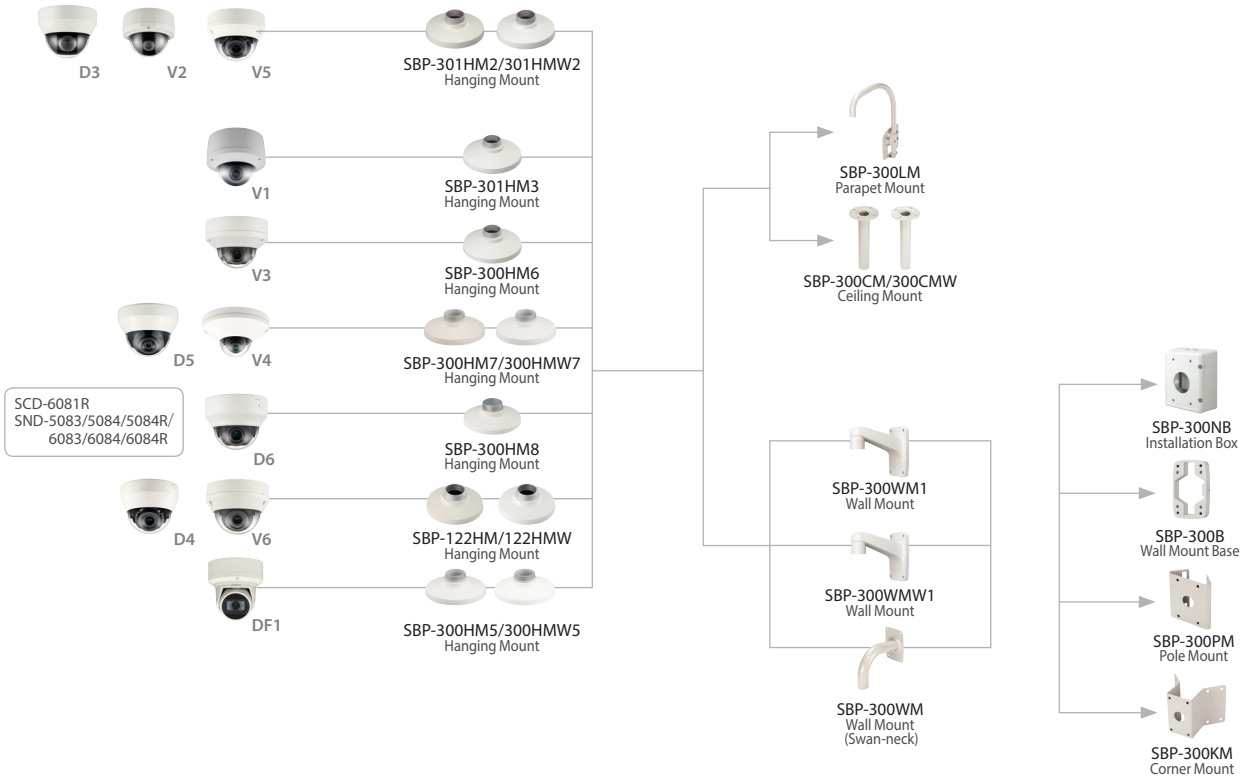
ACCESSORY CONFIGURATION

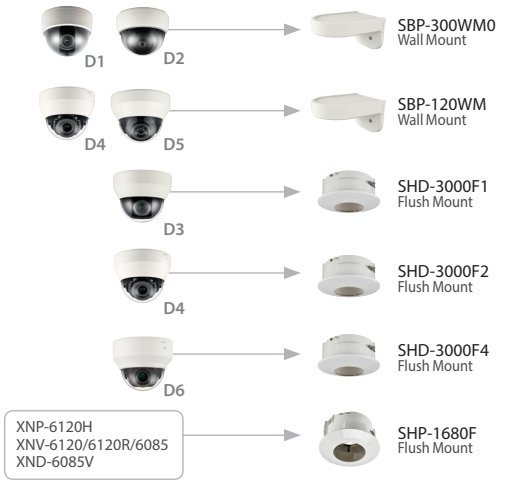


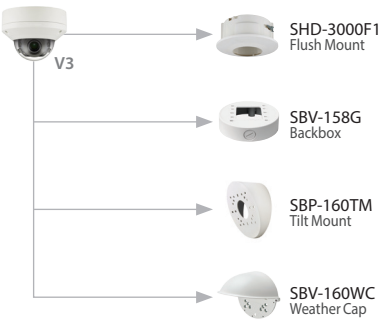


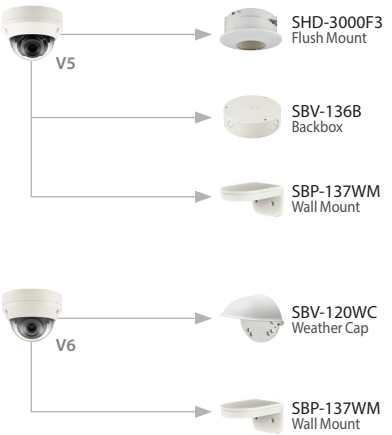
ACCESSORY CONFIGURATION

DOME ACC

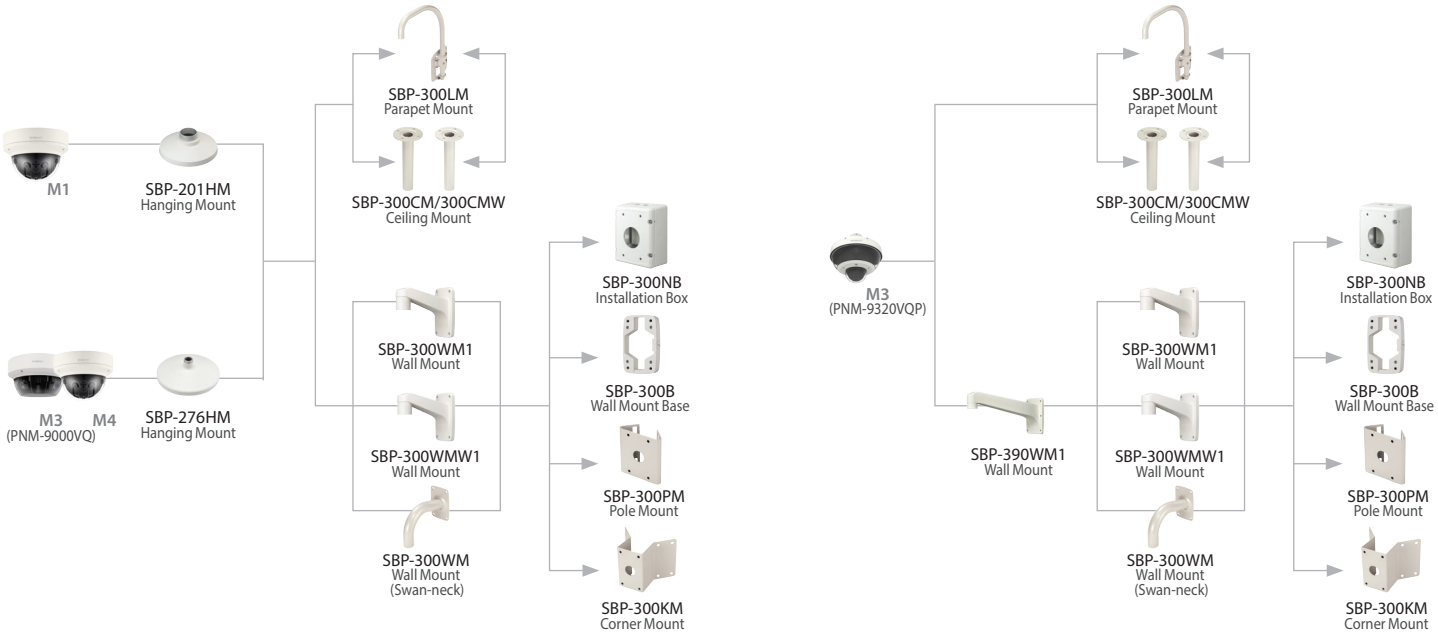


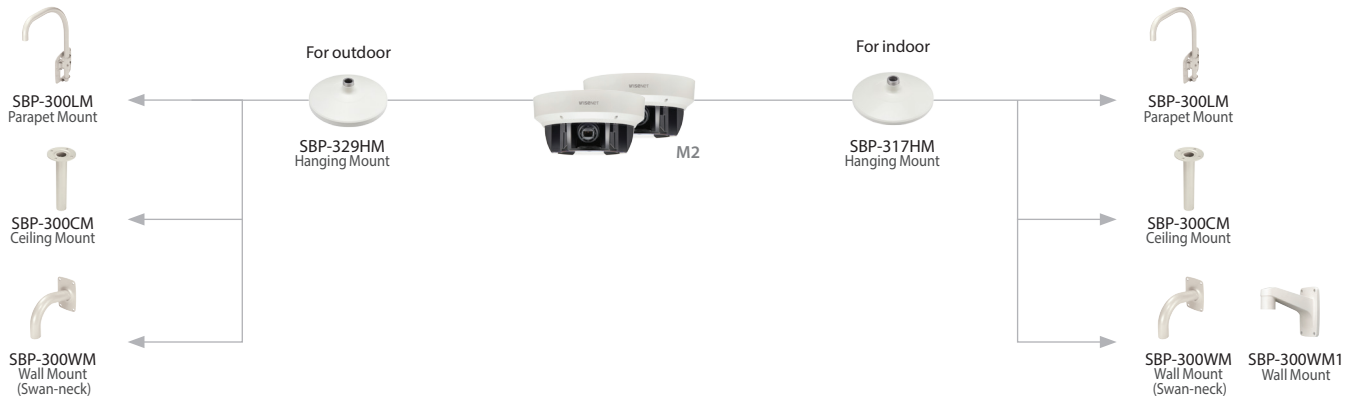






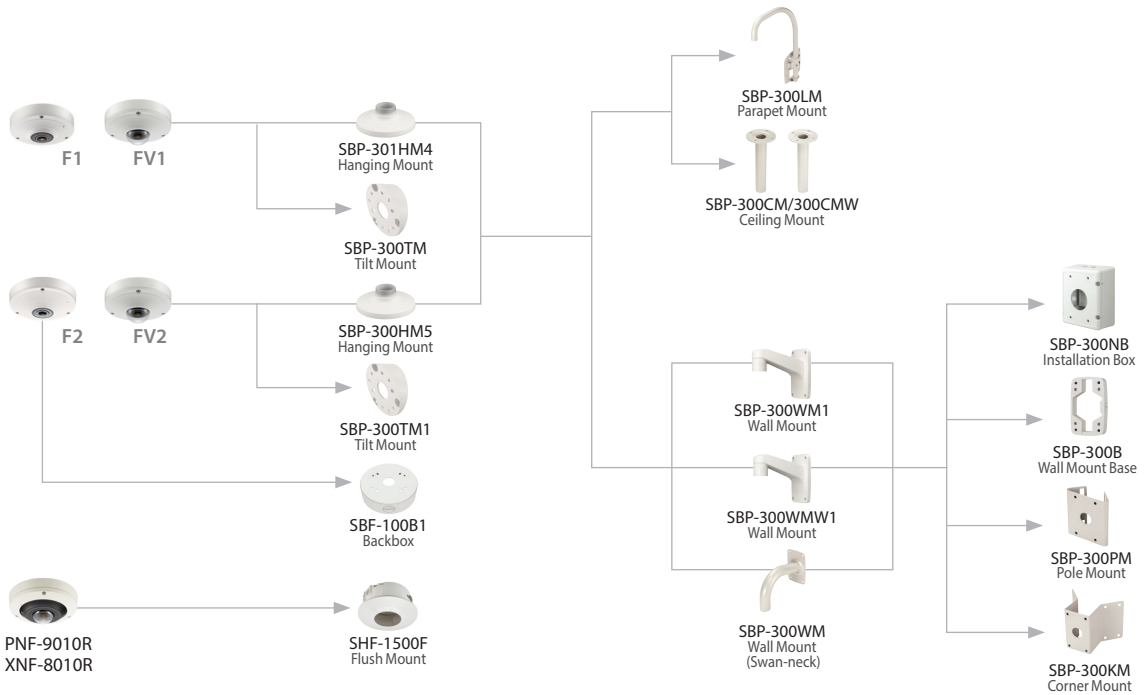
MULTI IMAGER ACC





ACCESSORY CONFIGURATION

FISHEYE ACC



BULLET ACC

PNO-9080R
XNO-8080R/8020R/8030R/8040R/6010R/6020R/6080R/6085R/6120R
SNO-8081R

SBP-302PM
Pole Mount

QNO-7080R/6070R/7010R/7020R/7030R/6010R/6020R/6030R
SNO-L6083R/L5083R
SCO-6083R
HCO-7070R/7010R/7020R/7030R/6080R/6070R

SBO-100B1
Back Box

SBP-302PM
Pole Mount

PRODUCT NAMING RULE

Camera

X N P - 6 3 2 0 R H

- **Series Name**
  - P : Premium (4K)
  - X : Versatile (WN5)
  - Q : Quality (Entry)
  - H : Advanced (AHD)
  - T : Vertical (Special)
  - S : Legacy (Existing)
- **Product Type**
  - N : Network cam
  - C : Analog cam
  - U : UTP Camera
- **Shape**
  - B : Box
  - D : Dome
  - F : Fisheye
  - M : Multi-Sensor
  - O : Bullet
  - P : PTZ
  - U : Positioning
  - V : Vandal
  - Z : Zoom box
  - E : Flateye
- **Grade**
  - Null : Basic
  - E : Entry
  - L : Lite
- **Total Resolution**
  - 1 : ~VGA
  - 2 : BLC CCD
  - 3 : WDR CCD
  - 4 : SVGA, 1/2"
  - 5 : 1M
  - 6 : 2M
  - 7 : 3 ~ 4M
  - 8 : 5 ~ 7M
  - 9 : 8M ↑
- **Lens**
  - 00 : No Lens
  - 01 : 3mm ↓ fixed
  - 02 : 3.1 ~ 4mm fixed
  - 03 : 4.1 ~ 6mm fixed
  - 04 : 6.1 ~ 9.9mm fixed
  - 05 : 10mm ↑ fixed
  - 06 : 2X V/F
  - 07 : 2X ~ 9X V/F
  - 08 : 2X ~ 9X M-V/F
  - 09 : 10X ↑ V/F
  - Xx : Zoom (PTZ, Zoom)
- **Version**
  - 0 ~ 9
- **Feature**
  - A : Revision
  - B : Black Color
  - C : Counting or CVBS
  - E : Explosion Proof
  - F : Flush or SFP LC (Fibre Channel)
  - L : Laser
  - H : Housing
  - M : Mobile (M-12 connector)
  - Q : Quad eye
  - D : Dual eye
  - R : IR
  - S : Stainless Steel
  - T : Thermal
  - DU : Dummy
  - RU : Dummy with IR
  - V : Vandal
- **Video Signal**
  - [Network]
    - Null : Default
  - [Analog]
    - N : NTSC
    - P : PAL

Decoder/Encoder

S P D - 1 6 0 0 R

- **Series Name**
  - S : Legacy (Existing)
- **Product Type**
  - P : Peripheral
- **Type**
  - D : Decoder
  - E : Encoder
- **No. of Monitors**
  - 1 ~ 99
- **Performance**
  - [Decoder]
    - 5 : ~64ch
    - 6 : 65 ~144ch
    - 7 : 145 ~ 288ch
    - 8 : 289 ~ 576ch
  - [Encoder]
    - 1 : SD
    - 2 : Up-to 720p
    - 3 : Up-to 1080p
    - 4 : Up-to 5MP
    - 5 : Up-to 8MP
    - 6 : Up-to 12MP
- **Version**
  - 0 ~ 9
- **Extra Feature**
  - B : Blade (Card)
  - R : Rack
  - Null : Box

Recorder

P R N - 4 0 1 1 A - 1 0

- **Series Name**
  - P : Premium
  - X : Versatile
  - Q : Quality (16ch ↓)
  - H : Advanced (AHD)
  - T : Vertical (Special)
  - S : Legacy (Existing)
- **Product Type**
  - R : Recorder
- **Shape**
  - D : DVR
  - H : Hybrid
  - M : Mobile
  - N : NVR
  - P : PC DVR
  - S : S/W
- **Grade**
  - Null : Basic
- **Channel / Mbps**
  - [~ 16ch : Max CH]
    - 4 : 4CH
    - 8 : 8CH
    - 16 : 16CH
  - [32ch ~ : Max Mbps]
    - 10 : 100 ~ 199Mbps
    - 20 : 200 ~ 299Mbps
    - 30 : 300 ~ 399Mbps
    - 40 : 400 ~ 499Mbps
    - 50 : 500 ~ 599Mbps
- **Performance**
  - [HD DVR]
    - 1 : SD
    - 2 : Up to 720p
    - 3 : Up to 1080p
    - 4 : Up to 5MP
    - 5 : Up to 8MP
  - [NVR]
    - 0 ~ 9 : Major Version
- **Version**
  - 0 ~ 9
- **Function**
  - Null : Null
  - C : Coaxial
  - D : DVD
  - L : Non-RT
  - S : PoE Switch
  - U : UTP
  - M : PoE Switch with M12 Connector
- **Null : Version 1**
  - A : Version 2 (upgrade)
  - B : Version 3
- **N : NTSC (DVR)**
  - P : PAL (DVR)
  - ~ : NVR
- **Capacity**
  - 3G : 320GB
  - 5G : 520GB
  - 1T ~ 9T : 1 ~ 9TB
  - 10 ~ 99 : 10 ~ 99TB

Monitor

S M T - 4 9 3 3

- **Series Name**
  - S : Legacy (Existing)
- **Product Type**
  - M : Monitor
- **Appearance**
  - T : LED
- **Grade**
  - Null : Default
- **Panel Size**
  - Inch
- **Input**
  - 0 : BNC
  - 1 : VGA
  - 2 : VGA + BNC
  - 3 : etc.
- **Version**
  - 0 ~ 9
- **Function**
  - Null : Normal
  - N : N/W

HEAD OFFICE

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

Hanwha Techwin America

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

Hanwha Techwin Europe

Heriot House, Heriot Road, Chertsey, Surrey, KT16 9DT, United Kingdom
Tel : +44.1932.57.8100
Fax : +44.1932.57.8101
www.hanwha-security.eu

Hanwha Techwin Tianjin

No.11 Weiliu Rd., Micro-electronic Industrial Park,
Jingang Road Tianjin 300385, China
Tel : +86.22.2388.7788 (8700)
www.hanwha-security.cn

Hanwha Techwin Middle East FZE

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

Hanwha Techwin Singapore Branch

4 Shenton Way, #15-06, SGX Centre 2, Singapore, 068807
Tel : +65.6221.7512
Fax : +65.6227.9337
http://hanwha-security.com

Hanwha Techwin Russia Office

40/4, Bolshaya Ordynka str., Moscow, Russia, 119017
Tel : +7.499.750.17.30
www.hanwha-security.eu/ru/

© 2018 Hanwha Techwin Co., Ltd. All rights reserved.

DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE
Under no circumstances, this document shall be reproduced, distributed or changed,
partially or wholly, without formal authorization of Hanwha Techwin Co.,Ltd.
* Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.

M.H-1806

Hanwha Techwin