

LINE

2nd-3rd Quarter
2020

UP



WISENET



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
Yeochun 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.

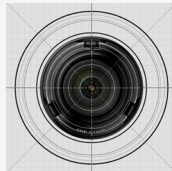
Core Technologies

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.



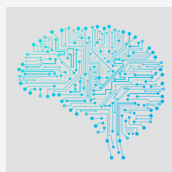
02. SoC design technology

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.



7 Possibilities creating the new paradigm

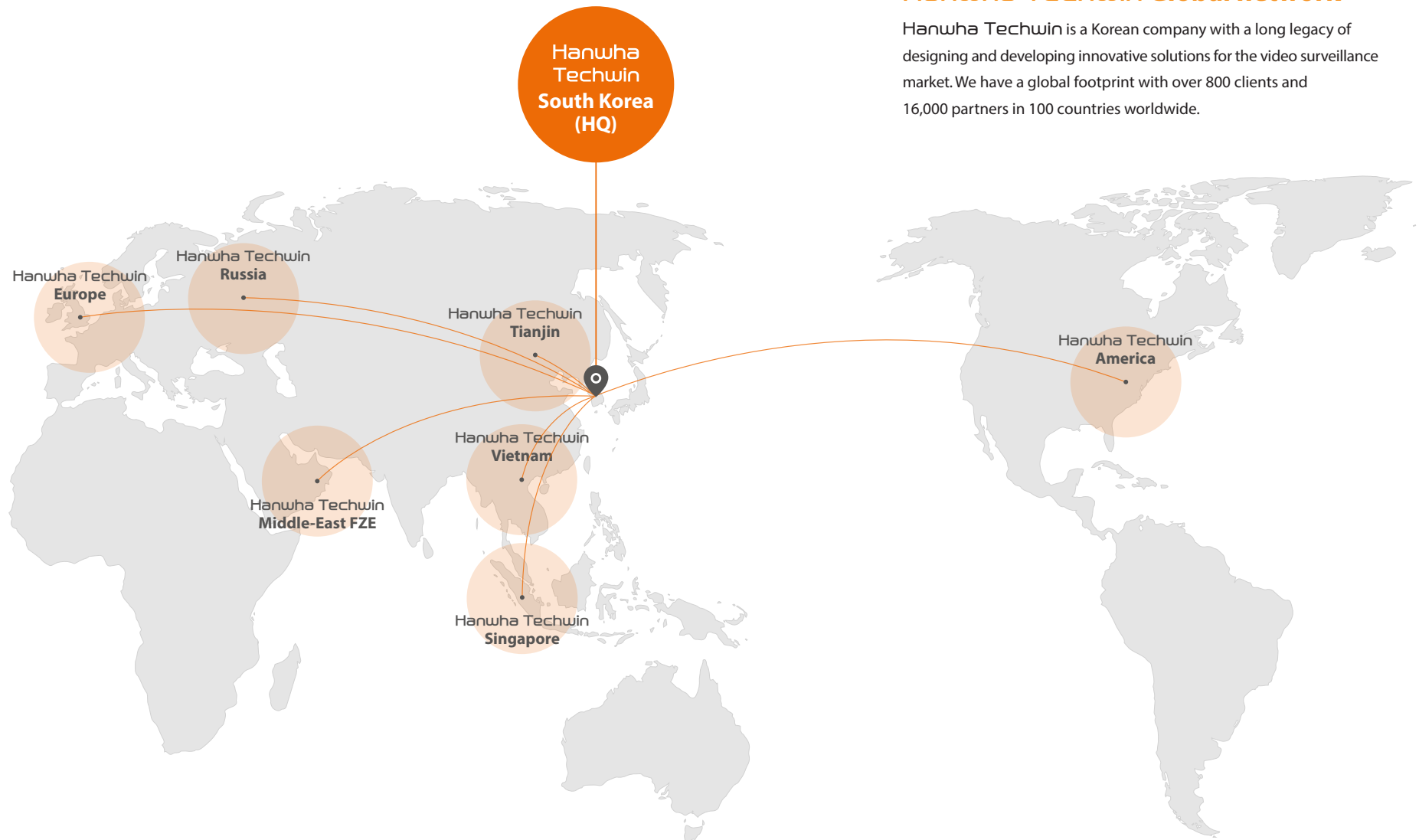
- Cybersecurity
- New WDR technology for even clearer images in variable lighting
- Enhanced low-light performance
- Improved Lens Distortion Correction
- Easy installation with the modular product design
- All new PTZ - AI based Targeted Object Auto Tracking
- Enhanced operational efficiency with AI-based object detection



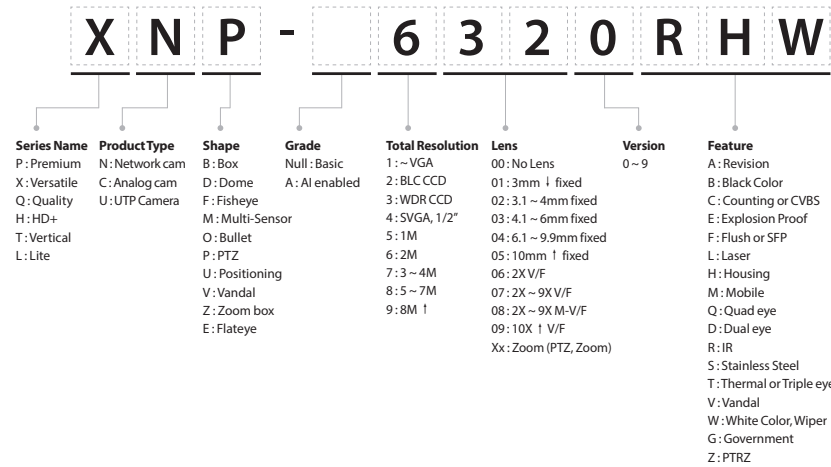
**30 years of Innovations &
7 Possibilities of Tomorrow**

Hanwha Techwin Global network

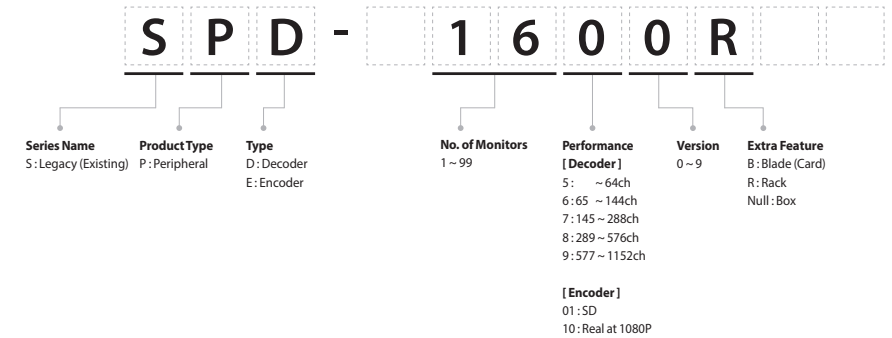
Hanwha Techwin is a Korean company with a long legacy of designing and developing innovative solutions for the video surveillance market. We have a global footprint with over 800 clients and 16,000 partners in 100 countries worldwide.



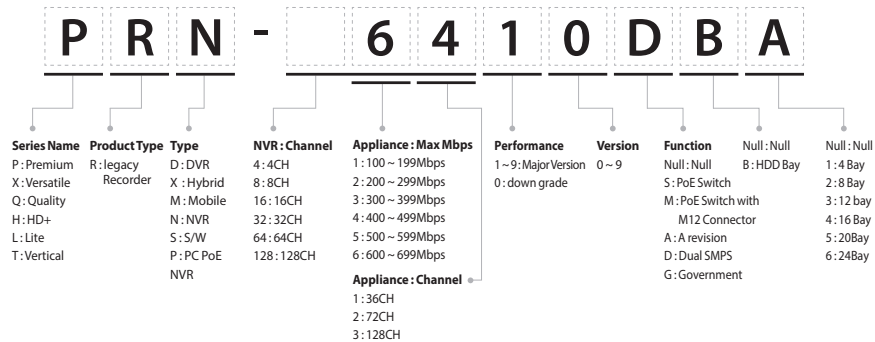
Camera



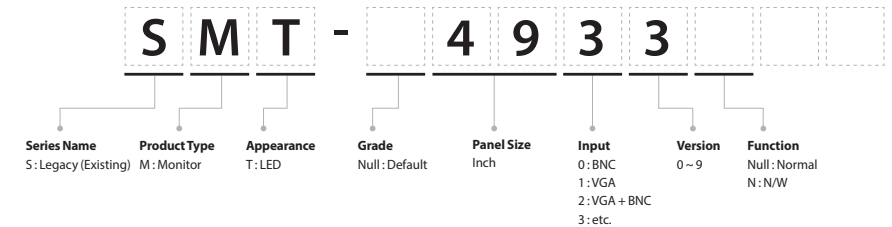
Decoder/Encoder



Recorder



Monitor



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Wisenet Q series	39	Wisenet HD+ series	69				
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Wisenet P_{series} AI Camera & NVR

Precise Object Detection & Classification with AI

Person

Face

Vehicle

License plate

Equipped with a powerful artificial intelligence (AI) engine that detects and classifies people and vehicles in real time, Wisenet P series AI cameras are designed to accurately capture the unique attributes of objects such as faces and license plates, whilst reducing false alarms caused by waving trees, video noise, and even shadows. It enables operators to quickly and efficiently search for specific events or objects with defined attributes.



AI Camera Series 4K

PNO-A9081R, PNV-A9081R,
PND-A9081RV/A9081RF,
PNB-A9001

* See more at P30



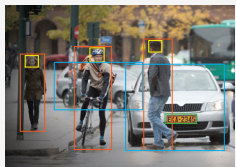
AI NVR Series

PRN-6410DB4/6410B4,
PRN-3210B4

* See more at P54

Wisenet AI Camera

Detect and classify objects real-time

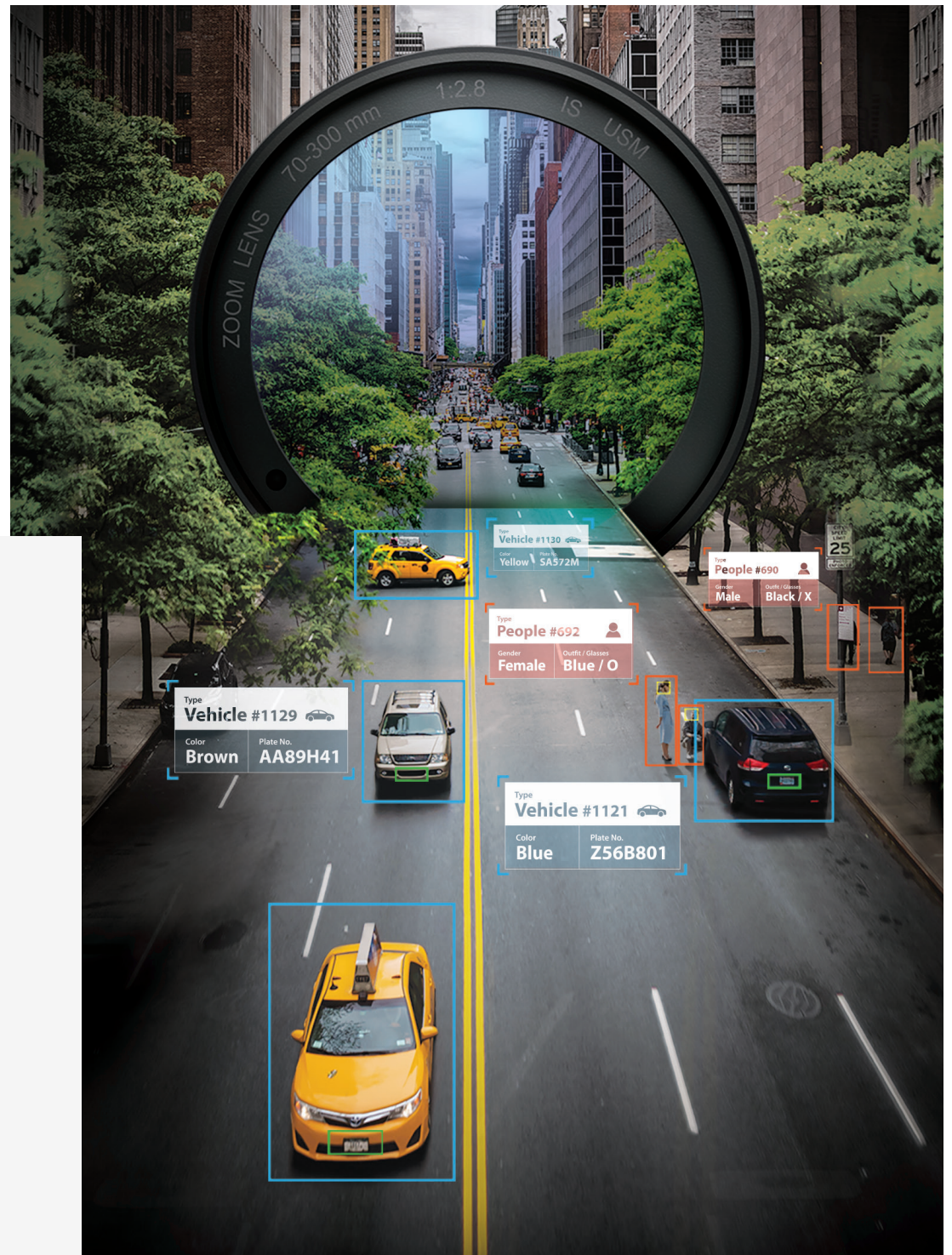
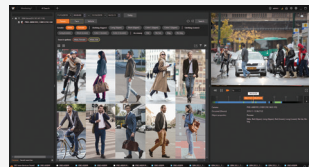


Attributes,
BestShot

* Person, face, vehicle, license plate

Wisenet AI Search

Quickly search based on attributes



**XNO-9082R**

Wisenet7 4K IR Bullet Camera

**XNV-9082R**

Wisenet7 4K IR Vandal Dome Camera

**XND-9082RF**

Wisenet7 4K IR Flush Mount Dome Camera

**XND-9082RV**

Wisenet7 4K IR Dome Camera

**XNB-9002**

Wisenet7 4K Box Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0.005Lux
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 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B
Focal Length	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	-
Angular Field of View	H: 114° (Wide) ~ 40.2° (Tele) / V: 62.0° (Wide) ~ 22.5° (Tele) / D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) / V: 62.0° (Wide) ~ 22.5° (Tele) / D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) / V: 62.0° (Wide) ~ 22.5° (Tele) / D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) / V: 62.0° (Wide) ~ 22.5° (Tele) / D: 133.0° (Wide) ~ 46.3° (Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	None
IR Viewable Length	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	None
Day & Night	Auto (ICR)/Color/BW/External/Schedule	Auto (ICR)/Color/BW/External/Schedule	Auto (ICR)/Color/BW/External/Schedule	Auto (ICR)/Color/BW/External/Schedule	Auto (ICR)/Color/BW/External/Schedule
Wide Dynamic Range	extreme WDR	extreme WDR	extreme WDR	extreme WDR	extreme WDR
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 Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection
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	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports
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/Built-in mic) / Line out	Selectable (mic in/line in/Built-in mic) Supply voltage: 2.5VDC (4mA), Input impedance: 2K Ohm
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	4K / 30fps	4K / 30fps	4K / 30fps	4K / 30fps	4K / 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	-50°C~+60°C (-58°F~+140°F) / Less than 95% RH(non condensing) * Start up should be done at above -30°C	-50°C~+60°C (-58°F~+140°F) / Less than 95% RH (non condensing) * Start up should be done at above -30°C	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 95% RH (non condensing)	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 95% RH (non condensing)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH (non condensing)
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, Plenum rate, IK10	IP52, IK10	-
Power Consumption	PoE: typ 10.5W, max 12.95W 12VDC: typ 9.4W, max 12.5W 24VAC: typ 11.2W, max 14.5W	PoE: typ 10.7W, max 12.95W 12VDC: typ 9.0W, max 11.5W 24VAC: typ 11.0W, max 13.5W	PoE: typ 10.7W, max 12.95W 12VDC: typ 9.0W, max 11.5W	PoE: typ 10.7W, max 12.95W 12VDC: typ 9.0W, max 11.5W	PoE: typ 8.2W, Max 12.95W 12VDC: typ 7.5W, Max 11.5W 24VAC: typ 8.9W, Max 13.5W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.85" x 14.51") 2.2kg (4.85lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.18lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95kg (4.29lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.52lb)	W81 x D165 x H67mm (W3.19" x D6.48" x H2.64") 0.88kg (1.94lb)
Additional Features	Wisenet7 4K Camera	Wisenet7 4K Camera	Wisenet7 4K Camera	Wisenet7 4K Camera	Wisenet7 4K Camera

**XNO-8082R**

Wisenet7 6MP IR Bullet Camera

**XNV-8082R**

Wisenet7 6MP IR Vandal Dome Camera

**XND-8082RF**

Wisenet7 6MP IR Flush Mount Dome Camera

**XND-8082RV**

Wisenet7 6MP IR Dome Camera

**XNB-8002**

Wisenet7 6MP IR Box Camera

	XNO-8082R	XNV-8082R	XND-8082RF	XND-8082RV	XNB-8002
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0.005Lux
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 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B
Focal Length	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	-
Angular Field of View	H: 114° (Wide) ~ 40.2° (Tele) / V: 62.0° (Wide) ~ 22.5° (Tele) / D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) / V: 62.0° (Wide) ~ 22.5° (Tele) / D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) / V: 62.0° (Wide) ~ 22.5° (Tele) / D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) / V: 62.0° (Wide) ~ 22.5° (Tele) / D: 133.0° (Wide) ~ 46.3° (Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	None
IR Viewable Length	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	None
Day & Night	Auto (ICR)/Color/BW/External/Schedule	Auto (ICR)/Color/BW/External/Schedule	Auto (ICR)/Color/BW/External/Schedule	Auto (ICR)/Color/BW/External/Schedule	Auto (ICR)/Color/BW/External/Schedule
Wide Dynamic Range	extreme WDR	extreme WDR	extreme WDR	extreme WDR	extreme WDR
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 Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection
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	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports
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/Built-in mic) / 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	6MP / 30fps	6MP / 30fps	6MP / 30fps	6MP / 30fps	6MP / 30fps
WiseStream	Manual (Sea area), 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	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 95% RH (non condensing) * Start up should be done at above -30°C	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 95% RH (non condensing) * Start up should be done at above -30°C	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 95% RH (non condensing)	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 95% RH (non condensing)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH (non condensing)
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, Plenum rate, IK10	IP52, IK10	-
Power Consumption	PoE: typ 10.5W, max 12.95W 12VDC: typ 9.4W, max 12.5W 24VAC: typ 11.2W, max 14.5W	PoE: typ 10.7W, max 12.95W 12VDC: typ 9.0W, max 11.5W 24VAC: typ 11.0W, max 13.5W	PoE: typ 10.7W, max 12.95W 12VDC: typ 9.0W, max 11.5W	PoE: typ 10.7W, max 12.95W 12VDC: typ 9.0W, max 11.5W	PoE: typ 8.2W, Max 12.95W 12VDC: typ 7.5W, Max 11.5W 24VAC: typ 8.9W, Max 13.5W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.85" x 14.51") 2.2kg (4.85lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.18lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95kg (4.29lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.52lb)	W81 x D165 x H67mm (W3.19" x D6.48" x H2.64") 0.88kg (1.76lb)
Additional Features	Wisenet7 6MP Camera	Wisenet7 6MP Camera	Wisenet7 6MP Camera	Wisenet7 6MP Camera	Wisenet7 6MP Camera

**XNV-8081RE**

5MP IR Vandal Dome Camera

**XND-8081REV**

5MP IR Dome Camera

**XNV-6081RE**

2MP IR Vandal Dome Camera

**XND-6081REV**

2MP IR DOME CAMERA

**XND-8081VZ**

5MP Dome Camera

Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.8" CMOS
Min. Illumination	Color: 0.07Lux (F1.3, 1/30sec) BW: 0Lux (IR LED)	Color: 0.07Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.015Lux (F1.4, 1/30sec) BW: 0Lux (IR LED)	Color: 0.015Lux (F1.4, 1/30sec) BW: 0Lux (IR LED)	Color: 0.07Lux (F1.2) B/W: 0.007Lux (F1.2)
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	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	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.6 ~ 9.4mm (2.6x) motorized varifocal
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: 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: 102.5° (Wide) ~ 38.7° (Tele) / V: 74.2° (Wide) ~ 29.0° (Tele) / D: 135.5° (Wide) ~ 48.6° (Tele)
Pan / Tilt / Rotate	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	±175° / 0° ~ 85° / ±175° (Remote)
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	50m (164.04ft)	50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	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 (built-in gyro sensor)	Support (built-in gyro sensor)	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 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	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), 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	5MP / 30fps	5MP / 30fps	2MP / 60fps	2MP / 60fps	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 (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, Wisenet open platform
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH * Start up should be done at above -35°C	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 90% RH	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH * Start up should be done at above -35°C	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 90% RH	-25°C ~ +60°C (-13°F ~ +140°F)
Certification	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, IK10
Power Consumption	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	PoE: Max 11W 12VDC: Max 9W
Dimensions (WxHxD) / Weight	Ø180 x 125mm (Ø7.09" x 4.92") 1.75kg (3.86lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.75kg (3.86lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)
Additional Features	PoE Extender Camera	PoE Extender Camera	PoE Extender Camera	PoE Extender Camera	Modular structure, Motorized PTRZ, Anti dust

X PLUS

**XND-8081FZ**

5MP Flush Mount Dome Camera

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**XND-8081RV**

5MP IR Dome Camera

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**XND-8081RF**

5MP IR Flush Mount Dome Camera

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**XNV-8081Z**

5MP Vandal Dome Camera

X PLUS

**XNV-8081R**

5MP IR Vandal Dome Camera

	XND-8081FZ	XND-8081RV	XND-8081RF	XNV-8081Z	XNV-8081R
Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" 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: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Color: 0.07 Lux (F1.2) B/W: 0.007 Lux (F1.2)	Color: 0.07Lux (F1.3) BW: 0Lux (IR LED)
Video Output	Micro USB Type B	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
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	3.6~9.4mm(2.6x) motorized varifocal	3.9~9.4mm (2.4x) motorized varifocal
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: 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)
Pan / Tilt / Rotate	±175° / 0 ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	±175° / 0 ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°
IR Viewable Length	-	50m (164.04ft)	50m (164.04ft)	-	50m (164.04ft)
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	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	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	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) / 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/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-25°C ~ +60°C (-13°F ~ +140°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	IP52, Plenum rate	IP52, IK10	IP52, Plenum rate	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X
Power Consumption	PoE: Max 11W 12VDC: Max 9W	PoE: Max 12.95W 12VDC: Max 11.7W	PoE: Max 12.95W 12VDC: Max 11.7W	PoE: Max 12.3W 12VDC: Max 10W 24VAC: Max 12.3W	PoE: Max 12.95W 12VDC: Max 11.7W 24VAC: Max 14.9W
Dimensions (WxHxD) / Weight	Ø205 x 155mm (Ø8.07" x 6.10") 1.85kg (4.08lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)
Additional Features	Modular structure, Motorized PTRZ, Anti dust	Modular structure, Anti dust	Modular structure, Anti dust	Modular structure, Motorized PTRZ	Modular structure

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XND-6081V
2MP Dome Camera

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XND-6081F
2MP Flush Mount Dome Camera

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XND-6081VZ
2MP Dome Camera

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XND-6081FZ
2MP Flush Mount Dome Camera

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XND-6081RV
2MP IR Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	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)	Color: 0.015 Lux (F1.4) B/W: 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p, 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	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	2.8 ~ 12mm (4.3x) 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: 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° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	±175° / 0° ~ 85° / ±175° (Remote)	±175° / 0° ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°
IR Viewable Length	-	-	-	-	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	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 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	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), Built-in mic / 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	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	-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)	-25°C ~ +60°C (-13°F ~ +140°F)
Certification	IP52, IK10	IP52, Plenum rate	IP52, IK10	IP52, Plenum rate	IP52, IK10
Power Consumption	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	PoE: Max 12.95W 12VDC: Max 10.8W
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)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.85kg (4.08lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)
Additional Features	Modular structure, Anti dust	Modular structure, Anti dust	Modular structure, Motorized PTRZ, Anti dust	Modular structure, Motorized PTRZ, Anti dust	Modular design, Anti dust

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XND-6081RF

2MP Flush Mount IR Dome Camera



XNV-6081Z

2MP Vandal Dome Camera



XNV-6081R

2MP IR Vandal Dome Camera



XNV-6081

2MP Vandal Dome Camera



XNB-8000

5MP Box Camera

	XND-6081RF	XNV-6081Z	XNV-6081R	XNV-6081	XNB-8000
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.8" CMOS
Min. Illumination	Color : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	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)	Color : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)
Video Output	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	CVBS 1.0 Vp-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	-
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)	-
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	±175° / 0° ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	-
IR Viewable Length	50m (164.04ft)	-	50m (164.04ft)	-	-
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 (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	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 Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	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	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), 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	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/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°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)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP52, Plenum rate	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X	-
Power Consumption	PoE : Max 12.95W 12VDC : Max 10.8W	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	PoE : Max 8.50W 12VDC : Max 7.50W 24VAC : Max 8.50W
Dimensions (WxHxD) / Weight	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.45kg (3.20lb)	Ø73.1 x 66.6 x 147.8mm (Ø2.88" x 2.62" x 5.82") 420g (0.93lb)
Additional Features	Modular design, Anti dust	Modular structure, Motorized PTRZ	Modular structure	Modular structure	Handover, Hallway View



XNO-8080R
5MP IR Bullet Camera



XNO-8020R/8030R/8040R
5MP IR Bullet 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" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Min. Illumination	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 (F1.3) 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	3.7 ~ 9.4mm (2.5x) motorized varifocal	3.7mm fixed (XNO-8020R) 4.6mm fixed (XNO-8030R) 7.0mm fixed (XNO-8040R)	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 : 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 : 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° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0°~355°/0°~47°/0°~353°
IR Viewable Length	50m (164.04ft)	30m (98.43ft)	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	Support	Support	Support (Built-in Gyro sensor)	Support
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	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	-
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), 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	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C	-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	IP67, IP66, NEMA4X, IK10	IP67/IP66/NEMA4X, IK10	IK08	IK08	-
Power Consumption	PoE : Max 12.95W 12VDC : Max 12.5W 24VAC : Max 14.5W	PoE : Max 10.3W 12VDC : Max 9.3W	PoE : Max 10W 12VDC : Max 9W	PoE : Max 9W 12VDC : Max 8W	PoE : Max 4.7W
Dimensions (WxHxD) / Weight	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)	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	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

**XNV-8080R**

5MP IR Vandal Dome Camera

**XNV-8080RS**

5MP Stainless IR Vandal Dome Camera

**XNV-8020R/8030R/8040R**

5MP IR Vandal Dome Camera

**XNF-9010RV/9010RVM**

4K IR Fisheye Camera

**XNF-8010R/8010RV/8010RVM**

6MP IR Fisheye Camera

	XNV-8080R 5MP IR Vandal Dome Camera	XNV-8080RS 5MP Stainless IR Vandal Dome Camera	XNV-8020R/8030R/8040R 5MP IR Vandal Dome Camera	XNF-9010RV/9010RVM 4K IR Fisheye Camera	XNF-8010R/8010RV/8010RVM 6MP IR Fisheye Camera
Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/2.3" CMOS	1/1.8" 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 : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.39 Lux (F2.2, 1/30sec) B/W : 0Lux (IR LED on)	Color : 0.1Lux (F1.6) B/W : 0Lux (IR LED on)
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 : 1.0 Vp-p, Micro USB Type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	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)	1.08mm fixed focal	1.6mm 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 : 97.5°/V : 71.9°/ D : 126.2° (XNV-8020R) H : 77.9°/V : 57.9°/ D : 98.7° (XNV-8030R) H : 50.7°/V : 37.8°/ D : 63.8° (XNV-8040R)	H : 187° / V : 187° / D : 187°	H : 192° / V : 192° / D : 192°
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	None	-
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)	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	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support	Support (Built-in Gyro sensor)	None	
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	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	2 configured I / O	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), 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	5MP / 30fps	5MP / 30fps	5MP / 30fps	4K / 30fps	2048 x 2048 / 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 2slot 2TB	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, SUNAPI Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +131°F) / Less than 95% RH	-10°C ~ +55°C (+14°F ~ +131°F) (XNF-8010R) -40°C ~ +55°C (-40°F ~ +131°F) (XNF-8010RV/8010RVM)
Certification	IP67, IP66, NEMA4X, IK10	IP66, IK10+, NEMA4X	IP66, IP67, IK10	IP66, IK10, NEMA4X (XNF-9010RV/9010RVM) EN50155 class T3, EN-45545-2 NEPA 130, BSS 7239 (XNF-9010RVM)	IP66, IK10 (XNF-8010RV/8010RVM)
Power Consumption	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	PoE: Max 12.95W 12VDC: Max 12W	PoE : Max 12W, 12VDC : Max 11W (XNF-8010R) PoE : Max 12.95W, 12VDC : Max 12W (XNF-8010RV/8010RVM)
Dimensions (WxHxD) / Weight	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)	Ø160 x 72mm (Ø6.38" x 2.83") 800g (1.76lb)	Ø146 x 54.8mm (Ø5.75" x 2.16") 730g (1.61lb) (XNF-8010R) Ø146 x 65.8mm (Ø5.75" x 2.59") 785g (1.73lb) (XNF-8010RV) 790g (1.74lb) (XNF-8010RVM)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarping	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarping

**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	1/2.8"CMOS	1/2.8" CMOS	1/2" CMOS	1/2.8" CMOS
Min. Illumination	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 1.0Vpp, Micro USB type B
Focal Length	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (32x) zoom	-	-
Angular Field of View	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	-	-
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	Auto (ICR)	Auto(ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	120dB	150dB	150dB
Digital Noise Reduction	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 Shock detection	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	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), 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
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	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	-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 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	96 x 76 x 143.5mm (3.78" x 2.99" x 5.65") 578g (1.274lb)	72 x 63.9 x 135.4mm (2.83" x 2.52" x 5.33") 480g (1.06lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)
Additional Features	Defog, SFP Slot	Defog	Handover, Hallway View	Handover, Hallway View

Remote Head Cam
& Lens modules

NEW

**PNM-9000QB**

4K Remote Head Camera

XNB-6001

2MP Remote Head Camera

SLA-T4680/T4680V

2MP lens for PNM-9000QB, XNB-6001

SLA-T2480/T2480V

2MP lens for PNM-9000QB, XNB-6001

SLA-T1080F

2MP lens for PNM-9000QB, XNB-6001

	PNM-9000QB 4K Remote Head Camera	XNB-6001 2MP Remote Head Camera	SLA-T4680/T4680V 2MP lens for PNM-9000QB, XNB-6001	SLA-T2480/T2480V 2MP lens for PNM-9000QB, XNB-6001	SLA-T1080F 2MP lens for PNM-9000QB, XNB-6001
Imaging Device	-	-	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	-	-	Color : 0.06Lux (F2.5) B/W : 0.06Lux (F2.5)	Color : 0.45Lux (F2.0) B/W : 0.45Lux (F2.0)	Color : 0.03Lux (F1.6)
Video Output	HDMI (1920x1080, Quad view support)	CVBS 1.0Vp-p, Micro USB type B	-	-	-
Focal Length	-	-	4.6mm Pinhole	2.4mm fixed	1.6mm fisheye
Angular Field of View	-	-	H : 73° / V : 39° / D : 85°	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)
Wide Dynamic Range	120dB	120dB	-	-	-
Digital Noise Reduction	SSNRV	SSNRV	-	-	-
Digital Image Stabilization	Support	Support	-	-	-
Analytics	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Intelligent analytics Audio detection	-	-	-
Business Intelligence	-	People counting, Queue management, Heatmap	-	-	-
Alarm I/O	1 / 1	1 / 1	-	-	-
Audio I/O	Line in / Line out	Selectable (mic in/line in) / Line out	-	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	4K / 30fps	2MP / 60fps	-	-	-
WiseStream	WiseStream II	WiseStream II	-	-	-
Streaming	Up to 10 profiles	Up to 10 Profiles	-	-	-
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	-	-	-
Operating Temperature	-10°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH (0~40)	-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 25.5W	PoE : Max 6W 12VDC : Max 6.5W	-	-	-
Dimensions (WxHxD) / Weight	180 x 33 x 146mm (7.08" x 1.29" x 5.74") 800g (1.76lb)	131.1 x 28 x 86mm (5.16" x 1.10" x 3.39") 245g (0.54lb)	Ø24 x 42mm(Ø0.94" x 1.65") (Lens) 8m (314.96") (Cable)310g (0.68lb) (SLA-T4680) 30 x 20.2 x 45mm(1.18" x 0.80" x 1.77") (Lens) 8m (314.96") (Cable)321g (0.71lb) (SLA-T4680V)	Ø24 x 49.8mm(Ø0.94" x 1.96") (Lens) 8m (314.96") (Cable)318g (0.70lb) (SLA-T2480) 30 x 27.9 x 45mm(1.18" x 0.10" x 1.77") (Lens) 8m (314.96") (Cable)328g (0.72lb) (SLA-T2480V)	Ø35 x 68.9mm (Ø1.38" x 2.71") (Lens) 8m (314.96") (Cable) 321g (0.71lb)
Additional Features	Defog	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" CMOS	1/2" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (4.81lb)	Ø91.0 x 388.6mm (Ø3.58" x 15.30") 2.35Kg (5.18lb)	Ø91.0 x 368.6mm (Ø3.58" x 14.51") 2.18Kg (4.81lb)	Ø91 x 322.9mm (Ø3.58" x 12.71") 1.29Kg (4.25lb)	Ø70 x 301.5mm (Ø2.76" x 11.87") (XNO-6010R) Ø70 x 296mm (Ø2.76" x 11.65") (XNO-6020R) 1.22Kg (2.69lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View



XND-6085/6085V
2MP Dome Camera (extraLUX)



XND-6080/6080V
2MP Dome Camera



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



XND-L6080R/L6080RV
2MP IR Dome Camera



XND-L6080V
2MP Dome Camera

	XND-6085/6085V 2MP Dome Camera (extraLUX)	XND-6080/6080V 2MP Dome Camera	XND-6080R/6080RV 2MP IR Dome Camera	XND-L6080R/L6080RV 2MP IR Dome Camera	XND-L6080V 2MP Dome Camera
Imaging Device	1/2" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0.01Lux (F1.6)
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	4.1~16.4mm (Optical 4x)	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 : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)
Pan / Tilt / Rotate	±175° / ±73° / ±175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	30m (98.43ft)	30m (98.42ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	150dB	150dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	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), 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 5 Profiles	Up to 5 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, 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 -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IK08	IK08	IK08	IK08	IK08
Power Consumption	PoE : Max 10.2W 12VDC : Max 8.6W	PoE : Max 6.5W 12VDC : Max 6W	PoE : Max 10W 12VDC : Max 9W	PoE : Max 8W	PoE : Max 6W
Dimensions (WxHxD) / Weight	Ø160.0 x 140.0mm (Ø6.30" x 5.51") 1.10 kg (2.43lb) (XND-6085) 1.25 kg (2.76lb) (XND-6085V)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34lb) (XND-6080) 714g (1.57lb) (XND-6080V)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 624g (1.38lb) (XND-6080R) 724g (1.60lb) (XND-6080RV)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 580g (1.28lb) (XND-L6080R) 690g (1.52lb) (XND-L6080RV)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 675g (1.49lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Defog, Hallway View	Defog, Hallway View



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



XNV-6120RS
2MP Stainless IR Vandal Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	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)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	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	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4mm fixed	2.8mm fixed	2.4mm fixed	5.2 ~ 62.4mm (Optical 12x)	5.2 ~ 62.4mm (Optical 12x)
Angular Field of View	H : 88.6° / V : 47.5° / D : 104.8°	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°	H : 54.58° (Wide) ~ 5.30° (Tele) / V : 32.19° (Wide) ~ 3.00° (Tele) / D : 61.40° (Wide) ~ 6.06° (Tele)	H : 54.6° (Wide) ~ 5.30° (Tele) / V : 32.2° (Wide) ~ 3.00° (Tele) / D : 61.40° (Wide) ~ 6.06° (Tele)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 75° / 0° ~ 355°	0° ~ 354° / 0° ~ 75° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	-	-	70m (229.66ft) (XNV-6120R)	70m (229.66ft)
Day & Night	Auto (ICR)	Auto (Electrical)	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	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	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
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	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	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	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, 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)	-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)
Certification	IK08	-	IK08	IP67, IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10+
Power Consumption	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)	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W
Dimensions (WxHxD) / Weight	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84lb)	Ø98.9 x 129mm (Ø3.89" x 5.08") 275g (0.61lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34lb)	Ø160.0 x 128.5mm (Ø6.30" x 5.06") 985g (2.17lb) (XNV-6120) 995g (2.19lb) (XNV-6120R)	Ø162 x 134.5mm (Ø6.38" x 5.3") 2.7Kg (5.95lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

**XNV-6085**

2MP Vandal Dome Camera (extraLUX)

**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-6085 2MP Vandal Dome Camera (extraLUX)	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
Imaging Device	1/2" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.004Lux (F0.94) B/W : 0.0004Lux (F0.94)	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)
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	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	3.2 ~ 10mm (3.1x) 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 : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)
Pan / Tilt / Rotate	±175° / ±73° / ±175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	50m (164.04ft)	50m (164.04ft)	-
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	Support	Support	Support
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	Intelligent analytics
Business Intelligence	-	-	-	-	-
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 10 Profiles	Up to 5 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, 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)	-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, NEMA 4X, IK10	IP67, IP66, NEMA4X, IK10	IP67/IP66/NEMA4X, IK10	IP66, NEMA4X, IK10+	IP66, IK10
Power Consumption	PoE : Max 12.1W 12VDC : Max 11.1W 24VAC : Max 13.5W	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
Dimensions (WxHxD) / Weight	Ø160.0 x 140.0mm (Ø6.30" x 5.51") 1.40kg (3.09lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 985g (2.17lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 995g (2.19lb)	Ø160 x 120.5mm (Ø6.38" x 4.74") 2.8kg (6.17lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 940g (2.1lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

**XNV-L6080R**

2MP IR Vandal Dome Camera

**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

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	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)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB Type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB Type B	Micro USB type B
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	3.6mm fixed	4mm fixed	2.8mm fixed	2.4mm 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 : 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°
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / 0° ~ 67° / ±90°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / ±10° / ±90°	±5° / 0° ~ 67° / ±90°
IR Viewable Length	30m (98.43ft)	15m (49.21ft)	30m (98.43ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent 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)
Business Intelligence	-	-	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 5 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	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, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10, NEMA4X	IP67, IP66, IK10	IP67, IP6K9K, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE : Max 11W	PoE : Max 6.70W	PoE : Max 9W 12V DC : Max 8W	PoE : Max 7.20W	PoE : Max 6.50W
Dimensions (WxHxD) / Weight	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 940g (2.07lb)	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)	103.7 x 72.3 x 126.8mm (4.08" x 2.85" x 4.99") 478g (1.04lb)	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65lb)
Additional Features	Handover, Hallway View	M12 Connector (XNV-6022RM) Handover, Hallway View	Handover, Hallway View	M12 Connector Handover, Hallway View	M12 Connector (XNV-6012M) Handover, Hallway View

**XNV-6011**

2MP Vandal Dome Camera

**XNV-6010**

2MP Vandal Dome Camera



NEW

XNP-9300RW

Wisenet7 8MP 30x IR PTZ Camera



NEW

XNP-8300RW

Wisenet7 6MP 30x IR PTZ Camera



NEW

XNP-6400RW

Wisenet7 2MP 40x IR PTZ Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 : 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color : 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color : 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	None	None	None
Focal Length	2.8mm fixed	2.4mm fixed	5~150mm (30x) zoom	5~150mm (30x) zoom	4.25~170mm (40x) zoom
Angular Field of View	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°	H: 57.42° (Wide) ~ 2.19° (Tele) / V: 33.54° (Wide) ~ 1.25° (Tele)	H: 57.42° (Wide) ~ 2.19° (Tele) / V: 33.54° (Wide) ~ 1.25° (Tele)	H: 65.66° (Wide) ~ 1.88° (Tele) / V: 39.40° (Wide) ~ 1.09° (Tele)
Pan / Tilt / Rotate	0° ~ 353° / 0° ~ 59° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / -20° ~ 90° / -	360° Endless / -20° ~ 90° / -	360° Endless / -5° ~ 90° / -
IR Viewable Length	-	-	200m (656.17ft)	200m (656.17ft)	300m (984.25ft)
Day & Night	Auto (Electrical)	Auto (ICR)	Auto(ICR)/Color/BW/External/Schedule	Auto(ICR)/Color/BW/External/Schedule	Auto(ICR)/Color/BW/External/Schedule
Wide Dynamic Range	150dB	150dB	extreme WDR	extreme WDR	extreme WDR
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support	Support (built-in gyro sensor)	Support (built-in gyro sensor)	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	-	-	-
Alarm I/O	-	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	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	4K / 30fps	6MP / 30fps	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	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 (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	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 95% RH (non condensing)	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 95% RH (non condensing)	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 95% RH (non condensing)
Certification	IP66, IK10, NEMA4X	IP67, IP66, IK10	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE : Max 6.50W	PoE : Max 6W 12V DC : Max 5.5W	HPoE : Max 35W, Typical 20W	HPoE : Max 35W, Typical 20W	HPoE : Max 35W, Typical 20W
Dimensions (WxHxD) / Weight	Ø112.8 x 63.7mm (Ø4.44" x 2.51") 420g (0.93lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 625g (1.38lb)	Ø185.0 x 319.0mm (Ø7.28" x 12.55") 5.5Kg (12.12lb)	Ø185.0 x 319.0mm (Ø7.28" x 12.55") 5.5Kg (12.12lb)	Ø185.0 x 319.0mm (Ø7.28" x 12.55") 5.5Kg (12.12lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	New design, 1 Terminal & Cable, Upgraded preset accuracy, built-in wiper	New design, 1 Terminal & Cable, Upgraded preset accuracy, built-in wiper	New design, 1 Terminal & Cable, Upgraded preset accuracy, built-in wiper



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



XNP-6320HS
2MP Stainless 32x PTZ Camera

Imaging Device	1/2.8" CMOS	1/1.9" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	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)	Color : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS: 1.0 Vp-p	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4.75 ~ 261.4mm (55x) zoom	6 ~ 222mm (37x) zoom	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (32x) zoom
Angular Field of View	H : 58.6° (Wide) ~ 1.23° (Tele) / V : 34.8° (Wide) ~ 0.71° (Tele)	H : 59.3° (Wide) ~ 1.9° (Tele) / V : 35.8° (Wide) ~ 1.1° (Tele)	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)
Pan / Tilt / Rotate	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 210° (-15° ~ 195°) / -	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	120dB	120dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNR	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 Shock detection	Intelligent analytics Audio detection	Intelligent analytics Audio detection, Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification Shock detection
Business Intelligence	-	-	-	-	-
Alarm I/O	4 / 2	4 / 2	4 / 1	4 / 2	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	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 3 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDH C/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, 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 ~ +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)	PoE+ : -35°C ~ +55°C (-31°F ~ +131°F) 24VAC : -50°C ~ +55°C (-58°F ~ +131°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10 (XNP-6320H) IK10 (With SHP-3701H) (XNP-6320)	IP67, IP66, NEMA4X, IK10
Power Consumption	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)	24VAC : Max 65W
Dimensions (WxHxD) / Weight	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 6.8Kg (14.99lb)	Ø220 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28lb) (XNP-6320H) Ø152 x 218mm (Ø5.98" x 8.58") 1.7Kg (3.75lb) (XNP-6320)	Ø227 x 296mm (Ø8.94" x 11.65") 5.3Kg (11.69lb)
Additional Features	Defog, Auto tracking	Defog, Auto tracking	Defog, Auto tracking, Direction indicator	Defog, Auto tracking	Defog, Auto tracking



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" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	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	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	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) ~ 2.84° (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 / 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)
Wide Dynamic Range	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	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	Intelligent analytics Audio detection, Sound classification
Business Intelligence	-	-	-
Alarm I/O	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
Video Compression	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
WiseStream	WiseStream II	WiseStream II	WiseStream II
Streaming	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, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	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	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	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	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, 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

Imaging Device	1/1.7" CMOS	1/1.7" CMOS	1/1.7" CMOS	1/2.5" CMOS	1/1.7" 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 (3.09lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 990g (2.18lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65lb)	Ø146.0 x 63.4mm (Ø5.75" x 2.50") 805g (1.77lb) (PNF-9010R), 810g (1.79lb) (PNF-9010RV), 815g (1.8lb) (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" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" 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 (Ø3.58" x 14.51") (Without sunshield) 2.48Kg (5.47lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.90Kg (4.19lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.60Kg (3.53lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95Kg (4.30lb)	73.1 x 66.6 x 147.8mm (2.87" x 2.62" x 5.81") 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-9002VQ**

8MP/20MP 4CH Multi-directional Camera

**PNM-7002VD**

8MP 4CH 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-9002VQ	PNM-7002VD	PNM-9030V	PNM-9020V	PNM-9084RQZ
Imaging Device	-	-	1/2.8" 4CH	1/2.8" 4CH	1/2.8" 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)
Video Output	CVBS 1.0 Vp-p (Multi)	CVBS 1.0 Vp-p (Multi)	Micro USB Type B	-	-
Focal Length	-	-	4mm fixed	3.6mm fixed	3.2~10mm (3.1x) 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)
Pan / Tilt / Rotate	-	-	0° ~ 355° / 0° ~ 60° / -	0° ~ 355° / 0° ~ 60° / -	0~360° / 30~80° / 0~90°
IR Viewable Length	-	-	-	-	30m (98.42ft)
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	2MP 150dB, 5MP 120dB	150dB	120dB	-	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNR III	SSNRV
Digital Image Stabilization	Support	Support	-	-	Support
Analytics	Defocus detection, Directional detection, Face detection, Fog detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line	Defocus detection, Directional detection, Face detection, Fog detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection	Intelligent analytics Audio detection
Business Intelligence	-	-	Heatmap	Heatmap	-
Alarm I/O	-	-	1 / 1	1 / 1	1 / 1
Audio I/O	-	-	Line in / Line out	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, 2MP / 60fps	2MP / 60fps	15.5MP / 30fps	7.3MP / 30fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream	WiseStream II
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 5 or 3 profiles for each CH	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	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI, Wisenet Open Platform	ONVIF profile S/T, SUNAPI, Wisenet Open Platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH	-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)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10, NEMA4X
Power Consumption	Max 25.5W	Max 12.95W	PoE+ : Max 25.5W 12VDC : Max 21.0W	PoE+ : Max 25.5W - Heater on 12VDC : Max 21.0W - Heater on	Max 42W, typical 28W
Dimensions (WxHxD) / Weight	Ø253 x 130mm (Ø9.96" x 5.11") 3000g (6.61lb)	Ø160 x 73mm (Ø6.29" x 2.87") 840g (1.85lb)	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 (Ø12.4" x 5.74") 5.2kg (11.46lb)
Additional Features	Defog	Defog	Defog	Defog	Motorized PTRZ

**PNM-9085RQZ**

20MP IR PTRZ Multi-directional Camera

**PNM-9084QZ**

8MP Multi-directional Camera

**PNM-9081VQ**

20MP Multi-directional Camera

**PNM-9080VQ**

8MP Multi-directional Camera

	PNM-9085RQZ	PNM-9084QZ	PNM-9081VQ	PNM-9080VQ
Imaging Device	1/1.8" CH	1/2.8" 4CH	1/1.8" 4CH	1/2.8" 4CH
Min. Illumination	Color: 0.11lux (F1.6) BW: 0Lux (IR LED on)	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 1.0Vp-p	CVBS 1.0Vp-p
Focal Length	4.13~9.4mm (2.3x) motorized varifocal	3 ~ 6mm (2x) motorized varifocal	3 ~ 6mm (2x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal
Angular Field of View	H: 87.58° (Wide) ~ 37.34° (Tele) / V: 64.58° (Wide) ~ 28.04° (Tele) / D: 112.46° (Wide) ~ 46.85° (Tele)	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° / 35~80° / 0~90°	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	30m (98.42ft)	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection	Intelligent analytics Audio detection	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-
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	-	-
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	2MP / 60fps	5MP / 30fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	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	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/T, SUNAPI, Wisenet Open Platform	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)	-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, NEMA4X	IP66, IK10	IP66, IK10
Power Consumption	Max 45W, typical 32W	HPoE: Max 33W typical 20W	HPoE: Max 33.6W 12VDC: Max 28.8W	PoE+: Max 25.5W 12VDC: Max 21.6W
Dimensions (WxHxD) / Weight	Ø315 x 145.9mm (Ø12.4" x 5.74") 5.2Kg (11.46lb)	Ø251 x 116.5mm (Ø9.88" x 4.59") 3Kg (6.6lb)	Ø314 x 152mm (Ø12.36" x 5.98") 4.89kg (10.78lb)	Ø314 x 152mm (Ø12.36" x 5.98") 4.83kg (10.65lb)
Additional Features	Motorized PTRZ	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

Imaging Device	1/2.8" CMOS (PTZ)	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.05Lux (F1.6) B/W : 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 1.0 Vp-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	SSNRV	-	-	-	-
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 (16.1lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)
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" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)
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" CMOS	1/1.8" CMOS	1/1.8" 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 (6.7lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)
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" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)
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" CMOS	1/1.8" CMOS	1/1.8" 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 (2.76lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)
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" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (1.85lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06lb)
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" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (2.624lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø120.3 x 102.0mm (Ø4.74" x 4.02") 430g (0.948lb)
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" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (0.794lb)	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794lb)	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794lb)	Ø99 x 56mm (Ø3.9" x 2.2") 165g (0.364lb)	Ø99 x 56mm (Ø3.9" x 2.2") 165g (0.364lb)
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" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (1.543lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	73.8 x 66.6 x 136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View

**QNE-8021R**

5MP IR Flat-eye Camera

**QNE-8011R**

5MP IR Flat-eye Camera

**QNO-7080R**

4MP IR Bullet Camera

**QNO-7010R/7020R/7030R**

4MP IR Bullet Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/3" CMOS	1/3" 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 (1.422lb)	Ø125 x 87.35mm (Ø4.92" x 3.44") 645g (1.422lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 750g (1.65lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 730g (1.61lb)
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" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" 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 (0.78lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 680g (1.5lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08lb)	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

	QNO-6082R	QNO-6072R	QNO-6032R	QNO-6022R	QNO-6012R
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (1.984lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 730g (1.609lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 700g (1.543lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 700g (1.543lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 700g (1.543lb)
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

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (0.705lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 320g (0.705lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 255g (0.562lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 255g (0.562lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 255g (0.562lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



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

	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" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (0.320lb)	Ø99 x 56mm (Ø3.9" x 2.2") 145g (0.320lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 710g (1.565lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 710g (1.565lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)
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

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (1.124lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65lb)	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65lb)	73.8 x 66.6 x 136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)
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" CMOS	1/2.8" CMOS	1/2.3" CMOS	1/1.8" 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-6320H) IK10 (With SHP-3701H) (QNP-6320)	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 (3.75lb) (QNP-6230H) Ø152.0 x 218.0mm (Ø5.98" x 8.58") 1.7Kg (3.75lb) (QNP-6230)	Ø236.9x407.7mm (9.33" x 16.05") 6.8Kg (14.99lb)	Ø99 x 49 mm (Ø3.9" x 1.93") 370g (0.82lb)	Ø99 x 49 mm (Ø3.9" x 1.93") 320 g (0.705lb)
Additional Features	Defog	Defog	Panorama view, Business Intelligence	Panorama view, Business Intelligence



TNB-9000
8K Box Camera



TNV-8010C
Compact Corner Mount Camera



TNV-7010RC
3MP Corner Mount Camera



TNO-6320E
2MP Explosion-proof Camera



TNU-6320E
2MP Explosion-proof PTZ Camera



TNU-6321
2MP Positioning Camera

	TNB-9000 8K Box Camera	TNV-8010C Compact Corner Mount Camera	TNV-7010RC 3MP Corner Mount Camera	TNO-6320E 2MP Explosion-proof Camera	TNU-6320E 2MP Explosion-proof PTZ Camera	TNU-6321 2MP Positioning Camera
Imaging Device	43.3mm Full-frame CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color: 0.1 lux (F2.3, 1/30sec) B/W: 0.02 lux (F2.3, 1/30sec)	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: 0.05Lux (F1.6, 1/30sec) B/W: 0.005 Lux (F1.6, 1/30sec)
Video Output	HDMI (1080p)	CVBS: 1.0 Vp-p/ USB: Micro USB Type B	CVBS 1.0 Vp-p	-	-	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P), for installation
Focal Length	-	2.3mm fixed	2.8mm fixed	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 142.6mm (Optical 32x)	4.44~142.6mm (32x) zoom
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: 131°, V: 93.4°, D: 174°	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: 61.8° (Wide) ~ 2.19° (Tele) / V: 36.2° (Wide) ~ 1.24° (Tele)
Pan / Tilt / Rotate	-	0° / ±7° / 0°-	0° / ±15° / 0°	-	360° Endless / 180° (-90° ~ 90°) / -	None
IR Viewable Length	-	-	10m (32.8ft) with 940nm IR LED	-	-	None
Day & Night	Auto (ICR)	Auto(ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto(ICR)
Wide Dynamic Range	-	120dB	120dB	120dB	120dB	150dB
Digital Noise Reduction	SSNRV	SSNR	SSNRV	SSNRIII	SSNRIII	SSNRV
Digital Image Stabilization	-	-	Support	Support	Support	Support
Analytics	Intelligent analytics, Audio detection, Sound classification	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	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	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	-	-	Line in / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	8K/15fps, 24MP/20fps, 15MP/30fps, 4K/60fps	5MP / 30fps	3MP / 30fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	-	-	WiseStream II
Streaming	Up to 3 Profiles	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	Micro SD/SDHC/SDXC	-	-	SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	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/G/T SUNAPI (HTTP API)Wisenet open platform
Operating Temperature	0°C ~ +45°C (32°F ~ +122°F)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH	-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) / Less than 90% RH
Certification	EMC	IP66, IP6K9K, IK10	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, Safety (UL, KC-SDOC), EMC (FCC, CE, VCCI, RCM, KC)
Power Consumption	PoE : Max 30W, typical 20W 12VDC : Max 26W, typical 18W	PoE : Typical 7W	PoE : Max 12W 12VDC : Max 11W	24VAC : Max 28W	24VAC : Max 49W	Max 100W (Heater On), typical 25W (Heater Off)
Dimensions (WxHxD) / Weight	120x118.5x179mm (4.72" x 4.66" x 7.04") 2.2kg (4.85lb)	143 x 122 x 73.7mm (5.62" x 4.80" x 2.90") 700g (1.54lb)	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 (15.43lb)	384.0 x 402.0 x 250.0mm (15.12" x 15.83" x 9.84") 35Kg (77.16lb)	219 x 528.2 x 460mm (8.62" x 20.79" x 18.11") 14Kg (30.86lb)
Additional Features	8K, Canon EF mount	Anti ligature design, Hallway View	Anti ligature design, Invisible IR LED, Hallway View	Stainless (SUS316L) housing, Built in wiper	Stainless (SUS316L) housing, Built in wiper	Tampering, Audio detection

**TNU-6320**

2MP Positioning Camera

**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

	TNU-6320 2MP Positioning Camera	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	1/2.8" CMOS	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Min. Illumination	Color : 0.015Lux (F1.6) B/W : 0.015Lux (F1.6)	-	-	-	-
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	4.44 ~ 142.6mm (Optical 32x)	19mm / 35mm fixed	35mm fixed	35mm fixed	19mm fixed
Angular Field of View	H : 62.8° (Wide) ~ 2.23° (Tele) / V : 36.8° (Wide) ~ 1.26° (Tele)	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 / 180° (-90° ~ 90°) / -	360° Endless / -90° ~ 40°	-	-	-
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (ICR)	-	-	-	-
Wide Dynamic Range	120dB	-	-	-	-
Digital Noise Reduction	SSNR III	-	-	-	-
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	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 / 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.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	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	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S, 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)	-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	IP66, NEMA 4X, IK10	IP66, NEMA 4X	IP66, NEMA 4X	IP66, NEMA 4X, IK10
Power Consumption	24VAC : Max 100W - Heater On Max 25W - Heater Off	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	219.0 x 460.0 x 528.0mm (8.62" x 18.11" x 20.79") 14Kg (30.86lb)	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 (5.51lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3,175g (7.0lb)	Ø101.97 x 309mm (Ø4.01" x 12.17") 2,501g (5.51lb)
Additional Features	Defog, Built in wiper	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 (7.0lb)	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 (7.0lb)	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

Imaging Device	1/2.9" CMOS	1/2.9" CMOS	1/2.9" CMOS	1/2.9" CMOS	1/2.9" CMOS	1/2.9" 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 (0.84lb)	Ø58.6 x 182.0mm (Ø2.31" x 7.17") 240g (0.53lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 274g (0.60lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 230g (0.51lb)	Ø137.8 x 106.1mm (Ø5.43" x 4.18") 515g (1.16lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 395g (0.87lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



XRN-6410DB4/6410B4
64CH 32MP NVR



XRN-3210B4
32CH 32MP NVR



XRN-3010A
64CH 12MP NVR



XRN-2011A
32CH 12MP NVR



XRN-2010A
32CH 12MP NVR

Os	Linux, Window 10, Mac OS X (10.8)	Linux, Window 10, Mac OS X (10.8)	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps (RAID 5/6, Single HDD)	400Mbps (RAID 5/6, Single HDD)	300Mbps	256Mbps 100Mbps (RAID 5 mode)	256Mbps
Max # of Cameras	64CH	32CH	64	32	32
Internal Storage	Up to 16 SATA (Max. 160TB)	Up to 16 SATA (Max. 160TB)	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	iSCSI	iSCSI	1 e-SATA	iSCSI	iSCSI, 1 e-SATA
RAID	RAID-5/6 (5/6 Array Size : 8-HDD x 2 Array)	RAID-5/6 (5/6 Array Size : 8-HDD x 2 Array)	-	RAID 5	-
Hot Swap	Yes	Yes	-	Yes	-
Network Viewer Software	Wisenet SSM, Webviewer, Smart Viewer, Wisenet Mobile	Wisenet SSM, Webviewer, Smart Viewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI 1 (Up to 4K), HDMI 2 (FHD), Support dual monitor	HDMI 1 (Up to 4K), HDMI 2 (FHD), Support dual 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	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	•N+1 failover supported •Bookmark supported •Intel secure boot •Simultaneous playback up to 64ch •AI attributes search	•N+1 failover supported •Bookmark supported •Intel secure boot •Simultaneous playback up to 32ch •AI attributes search	•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



XRP-4310DB4
128CH 32 NVR



XRP-4210B4
72CH 32 NVR

Os	Linux	Linux	Linux	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	180Mbps	100Mbps	50Mbps	400Mbps	400Mbps
Max # of Cameras	16	8	4	128	72
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)	Up to 16 SATA (Max. 160TB)	Up to 8 SATA (Max. 80TB)
External Storage	iSCSI, 1 e-SATA	-	-	iSCSI	iSCSI
RAID	-	-	-	RAID 1/5/6/10/50/60	RAID 1/5/6/10/50/60
Hot Swap	-	-	-	Yes	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	HDMI (Up to 4K), VGA	HDMI 2ea (4K 1ea, FHD 1ea)	HDMI 2ea (4K 1ea, FHD 1ea)
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	Wisenet, ONVIF	Wisenet, 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	• 128ch Server NVR(Non-AI) • SSM v2.20.0 • Dual SMPS, 16 HDD	• 72ch Server NVR(Non-AI) • SSM v2.20.0 • Single SMPS, 16 HDD



PRN-6410DB4/6410B4
64CH 32MP NVR



PRN-3210B4
32CH 32MP NVR



PRN-4011
64CH 12MP NVR



PRP-5000H16
128CH SSM Recording Server



PRP-4000H8
72CH SSM Recording Server

Os	Linux, Window 10, Mac OS X (10.8)	Linux, Window 10, Mac OS X (10.8)	Linux	Windows 10 IoT Enterprise	Windows 10 IoT Enterprise
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps (RAID 5/6, Single HDD)	400Mbps (RAID 5/6, Single HDD)	400Mbps (RAID 5/6)	520Mbps	400Mbps
Max # of Cameras	64CH	32CH	64	128	72
Internal Storage	Up to 16 SATA (Max. 160TB)	Up to 16 SATA (Max. 160TB)	Up to 12 SATA (Max. 96TB)	Up to 16 SATA (Max. 160TB)	Up to 8 SATA (Max. 80TB)
External Storage	iSCSI	iSCSI	iSCSI	iSCSI	iSCSI
RAID	RAID-5/6 (5/6 Array Size : 8-HDD x 2 Array)	RAID-5/6 (5/6 Array Size : 8-HDD x 2 Array)	RAID 5/6	RAID 0/1/5/6	RAID 0/1/5/6
Hot Swap	Yes	Yes	Yes	Yes	Yes
Network Viewer Software	Wisenet SSM, Webviewer, Smart Viewer, Wisenet Mobile	Wisenet SSM, Webviewer, Smart Viewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM Client, SSM Mobile	SSM Client, SSM Mobile
Local Monitor	HDMI 1 (Up to 4K), HDMI 2 (FHD), Support dual monitor	HDMI 1 (Up to 4K), HDMI 2 (FHD), Support dual monitor	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI, VGA, DVI	HDMI, VGA, DP
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	Wisenet, ONVIF	Wisenet, ONVIF
Additional Features	•LPR search (English, Korean, Numbers) •AI (BestShot, Attributes) •N+1 failover supported •Bookmark supported •Intel secure boot •Simultaneous playback up to 64ch •AI attributes search	•LPR search (English, Korean, Numbers) •AI (BestShot, Attributes) •N+1 failover supported •Bookmark supported •Intel secure boot •Simultaneous playback up to 32ch •AI attributes search	• 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)



QRN-1620S
16CH 8MP NVR



QRN-1610S
16CH 8MP NVR



QRN-820S
8CH 8MP NVR

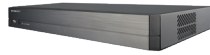


QRN-810S/810
8CH 8MP NVR



QRN-420S
4CH 8MP NVR

Os	Linux	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG	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	128Mbps	80Mbps	100Mbps (QRN-810), 80Mbps (QRN-810S)	40Mbps
Max # of Cameras	16	16	8	8	4
Internal Storage	Up to 2 SATA (Max. 12TB)	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	SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI(8MP), VGA	HDMI (Up to 8MP), VGA	HDMI(8MP), VGA	HDMI (Up to 8MP), VGA (QRN-810) HDMI (Up to 8MP) (QRN-810S)	HDMI(8MP), VGA
Camera Support	SUNAPI, ONVIF	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 • Dual monitor • Dual track recording	• 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 (QRN-810S) • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps (QRN-810), 80Mbps (QRN-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



QNR-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 (QNR-410), 40Mbps (QNR-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 (QNR-410) HDMI (Up to 4K) (QNR-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 (QNR-410S) • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 64Mbps (QNR-410), 50Mbps (QNR-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, Hallway 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

Convenience for everyone

Wisenet SSM 2.1

Wisenet SSM is video management software with features for both traditional and contemporary surveillance operations. It mainly consists of two parts; server and client software giving users a simple and easy to expand architecture. On the other hand, client software provides PC console for operators in security room and mobile viewer for guards on the move.

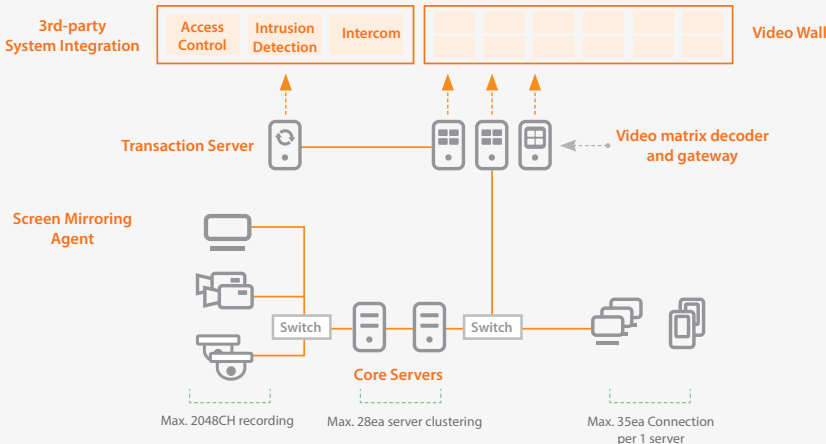


Key Features

- 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.



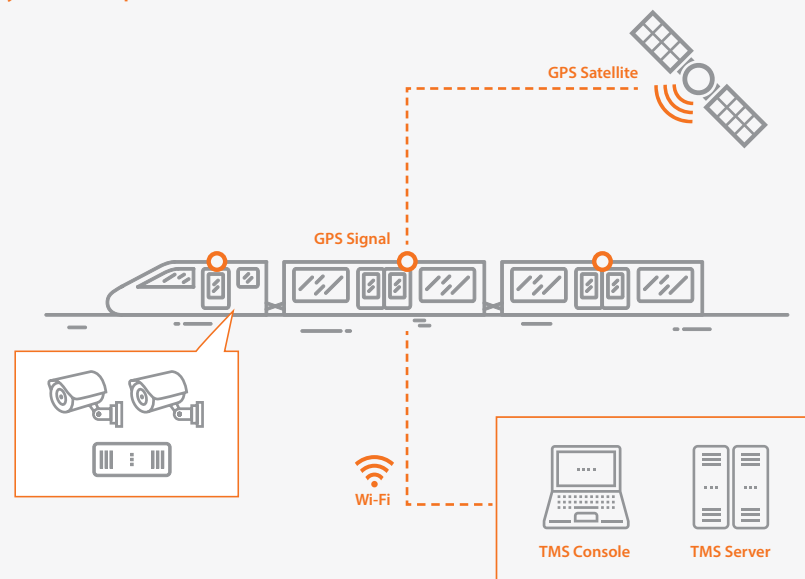
System configuration



BASIC FEATURE		
General	Supported Device	Hanwha Techwin : Network camera, Encoder, NVR, DVR, Decoder, Controller Others : Network camera, Encoder through ONVIF
	Camera Protocol	SUNAPI, ONVIF (PROFILES)
	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

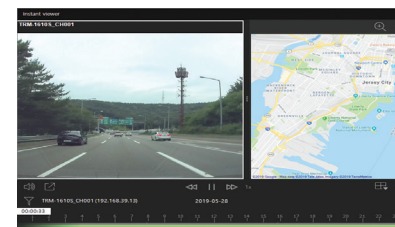
If you are unable to identify the vehicle(ship) in which an accident occurred, search based on the map where the incident occurred. TMS quickly search / playback the GPS and video information in a specific area.

• 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

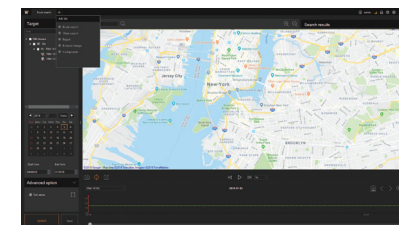
TMS system can aggregate various operational statistics records. It provides a variety of information, such as speeding information of the vehicle, working hours of the driver, driving time and statistics of the vehicle. (Support to add function based on project request.)



Search & Playback of route (based on GPS)



Search & playback from cameras footage

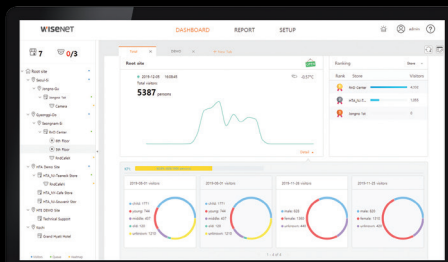


Route search

Wisenet Retail Insight

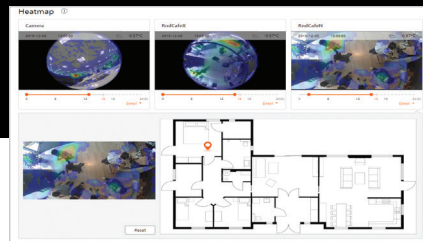
Business Intelligence for your retail shops

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



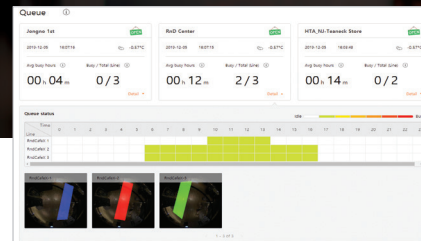
People counting (age, gender)

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.



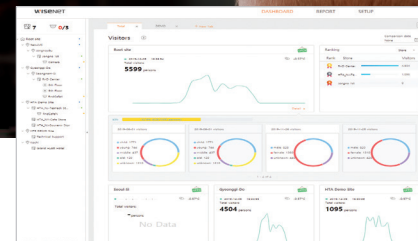
Heatmap (Time-lapse)

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.



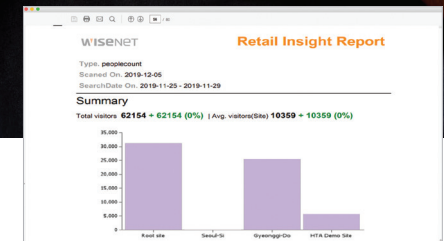
Queue management

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



BioEntry W2
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 / 12V DC	-	-	-
Operating Temperature	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)
PoE	-	802.af	-	-
Color	Gray	Black	Gray	Gray

Standalone



Face station2
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



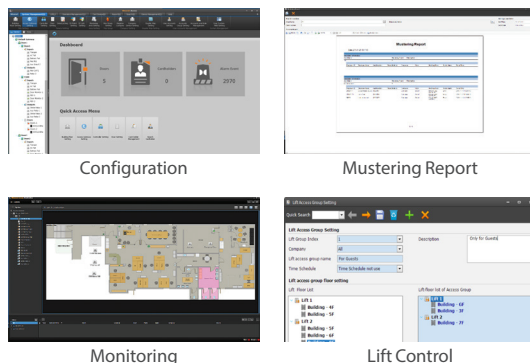
SSA-X300
Power Package

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

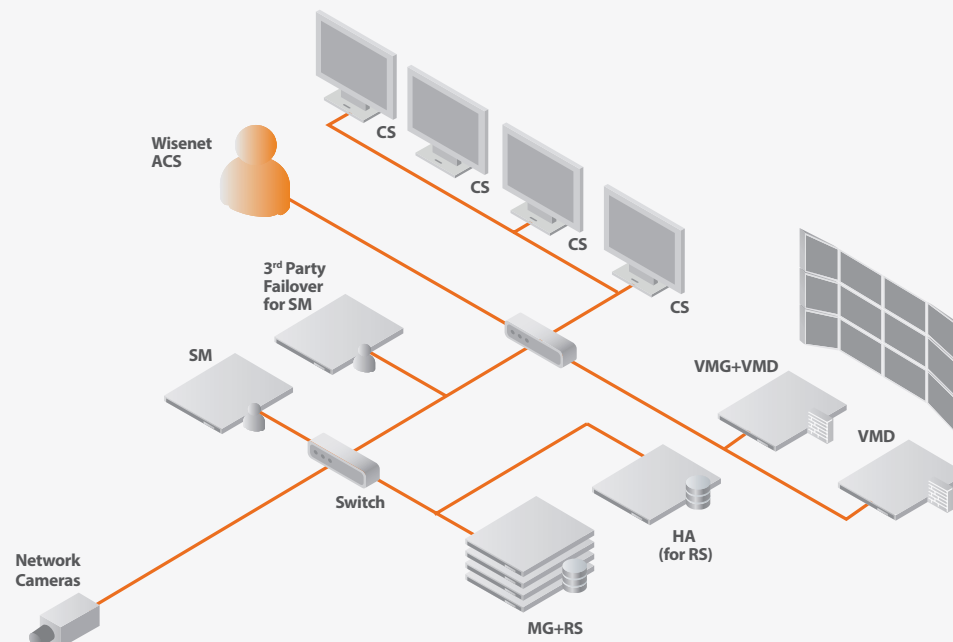


Access Control	Device auto discovery
	Cardholder management
	Batch uploads
	Card (s) pre-registration
	Device maintenance
	Unlimited access groups, Time schedules
	Area / Zone management
Monitoring	Biometric readers (FP)
	Lift Control (with V300)
	Real time access events & alarm monitoring
	Graphic maps
	Remote door management (Close / Open)
	I/O monitoring
	Mustering
Card Design and Printing	Event filtering for monitoring
	Control door monitoring / Management permissions per user group
	Create multiple design templates
Fire Groups	Auto-fill card holder data from system database
	Print cards
Advanced Reporting	Create firegroups for each fire sensor input
	Extensive reporting options
Video Integration with SSM	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
	Auditing & user activity logs
System	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" CMOS	1/3" CMOS	1/3" CMOS	1/3" 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 (0.41lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02lb)	Ø70.0 x 246.0 mm (Ø2.76" x 9.69") (Without sunshield) 670g (1.48lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.71lb)
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" CMOS	1/3" CMOS	1/3" CMOS	1/2.8" CMOS	1/2.8" 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 (0.53lb)	Ø137 × 106.1mm (Ø5.39" × 4.18") 715g (1.58lb)	Ø120.3 × 91.7mm (Ø4.74" × 3.61") 510g (1.12lb)	73.1 × 67.2 × 123.9mm (2.88" × 2.65" × 4.88") 287g (0.63lb)	68.4 × 59.6 × 92.7mm (2.69" × 2.35" × 3.65") 186g (0.41lb)
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" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (1.05lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 948g (2.09lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.50") (Without sunshield) 285g (0.62lb)	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" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 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 (0.71lb)	Ø110 x 86mm (Ø4.33" x 3.39") 225g (0.49lb)	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 (7.28lb) (HCP-6320HA), Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85lb) (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-6005
2MP IR Box Camera



SCB-6003
1080p HD Box Camera



SCO-6085R
1080p HD IR Bullet Camera



SCO-6025R
2MP IR Bullet Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/3" CMOS	1/2.8" CMOS	1/2.8" CMOS
Resolution	1920 x 1080	1945 x 1097	1920 x 1080	1920 x 1080	1945 x 1097
Min. Illumination	Color: 0.2Lux (F1.6) B/W: 0.01Lux (F1.6)	Color: 0.11Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.2) B/W: 0.004Lux (F1.2)	Color: 0.11Lux (F1.6) B/W: 0Lux (IR LED on)	Color: 0.11Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)
Focal Length	4.44 ~ 101.2mm (Optical 23x)	3.2~10mm(3.1x) varifocal	-	3.2 ~ 10mm (3.1x) manual varifocal"	3.2~10mm(3.1x) varifocal
Angular Field of View	H: 62.8°(Wide) ~ 3.14°(Tele) / V: 36.8°(Wide) ~ 1.76°(Tele)	H: 97.9°(Wide) ~ 30.1°(Tele) V: 52.5°(Wide) ~ 17.00°(Tele) D: 114.5°(Wide) ~ 34.3°(Tele)	-	H: 110.2° (Wide) ~ 32.0° (Tele) / V: 55.4° (Wide) ~ 18.0° (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)
Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°) / -	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 (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	BLC, HLC, DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC, HLC, DWDR
Digital Noise Reduction	SSNRIII	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	32 Zones	8 Zones	4 Zones	8 Zones	8 Zones
Alarm I/O	4 / 2 (Relay)	0 / 1	0 / 1, External D/N 1	0 / 1	0 / 1
Protocol	AHD: ACP (AHD Coax Protocol), RS-485: Samsung-T/E, Pelco-P/D, Sungjin, Panasonic, Honeywell, AD, Vicon, Bosch, GE	ACP(AHD Coax Protocol) CVBS: Pelco-C(Coaxitron)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), RS-485	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)	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)	-30°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH
Certification	IP66, IK10 (HCP-6230H), IK10 (With SHP-3701H) (HCP-6230)	IP66, IK10	-	IP66, IK10	IP66, IK10
Power Consumption	24VAC: Max. 24.0W / 65.0W - Heater off / on (HCP-6230H) 24VAC: Max 20.0W (HCP-6230)	Max 4W	12VDC & 24VAC: Max 4.2W	12VDC: Max 5.4W 24VAC: Max 5.4W	Max 4W
Dimensions (WxHxD) / Weight	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28lb) (HCP-6230H), Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85lb) (HCP-6230)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.57lb)	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 175.5g (0.39lb)	Ø78 x 259.8mm (3.07" x 10.23") 887g (1.95lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.57lb)
Additional Features	Defog	Defog	Defog	Defog	Defog



SCO-6023R
1080p HD IR Bullet Camera



SCD-6085R
2MP IR Dome Camera



SCD-6083R
1080p HD IR Dome Camera



SCD-6025R
2MP IR Dome Camera



SCD-6023R
1080p HD IR Dome Camera

	SCO-6023R 1080p HD IR Bullet Camera	SCD-6085R 2MP IR Dome Camera	SCD-6083R 1080p HD IR Dome Camera	SCD-6025R 2MP IR Dome Camera	SCD-6023R 1080p HD IR Dome Camera
Imaging Device	1/3" CMOS	1/2.8" CMOS	1/3" CMOS	1/2.8" CMOS	1/3" CMOS
Resolution	1920 x 1080	1945 x 1097	1920 x 1080	1945 x 1097	1920 x 1080
Min. Illumination	Color: 0.25Lux (F2.1) B/W: 0Lux (IR LED on)	Color: 0.11Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.11Lux (F1.4) B/W: 0Lux (IR LED on)	Color: 0.17Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.25Lux (F2.1) B/W: 0Lux (IR LED on)
Focal Length	4mm fixed	3.2~10mm (3.1x) varifocal	2.8 ~ 12mm (4.3x) varifocal	4mm fixed	4mm fixed
Angular Field of View	H: 80.7° / V: 43.5° / D: 95.8°	H: 110.2° (Wide) ~ 32° (Tele) V: 55.4° (Wide) ~ 18° (Tele) D: 128.4° (Wide) ~ 36.6° (Tele)	H: 102° (Wide) ~ 32.2° (Tele) / V: 54° (Wide) ~ 18.2° (Tele) / D: 121° (Wide) ~ 38° (Tele)	H: 87.6° / V: 46.4° / D: 104.5°	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°
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)
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	8 Zones	4 Zones	8 Zones	4 Zones
Alarm I/O		0 / 1	0 / 1	0 / 1	-
Protocol	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)	ACP (AHD Coax Protocol) CVBS: Pelco-C (Coaxitron)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)	ACP (AHD Coax Protocol) CVBS: Pelco-C (Coaxitron)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66	-	-	-	-
Power Consumption	12VDC: Max 4.2W	Max 4W	12VDC & 24VAC: Max 4.2W	Max 4W	12VDC: Max 4.2W
Dimensions (WxHxD) / Weight	Ø58.6 x 165.2mm (Ø2.31" x 6.50") (Without Sunshield) 208g (0.46lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.70lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 304g (0.67lb)	Ø110 x 86mm (4.33 x 3.39") 227g (0.50lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 242g (0.53lb)
Additional Features	Defog	Defog	Defog	Defog	Defog

**SCD-6013**

1080p HD Dome Camera

**SCV-6085R**

2MP IR Vandal Dome Camera

**SCV-6083R**

1080p HD IR Vandal Dome Camera

**SCV-6023R**

1080p HD IR Vandal Dome Camera

Imaging Device	1/3" CMOS	1/2.8" CMOS	1/3" CMOS	1/3" CMOS
Resolution	1920 x 1080	1945(H)x1097(V)	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.1Lux (F1.8) B/W : 0.01Lux (F1.8)	Color: 0.27Lux (F2.0, 1/30sec) BW: 0.017Lux(F2.0)	Color : 0.11Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.25Lux (F2.1) B/W : 0Lux (IR LED on)
Focal Length	2.8mm fixed	2.8mm fixed	2.8 ~ 12mm (4.3x) varifocal	4mm fixed (F 2.1)
Angular Field of View	H : 108.7° / V : 60.6° / D : 125.4°	H : 113.7° / V : 61.5° / D : 134.5°	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°
IR Viewable Length	-	-	30m (98.43ft)	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	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support
Privacy Masking	4 Zones	8 Zones	4 Zones	4 Zones
Alarm I/O	-	-	0 / 1	-
Protocol	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	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) / Less than 90% RH	-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 : Max 2.5W	Max 4W	12VDC & 24VAC : Max 4.2W	12VDC : Max 4.2W
Dimensions (WxHxD) / Weight	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 231g (0.51lb)	Ø110 x 86mm (4.33" x 3.39") 227g (0.50lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 716g (1.58lb)	Ø137.0 x 94.0mm (Ø5.39" x 3.70") 560g (1.23lb)
Additional Features	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

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

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	• 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
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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									Manual				Manual	
	SLA-M2890PN					P-Iris								45.0 x 51.5 x 54.3mm (1.77" x 2.03" x 2.14")	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	SHD-1198FW	SHD-1408FW	SHF-1500F
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-300HMW5	SBP-300HMW7		SBP-201HMW	SBP-300HF/301HF/302HF/303HF		SBP-300TM1/300TM	SBP-160TM	SBP-300CM/300LM	
									
Wall mount									
SBP-300CMW/300LMW	SBP-300WM1/300WMW1	SBP-300WM_300WMW	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 compatible accessories with Wisenet Toolbox plus on Hanwha-security.com

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_158G	SBV-120GW_125BW_136BW	SBO-126B/100B1	SBP-300HMS6	SBP-300WMS1/300WMS
	Ivory / White 						
Fixed housing		Fixed mount			IR Illuminator	Skin cover	
SBP-300PMS/300KMS	SHB-9000H	SHB-4300H/4300H1/4300H2/4300HP	SHB-4200/4200H	STH-200	STB-400/4150V	SPI-50	SBC-160B/180B
	 NEW						
Smoked dome cover							
SPB-IND85W	SPB-IND5/IND6/IND7	SPB-IND11/IND81/IND81V	SPB-IND12/IND72	SPB-IND83/IND83V	SPG-IND73B	SPG-IND12B	SPG-IND72B
 NEW							
SPB-VAN85W	SPB-FCD85W	SPB-VAN3/VAN4	SPB-VAN11/VAN71/VAN81	SPB-VAN12/VAN72	SPB-PTZ71	SPB-PTZ73	
 NEW	 NEW						

* You can find compatible accessories with Wisenet Toolbox plus on Hanwha-security.com

Wisenet P series AI Camera
Precise Object Detection & Classification with AI
For enhanced operational efficiency

Vehicle #1129
Brown AAB9141

Vehicle #1121
Blue Z56801

People #112
Female Blue/O

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Accessory Selector
Find the right accessories for your product.

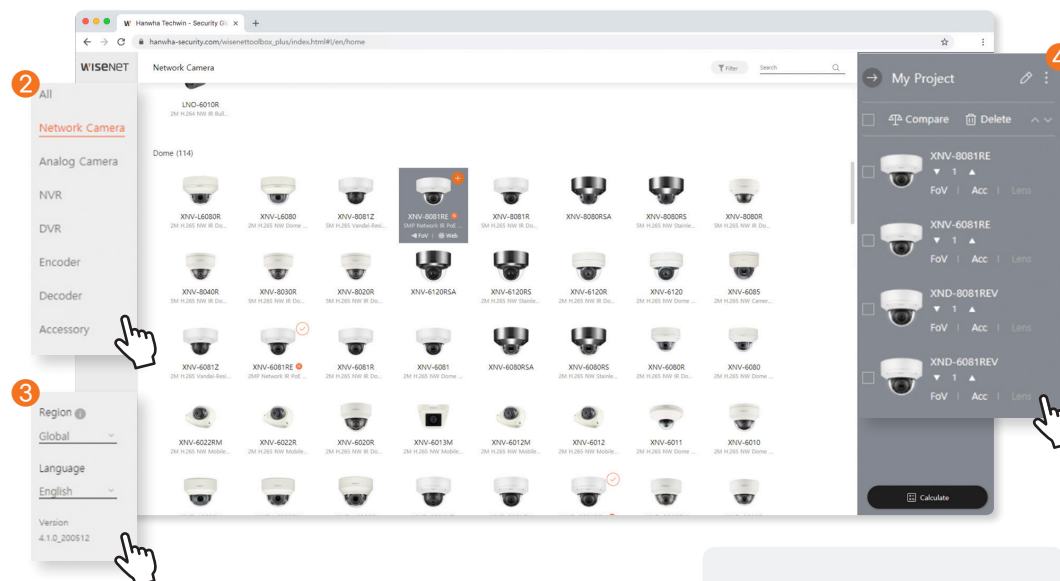
Data Center
Find the data you want easily and quickly.

Wisenet Toolbox
Compare our products and discover helpful Bandwidth/Fov Calculator.

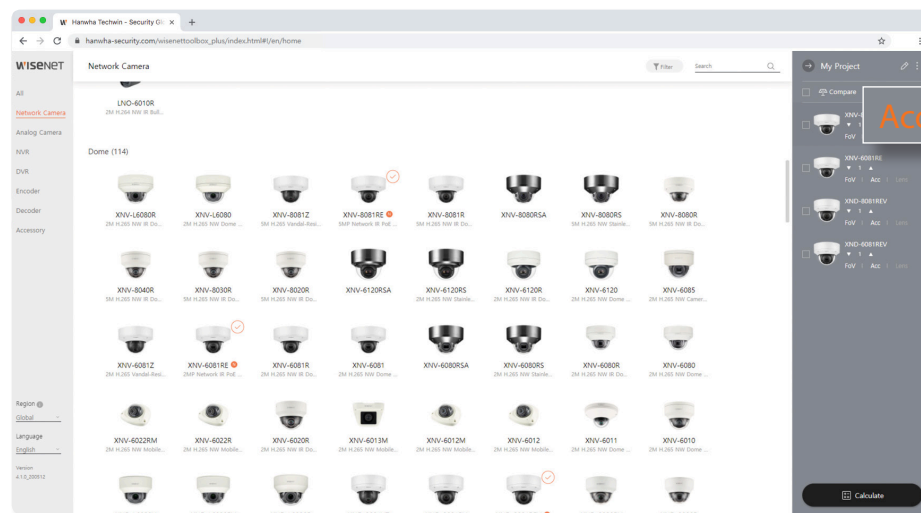
1 Click the Wisenet Toolbox or direct link

2 Choose product you are interested in

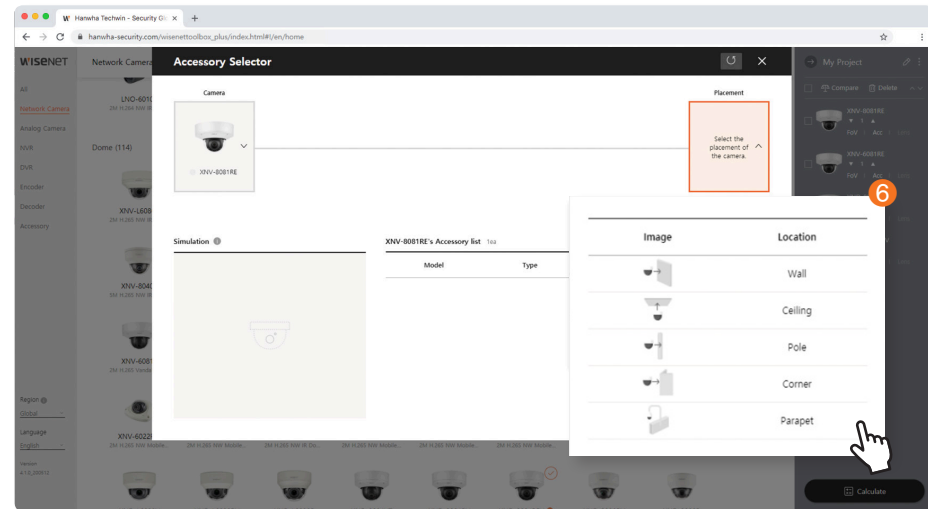
3 Select region and language
* Now only English available



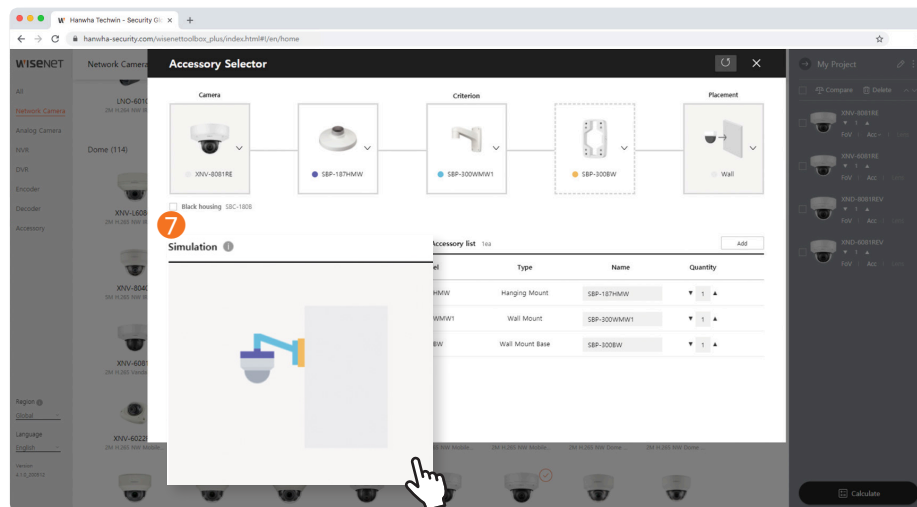
4 When you select cameras, they will be added on My Project



5 Click the Acc to find compatible accessories



6 Accessory Selector pops up.
All compatible accessories
are shown



7 Choose accessories then the
simulation intuitively shows all
connected accessories

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