



WISENET

Product line-up

1st Quarter 2020

Hanwha Group

Founded in 1952, **Hanwha** is a FORTUNE Global 500 company and the 7th largest business group in Korea, comprising of 76 domestic affiliates and 351 global networks around the world.

Hanwha's business area included span aerospace & mechatronics, chemicals & materials, solar energy, finance, service & leisure, and construction.

By integrating its growing number of affiliate enterprises worldwide,

Hanwha is harnessing the power of sustainable, quality growth to continually increase the value we bring to customers.

Products & Services

Aerospace & Mechatronics

Hanwha Corporation
(Machinery / Explosives)

Hanwha Aerospace

Hanwha Techwin

Hanwha Systems

Hanwha Defense

Hanwha Power Systems

Hanwha Precision Machinery

Solar Energy

Hanwha Q CELLS

Hanwha Energy

Hanwha Solar Power

Services & Leisure

Hanwha Hotels & Resorts

Hanwha Galleria

Hanwha Galleria Timeworld

Hanwha 63 City

Hanwha Station Development

Chemicals & Materials

Hanwha Chemical

Hanwha Total Petrochemical

Hanwha Advanced Materials

Hanwha General Chemical

Yechun NCC

Finance

Hanwha Investment & Securities

Hanwha Life

Hanwha General Insurance

Hanwha Asset Management

Hanwha Savings Bank

Construction

Hanwha Engineering & Construction

Hanwha City Development

Hanwha delivers energy to customers to
make our future
more vibrant and sustainable.





Hanwha Techwin brings you
security solutions
that deliver values beyond safety.

A leading global security company, Hanwha Techwin has built its professional expertise in the video surveillance business through its world-leading optical, manufacturing and image processing technologies, accumulated about 30 years since our first launch of a surveillance camera in 1991.

As the world welcomes the 4th Industrial Revolution, we are leading the market by taking advantage of next-generation technologies, such as Deep Learning, Artificial Intelligence (AI) and Business Intelligence (BI). We are also able to offer solutions tailored to meet the requirements of various vertical markets. By offering cybersecurity that customers can trust and rely on, we are growing as a total security solution company which provides high satisfaction and value, as well as real-life practical benefits.

Hanwha Techwin will continuously strengthen its development and marketing investments in the security business to drive future growth.

History

2010 ~ Current

- 2018 - Hanwha Techwin Vietnam manufacturing subsidiary established
- 2017 - Winner of IF Design Award, Red Dot Design Award
- 2017 - Wisenet V SoC and Wisenet X camera series launched
- 2015 - Hanwha Techwin is formed by strategic acquisition by Hanwha Group
- 2015 - Winner of Red Dot Design Award
- 2015 - Wisenet Lite series launched
- 2013 - Wisenet III SoC and camera series launched
- 2012 - Winner of Red Dot Design, CES Innovation Award
- 2012 - World's first 37X IR PTZ camera launched
- 2011 - B2C business began

1991 ~ 2009

- 2009 - Hanwha Techwin Tianjin and Shanghai subsidiaries established
- 2008 - Korea's first 37X optical AF PTZ camera launched
- 2004 - WinnerIII analog ISP chip developed
- 2001 - Hanwha Techwin Europe subsidiary established
- 1997 - World-class ultra low-light surveillance camera launched
- 1993 - Korea's first auto-iris lens for CCTV cameras developed
- 1991 - Video surveillance business established

Engineered in Korea

Hanwha Techwin's R&D(Research and Development) Center, is located in Pangyo Techno Valley, Gyeonggi-do, South Korea. The large R&D complex, which is focused on state-of-the-art technology and innovation, is also a home to many other of Korea's world leading companies. In the middle of the R&D hub, Hanwha Techwin is developing a variety of advanced technologies helping to drive the global video surveillance industry toward the future.

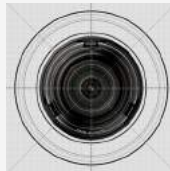
Core Technologies

Based on long-established optical and image-processing technologies, Hanwha Techwin has competitive edge not only in optical lenses but also in SoC cameras chipset development. As technologies become more advanced and security solutions are leveraged across all areas of life, the role of security goes beyond just monitoring. It is now being utilized in many other ways in order to fulfill the growing market demand for built-in analytics capabilities and intelligent functionality.

In order to provide agile response to such trend, Hanwha Techwin will strive to achieve technological advancement by developing deep-learning and AI solutions.

01. Optical design technology

Based on world class optical and image processing technologies, Wisenet provides high precision and resolution cameras.



02. SoC design technology

Outstanding level of SoC (System on Chip) design capabilities evident in our Wisenet SoC are also equipped with diverse analytics technologies.



03. Intelligent Analytics technology

Hanwha Techwin provides exclusive solutions for intelligent analytics thanks to its unique analytics algorithms.



Based on its solid core technologies, Hanwha Techwin strengthens its competitive edge for the future by harnessing innovative technologies.



To ensure
24/7 reliability of our products,
we added smart manufacturing system
to our top technologies.

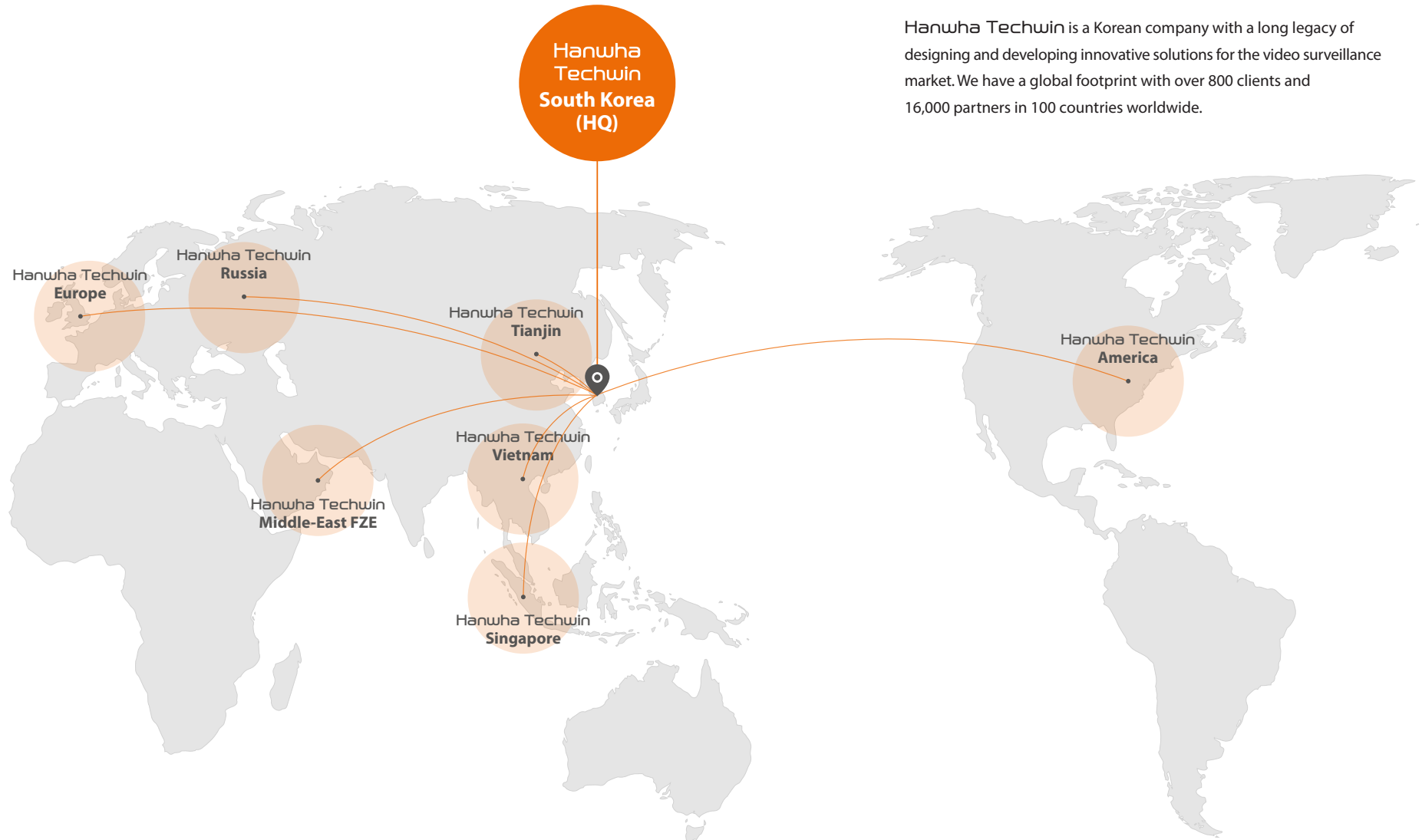


High-tech Powered in Vietnam

Hanwha Techwin's manufacturing subsidiary in Vietnam (HTSV) has been in operation since 2018 in order to expand its global production capability as well as to strengthen cost competitiveness. Through automation and smart systems, Hanwha Techwin has built sophisticated and fast-moving manufacturing lines producing all its product line-ups including cameras and storage devices. All products produced in HTSV go through a reliable manufacturing and quality assurance process and sold globally, these products represent 75% of Hanwha Techwin's total sales.

Hanwha Techwin Global network

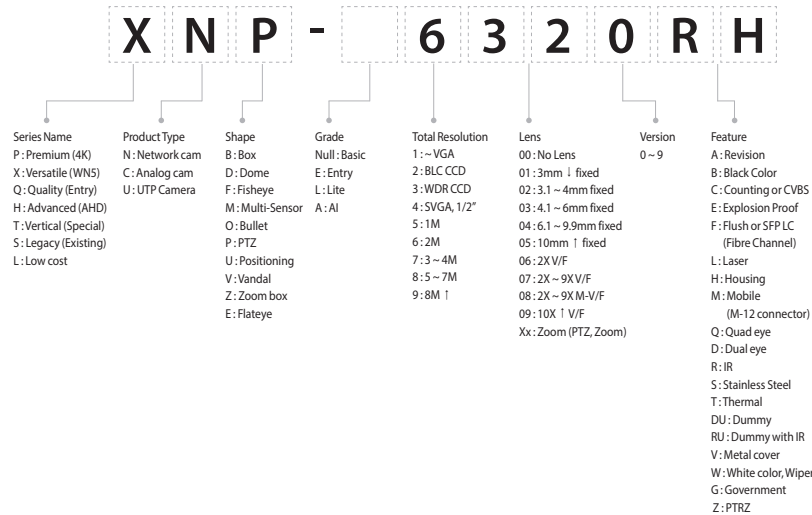
Hanwha Techwin is a Korean company with a long legacy of designing and developing innovative solutions for the video surveillance market. We have a global footprint with over 800 clients and 16,000 partners in 100 countries worldwide.



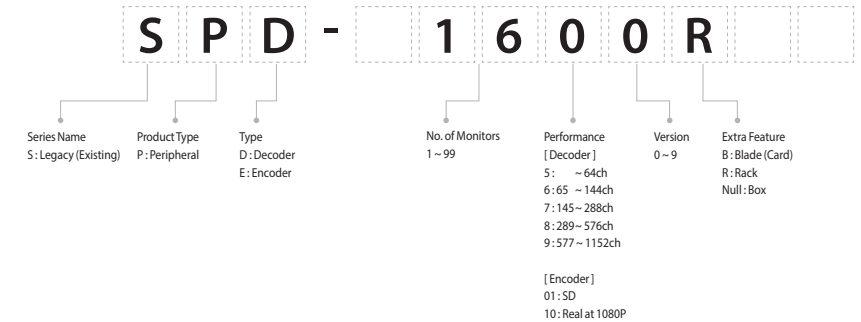
PRODUCT NAMING RULE

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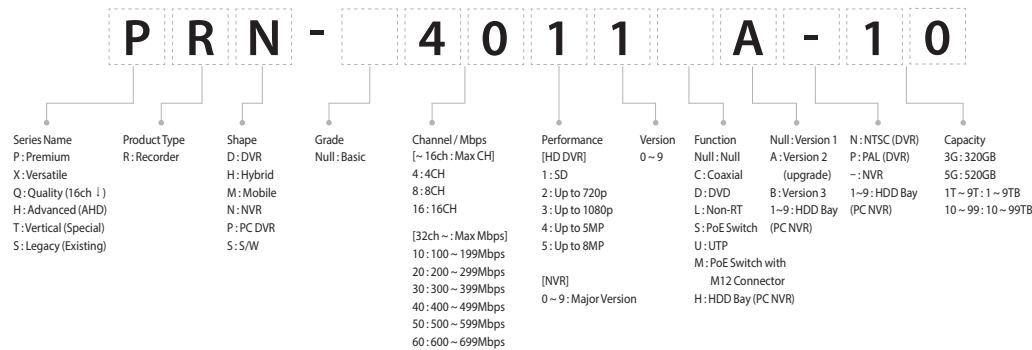
Camera



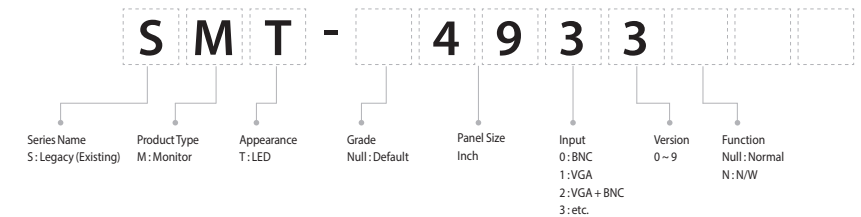
Decoder/Encoder



Recorder



Monitor



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Wisenet AI camera

Wisenet AI lineup have a powerful artificial intelligence (AI) engine which can detect and classify people and vehicles in real-time.

They are designed to capture the varying attributes of objects, including people, vehicles, faces and license plates.

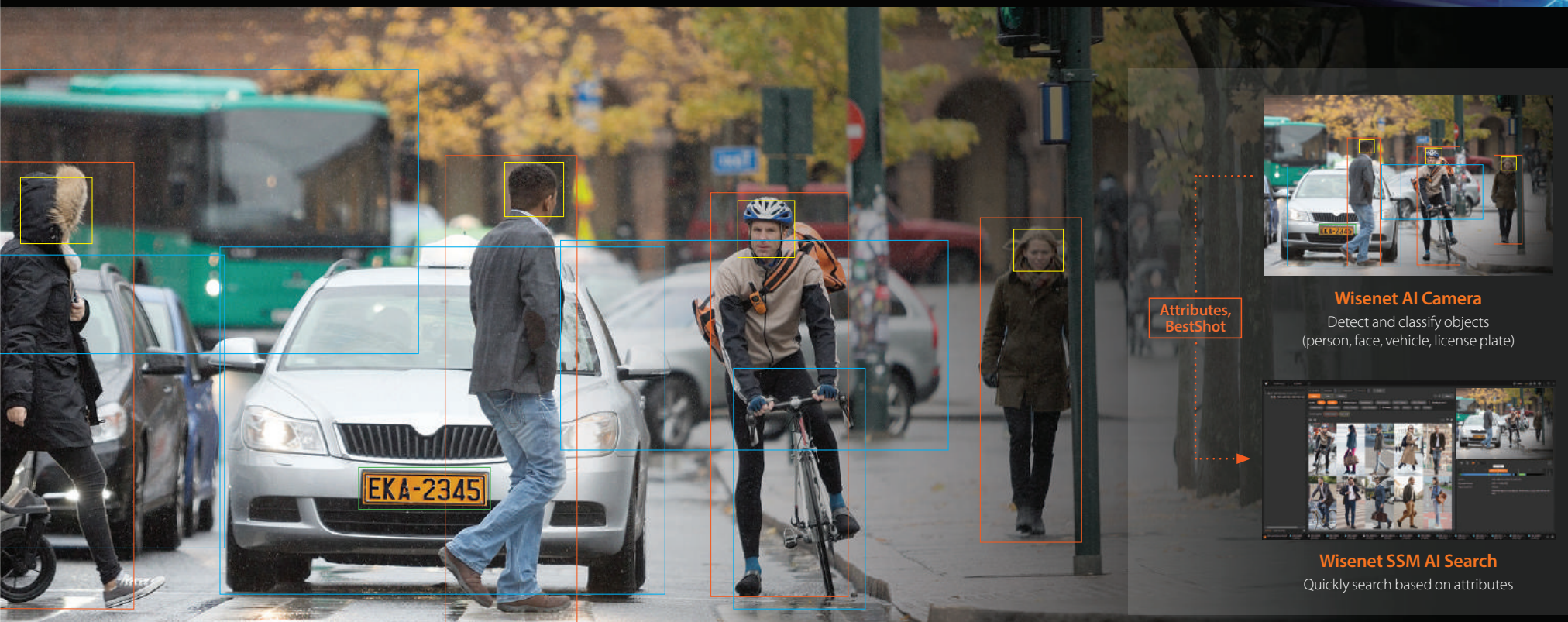
This enable operators to use AI applications running on a back-end server, for faster searching and analyze the information they need.

It can also significantly reduce false alarms caused by waving trees, video noise and even moving shadows.



AI Camera Series

- 4K PNO-A9081R, PNV-A9081R, PND-A9081RV/A9081RF, PNB-A9001
- 4MP PNO-A7081R, PNV-A7081R, PND-A7081RV/A7081RF, PNB-A7001
- 2MP PNO-A6081R, PNV-A6081R, PND-A6081RV/A6081RF, PNB-A6001



* Actual UI of Wisenet SSM AI search



XNB-8000
5MP Box Camera



XNO-8080R
5MP IR Bullet Camera



XNO-8020R/8030R/8040R
5MP IR Bullet Camera



XND-8081VZ
5MP Dome Camera



XND-8081FZ
5MP Flush Mount Dome Camera

	XNB-8000 5MP Box Camera	XNO-8080R 5MP IR Bullet Camera	XNO-8020R/8030R/8040R 5MP IR Bullet Camera	XND-8081VZ 5MP Dome Camera	XND-8081FZ 5MP Flush Mount Dome Camera
Imaging Device	1/1.8" 6MP CMOS	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS
Min. Illumination	Color : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)	Color : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)
Video Output	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	-	3.7 ~ 9.4mm (2.5x) motorized varifocal	3.7mm fixed (XNO-8020R) 4.6mm fixed (XNO-8030R) 7.0mm fixed (XNO-8040R)	3.6 ~ 9.4mm (2.6x) motorized varifocal	3.6 ~ 9.4mm (2.6x) motorized varifocal
Angular Field of View	-	H : 100.2°(Wide) ~ 38.7°(Tele) / V : 67.2°(Wide) ~ 29.0°(Tele) / D : 119.9°(Wide) ~ 48.6°(Tele)	H : 97.5° / V : 71.9° / D : 126.2° (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 : 102.5°(Wide) ~ 38.7°(Tele) / V : 74.2°(Wide) ~ 29.0°(Tele) / D : 135.5°(Wide) ~ 48.6°(Tele)	H : 102.5°(Wide) ~ 38.7°(Tele) / V : 74.2°(Wide) ~ 29.0°(Tele) / D : 135.5°(Wide) ~ 48.6°(Tele)
Pan / Tilt / Rotate	-	-	-	±175° / 0 ~ 85° / ±175° (Remote)	±175° / 0 ~ 85° / ±175° (Remote)
IR Viewable Length	-	50m (164.04ft)	30m (98.43ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection
Business Intelligence	-	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out
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 / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)
Certification	-	IP67, IP66, NEMA4X, IK10	IP67/IP66/NEMA4X, IK10	IP52, IK10	IP52, Plenum rate
Power Consumption	PoE : Max 8.50W 12VDC : Max 7.50W 24VAC : Max 8.50W	PoE : Max 12.95W 12VDC : Max 12.5W 24VAC : Max 14.5W	PoE : Max 10.3W 12VDC : Max 9.3W	PoE : Max 11W 12VDC : Max 9W	PoE : Max 11W 12VDC : Max 9W
Dimensions (WxHxD) / Weight	Ø73.1 x 66.6 x 147.8mm (Ø2.88" x 2.62" x 5.82") 420g (0.93lb)	Ø91.0 x 368.6mm (Ø6.3" x 4.67") 2.18Kg (4.81lb)	Ø70.0 x 296mm (Ø2.76" x 11.65") 1.22kg (2.69lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.85kg (4.08lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Modular structure, Motorized PTRZ, Anti dust	Modular structure, Motorized PTRZ, Anti dust

X PLUS

**XND-8081RV**

5MP IR Dome Camera

X PLUS

**XND-8081RF**

5MP IR Flush Mount Dome Camera

**XND-8080R/8080RV**

5MP IR Dome Camera

**XND-8020R/8030R/8040R**

5MP IR Dome Camera

**XND-8020F**

5MP Flush Mount Dome Camera

Imaging Device	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS	1/1.8" 5MP CMOS	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS
Min. Illumination	Color: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Color: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Color: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Color: 0.16Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.16Lux (F1.6) B/W: 0.16Lux (F1.6)
Video Output	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B
Focal Length	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.7mm fixed (XND-8020R) 4.6mm fixed (XND-8030R) 7.0mm fixed (XND-8040R)	3.7mm fixed
Angular Field of View	H: 92.1°(Wide) ~ 38.7°(Tele) / V: 67.2°(Wide) ~ 29.0°(Tele) / D: 119.9°(Wide) ~ 48.6°(Tele)	H: 92.1°(Wide) ~ 38.7°(Tele) / V: 67.2°(Wide) ~ 29.0°(Tele) / D: 119.9°(Wide) ~ 48.6°(Tele)	H: 92.1°(Wide) ~ 38.7°(Tele) / V: 67.2°(Wide) ~ 29.0°(Tele) / D: 119.9°(Wide) ~ 48.6°(Tele)	H: 97.5°/V: 71.9°/D: 126.2° (XND-8020R) H: 77.9°/V: 57.9°/D: 98.7° (XND-8030R) H: 50.7°/V: 37.8°/D: 63.8° (XND-8040R)	H: 97.5° / V: 71.9° / D: 126.2°
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)	30m (98.43ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB	-
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Built-in mic / -
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 / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-25°C ~ +60°C (-13°F ~ +140°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)
Certification	IP52, IK10	IP52, Plenum rate	IK08	IK08	-
Power Consumption	PoE: Max 12.95W 12VDC: Max 11.7W	PoE: Max 12.95W 12VDC: Max 11.7W	PoE: Max 10W 12VDC: Max 9W	PoE: Max 9W 12VDC: Max 8W	PoE: Max 4.7W
Dimensions (WxHxD) / Weight	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20 lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 628g (1.38lb) (XND-8080R) 732g (1.61lb) (XND-8080RV)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84lb)	Ø98.9 x 129.1mm (Ø3.89" x 5.08") 275g (0.61lb)
Additional Features	Modular structure, Anti dust	Modular structure, Anti dust	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

X PLUS

**X NV-8081Z**

5MP Vandal Dome Camera

X PLUS

**X NV-8081R**

5MP IR Vandal Dome Camera

**X NV-8080R**

5MP IR Vandal Dome Camera

**X NV-8080RS**

5MP Stainless IR Vandal Dome Camera

**X NV-8020R/8030R/8040R**

5MP IR Vandal Dome Camera

Imaging Device	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS	1/1.8" 5MP CMOS	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS
Min. Illumination	Color: 0.07 Lux (F1.2) B/W: 0.007 Lux (F1.2)	Color: 0.07Lux (F1.3) B/W: 0Lux (IR LED)	Color: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Color: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Color: 0.16Lux (F1.6) B/W: 0Lux (IR LED on)
Video Output	Micro USB Type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B
Focal Length	3.6~9.4mm(2.6x) motorized varifocal	3.9~9.4mm (2.4x) motorized varifocal	3.9~9.4mm (2.4x) motorized varifocal	3.9~9.4mm (2.4x) motorized varifocal	3.7mm fixed (XNV-8020R) 4.6mm fixed (XNV-8030R) 7.0mm fixed (XNV-8040R)
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: 92.1°(Wide) ~ 38.7°(Tele) / V: 67.2°(Wide) ~ 29.0°(Tele) / D: 119.9°(Wide) ~ 48.6°(Tele)	H: 92.1°(Wide) ~ 38.7°(Tele) / V: 67.2°(Wide) ~ 29.0°(Tele) / D: 119.9°(Wide) ~ 48.6°(Tele)	H: 92.1°(Wide) ~ 38.7°(Tele) / V: 67.2°(Wide) ~ 29.0°(Tele) / D: 119.9°(Wide) ~ 48.6°(Tele)	H: 97.5°/V: 71.9°/D: 126.2° (XNV-8020R) H: 77.9°/V: 57.9°/D: 98.7° (XNV-8030R) H: 50.7°/V: 37.8°/D: 63.8° (XNV-8040R)
Pan / Tilt / Rotate	±175°/ 0 ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	50m (164.04ft)	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support	Support	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-	-	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
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 / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI Wisenet open platform	ONVIF profile S/G, SUNAPI Wisenet open platform
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°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)
Certification	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, NEMA4X, IK10	IP66, IK10+, NEMA4X	IP66, IP67, IK10
Power Consumption	PoE: Max 12.3W 12VDC: Max 10W 24VAC: Max 12.3W	PoE: Max 12.95W 12VDC: Max 11.7W 24VAC: Max 14.9W	PoE: Max 12.95W 12VDC: Max 11.5W 24VAC: Max 14W	PoE: Max 12.95W 12VDC: Max 11.5W 24VAC: Max 14W	PoE: Max 9.00W 12VDC: Max 8.00W
Dimensions (WxHxD) / Weight	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 1.01kg (2.23lb)	Ø160 X 120.5mm (Ø6.38" x 4.74") 2.8kg (6.17lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)
Additional Features	Modular structure, Motorized PTRZ	Modular structure	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View



XNF-8010R/8010RV/8010RVM
6MP IR Fisheye Camera



XNZ-6320
2MP 32x Zoom Camera



XNZ-L6320
2MP 32x Zoom Camera



XNB-6005
2MP Box Camera (extraLUX)



XNB-6000
2MP Box Camera

Imaging Device	1/1.8" 6MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2" 2.17MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color: 0.1Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.05Lux (F1.6) B/W: 0.005Lux (F1.6)	Color: 0.05Lux (F1.6) B/W: 0.005Lux (F1.6)	Color: 0.006Lux (F1.2) B/W: 0.0006Lux (F1.2)	Color: 0.01Lux (F1.2) B/W: 0.001Lux (F1.2)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	1.6mm fixed	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (32x) zoom	-	-
Angular Field of View	H: 192° / V: 192° / D: 192°	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)	-	-
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	15m (49.21ft)	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	150dB	120dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization		Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification Shock detection	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	People counting, Queue management, Heatmap	-	-	-	-
Alarm I/O	1 / 1	1 / 2	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out
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 / Max. Frame Rate	2048 x 2048 / 30fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F) (XNF-8010R) -40°C ~ +55°C (-40°F ~ +131°F) (XNF-8010RV/8010RVM)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IK10 (XNF-8010RV/8010RVM)	-		-	-
Power Consumption	PoE: Max 12W, 12VDC: Max 11W (XNF-8010R) PoE: Max 12.95W, 12VDC: Max 12W (XNF-8010RV/8010RVM)	PoE: Max 7W 12VDC: Max 6.7W	PoE: Max 6.8W 12VDC: Max 5.2W	PoE: Max. 8.5W 12VDC: Max 8W 24VAC: Max 9W	PoE: Max 7.5W 12VDC: Max 6.5W 24VAC: Max 8W
Dimensions (WxHxD) / Weight	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)	96 x 76 x 143.5mm (3.78" x 2.99" x 5.65") 578g (1.274 lb)	72 x 63.9 x 135.4mm (2.83" x 2.52" x 5.33") 480g (1.06 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)
Additional Features	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarping	Defog, SFP Slot	Defog	Handover, Hallway View	Handover, Hallway View

**XNB-6001**

2MP Remote Head Camera

**SLA-T4680**

2MP lens for XNB-6001

**SLA-T4680V**

2MP lens for XNB-6001

**SLA-T2480**

2MP lens for XNB-6001

**SLA-T2480V**

2MP lens for XNB-6001

**SLA-T1080F**

2MP lens for XNB-6001

	XNB-6001	SLA-T4680	SLA-T4680V	SLA-T2480	SLA-T2480V	SLA-T1080F
Imaging Device	-	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	-	Color : 0.06Lux (F2.5) B/W : 0.06Lux (F2.5)	Color : 0.06Lux (F2.5) B/W : 0.06Lux (F2.5)	Color : 0.45Lux (F2.0) B/W : 0.45Lux (F2.0)	Color : 0.45Lux (F2.0) B/W : 0.45Lux (F2.0)	Color : 0.03Lux (F1.6)
Video Output	CVBS 1.0Vp-p, Micro USB type B	-	-	-	-	-
Focal Length	-	4.6mm Pinhole	4.6mm Pinhole	2.4mm fixed	2.4mm fixed	1.6mm fisheye
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°
Pan / Tilt / Rotate	-	-	-	-	-	-
IR Viewable Length	-	-	-	-	-	-
Day & Night	-	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	-	-	-	-	-
Digital Noise Reduction	SSNRV	-	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-	-
Analytics	Intelligent analytics Audio detection	-	-	-	-	-
Business Intelligence	People counting, Queue management, Heatmap	-	-	-	-	-
Alarm I/O	1 / 1	-	-	-	-	-
Audio I/O	Selectable (mic in/line in) / Line out	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps	-	-	-	-	-
WiseStream	WiseStream II	-	-	-	-	-
Streaming	Up to 10 Profiles	-	-	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-	-	-
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	-	-	-	-	-
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)
Certification	-	-	-	-	-	-
Power Consumption	PoE : Max 6W 12VDC : Max 6.5W	-	-	-	-	-
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)	Ø35 x 68.9mm (Ø1.38" x 2.71") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)
Additional Features	Handover, Hallway View	-	-	-	-	-



XNO-6120R
2MP IR Bullet Camera



XNO-6085R
2MP IR Bullet Camera (extraLUX)



XNO-6080R
2MP IR Bullet Camera



XNO-L6080R
2MP IR Bullet Camera



XNO-6010R/6020R
2MP IR Bullet Camera

Imaging Device	1/2.8" 2MP CMOS	1/2" 2.17MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.004Lux (F0.94) B/W : 0Lux (IR LED on)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.03lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.055lux (F2.0) (XNO-6010R) Color : 0.015lux (F1.4) (XNO-6020R) B/W : 0 Lux (IR LED On)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	5.2 ~ 62.4mm (Optical 12x)	4.1 ~ 16.4mm (Optical 4x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal	2.4mm fixed (XNO-6010R) 4mm fixed (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)
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	70m (229.66ft)	70m (229.66ft)	50m (164.04ft)	30m (98.42ft)	20m (65.62ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	120dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	-	-	-	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	-	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-	Selectable (mic in/line in) / Line out
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 / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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
Certification	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP66, IK10	IP67, IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 12.95W 12VDC : Max 12.5W 24VAC : Max 14.5W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 12.95W	PoE : Max 12.95W 12VDC : Max 12W 24VAC : Max 15W	PoE : Max. 11W	PoE : Max 9.7W 12VDC : Max 8.8W
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 368.6mm (Ø3.58" x 14.51") 2.18Kg (4.81 lb)	Ø91 x 322.9mm (Ø3.58" x 12.71") 1.29Kg (4.25 lb)	Ø70 x 301.5mm (Ø2.76" x 11.87") (XNO-6010R) Ø70 x 296mm (Ø2.76" x 11.65") (XNO-6020R) 1.22Kg (2.69 lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

**XND-6085V**

2MP Dome Camera (extraLUX)

X PLUS**XND-6081V**

2MP Dome Camera

X PLUS**XND-6081F**

2MP Flush Mount Dome Camera

X PLUS**XND-6081VZ**

2MP Dome Camera

X PLUS**XND-6081FZ**

2MP Flush Mount Dome Camera

	XND-6085V 2MP Dome Camera (extraLUX)	XND-6081V 2MP Dome Camera	XND-6081F 2MP Flush Mount Dome Camera	XND-6081VZ 2MP Dome Camera	XND-6081FZ 2MP Flush Mount Dome Camera
Imaging Device	1/2" 2.17MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.004Lux (F0.94) B/W : 0.0004Lux (F0.94)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	Micro USB type B
Focal Length	4.1~16.4mm (Optical 4x)	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal
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 : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)
Pan / Tilt / Rotate	±175° / ±73° / ±175°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	±175° / 0 ~ 85° / ±175° (Remote)	±175° / 0 ~ 85° / ±175° (Remote)
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection
Business Intelligence	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out
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 / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)
Certification	IK08	IP52, IK10	IP52, Plenum rate	IP52, IK10	IP52, Plenum rate
Power Consumption	PoE : Max 10.2W 12VDC : Max 8.6W	PoE : Max 7.0W 12VDC : Max 5.40W	PoE : Max 7.0W 12VDC : Max 5.40W	PoE : Max 10W 12VDC : Max 8.5W	PoE : Max 10W 12VDC : Max 8.5W
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)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.85kg (4.08lb)
Additional Features	Handover, Hallway View	Modular structure, Anti dust	Modular structure, Anti dust	Modular structure, Motorized PTRZ, Anti dust	Modular structure, Motorized PTRZ, Anti dust

X PLUS


XND-6081RV
2MP IR Dome Camera

X PLUS


XND-6081RF
2MP Flush Mount IR Dome Camera

XND-6080/6080V
2MP Dome Camera

XND-6080R/6080RV
2MP IR Dome Camera

XND-L6080R/L6080RV
2MP IR Dome Camera

	XND-6081RV 2MP IR Dome Camera	XND-6081RF 2MP Flush Mount IR Dome Camera	XND-6080/6080V 2MP Dome Camera	XND-6080R/6080RV 2MP IR Dome Camera	XND-L6080R/L6080RV 2MP IR Dome Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	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)
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	-	30m (98.43ft)	30m (98.42ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out	-
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 / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°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)
Certification	IP52, IK10	IP52, Plenum rate	IK08	IK08	IK08
Power Consumption	PoE : Max 12.95W 12VDC : Max 10.8W	PoE : Max 12.95W 12VDC : Max 10.8W	PoE : Max 6.5W 12VDC : Max 6W	PoE : Max 10W 12VDC : Max 9W	PoE : Max 8W
Dimensions (WxHxD) / Weight	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97lb)	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)
Additional Features	Modular design, Anti dust	Modular design, Anti dust	Handover, Hallway View	Handover, Hallway View	Defog, Hallway View



XND-L6080V
2MP Dome Camera



XND-6020R
2MP IR Dome Camera



XND-6011F
2MP Flush Mount Dome Camera



XND-6010
2MP Dome Camera



XNV-6120/6120R
2MP Vandal / IR Vandal Dome Camera

	XND-L6080V 2MP Dome Camera	XND-6020R 2MP IR Dome Camera	XND-6011F 2MP Flush Mount Dome Camera	XND-6010 2MP Dome Camera	XNV-6120/6120R 2MP Vandal / IR Vandal Dome Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0.01Lux (F1.6)	Color : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.03Lux (F1.6), B/W : 0.003Lux (F1.6) (XNV-6120) Color : 0.03Lux (F1.6), B/W : 0Lux (IR LED on) (XNV-6120R)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	4mm fixed	2.8mm fixed	2.4mm fixed	5.2 ~ 62.4mm (Optical 12x)
Angular Field of View	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)	H : 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)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 75° / 0° ~ 355°
IR Viewable Length	-	30m (98.43ft)	-	-	70m (229.66ft) (XNV-6120R)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	150dB	-	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support	Support	Support	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-
Alarm I/O	-	1 / 1	-	1 / 1	1 / 1
Audio I/O	-	Selectable (mic in/line in), Built-in mic / Line out	Built-in mic / -	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out
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 / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 5 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)
Certification	IK08	IK08	-	IK08	IP67, IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 6W	PoE : Max 9W 12VDC : Max 8W	PoE : Max 4.7W	PoE : Max 6.5W 12VDC : Max 6W	PoE : Max. 7.8W, 12V DC : Max 7W, 24V AC : Max. 8.2W (XNV-6120) PoE : Max. 12.95W, 12V DC : Max. 11.5W, 24V AC : Max. 14W (XNV-6120R)
Dimensions (WxHxD) / Weight	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 675g (1.49 lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84 lb)	Ø98.9 x 129mm (Ø3.89" x 5.08") 275g (0.61 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34 lb)	Ø160.0 x 128.5mm (Ø6.30" x 5.06") 985g (2.17 lb) (XNV-6120) 995g (2.19 lb) (XNV-6120R)
Additional Features	Defog, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

**XNV-6120RS**

2MP Stainless IR Vandal Dome Camera

**XNV-6085**

2MP Vandal Dome Camera (extraLUX)

**XNV-6081Z**

2MP Vandal Dome Camera

**XNV-6081R**

2MP IR Vandal Dome Camera

**XNV-6081**

2MP Vandal Dome Camera

	XNV-6120RS	XNV-6085	XNV-6081Z	XNV-6081R	XNV-6081
Imaging Device	1/2.8" 2MP CMOS	1/2" 2.17MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.004Lux (F0.94) B/W : 0.0004Lux (F0.94)	Color : 0.015 lux (F1.4) B/W : 0.0015 Lux (F1.4)	Color : 0.015Lux (F1.4) BW : 0Lux (IR LED)	Color : 0.015 Lux (F1.4) B/W : 0.0015 Lux (F1.4)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	5.2 ~ 62.4mm (Optical 12x)	4.1 ~ 16.4mm (Optical 4x)	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal
Angular Field of View	H : 54.6° (Wide) ~ 5.30° (Tele) / V : 32.2° (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 : 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)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 75° / 0° ~ 355°	±175° / ±73° / ±175°	±175° / 0 ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°
IR Viewable Length	70m (229.66ft)	-	-	50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
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)
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection
Business Intelligence	-	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
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 / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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)	-50°C ~ +60°C (-58°F ~ +140°F) *Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) *Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) *Start up above -35°C (-31°F)
Certification	IP66, NEMA 4X, IK10+	IP67, IP66, NEMA 4X, IK10	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X
Power Consumption	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 12.1W 12VDC : Max 11.1W 24VAC : Max 13.5W	PoE : Max 11W 12VDC : Max 9.5W 24VAC : Max 11W	PoE : Max 12.95W 12VDC : Max 10.8W 24VAC : Max 13.3W	PoE : Max 7.0W 12VDC : Max 5.4W 24VAC : Max 7.1W
Dimensions (WxHxD) / Weight	Ø162 x 134.5mm (Ø6.38" x 5.3") 2.7Kg (5.95 lb)	Ø160.0 x 140.0mm (Ø6.30" x 5.51") 1.40kg (3.09 lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86 lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86 lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.45kg (3.20 lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Modular structure, Motorized PTRZ	Modular structure	Modular structure

**XNV-6080**

2MP Vandal Dome Camera

**XNV-6080R**

2MP IR Vandal Dome Camera

**XNV-6080RS**

2MP Stainless IR Vandal Dome Camera

**XNV-L6080**

2MP Vandal Dome Camera

**XNV-L6080R**

2MP IR Vandal Dome Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color: 0.015Lux (F1.4) B/W: 0.015Lux (F1.4)	Color: 0.015Lux (F1.4) B/W: 0Lux (IR LED on)	Color: 0.015Lux (F1.4) B/W: 0Lux (IR LED on)	Color: 0.03Lux (F1.6) B/W: 0.01Lux (F1.6)	Color: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H: 119.5° (Wide) ~ 27.9° (Tele) / V: 62.8° (Wide) ~ 15.7° (Tele) / D: 142.1° (Wide) ~ 32.0° (Tele)	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)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	50m (164.04ft)	50m (164.04ft)	-	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support	Support	Support	Support
Analytics	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	-	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-	-
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 / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles	Up to 5 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
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)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)
Certification	IP67, IP66, NEMA4X, IK10	IP67/IP66/NEMA4X, IK10	IP66, NEMA4X, IK10+	IP66, IK10	IP66, IK10
Power Consumption	PoE: Max 7.8W 12VDC: Max 7W 24VAC: Max 8.2W	PoE: Max 12.95W 12VDC: Max 11.5W 24VAC: Max 14W	PoE: Max 12.95W 12VDC: Max 11.5W 24VAC: Max 14W	PoE: Max 8W	PoE: Max 11W
Dimensions (WxHxD) / Weight	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)	Ø160 x 120.5mm (Ø6.38" x 4.74") 2.8kg (6.17 lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 940g (2.1 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 940g (2.07 lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View



XNV-6022R/6022RM
2MP Mobile IR Flat Camera



XNV-6020R
2MP IR Vandal Dome Camera



XNV-6013M
2MP Mobile Camera



XNV-6012M/6012
2MP Mobile Flat Camera



XNV-6011
2MP Vandal Dome Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.04Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)	Color : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	Micro USB Type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB Type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	3.6mm fixed	4mm fixed	2.8mm fixed	2.4mm fixed	2.8mm fixed
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°
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°
IR Viewable Length	15m (49.21ft)	30m (98.43ft)	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support
Analytics	Intelligent analytics Audio detection Sound classification (w/ external MIC)	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection Sound classification (w/ external MIC)	Intelligent analytics
Business Intelligence	-	People counting, Queue management, Heatmap	-	-	People counting, Queue management, Heatmap
Alarm I/O	-	1 / 1	-	-	-
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	-
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 / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/ SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
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)
Certification	IP66, IK10, NEMA4X	IP67, IP66, IK10	IP67, IP6K9K, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE : Max 6.70W	PoE : Max 9W 12V DC : Max 8W	PoE : Max 7.20W	PoE : Max 6.50W	PoE : Max 6.50W
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)
Additional Features	M12 Connector (XNV-6022RM) Handover, Hallway View	Handover, Hallway View	M12 Connector Handover, Hallway View	M12 Connector (XNV-6012M) Handover, Hallway View	Handover, Hallway View

**XNV-6010**

2MP Vandal Dome Camera

**XNP-6550RH**

2MP 55x IR PTZ Camera

**XNP-6370RH**

2MP 37x IR PTZ Camera

**XNP-6320RH**

2MP 32x IR PTZ Camera

**XNP-6320H/6320**

2MP PTZ Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/1.9" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.055Lux (F2.0) B/W : 0.0055Lux (F2.0)	Color : 0.02Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.05Lux (F1.5) B/W : 0Lux (IR LED on)	Color : 0.05Lux (F1.6) B/W : 0Lux (IR LED On)	Color : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)
Video Output	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS: 1.0 Vp-p	CVBS 1.0 Vp-p, Micro USB Type B
Focal Length	2.4mm fixed	4.75 ~ 261.4mm (55x) zoom	6 ~ 222mm (37x) zoom	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (32x) zoom
Angular Field of View	H : 139.0° / V : 73.0° / D : 167.0°	H : 58.6° (Wide) ~ 1.23° (Tele) / V : 34.8° (Wide) ~ 0.71° (Tele)	H : 59.3° (Wide) ~ 1.9° (Tele) / V : 35.8° (Wide) ~ 1.1° (Tele)	H : 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)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 210° (-15° ~ 195°) / -
IR Viewable Length	-	500m (1,640.42ft)	350m (1,148.29ft)	200m (656.17ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	120dB	120dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNR	SSNRV	SSNRV
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification Shock detection	Intelligent analytics Audio detection	Intelligent analytics Audio detection, Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification Shock detection
Business Intelligence	People counting, Queue management, Heatmap	-	-	-	-
Alarm I/O	1 / 1	4 / 2	4 / 2	4 / 1	4 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
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 / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 3 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDH C/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-50°C ~ +55°C (-122°F ~ +131°F) * Start up above -30°C (HPoE Mode)	-50°C ~ +55°C (-122°F ~ +131°F)	HPoE : -40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C 24VAC : -50°C ~ +55°C (-58°F ~ +131°F)	PoE+ : -35°C ~ +55°C (-31°F ~ +131°F) 24VAC : -50°C ~ +55°C (-58°F ~ +131°F) (XNP-6320H) -10°C ~ +55°C (-14°F ~ +131°F) (XNP-6320)
Certification	IP67, IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10 (XNP-6320H) IK10 (With SHP-3701H) (XNP-6320)
Power Consumption	PoE : Max 6W 12V DC : Max 5.5W	HPoE : 60W 24VAC : Max 92W	24VAC : Max 90W	HPoE : Max 51W, typical 30W 24VAC : Max 83W, typical 30W	PoE+, 24VAC : Max 24W - Heater off 24VAC : Max 65W - Heater on (XNP-6320H) PoE+, 24VAC : Max 20W (XNP-6320)
Dimensions (WxHxD) / Weight	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 625g (1.38 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 6.8Kg (14.99 lb)	Ø220 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb) (XNP-6320H) Ø152 x 218mm (Ø5.98" x 8.58") 1.7Kg (3.75 lb) (XNP-6320)
Additional Features	Handover, Hallway View	Defog, Auto tracking	Defog, Auto tracking	Defog, Auto tracking, Direction indicator	Defog, Auto tracking

**XNP-6320HS**

2MP Stainless 32x PTZ Camera

**XNP-6250RH**

2MP 25x IR PTZ Camera

**XNP-6120H**

2MP 12x PTZ Camera

**XNP-6040H**

2MP 4.3x PTZ Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2.16MP CMOS	1/2.8" 2.16MP CMOS
Min. Illumination	Color : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)	Color : 0.05Lux (F1.6) B/W : 0Lux (IR LED On)	Color : 0.03Lux (F1.6) B/W : 0.003Lux (F1.6)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 111mm (25x) zoom	5.2 ~ 62.4mm (12x) zoom	2.8 ~ 12mm (4.3x) zoom
Angular Field of View	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	H : 61.8° (Wide) ~ 2.84° (Tele) / V : 36.2° (Wide) ~ 1.60° (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)
Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 190° (-5° ~ 185°) / -	0° ~ 355° / 0° ~ 90°
IR Viewable Length	-	200m (656.17ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection, Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification
Business Intelligence	-	-	-	-
Alarm I/O	4 / 2	4 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	PoE+ : -35°C ~ +55°C (-31°F ~ +131°F) 24VAC : -50°C ~ +55°C (-58°F ~ +131°F)	HPoE : -40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C 24VAC : -50°C ~ +55°C (-58°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)
Certification	IP67, IP66, NEMA4X, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	24VAC : Max 65W	HPoE : Max 51W, typical 30W 24VAC : Max 83W, typical 30W	PoE, 12VDC : Max 12W	PoE : Max 9.6W 12VDC : Max 8.6W
Dimensions (WxHxD) / Weight	Ø227 x 296mm (Ø8.94" x 11.65") 5.3Kg (11.69 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 6.8Kg (14.99 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, Auto tracking	Defog, Auto tracking, Direction indicator	Defog, Auto tracking	Defog, Auto tracking

**PNO-9080R**

4K IR Bullet Camera

**PND-9080R**

4K IR Dome Camera

**PNV-9080R**

4K IR Vandal Dome Camera

**PNP-9200RH**

4K 20x IR PTZ Camera

**PNF-9010R/9010RV/9010RVM**

9MP IR Fisheye Camera

	PNO-9080R 4K IR Bullet Camera	PND-9080R 4K IR Dome Camera	PNV-9080R 4K IR Vandal Dome Camera	PNP-9200RH 4K 20x IR PTZ Camera	PNF-9010R/9010RV/9010RVM 9MP IR Fisheye Camera
Imaging Device	1/1.7" 12.4MP CMOS	1/1.7" 12.4MP CMOS	1/1.7" 12.4MP CMOS	1/2.5" 8MP CMOS	1/1.7" 12.4MP CMOS
Min. Illumination	Color : 0.3Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.3Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.3Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.1Lux (F1.8) B/W : 0Lux (IR LED on)	Color : 0.3Lux (F2.2) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	4.5 ~ 10mm (2.2x) motorized varifocal	4.5 ~ 10mm (2.2x) motorized varifocal	4.5 ~ 10mm (2.2x) motorized varifocal	4.8 ~ 96mm (20x) zoom	2.1mm Fixed
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 : 65.1° (Wide) ~ 3.8° (Tele) / V : 38.4° (Wide) ~ 2.2° (Tele)	H : 180° / V : 180° / D : 180°
Pan / Tilt / Rotate	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / 190° (-5° ~ 185°) / -	-
IR Viewable Length	40m (131.23ft)	30m (98.43ft)	40m (131.23ft)	200m (656.17ft)	15m (49.21ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	Support	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics Audio detection	Intelligent analytics Audio detection
Business Intelligence	-	-	-	-	People counting, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	4 / 2	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
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 / Max. Frame Rate	12MP / 20fps, 8MP / 30fps	12MP / 20fps, 8MP / 30fps	12MP / 20fps, 8MP / 30fps	12MP / 20fps, 8MP / 30fps	12MP / 20fps, 9MP / 25fps
WiseStream	WiseStream	WiseStream	WiseStream	WiseStream	WiseStream
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
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)	-50°C ~ +55°C (-58°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F) (PNF-9010R) -40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F) (PNF-9010RV/9010RVM)
Certification	IP66, IK10	IK08	IP66, IP67, IK10	IP66, IK10	IK10 (PNF-9010R) IK66, IK10 (PNF-9010RV/9010RVM)
Power Consumption	PoE : Max 11.77W / 12.95W - Heater off/on 12VDC : Max 10.45W / 11.55W - Heater off/on 24VAC : Max 12.43W / 14.08W - Heater off/on	PoE : Max. 10.5W 12V DC : Max. 9.5W	PoE : Max 11.77W / 12.95W - Heater off/on 12VDC : Max 10.45W / 11.55W - Heater off/on 24VAC : Max 12.43W / 14.08W - Heater off/on	24VAC : Max 60.0W / 90.0W - Heater off/on, IR on	Max. 11W (12V DC) Max. 12W (PoE) (PNF-9010R) Max. 12W (12V DC) Max. 12.95W (PoE) (PNF-9010RV/RVM)
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)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 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)
Additional Features	Hallway View, P-Iris, Defog	Hallway View, P-Iris, Defog	Hallway View, P-Iris, Defog	Defog	M12 Connector (PNF-9010RVM), Built-in mic, On Board Dewarping



PNO-A9081R
4K AI IR Bullet Camera



PNV-A9081R
4K AI IR Vandal Dome Camera



PND-A9081RV
4K AI IR Dome Camera



PND-A9081RF
4K AI IR Dome Camera



PNB-A9001
4K AI Box Camera

Imaging Device	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS
Min. Illumination	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.03Lux(F1.2, 1/30sec)
Video Output	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p
Focal Length	4.5~10mm(2.2x) motorized varifocal	4.5~10mm(2.2x) motorized varifocal	4.5~10mm(2.2x) motorized varifocal	4.5~10mm(2.2x) motorized varifocal	-
Angular Field of View	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	30m(98.42ft)	30m(98.42ft)	30m(98.42ft)	30m(98.42ft)	-
Day & Night	Auto(ICR)	Auto(ICR)	Auto(ICR)	Auto(ICR)	Auto(ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
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)
Analytics	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out
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 / Max. Frame Rate	8MP/30fps	8MP/30fps	8MP/30fps	8MP/30fps	8MP/30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -10°C	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -10°C	-25°C ~ +50°C (-13°F ~ +122°F)	-25°C ~ +50°C (-13°F ~ +122°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, Plenum rate	-
Power Consumption	PoE+ : Max 20.00W, typical 17.00W 12VDC : Max 18.00W, typical 16.00W	PoE+ : Max 20.00W, typical 17.00W 12VDC : Max 18.70W, typical 15.00W	PoE+ : Max 20.00W, typical 16.00W 12VDC : Max 17.70W, typical 14.00W	PoE+ : Max 20.00W, typical 16.00W 12VDC : Max 17.70W, typical 14.00W	PoE+ : Max 16.50W, typical 12.50W 12VDC : Max 13.50W, typical 10.80W
Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (3.58" x 14.51") (Without sunshield), Weight : 2.48Kg (5.47lb)	Ø180 x 125mm(7.09" x 4.92"), Weight : 1.90Kg (4.19lb)	Ø160 x 125mm(6.30" x 4.92"), Weight : 1.60Kg (3.53lb)	Ø205 x 163mm(8.07" x 6.42"), Weight : 1.95Kg (4.30lb)	73.1 x 66.6 x 147.8mm, Weight : 0.70Kg (1.54lb)
Additional Features	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)

**PNM-9030V**

15MP 180°/220° Panoramic Camera

**PNM-9020V**

7.3MP 180° Panoramic Camera

**PNM-9084RQZ**

8MP IR PTRZ Multi-directional Camera

**PNM-9085RQZ**

20MP IR PTRZ Multi-directional Camera

	PNM-9030V 15MP 180°/220° Panoramic Camera	PNM-9020V 7.3MP 180° Panoramic Camera	PNM-9084RQZ 8MP IR PTRZ Multi-directional Camera	PNM-9085RQZ 20MP IR PTRZ Multi-directional Camera
Imaging Device	1/2.8" 5MP x 4CH	2MP x 4CH	1/2.8" 2MP x 4CH	1/1.8" 5MP x 4CH
Min. Illumination	Color : 0.15Lux (F2.0) B/W : 0.01Lux (F2.0)	Color : 0.3Lux (F2.0) B/W : 0.03Lux (F2.0)	Color : 0.05lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.11lux(F1.6) BW : 0Lux(IR LED on)
Video Output	Micro USB Type B	-	-	-
Focal Length	4mm fixed	3.6mm fixed	3.2~10mm(3.1x) motorized varifocal	4.13~9.4mm(2.3x) motorized varifocal
Angular Field of View	[180° mode] H : 180° / V : 70° [220° mode] H : 220° / V : 52°	[Total 4sensor] H : 180° / V : 84°	H : 109.0°(Wide)~33.2°(Tele) / V : 57.4°(Wide)~18.7°(Tele) / D : 132.0°(Wide)~38.0°(Tele)	H : 87.58°(Wide)~37.34°(Tele) / V : 64.58°(Wide)~28.04°(Tele) / D : 112.46°(Wide)~46.85°(Tele)
Pan / Tilt / Rotate	0° ~ 355° / 0° ~ 60° / -	0° ~ 355° / 0° ~ 60° / -	0~360° / 30~80° / 0~90°	0~360° / 35~80° / 0~90°
IR Viewable Length	-	-	30m(98.42ft)	30m(98.42ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	-	120dB	120dB
Digital Noise Reduction	SSNRV	SSNR III	SSNRV	SSNRV
Digital Image Stabilization	-	-	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection	Intelligent analytics Audio detection	Intelligent analytics Audio detection
Business Intelligence	Heatmap	Heatmap	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Line in / Line out	Line in / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	15.5MP / 30fps	7.3MP / 30fps	2MP / 60fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream	WiseStream II	WiseStream II
Streaming	Up to 5 or 3 profiles for each CH	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI, Wisenet Open Platform	ONVIF profile S/T, SUNAPI, Wisenet Open Platform	ONVIF profile S/T, SUNAPI, Wisenet Open Platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -30°C (-22°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)
Certification	IP66, IK10	IP66, IK10	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE+ : Max 25.5W 12VDC : Max 21.0W	PoE+ : Max 25.5W - Heater on 12VDC : Max 21.0W - Heater on	Max 42W, typical 28W	Max 45W, typical 32W
Dimensions (WxHxD) / Weight	Ø253 x H165mm (Ø9.96" x 6.5") 3.2Kg (7.1lb)	Ø199.0 x 143.5mm (Ø7.83" x 5.65") 2.03Kg (4.5 lb)	Ø315x145.9mm (12.4" x 5.74") 5.2kg(11.46lb)	Ø315 x 145.9mm (12.4" x 5.74")
Additional Features	Defog	Defog	Motorized PTRZ	Motorized PTRZ



PNM-9084QZ
8MP Multi-directional Camera



PNM-9081VQ
20MP Multi-directional Camera



PNM-9080VQ
8MP Multi-directional Camera

Imaging Device	1/2.8" 2MP x 4CH	1/1.8" 6MP x 4CH	1/2.8" 2.38MP x 4CH
Min. Illumination	Color : 0.08lux(F2.2) BW : 0.008lux(F2.2)	Color : 0.007Lux (F1.2) B/W : 0.007Lux (F1.2)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)
Video Output	-	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	3 ~ 6mm (2x) motorized varifocal	3 ~ 6mm (2x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal
Angular Field of View	H : 107° (Wide) ~ 56.3° (Tele) / V : 57° (Wide) ~ 31.5° (Tele) / D : 126° (Wide) ~ 64.3° (Tele)	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)
Pan / Tilt / Rotate	0° ~ 360° / 0° ~ 90° / 0° ~ 90°	[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°
IR Viewable Length	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable(mic in/line in) / Line out	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	5MP / 30fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 40 profiles	Up to 40 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/T, SUNAPI, Wisenet Open Platform	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI
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)
Certification	IP66, IK10, NEMA4X	IP66, IK10	IP66, IK10
Power Consumption	HPoE : Max 33W typical 20W	HPoE : Max 33.6W 12VDC : Max 28.8W	PoE+ : Max 25.5W 12VDC : Max 21.6W
Dimensions (WxHxD) / Weight	Ø251 x 116.5mm (Ø9.88" x 4.59") 3Kg (6.6 lb)	Ø314 x 152mm (Ø12.36" x 5.98") 4.89kg (10.78 lb)	Ø314 x 152mm (Ø12.36" x 5.98") 4.83kg (10.65 lb)
Additional Features	Motorized PTRZ, Hallway view, Defog	Hallway view, Defog	Hallway view, Defog

**PNM-9320VQP**

20MP Multi-directional + 2MP 32x PTZ

**SLA-5M7000P**

5MP lens for PNM-9320VQP

**SLA-5M4600P**

5MP lens for PNM-9320VQP

**SLA-5M3700P**

5MP lens for PNM-9320VQP

**SLA-2M6000P**

2MP lens for PNM-9320VQP

	PNM-9320VQP 20MP Multi-directional + 2MP 32x PTZ	SLA-5M7000P 5MP lens for PNM-9320VQP	SLA-5M4600P 5MP lens for PNM-9320VQP	SLA-5M3700P 5MP lens for PNM-9320VQP	SLA-2M6000P 2MP lens for PNM-9320VQP
Imaging Device	1/2.8" 2.4MP CMOS (PTZ)	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS	1/2.8" 5MP CMOS
Min. Illumination	Color : 0.05Lux (F1.6) BW : 0.005Lux (F1.6) (PTZ)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	CVBS 1.0Vp-p (Multi)	-	-	-	-
Focal Length	4.44 ~ 142.6mm (Optical 32x) F1.6 (Wide) / F4.4 (Tele) (PTZ)	7.0mm fixed	4.6mm fixed	3.7mm fixed	6.0mm fixed
Angular Field of View	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele) (PTZ)	H : 50.7° / V : 37.8° / D : 63.8°	H : 77.9° / V : 57.9° / D : 98.7°	H : 97.5° / V : 71.9° / D : 126.2°	H : 50.4° / V : 28.8° / D : 58.1°
Pan / Tilt / Rotate	360° Endless / 190° (-5° ~ 185°) (PTZ)	±90° / +12° ~ +93° / ±180°	±90° / +21° ~ +85° / ±180°	±90° / +36° ~ +73° / ±180°	±90° / +10° ~ +95° / ±180°
IR Viewable Length	-	-	-	-	-
Day & Night	Electrical (Multi), ICR (PTZ)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB (2MP), 120dB (5MP)	120dB	120dB	120dB	150dB
Digital Noise Reduction	SSNR V	-	-	-	-
Digital Image Stabilization	Support (Built-in Gyro sensor - PTZ)	-	-	-	-
Analytics	Intelligent analytics * Defocus detection (Multi)	-	-	-	-
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 2	-	-	-	-
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-	-
Resolution / Max. Frame Rate	5MP / 30fps, 2MP / 60fps	-	-	-	-
WiseStream	WiseStream II	-	-	-	-
Streaming	Up to 10 Profiles	-	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-	-
Application Programming Interface	ONVIF Profile S, SUNAPI	-	-	-	-
Operating Temperature	-35°C ~ +55°C (-31°F ~ +131°F)	-	-	-	-
Certification	IP66, IK10	-	-	-	-
Power Consumption	HPoE : Max 65W	-	-	-	-
Dimensions (WxHxD) / Weight	Ø367.8 x 381.5mm (Ø144.49" x 15.02") 7.05kg (16.1 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)
Additional Features	Exchangeable 4ea x 2MP / 5MP lens modules, Hallway view, Defog	-	-	-	-

**SLA-2M3600P**

2MP lens for PNM-9320VQP

**SLA-2M2800P**

2MP lens for PNM-9320VQP

**SLA-2M2400P**

2MP lens for PNM-9320VQP

**SLA-2M1200P**

2MP lens for PNM-9320VQP

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	-	-	-	-
Focal Length	3.6mm fixed	2.8mm fixed	2.4mm fixed	12mm fixed
Angular Field of View	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°	H : 26.3° / V : 14.9° / D : 30.0°
Pan / Tilt / Rotate	±90° / +22° ~ +84° / ±180°	±90° / +26° ~ +80° / ±180°	±90° / +52° ~ +56° / ±180°	±90° / +10° ~ +97° / ±180°
IR Viewable Length	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB	150dB	150dB	150dB
Digital Noise Reduction	-	-	-	-
Digital Image Stabilization	-	-	-	-
Analytics	-	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	-	-	-	-
Resolution / Max. Frame Rate	-	-	-	-
WiseStream	-	-	-	-
Streaming	-	-	-	-
Edge Storage	-	-	-	-
Application Programming Interface	-	-	-	-
Operating Temperature	-	-	-	-
Certification	-	-	-	-
Power Consumption	-	-	-	-
Dimensions (WxHxD) / Weight	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)
Additional Features	-	-	-	-

**PNM-9000VQ**

20MP 4CH Multi-directional Camera

**SLA-5M7000Q**

5MP lens for PNM-9000VQ

**SLA-5M4600Q**

5MP lens for PNM-9000VQ

**SLA-5M3700Q**

5MP lens for PNM-9000VQ

Imaging Device	-	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS
Min. Illumination	-	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)
Video Output	CVBS 1.0 Vp-p	-	-	-
Focal Length	-	7.0mm fixed	4.6mm fixed	3.7mm fixed
Angular Field of View	-	H : 50.7° / V : 37.8° / D : 63.8°	H : 77.9° / V : 57.9° / D : 98.7°	H : 97.5° / V : 71.9° / D : 126.2°
Pan / Tilt / Rotate	-	±90° / 40° ~ 89° / ±180°	±90° / 50° ~ 80° / ±180°	±90° / 59° ~ 66° / ±180°
IR Viewable Length	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB (2MP), 120dB (5MP)	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Intelligent analytics	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	5MP / 30fps, 2MP / 60fps	-	-	-
WiseStream	WiseStream II	-	-	-
Streaming	Up to 10 Profiles	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S, SUNAPI	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-	-	-
Certification	IP66, IK10	-	-	-
Power Consumption	PoE+ : 25.5W	-	-	-
Dimensions (WxHxD) / Weight	Ø253 x 130mm (Ø9.96" x 5.12") 3.0 kg (6.7 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)
Additional Features	Exchangeable 4ea x 2MP / 5MP lens modules, Hallway view, Defog	-	-	-

**SLA-2M6000Q**

2MP lens for PNM-9000VQ

**SLA-2M3600Q**

2MP lens for PNM-9000VQ

**SLA-2M2800Q**

2MP lens for PNM-9000VQ

**SLA-2M2400Q**

2MP lens for PNM-9000VQ

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	-	-	-	-
Focal Length	6.0mm fixed	3.6mm fixed	2.8mm fixed	2.4mm fixed
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°
Pan / Tilt / Rotate	±90° / 30° ~ 89° / ±180°	±90° / 37° ~ 89° / ±180°	±90° / 40° ~ 89° / ±180°	±90° / 62° / ±180°
IR Viewable Length	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB	150dB	150dB	150dB
Digital Noise Reduction	-	-	-	-
Digital Image Stabilization	-	-	-	-
Analytics	-	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	-	-	-	-
Resolution / Max. Frame Rate	-	-	-	-
WiseStream	-	-	-	-
Streaming	-	-	-	-
Edge Storage	-	-	-	-
Application Programming Interface	-	-	-	-
Operating Temperature	-	-	-	-
Certification	-	-	-	-
Power Consumption	-	-	-	-
Dimensions (WxHxD) / Weight	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)
Additional Features	-	-	-	-

**PNM-9000VD**

10MP 2CH Multi-directional Camera

**SLA-5M7000D**

5MP lens for PNM-9000VD

**SLA-5M4600D**

5MP lens for PNM-9000VD

**SLA-5M3700D**

5MP lens for PNM-9000VD

Imaging Device	-	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS
Min. Illumination	-	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)
Video Output	CVBS 1.0Vp-p	-	-	-
Focal Length	-	7.0mm fixed	4.6mm fixed	3.7mm fixed
Angular Field of View	-	H : 50.7° / V : 37.8° / D : 63.8°	H : 77.9° / V : 57.9° / D : 98.7°	H : 97.5° / V : 71.9° / D : 126.2°
Pan / Tilt / Rotate	-	±90° / 36° ~ 73° / ±180°	±90° / 36° ~ 73° / ±180°	±90° / 36° ~ 73° / ±180°
IR Viewable Length	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Intelligent analytics	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	5MP / 30fps	-	-	-
WiseStream	WiseStream II	-	-	-
Streaming	Up to 10 Profiles	-	-	-
Edge Storage	Micro SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S/G, SUNAPI, Wisenet open platform	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-	-	-
Certification	IP66, IK10	-	-	-
Power Consumption	PoE : 12.95W	-	-	-
Dimensions (WxHxD) / Weight	Ø197.6 x 84mm (Ø7.78" x 3.31") 1250g (2.76 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)
Additional Features	Exchangeable 2ea x 5MP lens modules, Hallway view, Defog	-	-	-



PNM-7000VD
4MP 2CH Multi-directional Camera



SLA-2M6000D
2MP lens for PNM-7000VD



SLA-2M3600D
2MP lens for PNM-7000VD



SLA-2M2800D
2MP lens for PNM-7000VD



SLA-2M2400D
2MP lens for PNM-7000VD

	PNM-7000VD	SLA-2M6000D	SLA-2M3600D	SLA-2M2800D	SLA-2M2400D
Imaging Device	-	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	-	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	CVBS 1.0Vp-p	-	-	-	-
Focal Length	-	6.0mm fixed	3.6mm fixed	2.8mm fixed	2.4mm fixed
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°
Pan / Tilt / Rotate	-	±176° / 0° ~ 65° / ±90°	±176° / 0° ~ 54° / ±90°	±176° / 0° ~ 50° / ±90°	±176° / 0° ~ 30° / ±90°
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-
Analytics	Intelligent analytics	-	-	-	-
Business Intelligence	-	-	-	-	-
Alarm I/O	-	-	-	-	-
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps	-	-	-	-
WiseStream	WiseStream II	-	-	-	-
Streaming	Up to 10 Profiles	-	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-	-
Application Programming Interface	ONVIF Profile S, SUNAPI	-	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-	-	-	-
Certification	IP66, IK10	-	-	-	-
Power Consumption	PoE : 12.95W	-	-	-	-
Dimensions (WxHxD) / Weight	Ø161.0 x 73.0mm (Ø6.34" x 2.87") 840g (1.85 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)
Additional Features	Exchangeable 2ea x 2MP lens modules, Hallway view, Defog	-	-	-	-



QNO-8080R
5MP IR Bullet Camera



QNO-8030R
5MP IR Bullet Camera



QNO-8020R
5MP IR Bullet Camera



QNO-8010R
5MP IR Bullet Camera



QND-8080R
5MP IR Dome Camera

Imaging Device	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS
Min. Illumination	Color : 0.2Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 0.15 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	6.0mm fixed	4.0mm fixed	2.8mm fixed	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H : 100.3° (Wide) ~ 31.2° (Tele) / V : 72.3° (Wide) ~ 23.5° (Tele) / D : 133.1° (Wide) ~ 38.8° (Tele)	H : 49.4° / V : 37.4° / D : 61.0°	H : 79.8° / V : 58.1° / D : 105.9°	H : 104.7° / V : 76.5° / D : 136.0°	H : 100.3° (Wide) ~ 31.2° (Tele) / V : 72.3° (Wide) ~ 23.5° (Tele) / D : 133.1° (Wide) ~ 38.8° (Tele)
Pan / Tilt / Rotate	-	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	30m (98.42ft)	25m (82.02ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	-	-	-	-	-
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 / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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 ~ +50°C (+14°F ~ +122°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	-
Power Consumption	PoE : Max 9.5W, typical 7.3W	PoE : Max 7.5W, typical 6.1W	PoE : Max 7.5W, typical 6.1W	PoE : Max 7.5W, typical 6.1W	PoE : Max 8.9W, typical 6.6W
Dimensions (WxHxD) / Weight	Ø91 x 322.9mm (Ø3.58" x 12.71") 1190g (2.624 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 680g (1.499 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 680g (1.499 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 680g (1.499 lb)	Ø120.3 x 102.0mm (Ø4.74" x 4.02") 430g (0.948 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



QND-8030R
5MP IR Dome Camera



QND-8020R
5MP IR Dome Camera



QND-8010R
5MP IR Dome Camera



QND-8021
5MP Dome Camera



QND-8011
5MP Dome Camera

Imaging Device	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS
Min. Illumination	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6)	Color : 0.15Lux (F2.0)
Video Output	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	Micro HDMI	Micro HDMI
Focal Length	6.0mm fixed	4.0mm fixed	2.8mm fixed	4mm fixed	2.8mm fixed
Angular Field of View	H : 49.4° / V : 37.4° / D : 61.0°	H : 79.8° / V : 58.1° / D : 105.9°	H : 104.7° / V : 76.5° / D : 136.0°	H : 80.1° / V : 58.0° / D : 105.8°	H : 104.4° / V : 76.7° / D : 136.1°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	People counting	People counting
Alarm I/O	1 / 1	1 / 1	1 / 1	-	-
Audio I/O	-	-	-	-	-
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 / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +40°C (+14°F ~ +104°F)	-10°C ~ +40°C (+14°F ~ +104°F)
Certification	-	-	-	IP42, IK08	IP42, IK08
Power Consumption	PoE : Max 6.8W, typical 5.0W	PoE : Max 6.8W, typical 5.0W	PoE : Max 7.5W, typical 5.8W	PoE : Max 5W, typical 4W	PoE : Max 5W, typical 4W
Dimensions (WxHxD) / Weight	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794 lb)	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794 lb)	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794 lb)	Ø99 x 56mm (Ø3.9" x 2.2") 165g (0.364 lb)	Ø99 x 56mm (Ø3.9" x 2.2") 165g (0.364 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Super compact design, Hallway View	Super compact design, Hallway View

**QNV-8080R**

5MP IR Vandal Dome Camera

**QNV-8030R**

5MP IR Vandal Dome Camera

**QNV-8020R**

5MP IR Vandal Dome Camera

**QNV-8010R**

5MP IR Vandal Dome Camera

**QNB-8002**

5MP Box Camera

Imaging Device	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS
Min. Illumination	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.07Lux (F1.2)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	6.0mm fixed	4.0mm fixed	2.8mm fixed	-
Angular Field of View	H : 100.3°(Wide) ~ 31.2°(Tele) / V : 72.3°(Wide) ~ 23.5°(Tele) / D : 133.1°(Wide) ~ 38.8°(Tele)	H : 49.4° / V : 37.4° / D : 61.0°	H : 79.8° / V : 58.1° / D : 105.9°	H : 79.8° / V : 58.1° / D : 105.9°	-
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°	-
IR Viewable Length	30m (98.42ft)	30m (98.42ft)	25m (82.02ft)	20m (65.62ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	-	-	-	-	Line in / Line out
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 / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	-
Power Consumption	PoE : Max 8.9W, typical 6.6W	PoE : Max 7.2W, typical 5.4W	PoE : Max 7.2W, typical 5.4W	PoE : Max 7.5W, typical 5.8W	PoE : Max 6.4W, typical 4.6W 12VDC : Max 5.8W, typical 4.1W
Dimensions (WxHxD) / Weight	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 700g (1.543 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)	73.8 x 66.6 x 136.2mm (2.91" x 2.62" x 5.36") 320g (0.711 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



QNE-8021R
5MP IR Flateye Camera



QNE-8011R
5MP IR Flateye Camera



QNO-7080R
4MP IR Bullet Camera



QNO-7010R/7020R/7030R
4MP IR Bullet Camera

Imaging Device	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS
Min. Illumination	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.5Lux / 0.4Lux / 0.3Lux (F2.2) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	-	-
Focal Length	4.0mm fixed	2.8mm fixed	2.8 ~ 12mm (4.3x) motorized varifocal	2.8mm fixed (QNO-7010R) 3.6mm fixed (QNO-7020R) 6mm fixed (QNO-7030R)
Angular Field of View	H : 80.1° / V : 58.0° / D : 105.8°	H : 104.4° / V : 76.7° / D : 136.1°	H : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1°	H : 110.0° / V : 63.0° / D : 128.0° (QNO-7010R) H : 81.0° / V : 45.0° / D : 95.0° (QNO-7020R) H : 53.0° / V : 31.0° / D : 62.0° (QNO-7030R)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 75° / 0° ~ 360°	0° ~ 350° / 0° ~ 75° / 0° ~ 360°	-	-
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)	20m (65.62ft) / 25m (82.02ft) / 30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-
Alarm I/O	-	-	1 / 1	1 / 1
Audio I/O	-	-	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	4MP / 20fps	4MP / 20fps
WiseStream	WiseStream II	WiseStream II	WiseStream	WiseStream
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
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)
Certification	IP67, IK10	IP67, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 7.4W, typical 5.5W	PoE : Max 7.4W, typical 5.5W	PoE : Max 8W, 12VDC : Max 7W	PoE : Max 7W, 12VDC : Max. 6W
Dimensions (WxHxD) / Weight	Ø125 x 87.35mm (Ø4.92" x 3.44") 645g (1.422 lb)	Ø125 x 87.35mm (Ø4.92" x 3.44") 645g (1.422 lb)	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)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View



QND-7080R
4MP IR Dome Camera



QND-7010R/7020R/7030R
4MP IR Dome Camera



QNV-7080R
4MP IR Vandal Dome Camera



QNV-7010R/7020R/7030R
4MP IR Vandal Dome Camera



QNE-7080RV/7080RVW
4MP IR Flateye Camera

Imaging Device	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS
Min. Illumination	Color : 0.15Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.5Lux / 0.4Lux / 0.3Lux (F2.2) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.5Lux (F2.0) / 0.4Lux / 0.3Lux (F2.2) B/W : 0Lux (IR LED on)	Color : 0.2Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	-	-	-	-	-
Focal Length	2.8 ~ 12mm (4.3x) motorized varifocal	2.8mm fixed (QND-7010R) 3.6mm fixed (QND-7020R) 6mm fixed (QND-7030R)	2.8 ~ 12mm (4.3x) motorized varifocal	2.8mm fixed (QNV-7010R) 3.6mm fixed (QNV-7020R) 6mm fixed (QNV-7030R)	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1°	H : 110.0° / V : 63.0° / D : 128.0° (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° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1°	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° ~ 30.5° / V : 55.7° ~ 18.3° / D : 119.6° ~ 35.3°
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° ~ 70° / 0° ~ 360°
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)	20m (65.62ft) / 25m (82.02ft) / 30m (98.43ft)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (Built-in mic) / -	Selectable (Built-in mic) / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Line-in / -
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 / Max. Frame Rate	4MP / 20fps	4MP / 20fps	4MP / 20fps	4MP / 20fps	4MP / 20fps
WiseStream	WiseStream	WiseStream	WiseStream	WiseStream	WiseStream
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	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
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	-	IK08	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 7.2W 12VDC : Max 6.4W	PoE : Max 7W 12VDC : Max 5.8W (QND-7010R) PoE : Max 6.5W 12VDC : Max 5.43W (QND-7020R/7030R)	PoE : Max 7.2W 12VDC : Max 6.4W	PoE : Max 7W 12VDC : Max 5.8W (QNV-7010R) PoE : Max 6.8W 12VDC : Max 5.7W (QNV-7020R/7030R)	PoE : Max 8.6W 12VDC : Max 7.7W
Dimensions (WxHxD) / Weight	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 355g (0.78 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 680g (1.5 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb)	Ø144.9 x 135.5mm (Ø5.70" x 5.33") 1.3Kg (2.87lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



QNO-6082R
2MP IR Bullet Camera



QNO-6072R
2MP IR Bullet Camera



QNO-6032R
2MP IR Bullet Camera



QNO-6022R
2MP IR Bullet Camera



QNO-6012R
2MP IR Bullet Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) manual varifocal	6mm fixed	4mm fixed	2.8mm fixed
Angular Field of View	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele) /	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele) /	H : 52.8° / V : 30.3° / D : 60.4°	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)	25m (82.02ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1/1	1/1	1/1	1/1	1/1
Audio I/O	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -
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 / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 7.4W, typical 5.4W 12VDC : Max 6.5W, typical 4.8W	PoE : Max 7.4W, typical 5.4W 12VDC : Max 6.5W, typical 4.8W	PoE : Max 7W, typical 5.2W 12VDC : Max 6.1W, typical 4.5W	PoE : Max 7W, typical 5.2W 12VDC : Max 6.1W, typical 4.5W	PoE : Max 7W, typical 5.2W 12VDC : Max 6.1W, typical 4.5W
Dimensions (WxHxD) / Weight	Ø78.0 x 259.8mm (Ø3.07" x 10.23") 900g (1.984 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 730g (1.609 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 700g (1.543 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 700g (1.543 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 700g (1.543 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



QND-6082R
2MP IR Dome Camera



QND-6072R
2MP IR Dome Camera



QND-6032R
2MP IR Dome Camera



QND-6022R
2MP IR Dome Camera



QND-6012R
2MP IR Dome Camera

	QND-6082R	QND-6072R	QND-6032R	QND-6022R	QND-6012R
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) manual varifocal	6mm fixed	4mm fixed	2.8mm fixed
Angular Field of View	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)	H : 52.8° / V : 30.3° / D : 60.4°	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°
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°
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Built-in mic / -	Built-in mic / -	Built-in mic / -	Built-in mic / -	Built-in mic / -
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 / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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)
Certification	-	-	-	-	-
Power Consumption	PoE : Max 7.7W, typical 6W 12VDC : Max 6.5W, typical 5.1W	PoE : Max 7.7W, typical 6W 12VDC : Max 6.5W, typical 5.1W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W, typical 5.1W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W, typical 5.1W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W, typical 5.1W
Dimensions (WxHxD) / Weight	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 320g (0.705 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 320g (0.705 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 255g (0.562 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 255g (0.562 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 255g (0.562 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View

Q mini


QND-6021
2MP Dome Camera

Q mini


QND-6011
2MP Dome Camera

QNV-6082R
2MP IR Vandal Dome Camera

QNV-6072R
2MP IR Vandal Dome Camera

QNV-6032R
2MP IR Vandal Dome Camera

	QND-6021 2MP Dome Camera	QND-6011 2MP Dome Camera	QNV-6082R 2MP IR Vandal Dome Camera	QNV-6072R 2MP IR Vandal Dome Camera	QNV-6032R 2MP IR Vandal Dome Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.03Lux (F1.6)	Color : 0.03Lux (F2.0)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	Micro HDMI	Micro HDMI	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	4mm fixed	2.8mm fixed	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) manual varifocal	6mm fixed
Angular Field of View	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°	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)	H : 52.8° / V : 30.3° / D : 60.4°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	30m (98.42ft)	30m (98.42ft)	30m (98.42ft)
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	People counting	People counting	-	-	-
Alarm I/O	-	-	1 / 1	1 / 1	1 / 1
Audio I/O	-	-	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -
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 / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP42, IK08	IP42, IK08	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 4.8W, typical 2.8W	PoE : Max 4.8W, typical 2.8W	PoE : Max 7.7W, typical 6W 12VDC : Max 6.5W	PoE : Max 7.7W, typical 6W 12VDC : Max 6.5W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W
Dimensions (WxHxD) / Weight	Ø99 x 56mm (Ø3.9" x 2.2") 145g (0.320 lb)	Ø99 x 56mm (Ø3.9" x 2.2") 145g (0.320 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 710g (1.565 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 710g (1.565 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)
Additional Features	Super compact design, Hallway View	Super compact design, Hallway View	Hallway View	Hallway View	Hallway View

**QNV-6022R**

2MP IR Vandal Dome Camera

**QNV-6012R**

2MP IR Vandal Dome Camera

**QNV-6024RM**

2MP IR Flat Camera

**QNV-6023R**

2MP IR Flat Camera

**QNB-6002**

2MP Box Camera

	QNV-6022R	QNV-6012R	QNV-6024RM	QNV-6023R	QNB-6002
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.01Lux (F1.2)
Video Output	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p
Focal Length	4mm fixed	2.8mm fixed	3.6mm fixed	3.6mm fixed	-
Angular Field of View	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°	H : 94.8°, V : 49.3°, D : 114.3°	H : 94.8°, V : 49.3°, D : 114.3°	-
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	±5°/0-67°/±90°	±5°/0-67°/±90°	-
IR Viewable Length	25m (82.02ft)	20m (65.62ft)	15m (49.21ft)	15m (49.21ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	-	-	1 / 1
Audio I/O	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (Built-in mic) / Line out	Line in / -	Line in / Line out
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 / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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)	-30°C ~ +55°C (-22°F ~ +131°F)	-10°C ~ +55°C (-14°F ~ +131°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	-
Power Consumption	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W	PoE : Max 6.7W, typical 5W	PoE : Max 6.7W, typical 5W	PoE : Max 6.4W, typical 4.6W 12VDC : Max 5.8W, typical 4.1W
Dimensions (WxHxD) / Weight	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65 lb)	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65 lb)	73.8 x 66.6 x 136.2mm (2.91" x 2.62" x 5.36") 320g (0.71 lb)
Additional Features	Hallway View	Hallway View	M12 connector, Hallway View	Hallway View	Hallway View



QNP-6230H/6230
2MP 23x PTZ Camera



QNP-6230RH
2MP 23x IR PTZ Camera



QNF-9010
12MP Fisheye Camera



QNF-8010
6MP Fisheye Camera

Imaging Device	1/2.8" 2.4MP CMOS	1/2.8" 2MP CMOS	1/2.3" 12M CMOS	1/1.8" 6M CMOS
Min. Illumination	Color : 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)	Color : 0.05Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.19 Lux (F2.2)	Color : 0.2 Lux (F2.5)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	4.44 ~ 102.2mm (Optical 23x)	4.44~102.2mm(23x) optical zoom	1.08mm fixed	1.14mm fixed
Angular Field of View	H : 61.8° (Wide) ~ 3.08° (Tele) / V : 36.2° (Wide) ~ 1.73° (Tele)	H : 61.8°(Wide)~3.08°(Tele) / V : 36.2°(Wide)~1.73°(Tele)	H : 187° / V : 187° / D : 187°	H : 187° / V : 187° / D : 187°
Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°)	-	-	-
IR Viewable Length	-	100m(328.08ft)	-	-
Day & Night	Auto (ICR)	Auto(ICR)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support(built-in gyro sensor)	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	People counting, Heatmap	People counting, Heatmap
Alarm I/O	4 / 2	4 / 2.	-	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	9MP / 30fps	4MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	24VAC : -50°C~+55°C (-58°F ~ +131°F) HPoE : -40°C~+55°C (-40°F ~ +131°F) * Start up above -35°C	-10°C ~ +40°C (+14°F ~ +104°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IK10 (QNP-6230H) IK10 (With SHP-3701H) (QNP-6230)	IP66, IK10	-	IP42
Power Consumption	PoE+, 24VAC : Max 24.0W - Heater Off, 24VAC : Max 65.0W - Heater On (QNP-6230H) PoE+, 24VAC : Max 20.0W (QNP-6230)	24VAC: Max 83W, typical 30W HPoE : Max 51W, typical 30W	PoE : Max 7.5W, typical 6.2W	PoE : Max 6.4W, typical 4.6W
Dimensions (WxHxD) / Weight	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)	Ø236.9x407.7mm (9.33" x 16.05") 6.8Kg (14.99 lb)	Ø99 x 49 mm (Ø3.9" x 1.93") 370g (0.82lb)	Ø99 x 49 mm (Ø3.9" x 1.93") 320 g (0.705 lb)
Additional Features	Defog	Defog	Panorama view, Business Intelligence	Panorama view, Business Intelligence



TNB-9000
8K Box Camera



TNV-7010RC
3MP Corner Mount Camera



TNO-6320E
2MP Explosion-proof Camera



TNU-6320E
2MP Explosion-proof PTZ Camera



TNU-6320
2MP Positioning Camera

	TNB-9000 8K Box Camera	TNV-7010RC 3MP Corner Mount Camera	TNO-6320E 2MP Explosion-proof Camera	TNU-6320E 2MP Explosion-proof PTZ Camera	TNU-6320 2MP Positioning Camera
Imaging Device	43.3mm Full-frame CMOS	1/2.8" 3.2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.015Lux(F1.4) BW : 0.0015Lux(F1.4)	Color : 0.3Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 015Lux (F1.6) B/W : 0.015Lux (F1.6)	Color : 015Lux (F1.6) B/W : 0.015Lux (F1.6)	Color : 015Lux (F1.6) B/W : 0.015Lux (F1.6)
Video Output	HDMI (1080p)	CVBS 1.0 Vp-p	-	-	-
Focal Length	-	2.8mm fixed	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 142.6mm (Optical 32x)
Angular Field of View	Canon 24mm, H: 57.4° Canon 35mm, H: 42.6° Canon 50mm, H: 30.9° Canon 85mm, H: 19.1° Canon 100mm, H: 16.0° Canon 70-200mm, H: 22.8° ~ 8.0°	H : 102° / V : 75° / D : 129°	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)
Pan / Tilt / Rotate	-	0° / ±15° / 0°	-	360° Endless / 180° (-90° ~ 90°) / -	360° Endless / 180° (-90° ~ 90°) / -
IR Viewable Length	-	10m (32.8ft) with 940nm IR LED	-	-	-
Day & Night	Auto(ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRIII	SSNRIII	SSNRIII
Digital Image Stabilization	-	Support	Support	Support	Support
Analytics	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection, Sound classification, Shock detection	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	-	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Max. Frame Rate	8K/15fps, 24MP/20fps, 15MP/30fps, 4K/60fps	3MP / 30fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	-	-	-
Streaming	Up to 3 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	-	-	SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S, SUNAPI, Wisenet open platform	ONVIF profile S, SUNAPI, Wisenet open platform	ONVIF profile S, SUNAPI, Wisenet open platform
Operating Temperature	0°C ~ +45°C (32°F ~ +122°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)	-30°C ~ +60°C (-22°F ~ +140°F)	-40°C ~ +55°C (-40°F ~ +131°F)
Certification	EMC	IP66, IP6K9K, IK10+	IP67, IK10, CE2460, EX II 2 GD, Ex d IIC T6 Gb IP67, Ex tb IIIC T85°C Db	IP67, IK10, CE2460, EX II 2 GD, Ex d IIC T6 Gb IP67, Ex tb IIIC T80°C Db	IP66
Power Consumption	PoE : Max 30W, typical 20W 12VDC : Max 26W, typical 18W	PoE : Max 12W 12VDC : Max 11W	24VAC : Max 28W	24VAC : Max 49W	24VAC : Max 100W - Heater On Max 25W - Heater Off
Dimensions (WxHxD) / Weight	120x118.5x179mm 2.2kg (4.85 lb)	236 x 236 x 126.5mm (9.29" x 9.29" x 4.98") 2.2kg (4.85lb)	Ø162 x 244mm (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)
Additional Features	8K, Canon EF mount	Anti ligature design, Invisible IR LED, Hallway View	Stainless (SUS316L) housing, Built in wiper	Stainless (SUS316L) housing, Built in wiper	Defog, Built in wiper



TNU-4041T / 4051T
VGA Thermal Positioning Camera



TNO-4051T
VGA Thermal Bullet Camera



TNO-4050T
VGA Thermal Bullet Camera



TNO-4041T
VGA Thermal Bullet Camera

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Min. Illumination	-	-	-	-
Video Output	CVBS : 1.0 Vp-p	CVBS : 1.0 Vp-p	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p
Focal Length	19mm / 35mm fixed	35mm fixed	35mm fixed	19mm fixed
Angular Field of View	H : 32° / V : 24.3° / D : 39.2° H : 17.2° / V : 13° / D : 22°	H : 17.2° / V : 13° / D : 22°	H : 17.2° / V : 13° / D : 22°	H : 32° / V : 24.3° / D : 39.2°
Pan / Tilt / Rotate	360° Endless / -90° ~ 40°	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	-	-	-
Wide Dynamic Range	-	-	-	-
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)
Analytics	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature change detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature change detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature change detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature change detection
Business Intelligence	-	-	-	-
Alarm I/O	1 / 1	1 / 2	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
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)
Certification	IP66, NEMA 4X, IK10	IP66, NEMA 4X	IP66, NEMA 4X	IP66, NEMA 4X, IK10
Power Consumption	24VAC : Max 84W - Heater On Max 62W - Heater Off	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W
Dimensions (WxHxD) / Weight	219 x 528 x 335mm (8.62" x 20.79" x 13.19") 11.7 kg (25.79lb)	Ø101.97 x 309mm (Ø4.01" x 12.17") 2,501g (5.51 lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3,175g (7.0 lb)	Ø101.97 x 309mm (Ø4.01" x 12.17") 2,501g (5.51 lb)
Additional Features	Various color palettes	Various color palettes, PT type	Various color palettes	Various color palettes, PT type

**TNO-4041TR**

VGA Radiometric Thermal Bullet Camera

**TNO-4040T**

VGA Thermal Bullet Camera

**TNO-4040TR**

VGA Radiometric Thermal Bullet Camera

**TNO-4030T**

VGA Thermal Bullet Camera

**TNO-4030TR**

VGA Radiometric Thermal Bullet Camera

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Min. Illumination	-	-	-	-	-
Video Output	CVBS : 1.0 Vp-p	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B
Focal Length	19mm fixed	19mm fixed	19mm fixed	13mm fixed	13mm fixed
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 : 48.6° / V : 36.4° / D : 61.6°	H : 48.6° / V : 36.4° / D : 61.6°
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	-	-	-	-	-
Day & Night	-	-	-	-	-
Wide Dynamic Range	-	-	-	-	-
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)
Analytics	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 2	1 / 2	1 / 2	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
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 / Max. Frame Rate	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
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)
Certification	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W
Dimensions (WxHxD) / Weight	Ø101.97 x 309mm (Ø4.01" x 12.17") 2,452g (5.41lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3,175g (7.0 lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3,124g (6.89lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3,173g (7.0 lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3,124g (6.89lb)
Additional Features	Various color palettes Spot temperature reading, PT type	Various color palettes	Various color palettes Spot temperature reading	Various color palettes	Various color palettes Spot temperature reading



LNO-6070R
2MP IR Bullet Camera



LNO-6010R / 6020R / 6030R
2MP IR Bullet Camera



LND-6070R
2MP IR Dome Camera



LND-6010R/6020R/6030R
2MP IR Dome Camera



LNV-6070R
2MP IR Vandal Dome Camera



LNV-6010R / 6020R / 6030R
2MP IR Vandal Dome Camera

	LNO-6070R 2MP IR Bullet Camera	LNO-6010R / 6020R / 6030R 2MP IR Bullet Camera	LND-6070R 2MP IR Dome Camera	LND-6010R/6020R/6030R 2MP IR Dome Camera	LNV-6070R 2MP IR Vandal Dome Camera	LNV-6010R / 6020R / 6030R 2MP IR Vandal Dome Camera
Imaging Device	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS
Min. Illumination	Color : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.18Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.18Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.18Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	-	-	-	-	-	-
Focal Length	3.2 ~ 10mm (3.1x) manual varifocal	3mm / 4mm / 6mm fixed	3.2 ~ 10mm (3.1x) manual varifocal	3mm / 4mm / 6mm fixed	3.2 ~ 10mm (3.1x) manual varifocal	3mm / 4mm / 6mm fixed
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 : 102.0° / V : 54.0° / D : 120.0° (LNO-6010R) H : 80.0° / V : 43.0° / D : 94.0° (LNO-6020R) H : 51.0° / V : 29.0° / D : 58.0° (LNO-6030R)	H : 101.6° (Wide) ~ 31.3° (Tele) / V : 54.1° (Wide) ~ 17.8° (Tele) / D : 120.6° (Wide) ~ 36.0° (Tele) /	H : 102.0° / V : 54.0° / D : 120.0° (LND-6010R) H : 80.0° / V : 43.0° / D : 94.0° (LND-6020R) H : 51.0° / V : 29.0° / D : 58.0° (LND-6030R)	H : 101.6° (Wide) ~ 31.3° (Tele) / V : 54.1° (Wide) ~ 17.8° (Tele) / D : 120.6° (Wide) ~ 36.0° (Tele) /	H : 102.0° / V : 54.0° / D : 120.0° (LNV-6010R) H : 80.0° / V : 43.0° / D : 94.0° (LNV-6020R) H : 51.0° / V : 29.0° / D : 58.0° (LNV-6030R)
Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-	-
Alarm I/O	-	-	-	-	-	-
Audio I/O	-	-	-	-	-	-
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC	Micro SD/SDHC	Micro SD/SDHC	Micro SD/SDHC	Micro SD/SDHC	Micro SD/SDHC
Application Programming Interface	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
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)
Certification	IP66	IP66	-	-	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 6.5W	PoE : Max 6.5W	PoE : Max 6.5W	PoE : Max 6.5W	PoE : Max 6.5W	PoE : Max 6.5W
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	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



XRN-3010A
64CH 12MP NVR



XRN-2011A
32CH 12MP NVR



XRN-2010A
32CH 12MP NVR

Os	Linux	Linux	Linux
Supported Compression	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
Max # of Cameras	64	32	32
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)
External Storage	1 e-SATA	iSCSI	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
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
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Easy configuration (Setup Wizard, P2P (QR Code))	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Easy configuration (Setup Wizard, P2P (QR Code))	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Easy configuration (Setup Wizard, P2P (QR Code))



XRN-1610SA/1610A
16CH 12MP NVR



XRN-810S
8CH 8MP NVR



XRN-410S
4CH 8MP NVR

Os	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	180Mbps	100Mbps	50Mbps
Max # of Cameras	16	8	4
Internal Storage	Up to 4 SATA (Max. 24TB) (XRN-1610S) Up to 8 SATA (Max. 48TB) (XRN-1610)	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)
External Storage	iSCSI, 1 e-SATA	-	-
RAID	-	-	-
Hot Swap	-	-	-
Network Viewer Software	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	HDMI (Up to 4K), VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	• Plug & play by 16 PoE / PoE+ Ports (XRN-1610SA) • WiseStream supported • Easy configuration (Setup Wizard, P2P (QR Code))	• Plug & play by 8 PoE / PoE+ Ports • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps	• Plug & play by 4 PoE / PoE+ Ports • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 64Mbps



PRN-4011
64CH 12MP NVR



PRP-5000H16
128CH SSM Recording Server



PRP-4000H8
72CH SSM Recording Server



QNR-1620S
16CH 8MP NVR

NEW

Os	Linux	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise	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
Max. Recording Bit Rate	400Mbps (RAID 5/6)	520Mbps	400Mbps	128Mbps
Max # of Cameras	64	128	72	16
Internal Storage	Up to 12 SATA (Max. 96TB)	Up to 16 SATA (Max. 160TB)	Up to 8 SATA (Max. 80TB)	Up to 2 SATA (Max. 12TB)
External Storage	iSCSI	iSCSI	iSCSI	-
RAID	RAID 5/6	RAID 0/1/5/6	RAID 0/1/5/6	-
Hot Swap	Yes	Yes	Yes	-
Network Viewer Software	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM Client, SSM Mobile	SSM Client, SSM Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI (Up to 4K), VGA Support dual monitor: HDMI / VGA	HDMI, VGA, DVI	HDMI, VGA, DP	HDMI(8MP), VGA
Camera Support	SUNAPI, ONVIF	Wisenet, ONVIF	Wisenet, ONVIF	SUNAPI, ONVIF
Additional Features	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Dual power	• Dual track recording • Active - Active failover supported • WiseStream supported • Server clustering supported (Max. 2048CH)	• 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 • Dual monitor • Dual track recording



QNR-1610S
16CH 8MP NVR



QNR-820S
8CH 8MP NVR



QNR-810S/810
8CH 8MP NVR



QNR-420S
4CH 8MP NVR

NEW

NEW

Os	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG
Max. Recording Bit Rate	128Mbps	80Mbps	100Mbps (QNR-810), 80Mbps (QNR-810S)	40Mbps
Max # of Cameras	16	8	8	4
Internal Storage	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
External Storage	-	-	-	-
RAID	-	-	-	-
Hot Swap	-	-	-	-
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 8MP), VGA	HDMI(8MP), VGA	HDMI (Up to 8MP), VGA (QNR-810) HDMI (Up to 8MP) (QNR-810S)	HDMI(8MP), VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	• Plug & play by 16 PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps	• Plug & play by 8PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 80Mbps • Dual track recording	• Plug & play by 8 PoE ports (QNR-810S) • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps (QNR-810), 80Mbps (QNR-810S)	• Plug & play by 4 PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 50Mbps • Dual track recording



QRN-410S/410
4CH 8MP NVR



LRN-1610S
16CH 5MP NVR



LRN-810S
8CH 5MP NVR



LRN-410S
4CH 5MP NVR

OS	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Max. Recording Bit Rate	50Mbps (QRN-410), 40Mbps (QRN-410S)	100Mbps	50Mbps	40Mbps
Max # of Cameras	4	16	8	4
Internal Storage	Up to 1 SATA (Max. 6TB)	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
External Storage	-	-	-	-
RAID	-	-	-	-
Hot Swap	-	-	-	-
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 (QRN-410) HDMI (Up to 4K) (QRN-410S)	HDMI (Up to 5MP)	HDMI (Up to 5MP)	HDMI (Up to 5MP)
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	• 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-410S)	• Plug & play by 16 PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 100Mbps • Dual track recording	• Plug & play by 8 PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 30Mbps • Dual track recording	• Plug & play by 4 PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 20Mbps • Dual track recording



TAW-4000H16
Wisenet Transportation Appliance



TRM-1610M/1610S
16CH 12MP Mobile NVR



TRM-810S
8CH 8MP Mobile NVR



TRM-410S
4CH 8MP Mobile NVR

OS	Windows 10 IoT Enterprise	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	520Mbps	128Mbps	80Mbps	50Mbps
Max # of Cameras	Max. 128 device/server	16 (4PoE, M12: TRM-1610M / RJ-45: TRM-1610S)	8 (8 PoE, RJ-45)	4 (4 PoE, RJ-45)
Internal Storage	16 HDDs(Hot swap) Max. 160TB	Up to 2 SATA (Front-Swap) Max. 2TB (HDD) / Max. 4TB (SSD)	Up to 2 SATA (Front-Swap) Max. 2TB (HDD) / Max. 4TB (SSD)	Up to 2 SATA (Front-Swap) Max. 2TB (HDD) / Max. 4TB (SSD)
External Storage	-	-	-	-
RAID	RAID 0/1/5/6	RAID 1	RAID 1	-
Hot Swap	Yes (RAID 1/5/6)	Yes (RAID 1)	Yes (RAID 1)	-
Network Viewer Software	Wisenet TMS	Wisenet TMS, WebViewer, Wisenet Mobile	Wisenet TMS, WebViewer, Wisenet Mobile	Wisenet TMS, WebViewer, Wisenet Mobile
Local Monitor	VGA, DVI, HDMI	HDMI, VGA	HDMI, VGA	HDMI, VGA
Camera Support	Connect with mobile NVRs	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	• Provides vehicle's location based on GPS • Automatic Back-up when connecting Wi-Fi • Server clustering(Max. 28 server, Max. 10,000 CH) • Area search • Report(speed, driving hours etc)	• GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -40°C ~ +70°C (-40°F ~ +158°F)	• GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -25°C to +55°C (-13°F to +131°F)	• GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -25°C to +55°C (-13°F to +131°F)



SPE-1610
16CH Encoder



SPE-410
4CH Encoder



SPE-110
1CH Encoder

Max. # of Cameras	16	4	1
Supported Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Max. Resolution	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF
Max. Frame Rate per Channel	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)
Bi-Directional Audio	Support	Support	-
RS-485	Support	Support	Support
Alarm I/O	16 / 4	4 / 2	-
SD Card	-	-	-
Application Programming Interface	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI
Power	12VDC : Max 24W	PoE & 12VDC : Max 9.6W	PoE : Max 4.0W 12VDC : Max 3.6W

Decoder



SPD-1660R
16 Monitor Decoder



SPD-260B
Monitor Decoder Board for SPD-1660R



SPD-151
48CH Decoder



SPD-150
48CH Decoder

Video Out	HDMI (16ea), VGA (16ea)	HDMI (2ea), VGA (2ea)	HDMI, VGA, BNC	HDMI, VGA, BNC
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	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 / 2x2 / 3x3 / 4x4 / 5x5 / 6x6 (32Ch Only) (VGA) 1 / 2x2 / 3x3 / 4x4 (BNC) 1 Tile merge support	(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, Halfway View mode (Up to 20 layouts and sequence)
Power	100 ~ 240V AC	-	12V DC, PoE	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 Management using Web-Viewer	Up to 49CH, H.265 / H.264 / MJPEG codec, Layout sequence support

iSCSI External Storage



SRB-160S
16 Bay iSCSI External Storage

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
Additional Features	Dual SMPS for high reliability

Wisenet SSM 2.1

Single



Core Server

Free Trial



Full Feature

User Friendly



UI



Key Features

- **Single Core Server with Clustering**

Wisenet SSM has one Core Server merging multiple basic servers such as MG, RS, SM, and HA. The Core Servers can also be clustered together providing a higher degree of reliability.

- Free Trial License

Users are given a 45 days trial period before they can start activating their license. During the trial, full features are available for use including recording. After the trial, Wisenet SSM will generate a warning message and only limited features will be available.

- New Client User Interface

With Wisenet SSM's user friendly interface, operators can playback video during live streaming and easily control playback with new timeline control.

- Distributed Computing Architecture

Wisenet SSM's modular architecture allows the software to effectively manage any system, from low-end solutions to enterprise level installations.

- **Extended Scalability**

Wisenet SSM is suitable for both small and larger installations, with numerous features for enter prise systems including Federation, Transaction Server and 3rd party integration.

- Flexible System Architecture

The Transaction Server functionality provides easy integration with third party systems, including access control and intrusion detection.



Live Streaming

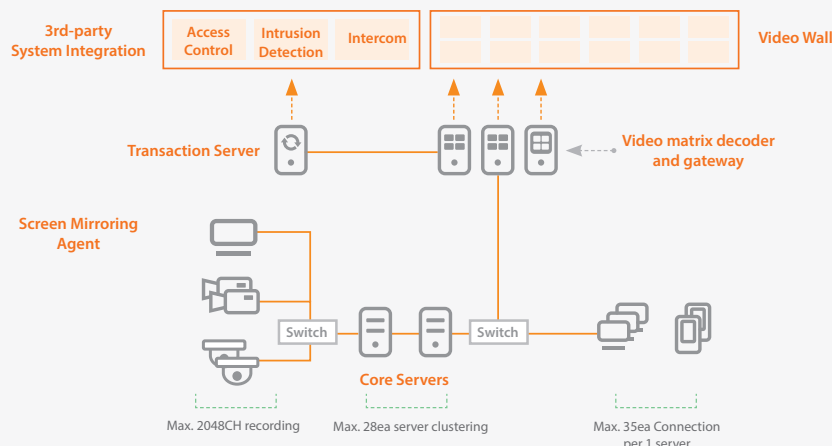


Display Events as Thumbnails



Location of Events for Google Map

System configuration

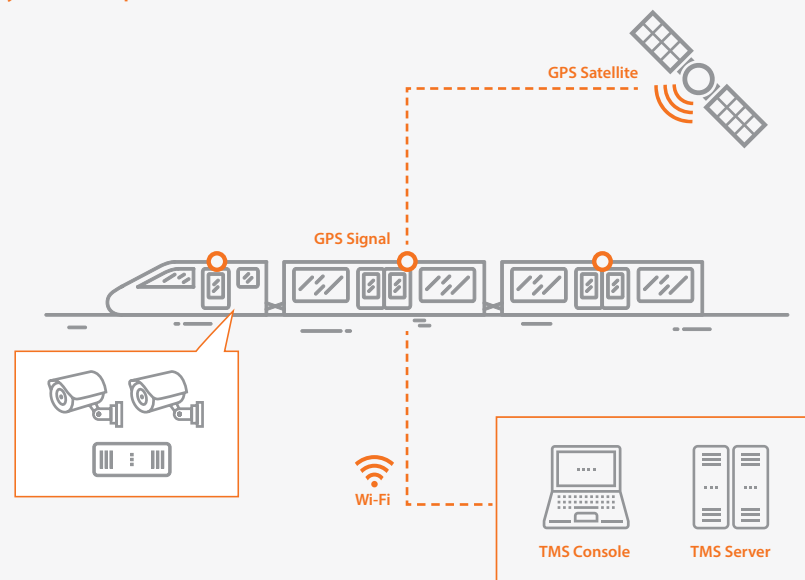


BASIC FEATURE

	Supported Device	Hanwha Techwin : Network camera, Encoder, NVR, DVR, Decoder, Controller Others : Network camera, Encoder through ONVIF
General	Camera Protocol	SUNAPI, ONVIF (PROFILE S)
	Access Control Management	WACS (Wisenet Access Control Software)
System Management	Centralized License Management	45 days free trial
	Server Clustering	Data sharing, Failure management
	System Dashboard	Real-time system status monitoring
	User Management	Configurable user group, LDAP supported Device access authority, Feature level authority
	Security	SSL, Database encryption Login lockdown, Multi-level user access authority
Device Management	Federation	Multi-tier domain federation, Max. 100 domains
	Centralized Device Configuration	Auto / Manual discovery, Device and add-on server registration
	Maintenance	Setup file backup / restore, Device firmware update
Event Management	Event Configuration	4 levels event priority, Configurable event color External event registration
	Event Action	Rule based event and triggering action setup Instant viewer pop-up, Alert sound, E-mail notification
Site / Layout / Map Design	Multi-Layered Site Configuration	Flexible site design, Site access authority
	Layout & Pattern	User defined layout and tile pattern
	Map	2D image map
OPTIONAL FEATURE		
Recording Module	Max. Camera Per Server	Up to 128 channel
	Recording Performance	Up to 520Mbps(@ 4 HDD)
	Recording Mode	Manual, Continuous, Event, Schedule
	Pre / Post Event Recording	Pre: 10 ~ 60 seconds / Post : 1,200 seconds
	RAID	Hardware RAID controller required
	Etc.	ARB (Auto recovery backup) from camera edge storage, Recoding retention time, iSCSI support



System concept



Key Features

• TMS S/W preinstalled

TAW-4000 is an appliance preloaded TMS software that is easy to use and maintain. Customer do not have to worry about purchasing a server.

• TAW Clustering

Up to 28 server clustering capabilities provide convenient system scalability and efficient operation and management of large sites (up to 10,000 ch)

• Up to 128 Recorder Back-up

Provides video and event management of up to 128 mobile NVRs with just one TAW-4000H16

• Area Search

If you are unable to identify the vehicle(ship) in which an accident occurred, search based on the map where the incident occurred. TMS quickly search / playback the GPS and video information in a specific area.

• Automatic Archiving

When a vehicle(boat) arrives at a place with a Wi-Fi connection, fully automatic backup of all evidence on mobile NVR installed in the vehicle(boat)

• Report

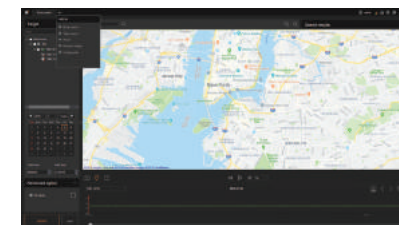
TMS system can aggregate various operational statistics records. It provides a variety of information, such as speeding information of the vehicle, working hours of the driver, driving time and statistics of the vehicle. (Support to add function based on project request.)



Search & Playback of route (based on GPS)



Search & playback from cameras footage

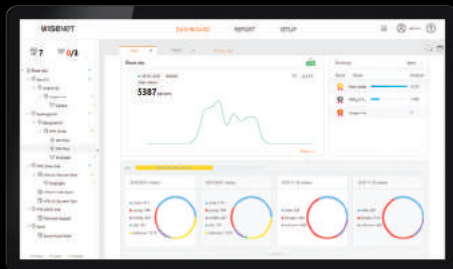


Route search

WISeNET Retail Insight

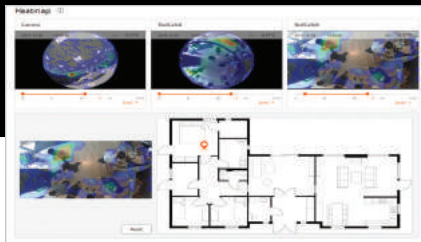
Business Intelligence for your retail shops

- Advanced BI functions
- User friendly UI (Detail button)
- People counting (age, gender)
- Heatmap (time laps feature added)
- Queue management
- Customizable dashboard and report
- Compatible all Wisenet cameras (applied BI function)



People counting (age, gender)

Wisenet Retail Insight not only counts the number of visitors in real time but also offers age & gender analytics, providing insightful information to store owners. Owners can use this information to build sales strategies.



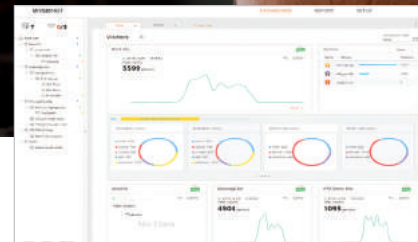
Heatmap (Time laps)

Heatmap feature measures and tracks customers dwell-time in certain locations, providing information on popular/unattractive products. Owners can configure the time duration to collect data at certain times.



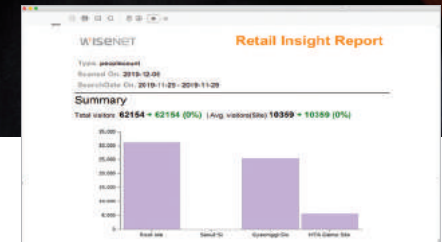
Queue management

Queue management is crucial for large retailers. The feature captures long waiting lines in real time and manages the queues in an efficient way, reducing customer complaints.



User friendly UI

The content is presented in the user-friendly form. It's easy to configure with multi tab function. Users can get information they want in a quick overview and click detail buttons for more information. Users can easily edit or delete. And it also provides weather information and the shop is open or not.



Regular automatic report

Wisenet Retail Insight offers reports on a daily, weekly, or monthly basis. Users can configure reports with the units they want, taking full advantage of the vast size of database and gaining information crucial in running retail stores.



Reader



R10/R40/RK40 (Elite / Mobile)
Card / Keypad Reader



U90
Long Range UHF Reader



BioEntryW2
Fingerprint / Card Reader



5427CK
Card Scanner



BioMini
Fingerprint Scanner

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 Connection	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
Distributed Controller



EH400K
PoE Controller



V1000
Centralized Controller



V100/V200/V300
Expansion Reader / Input / Output Module

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 / 12VDC	-	-	-
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
Face Recognition Controller

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)
13.56MHz Card



Mobile ID
Mobile Subscription

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

- Bluetooth / NFC via mobile device (Android, IOS)

Peripheral



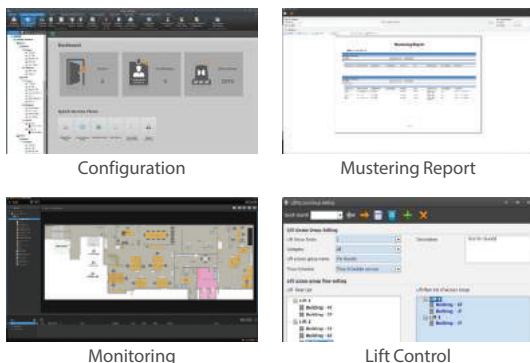
SSA-X300
Power Package

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 Access 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

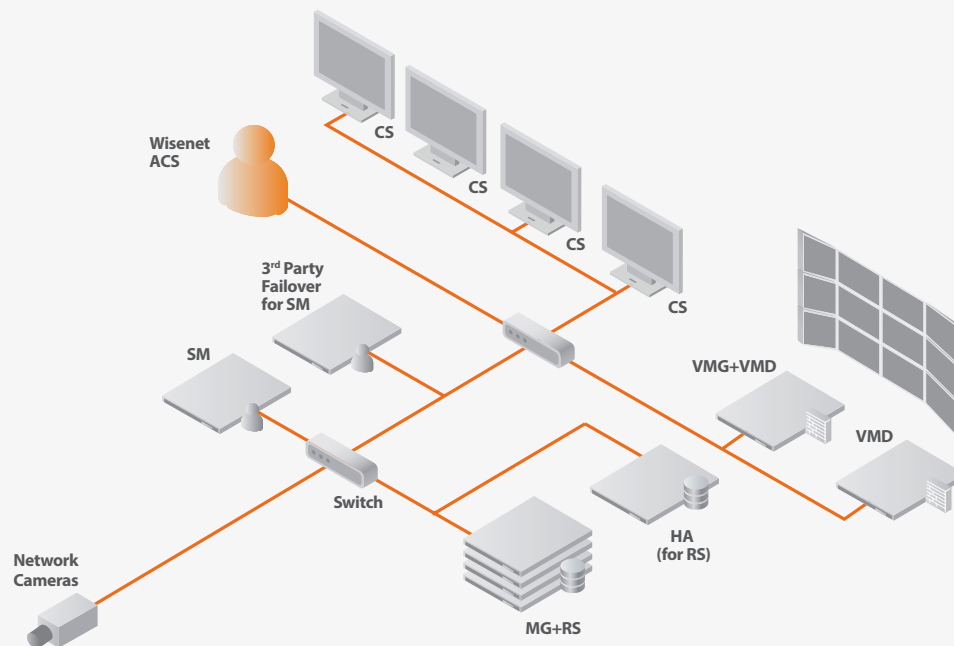


Access Control	Device auto discovery
	Cardholder management
	Batch uploads
	Card (s) pre-registration
	Device maintenance
	Unlimited access groups, Time schedules
Monitoring	Area / Zone management
	Biometric readers (FP)
	Lift Control (with V300)
	Real time access events & alarm monitoring
	Graphic maps
	Remote door management (Close / Open)
Card Design and Printing	I/O monitoring
	Mustering
	Event filtering for monitoring
	Control door monitoring / Management permissions per user group
	Create multiple design templates
	Auto-fill card holder data from system database
Advanced Reporting	Print cards
	Create firegroups for each fire sensor input
	Extensive reporting options
	Export to multiple formats (excel, pdf, word etc.)
	Full Integration with Hanwha Techwin's VMS, SSM
	Review video of the access events & alarms
Maintenance	Real-time event & alarm notification to SSM
	User group & user privileges
	Manual & scheduled database backup
	Database restore
	Data export & import
	Custom fields
System	Auditing & user activity logs
	Up to 32doors (standard), 256doors (professional), Unlimited doors (enterprise)
	Very simple and intuitive user interface
	Highly scalable

Wisenet ACS



Integration with Wisenet SSM





HCB-7000A
QHD Box Camera



HCO-7070RA
QHD IR Bullet Camera



HCO-7010RA/20RA/30RA
QHD IR Bullet Camera



HCD-7070RA
QHD IR Dome Camera

Imaging Device	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS
Resolution	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440
Min. Illumination	Color : 0.16Lux (F1.2) B/W : 0.009Lux (F1.2)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.26Lux (F1.8) (HCO-7010R) 0.27Lux (F2.0) (HCO-7020R/7030R) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)
Focal Length	-	3.2 ~ 10mm (3.1x) varifocal	2.8mm fixed (HCO-7010R) 4.0mm fixed (HCO-7020R) 6.0mm fixed (HCO-7030R)	3.2 ~ 10mm (3.1x) varifocal
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-7010RA) H : 78.22° / V : 41.21° / D : 87.91° (HCO-7020RA) H : 49.01° / V : 27.61° / D : 55.6° (HCO-7030RA)	H : 93.48° (Wide) ~ 29.44° (Tele) / V : 50.47° (Wide) ~ 16.64° (Tele) / D : 112.53° (Wide) ~ 33.7° (Tele)
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 63° / 0° ~ 355°
IR Viewable Length	-	30m (98.43ft)	20m (65.62ft) (HCO-7010R) 25m (82.02ft) (HCO-7020R) 30m (98.43ft) (HCO-7030R)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR
Digital Noise Reduction	2D DNR	2D DNR	2D DNR	2D DNR
Motion detection	Support	Support	Support	Support
Privacy Masking	2 Zones	2 Zones	2 Zones	2 Zones
Alarm I/O	MD Output 1	MD Output 1	-	MD Output 1
Protocol	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)
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)
Certification	-	IP66, IK10	IP66, IK10	-
Power Consumption	12VDC & 24VAC : Max 3.6W	12VDC & 24VAC : Max 5.8W	12VDC : Max 5.0W	12VDC & 24VAC : Max 5.8W
Dimensions (WxHxD) / Weight	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 186g (0.41 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02 lb)	Ø70.0 x 246.0mm (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)
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)



HCD-7010RA/20RA/30RA
QHD IR Dome Camera



HCV-7070RA
QHD IR Vandal Dome Camera



HCV-7010RA/20RA/30RA
QHD IR Vandal Dome Camera



HCB-6001
1080p HD Box Camera



HCB-6000
1080p HD Box Camera

Imaging Device	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Resolution	2560 x 1440	2560 x 1440	2560 x 1440	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.26Lux (F1.8) (HCD-7010R) 0.27Lux (F2.0) (HCD-7020R/7030R) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.26Lux (F1.8) (HCV-7010R) 0.27Lux (F2.0) (HCV-7020R/7030R) B/W : 0Lux (IR LED on)	Color : 0.09Lux (F1.2) B/W : 0.009Lux (F1.2)	Color : 0.09Lux (F1.2) B/W : 0.009Lux (F1.2)
Focal Length	2.8mm fixed (HCD-7010R) 4.0mm fixed (HCD-7020R) 6.0mm fixed (HCD-7030R)	3.2 ~ 10mm (3.1x) varifocal	2.8mm fixed (HCV-7010R) 4.0mm fixed (HCV-7020R) 6.0mm fixed (HCV-7030R)	-	-
Angular Field of View	H : 107.48° / V : 59.67° / D : 122.01° (HCD-7010R) H : 78.22° / V : 41.21° / D : 87.91° (HCD-7020R) H : 49.01° / V : 27.61° / D : 55.6° (HCD-7030R)	H : 93.48° (Wide) ~ 29.44° (Tele) / V : 50.47° (Wide) ~ 16.64° (Tele) / D : 112.53° (Wide) ~ 33.7° (Tele)	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)	-	-
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-	-
IR Viewable Length	20m (65.62ft) (HCD-7010R) 25m (82.02ft) (HCD-7020R) 30m (98.43ft) (HCD-7030R)	30m (98.43ft)	20m (65.62ft) (HCV-7010R) 25m (82.02ft) (HCV-7020R) 30m (98.43ft) (HCV-7030R)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	2D DNR	2D DNR	2D DNR	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	2 Zones	2 Zones	4 Zones	8 Zones
Alarm I/O	-	MD Output 1	-	0 / 1, External D/N 1	0 / 1, External D/N 1
Protocol	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), 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
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)
Certification	-	IP66, IK10	IP66, IK10	-	-
Power Consumption	12VDC : Max 5.0W	12VDC & 24VAC : Max 5.8W	12VDC : Max 5.0W	12VDC & 24VAC : Max 6W	12VDC & 24VAC : Max 3.5W
Dimensions (WxHxD) / Weight	Ø110.1 × 86.1mm (Ø4.33" × 3.39") 240g (0.53 lb)	Ø137 × 106.1mm (Ø5.39" × 4.18") 715g (1.58 lb)	Ø120.3 × 91.7mm (Ø4.74" × 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)
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)



HCZ-6320
1080p HD Box Camera



HCO-6080R
1080p HD IR Bullet Camera



HCO-6070R
1080p HD IR Bullet Camera



HCO-6020R
1080p HD IR Bullet Camera



HCD-6080R/6070R
1080p HD IR Dome Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.17Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)
Focal Length	4.44 ~ 142.6mm (Optical 32x)	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) varifocal	4mm fixed (F1.6)	3.2 ~ 10mm (3.1x) motorized varifocal (HCD-6080R) varifocal (HCD-6070R)
Angular Field of View	H : 62.8° (Wide) ~ 2.23° (Tele) / V : 36.80° (Wide) ~ 1.26° (Tele)	H : 110.2° (Wide) ~ 32° (Tele) / V : 55.4° (Wide) ~ 18° (Tele) / D : 128.4° (Wide) ~ 36.6° (Tele)	H : 110.2° (Wide) ~ 32° (Tele) / V : 55.4° (Wide) ~ 18° (Tele) / D : 128.4° (Wide) ~ 36.6° (Tele)	H : 87.6° / V : 46.4° / D : 104.5°	H : 110.2° (Wide) ~ 32° (Tele) / V : 55.4° (Wide) ~ 18° (Tele) / D : 128.4° (Wide) ~ 36.6° (Tele)
Pan / Tilt / Rotate	-	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNR III	SSNR IV	SSNR IV	SSNR IV	SSNR IV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	12 Zones	8 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	-	MD Output 1	MD Output 1	-	MD Output 1
Protocol	AHD : ACP (AHD Coax Protocol), RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	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)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	IP66, IK10	IP66, IK10	IP66	-
Power Consumption	12VDC : Max 6W	12VDC & 24VAC : Max 6.0W	12VDC & 24VAC : Max 6.0W	12VDC : Max 4.2W	12VDC & 24VAC : Max 6.0W (HCD-6080R) 12VDC & 24VAC : Max 4.2W (HCD-6070R)
Dimensions (WxHxD) / Weight	72.0 x 60 x 137mm (2.83" x 2.36" x 5.39") 476g (1.05 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 948g (2.09 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02 lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.50") (Without sunshield) 285g (0.62 lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 330g (0.73lb) (HCD-6080R) 320g (0.71lb) (HCD-6070R)
Additional Features	Defog	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)



HCD-6020R
1080p HD IR Dome Camera



HCD-6010
1080p HD Dome Camera



HCV-6080R/6070R
1080p HD IR Vandal Dome Camera



HCP-6320HA/6320A
1080p HD 32x PTZ Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color: 0.17Lux (F1.6) B/W : 0Lux (IR LED on)	Color: 0.27Lux (F2.0) B/W : 0.017 Lux (F2.0)	Color: 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Color: 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)
Focal Length	4mm fixed (F1.6)	2.8mm fixed (F2.0)	3.2 ~ 10mm (3.1x) motorized varifocal (HCV-6080R) varifocal (HCV-6070R)	4.44 ~ 142.6mm (Optical 32x)
Angular Field of View	H: 87.6° / V: 46.4° / D: 104.5°	H: 113.7° / V: 61.5° / D: 134.5°	H: 110.2° (Wide) ~ 32° (Tele) / V: 55.4° (Wide) ~ 18° (Tele) / D: 128.4° (Wide) ~ 36.6° (Tele)	H: 62.8° (Wide) ~ 2.23° (Tele) / V: 36.8° (Wide) ~ 1.26° (Tele)
Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	360° Endless / 210° (-15° ~ 195°) / -
IR Viewable Length	20m (65.62ft)	-	30m (98.43ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIII
Motion detection	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	32 Zones
Alarm I/O	-	-	MD Output 1	4 / 2 (Relay)
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)	AHD : ACP (AHD Coax Protocol), RS-485 : Samsung-T/E, Pelco-P/D, Sungjin, Panasonic, Honeywell, AD, Vicon, Bosch, GE
Operating Temperature	-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)	-50°C ~ +55°C (-58°F ~ +131°F) (HCP-6320HA), -10°C ~ +55°C (+14°F ~ +131°F) (HCP-6320A)
Certification	-	-	IP66, IK10	IP66, IK10 (HCP-6320HA), IK10 (With SHP-3701H) (HCP-6320A)
Power Consumption	12VDC : Max 4.2W	12VDC : Max 3.5W	12VDC & 24VAC : Max 4.2W	24VAC : Max 24.0W / 65.0W - Heater off / on (HCP-6320HA) 24VAC : Max 20.0W (HCP-6320A)
Dimensions (WxHxD) / Weight	Ø110 x 86mm (Ø4.33" x 3.39") 320g (0.71 lb)	Ø110 x 86mm (Ø4.33" x 3.39") 225g (0.49 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 725g (1.60lb) 715g (1.58lb)	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)
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)	Defog



HCP-6230H/6230
1080p HD 23x PTZ Camera



SCB-6003
1080p HD Box Camera



SCO-6085R
1080p HD IR Bullet Camera



SCO-6023R
1080p HD IR Bullet Camera

Imaging Device	1/2.8" 2MP CMOS	1/3" 2MP CMOS	1/2.8" 2MP CMOS	1/3" 2MP CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)	Color : 0.04Lux (F1.2) B/W : 0.004Lux (F1.2)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.25Lux (F2.1) B/W : 0Lux (IR LED on)
Focal Length	4.44 ~ 101.2mm (Optical 23x)	-	3.2 ~ 10mm (3.1x) manual varifocal"	4mm fixed
Angular Field of View	H : 62.8°(Wide) ~ 3.14°(Tele) / V : 36.8°(Wide) ~ 1.76°(Tele)	-	H : 110.2° (Wide) ~ 32.0° (Tele) / V : 55.4° (Wide) ~ 18.0° (Tele) / D : 128.4° (Wide) ~ 36.6° (Tele)	H : 80.7° / V : 43.5° / D : 95.8°
Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°) / -	-	-	-
IR Viewable Length	-	-	30m (98.42ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR
Digital Noise Reduction	SSNRIII	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support
Privacy Masking	32 Zones	4 Zones	8 Zones	4 Zones
Alarm I/O	4 / 2 (Relay)	0 / 1, External D/N 1	0 / 1	
Protocol	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)
Operating Temperature	-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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
Certification	IP66, IK10 (HCP-6230H), IK10 (With SHP-3701H) (HCP-6230)	-	IP66, IK10	IP66
Power Consumption	24VAC : Max. 24.0W / 65.0W - Heater off / on (HCP-6230H) 24VAC : Max 20.0W (HCP-6230)	12VDC & 24VAC : Max 4.2W	12VDC : Max 5.4W 24VAC : Max 5.4W	12VDC : Max 4.2W
Dimensions (WxHxD) / Weight	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 x 259.8mm (3.07" x 10.23") 887g (1.95 lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.50") (Without Sunshield) 208g (0.46 lb)
Additional Features	Defog	Defog	Defog	Defog



SCD-6083R
1080p HD IR Dome Camera



SCD-6023R
1080p HD IR Dome Camera



SCD-6013
1080p HD Dome Camera



SCV-6083R
1080p HD IR Vandal Dome Camera



SCV-6023R
1080p HD IR Vandal Dome Camera

	SCD-6083R 1080p HD IR Dome Camera	SCD-6023R 1080p HD IR Dome Camera	SCD-6013 1080p HD Dome Camera	SCV-6083R 1080p HD IR Vandal Dome Camera	SCV-6023R 1080p HD IR Vandal Dome Camera
Imaging Device	1/3" 2MP CMOS	1/3" 2MP CMOS	1/3" 2MP CMOS	1/3" 2MP CMOS	1/3" 2MP CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.11Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.25Lux (F2.1) B/W : 0Lux (IR LED on)	Color : 0.1Lux (F1.8) B/W : 0.01Lux (F1.8)	Color : 0.11Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.25Lux (F2.1) B/W : 0Lux (IR LED on)
Focal Length	2.8 ~ 12mm (4.3x) varifocal	4mm fixed	2.8mm fixed	2.8 ~ 12mm (4.3x) varifocal	4mm fixed (F 2.1)
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°
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°
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	-	30m (98.43ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (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	-
Protocol	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)
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)
Certification	-	-	-	IP66, IK10	IP66, IK10
Power Consumption	12VDC & 24VAC : Max 4.2W	12VDC : Max 4.2W	12VDC : Max 2.5W	12VDC & 24VAC : Max 4.2W	12VDC : Max 4.2W
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

**HRX-1621**

16CH 8MP Pentabrid Recorder

**HRX-1620**

16CH 8MP Pentabrid Recorder

**HRD-1642**

16CH 4MP A-HD DVR

**HRD-1641**

16CH 4MP A-HD DVR

		HRX-1621 16CH 8MP Pentabrid Recorder	HRX-1620 16CH 8MP Pentabrid Recorder	HRD-1642 16CH 4MP A-HD DVR	HRD-1641 16CH 4MP A-HD DVR
Video Inputs Signal		Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	AHD, TVI, CVI, CVBS	AHD, TVI, CVI, CVBS
Video Inputs Channel		Analog 16CH, N/W Camera 2CH (up to 18CH)	Analog 16CH, N/W Camera 2CH (up to 18CH)	16CH	16CH
Live (NTSC / PAL)		480fps / 400fps	480fps / 400fps	480fps / 400fps	480fps / 400fps
Recording Compression		H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264	H.264
Max. Recording		8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH
Internal Storage		Up to 8 SATA HDDs	Up to 2 SATA HDDs	Up to 8 SATA HDDs	Up to 2 SATA HDDs
Audio I/O		16 / 1	4 / 1	16 (Built in 4) / 1	4 / 1
Alarm I/O		16 / 4	16 / 4	16 / 4	16 / 4
Monitors	HDMI, VGA	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA	1 HDMI, 1 VGA
	Spot Composite	1 BNC	1 BNC	1 BNC	1 BNC
USB		2 ports	2 ports	2 ports	2 ports
e-SATA		-	-	2	1
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
	Transmission	Dual Stream	Dual Stream	Dual Stream	Dual Stream
	Monitoring	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer
Coax Protocol		Support (CVBS and AHD/CVI/TVI)	Support (CVBS and AHD/CVI/TVI)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)
Serial Interface		RS-485, Analog+NW camera port	RS-485, Analog+NW camera port	RS-485	RS-485

**HRX-821**

8CH 8MP Pentabrid Recorder

HRX-820

8CH 8MP Pentabrid Recorder

HRD-842

8CH 4MP A-HD DVR

HRD-841

8CH 4MP A-HD DVR

HRD-840

8CH 4MP A-HD DVR

		HRX-821 8CH 8MP Pentabrid Recorder	HRX-820 8CH 8MP Pentabrid Recorder	HRD-842 8CH 4MP A-HD DVR	HRD-841 8CH 4MP A-HD DVR	HRD-840 8CH 4MP A-HD DVR
Video Inputs Signal		Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	AHD, TVI, CVI, CVBS	AHD, TVI, CVI, CVBS	AHD, TVI, CVI, CVBS
Video Inputs Channel		Analog 8CH, N/W Camera 2CH (up to 10CH)	Analog 8CH, N/W Camera 2CH (up to 10CH)	8CH	8CH	8CH
Live (NTSC / PAL)		240fps / 200fps	240fps / 200fps	240fps / 200fps	240fps / 200fps	240fps / 200fps
Recording Compression		H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264	H.264	H.264
Max. Recording		8MP 8/8fps, 5MP 12/12fps 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps 2MP 30/25fps NTSC/PAL *per CH	4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH
Internal Storage		Up to 4 SATA HDDs	Up to 2 SATA HDDs	Up to 4 SATA HDDs	Up to 2 SATA HDDs	Up to 1 SATA HDD
Audio I/O		8 / 1	4 / 1	8 / 1	4 / 1	1 / 1
Alarm I/O		8 / 4	8 / 4	8 / 4	8 / 4	4 / 1
Monitors	HDMI, VGA	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA
	Spot Composite	1 BNC	1 BNC	1 BNC	1 BNC	1 BNC
USB		2 ports	2 ports	2 ports	2 ports	2 ports
e-SATA		-	-	2	1	-
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
	Transmission	Dual Stream	Dual Stream	Dual Stream	Dual Stream	Dual Stream
	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
Coax Protocol		Support (CVBS and AHD/CVI/TVI)	Support (CVBS and AHD/CVI/TVI)	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, Analog+NW camera port	RS-485, Analog+NW camera port	RS-485	RS-485	RS-485

**HRX-421**

4CH 8MP Pentabrid Recorder

**HRX-420**

4CH 8MP Pentabrid Recorder

**HRD-442**

4CH 4MP A-HD DVR

**HRD-440**

4CH 4MP A-HD DVR

		HRX-421 4CH 8MP Pentabrid Recorder	HRX-420 4CH 8MP Pentabrid Recorder	HRD-442 4CH 4MP A-HD DVR	HRD-440 4CH 4MP A-HD DVR
Video Inputs Signal		Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	AHD, TVI, CVI, CVBS	AHD, TVI, CVI, CVBS
Video Inputs Channel		Analog 4CH, N/W Camera 2CH (up to 6CH)	Analog 4CH, N/W Camera 2CH (up to 6CH)	4CH	4CH
Live (NTSC / PAL)		120fps / 100fps	120fps / 100fps	120fps / 100fps	120fps / 100fps
Recording Compression		H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264	H.264
Max. Recording		8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH
Internal Storage		Up to 2 SATA HDDs	Up to 1 SATA HDD	Up to 2 SATA HDDs	Up to 1 SATA HDDs
Audio I/O		4 / 1	1 / 1	4 / 1	1 / 1
Alarm I/O		4 / 2	4 / 1	4 / 1	4 / 1
Monitors	HDMI, VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA
	Spot Composite	1 BNC	1 BNC	1 BNC	1 BNC
USB		2 ports	2 ports	2 ports	2 ports
e-SATA		-	-	2	-
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
	Transmission	Dual Stream	Dual Stream	Dual Stream	Dual Stream
	Monitoring	SSM, WebViewer, SmartViewer, Mobile Viewer"	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer
Coax Protocol		Support (CVBS and AHD/CVI/TVI)	Support (CVBS and AHD/CVI/TVI)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)
Serial Interface		RS-485, Analog+NW camera port	RS-485, Analog+NW camera port	RS-485	RS-485

LED Monitor



SMT-4033
40" LED Monitor



SMT-3233
32" LED Monitor



SMT-2233
22" LED Monitor



SMT-1935
19" LED Monitor



SMT-1931
19" LED Monitor



SMT-1914
19" LED Monitor

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/m ²	350cd/m ²	250cd/m ²	250cd/m ²	250cd/m ²	250cd/m ²
Tempered Glass Screen	-	-	Yes	Yes	Yes	Yes
Picture In Picture	-	-	-	-	-	Yes
Built-in Speakers	Yes	Yes	Yes	Yes	Yes	-
Stand	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
System Controller



SPC-2000
Network Controller



SPC-2010
PTZ / DVR System Controller



SPC-1010
PTZ Control Keyboard

Features	SPC-7000 System Controller	SPC-2000 Network Controller	SPC-2010 PTZ / DVR System Controller	SPC-1010 PTZ Control Keyboard
	• 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	• Superior System Compatibility • 3D Joystick Control • Quick and Easy Installation • SSM Support	• 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	• 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			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)

Flush mount							
SHP-1680F/SHP-1680FW	SHP-3701H	SHD-3000F1/3000FW1	SHD-3000F2/3000FW2	SHD-3000F3/3000FW3	SHD-3000F4/3000FW4	SHD-3000F5	SHF-1500F
Ivory / White 		Ivory / White 	Ivory / White 	Ivory / White 	Ivory / White 		
Hanging mount							
SBP-301HM3	SBP-301HM4	SBP-301HM5	SBP-300HM5	SBP-300HM6	SBP-300HM7	SBP-300HM8	SBP-122HM/SBP-122HMW
							Ivory / White 
SBP-168HM	SBP-201HM	SBP-317HM/317HMW	SBP-329HM	SBP-276HM/276HMW	SBP-167HM	SBP-187HM	SBP-301HM2
		Ivory / White 		Ivory / White 			
			Built-in SFP install base for PTZ		Tilt mount		Ceiling mount, Parapet mount
SBP-300HWM5	SBP-300HWM7	SBP-201HWM	SBP-300HF/301HF/302HF/303HF		SBP-300TM1/300TM	SBP-160TM	SBP-300CM/300LM
							
Wall mount							
SBP-300CMW/300LMW	SBP-300WM1/300WMW1	SBP-300WM	SBP-137WM/137WMW	SBP-137WM1/137WMW1	SBP-120WM	SBP-390WM1/390WM2	SBP-120WMW
	Ivory / White 		Ivory / White 	Ivory / White  * with back plate			

*You can find applicable models with accessory selector www.hanwha-security.com/en/products/accessory-selector/

Wall mount		Pole mount			Corner mount base	Wall mount base, Installation box	
SBP-125WMW	SBU-500WM	SBP-300PM/300PMW	SBP-302PM	SBP-303PM	SBP-300KM / 300KMW	SBP-300B/300NB	SBP-300BW/300NBW
		Ivory / White 			Ivory / White 		
Weather cap		Back box				Stainless accessory	
SBV-160WC	SBV-120WC / 120WCW	SBV-116B / SBF-100B1	SBV-136B / 136BW	SBV-158G / 120GW / 125BW	SBO-126B/100B1	SBP-300HMS6	SBP-300WMS1/300WMS
	Ivory / White 						
Fixed housing		Fixed mount			IR Illuminator	Skin cover	
SBP-300PMS/300KMS	SHB-4300H/4300H1/4300H2/4300HP	SHB-4200/4200H	STH-200	STB-400/4150V	SPI-50	SBC-160B/180B	
							
Smoked dome cover							
SPB-IND5/IND6/IND7	SPB-IND11/IND81/IND81V	SPB-IND12/IND72	SPB-IND83/IND83V	SPG-IND73B	SPG-IND12B	SPG-IND72B	SPB-VAN3
							
SPB-VAN11/VAN71/VAN81	SPB-VAN12/VAN72	SPB-PTZ71	SPB-PTZ73	SPB-INW12 / INW13 / INW72 / INW73		SPB-VAW12 / VAW72	
							

* You can find applicable models with accessory selector www.hanwha-security.com/en/products/accessory-selector/

PTZ Cameras

Type	Outdoor PTZ					Indoor PTZ
Shape	 PH4	 PH5	 PH6	 PH7	 PH8	 P4
Color	Ivory					
Model	SCP-2271H/2273H/ 2371H/2373H/ 3371H SNP-5300H/5320H/ 5321H/5430H/ 6201H/6320H/ 6321H/L5233H/ L6233H HCP-6230H/6320H/ 6320HA XNP-6320H QNP-6230H	SCP-2370RH SNP-6200RH/ 6230RH/ 6320RH/ L6233RH	PNP-9200RH XNP-6370RH/ 6371RH/ 6250RH/ 6320RH QNP-6230RH	XNP-6120H	XNP-6040H	SCP-2271/2273/ 2371/2373/ 3371 SNP-5320/5321/ 5430/6230/ 6320/6321/ L5233/L6233 HCP-6230/6320/ 6320A XNP-6320 QNP-6230

White Cameras

Type	Vandal-Resistant				Indoor Dome			Fisheye	Flateye		Multi-sensor		
Shape	 VW5	 VW6	 VW7	 VW8	 DW4	 DW5	 DW6	 FW1	 FEW1	 FEW2	 MW1	 MW2	 MW3
Color	White												
Model	LNV-6070R QNV-6072R/ 6082R/ 8080R	LNV-6010R/ 6020R/ 6030R QNV-6012R/ 6022R/ 6032R/ 8010R/ 8020R/ 8030R	XND-8081VZ/ 6081VZ/ 8081RV/ 6081RV/ 6081V	XNV-8081Z/ 6081Z/ 6081R/ 6081	LND-6070R QND-6072R 6082R 8080R	LND-6010R/ 6020R/ 6030R QND-6012R/ 6022R/ 6032R/ 8010R/ 8020R/ 8030R	QND-6011/ 6021/ 8011/ 8021	QNF-8010/9010	QNE-7080RVW/ 6080RVW	QNE-8011R/ 8021R	PNM-9000VD	PNM-9084QZ	PNM-9084RQZ/ 9085RQZ

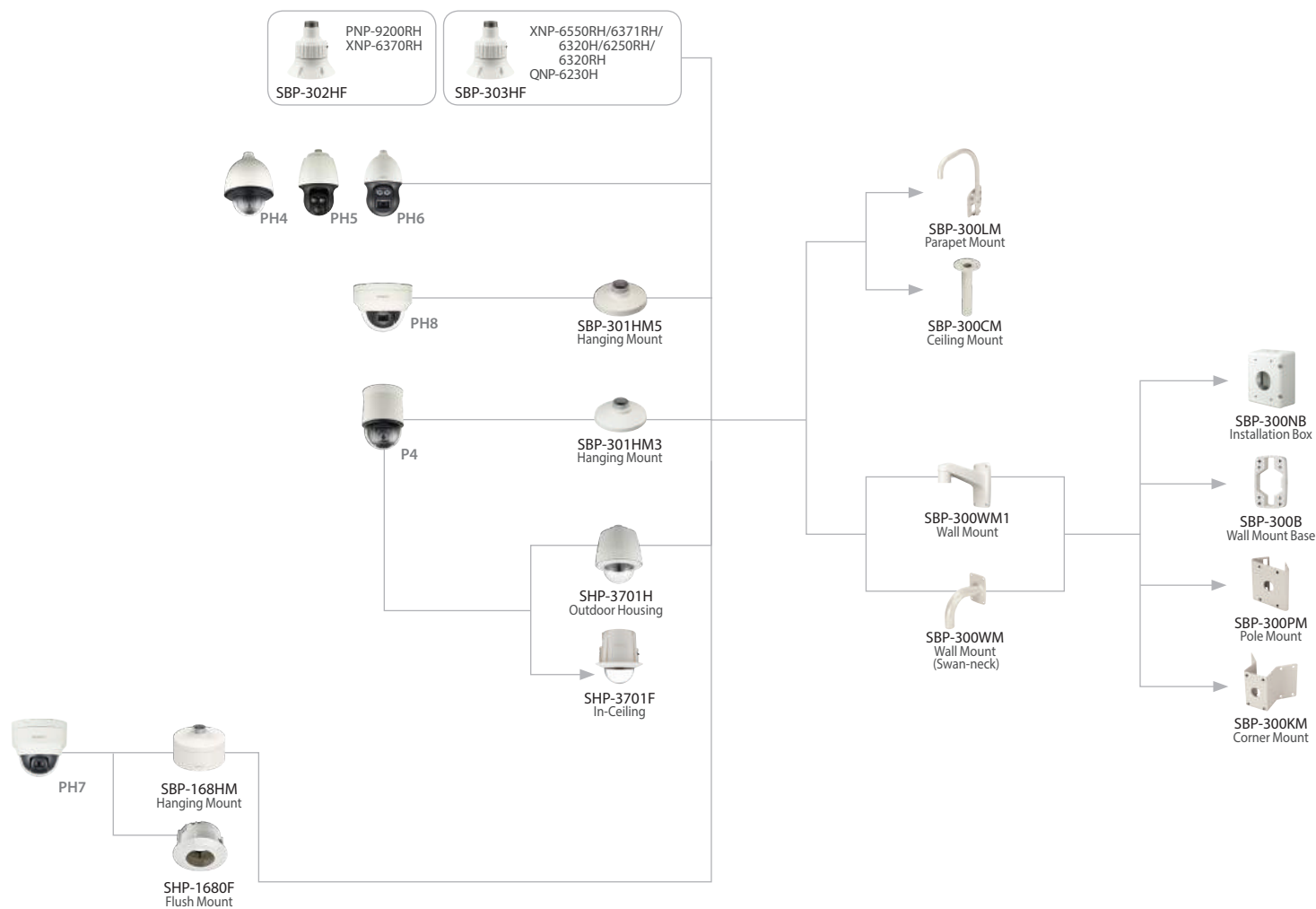
Dome Cameras

Type	Vandal-Resistant				Indoor Dome			
Shape								
Color	Ivory							
Model	PNV-9080R XNV-8080R/6120R/6120/ 6085/6085R/6080R/ 6080/L6080/L6080R SNV-8081R/8080/7084R/ 7084/6085R/6084R/ 6084/5084R/5084	SNV-6013 XNV-6011	QNV-6070R/6071R/6080R/ 7080R/7081R HCV-7070R/6080R/6070R LNV-6071R SNV-L6083R SCV-6083R/6023R/5082	XNV-8040R/8030R/8020R/ 6020R/6010 QNV-7030R/7020R/7010R/ 6030R/6020R/6010R HCV-7010R/7020R/7030R LNV-6011R/6021R/6031R	QND-6070R/6071R/6080R/ 7080R/7081R HCD-6070R/7070R/7080R/ 6080R SND-6011R/L5083R/L6083R SCD-6021/6083R/5083R/ 5083B/5080A SUD-6083R/6023R LND-6071R	XND-8040R/8030R/8020R/ 6020R/6010/L6020R QND-7030R/7020R/7010R/ 6030R/6020R/6010R HCD-7010R/7020R/7030R/ 6020R/E6020R/6020R/ 6010 SND-L6014R/L6013R/ L6013/L6012 SCD-6013/6023R LND-6011R/6021R/6031R	PND-9080R XND-8080RV/8080R/ 6080V/6080RV/ 6080R/6080/ L6080R/L6080RV/ L6080V	XND-6085V/6085

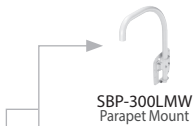
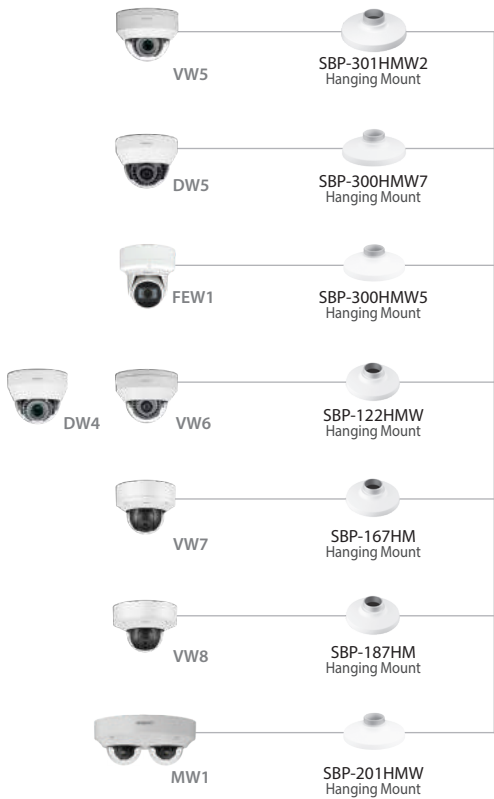
Fisheye / Multi-Sensor Cameras

Type	Fisheye		Flateye	Multi-sensor					
Shape									
Color	Ivory								
Model	XNF-8010R PNF-9010R	PNF-9010RV/9010RVM XNF-8010RV/8010RVM	QNE-7080RV/6080RV	PNM-9020V HCM-9020VQ	PNM-9081VQ/9080VQ	PNM-7000VD	PNM-9000VQ	PNM-9030V	PNM-9320VP

PTZ ACC



WHITE
ACC



SBP-300LMW
Parapet Mount

SBP-300CMW
Ceiling Mount

SBP-300WMW1
Wall Mount



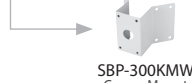
SBP-300NBW
Installation Box



SBP-300BW
Wall Mount Base



SBP-300PMW
Pole Mount



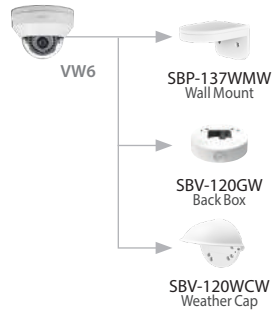
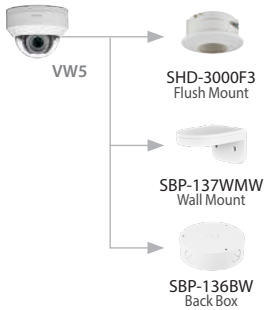
SBP-300KMW
Corner Mount



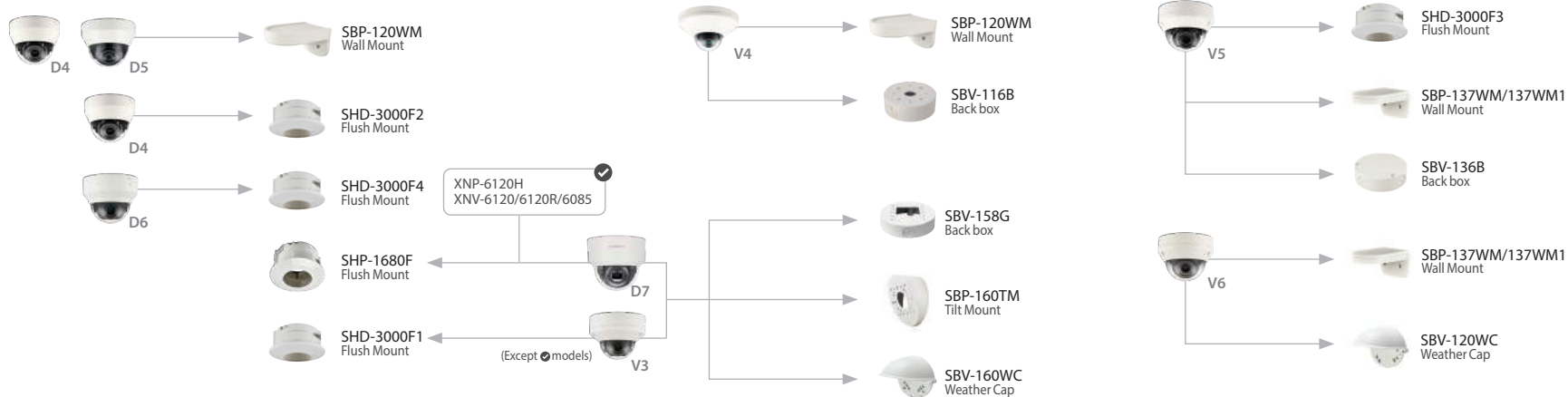
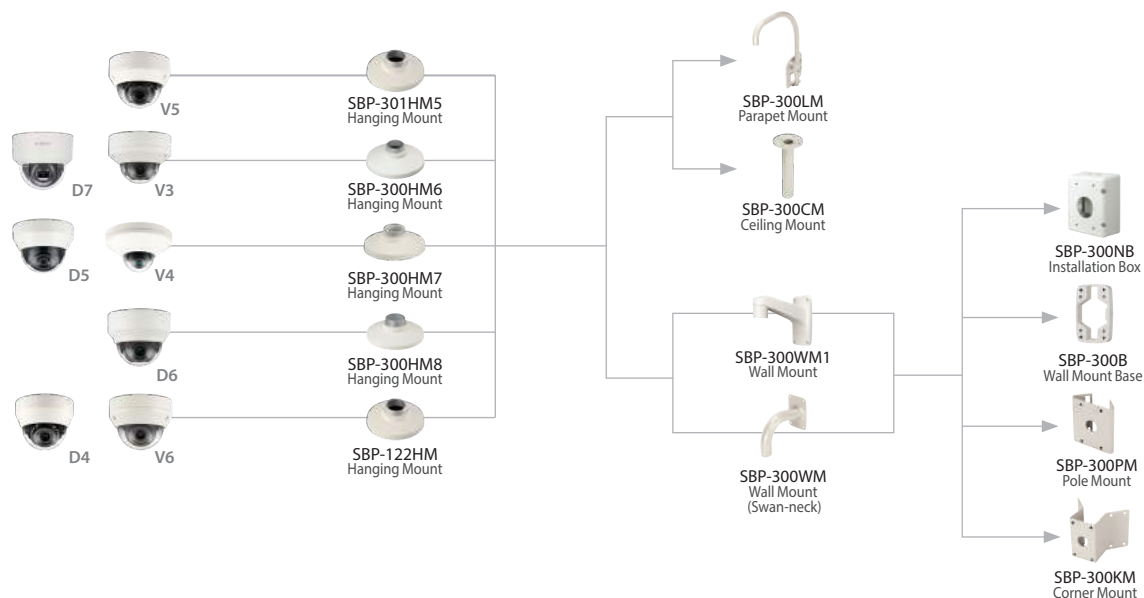
SBP-125WMW
Wall Mount



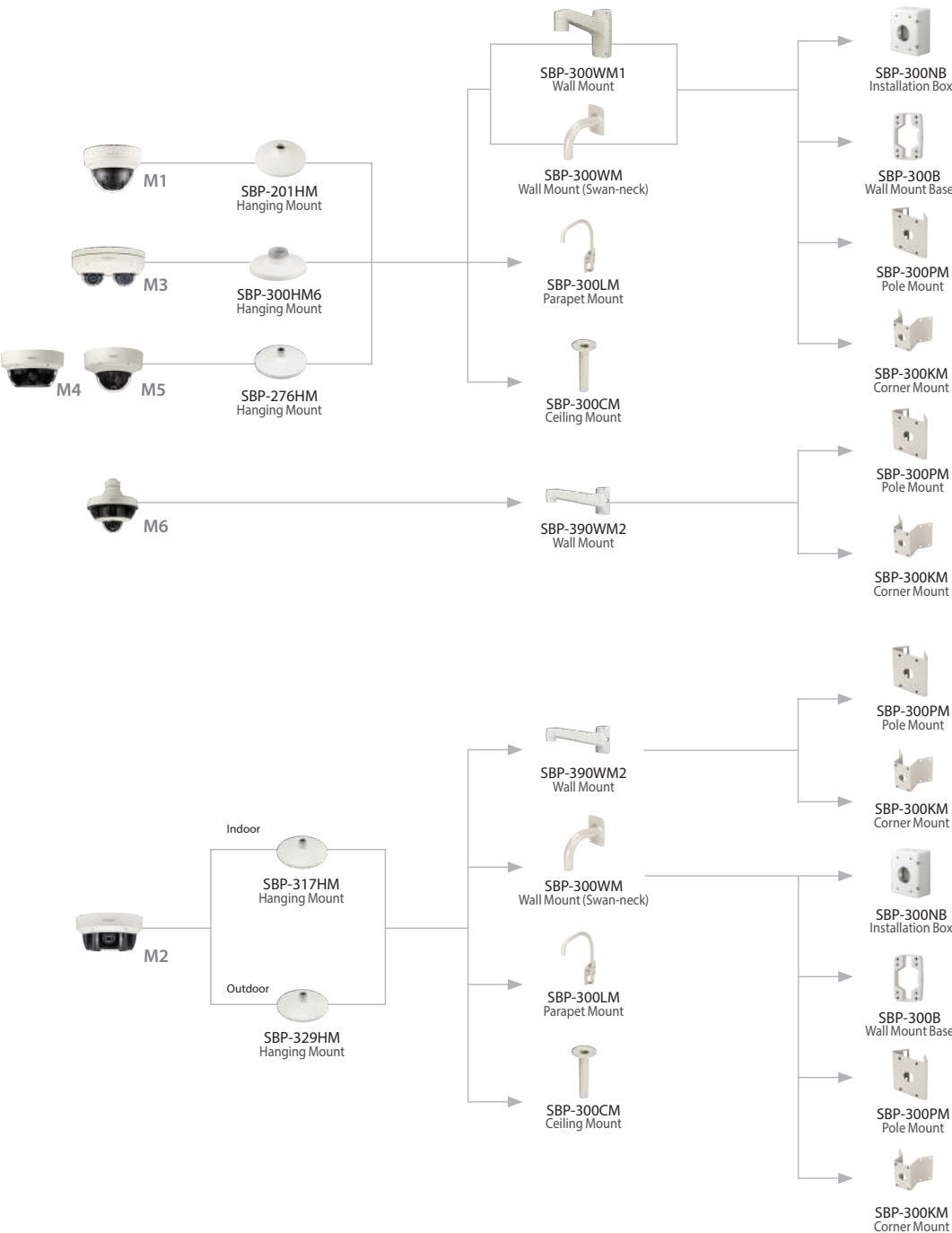
SBV-125BW
Back Box



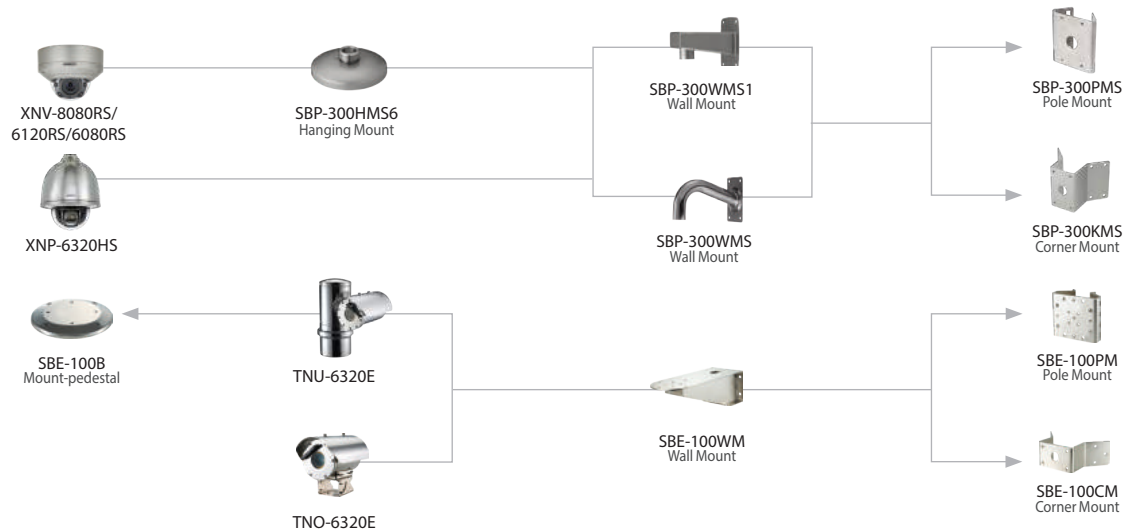
DOME ACC



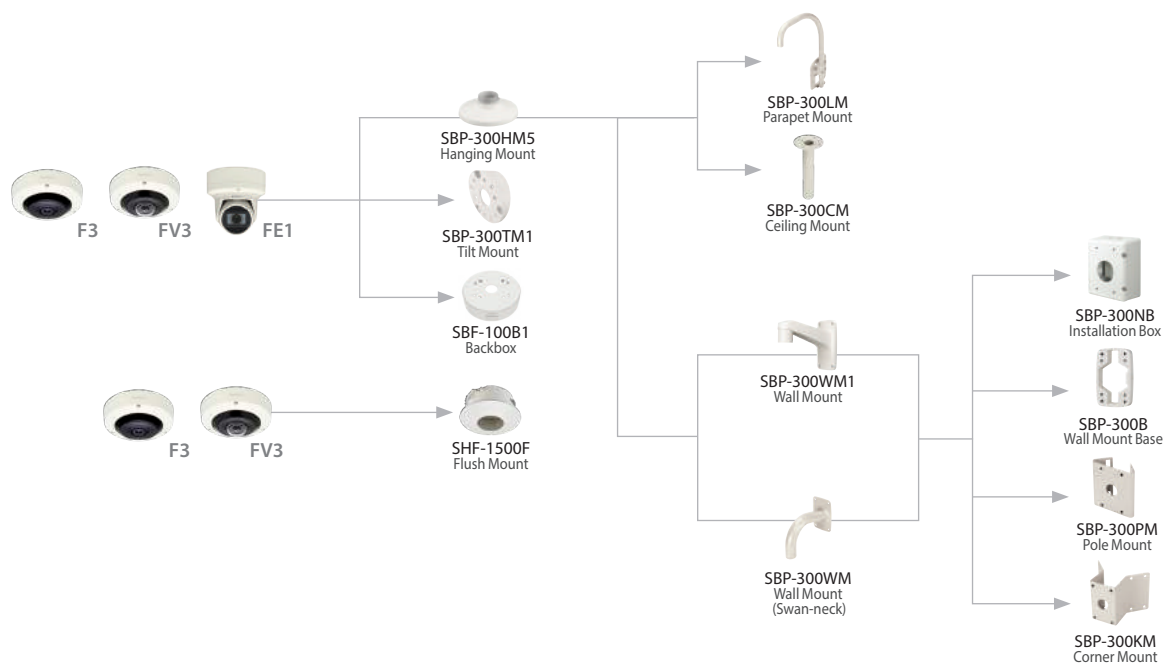
MULTI
SENSOR
ACC



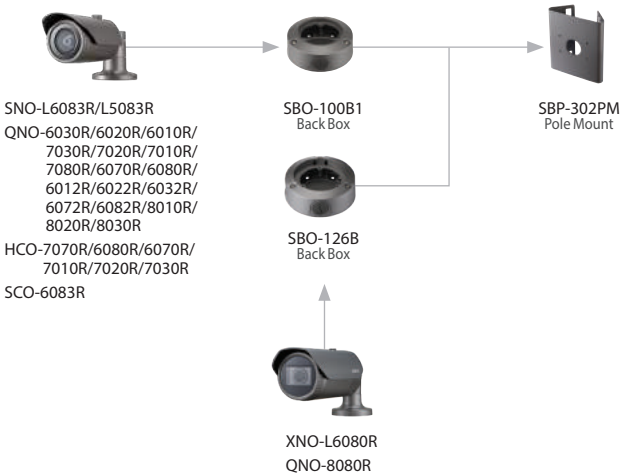
STAINLESS ACC



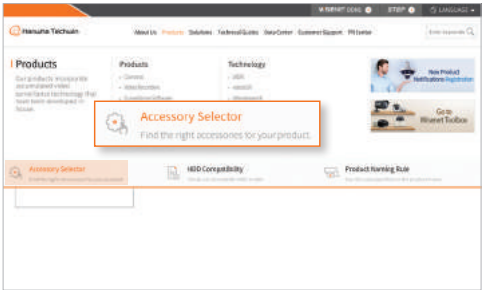
FISHEYE ACC



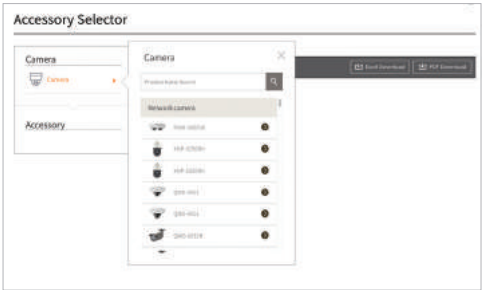
BULLET
ACC



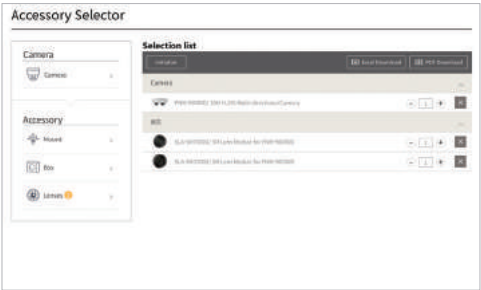
How to use Accessory Selector



Step1. click "Accessory Selector" on hanwha-techwin.com



Step2. Select camera you're interested in, then choose compatible mounts or lens including amount



Step3. Results you searched can be exported with PDF and excel format

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