

LINE

1H 2022

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

Yeocheon 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 over 30 years since our first launch of a surveillance camera in 1990.

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

2012 ~ Current

- 2020 - Hanwha Techwin's 30th anniversary, Wisenet7 SoC launched
- 2019 - Acquired Cybersecurity certification 'Secure by Default' from UK government
- 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

1990 ~ 2011

- 2011 - B2C business began
- 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
- 1990 - Video surveillance business established

Engineered in Korea

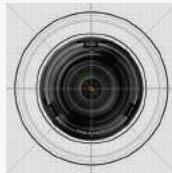
Hanwha Techwin's R&D(Research and Development) Center, is located in Pangyo Techno Valley, Gyeonggi-do, South Korea. The large R&D complex, which is focused on state-of-the-art technology and innovation, is also a home to many other of Korea's world leading companies. In the middle of the R&D hub, Hanwha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



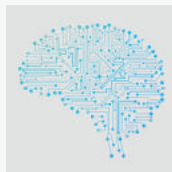
02. SoC design technology

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.

End-to-end Cybersecurity

Hanwha Techwin offers cybersecurity with the industry's highest levels of cybersecurity policy with secure boot/OS/storage, a signed firmware/open platform app, secure JTAG and more.

Hanwha Techwin established its own device certificate issuing system to embed certificates into the product not only in the development progress but also in the manufacturing progress.



- Hanwha Techwin Private Device Certification Root CA
- UL CAP, Secure by Default certified, TPM 2.0 (FIPS 140-2)
- Secure Boot, Secure Storage, Secure OS
- Secure Open Platform
- S-CERT : Security Computer Emergency Response Team
Please contact S-CERT by e-mail (secure.cctv@hanwha.com)

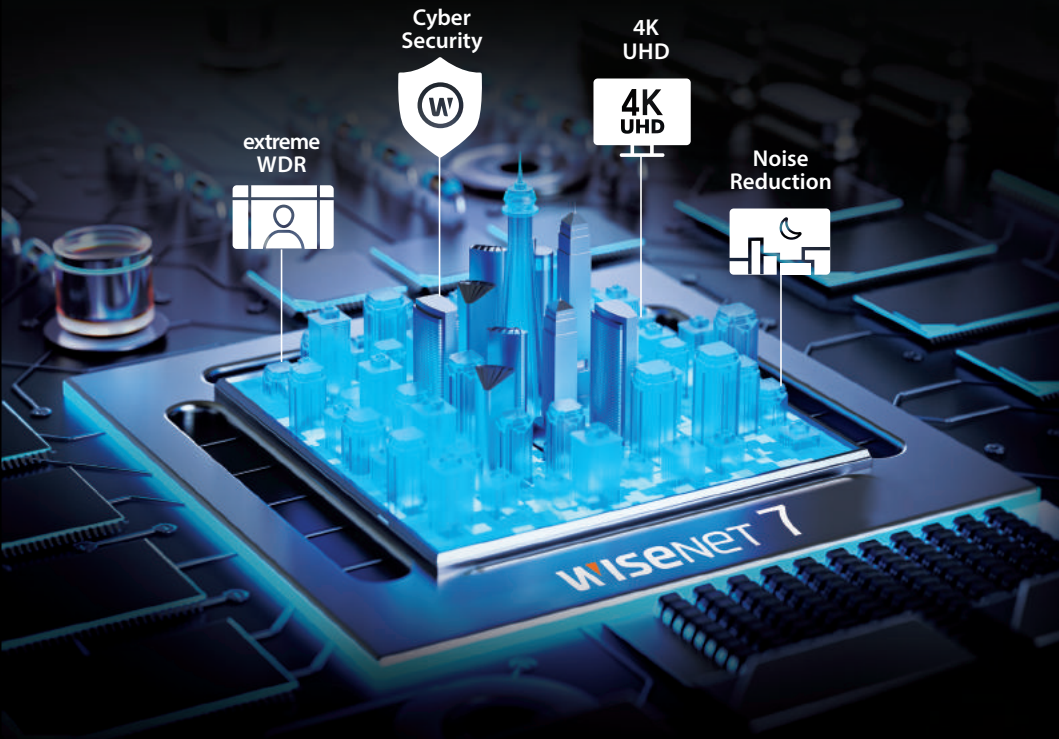
※ Please ask your local representative for UL CAP, Secure by Default, TPM 2.0 applied products

Next level of Cybersecurity



Innovating with excellence

WISeNET 7



Innovation in Image Quality

- extreme WDR (Up to 150dB)
- Enhanced Noise Reduction technology
- LDC (Lens Distortion Correction)
- Multi-directional camera support with single license(Up to 4CH)

Innovation in Cybersecurity

- Hanwha Techwin Device Certificate System (Root CA)
- UL CAP, Secure by Default certificate, TPM 2.0 (FIPS 140-2)
- Secure Boot, Secure OS, Secure Storage



New Generation PTZ

WISeNET PTZ PLUS

Clearer image with Wisenet IR

- Monitor and Identify objects with optical 40x, 30x, 25x Zoom
- Up to 200 meters with Wise IR
- Enhanced Preset Accuracy $\pm 0.1^\circ$
Quick Pan, Tilt correction (within 1 second)
- Easy and Safe Installation with Compact Design and Lighter Camera
- AI Deep learning based Object Auto Tracking
(Optional Target-Lock Tracking with right click)



- * 4K XNP-9300RW, XNP-9250R, XNP-9250
- * 6MP XNP-8300RW, XNP-8250R, XNP-8250
- * 2MP XNP-6400RW, XNP-6400R, XNP-6400

The New X series X Core/X Plus lineup

AI-Enhanced X series Cameras

Object detection

Edge-based business intelligence

Improved image quality

Wisenet7 SoC

Next level cybersecurity

Reinforced durability

User convenience

Featuring **Hanwha's** advanced artificial intelligence (AI) and deep-learning technologies, the New X series cameras offer industry-leading AI-based object detection for false alarm reduction analytics, AI-enhanced image quality and edge-based business intelligence.

X Plus

XNO-9083R/8083R/6083R

XNV-9083R/8093R/8083R/6083R

XND-9083RV/8093RV/8083RV/6083RV

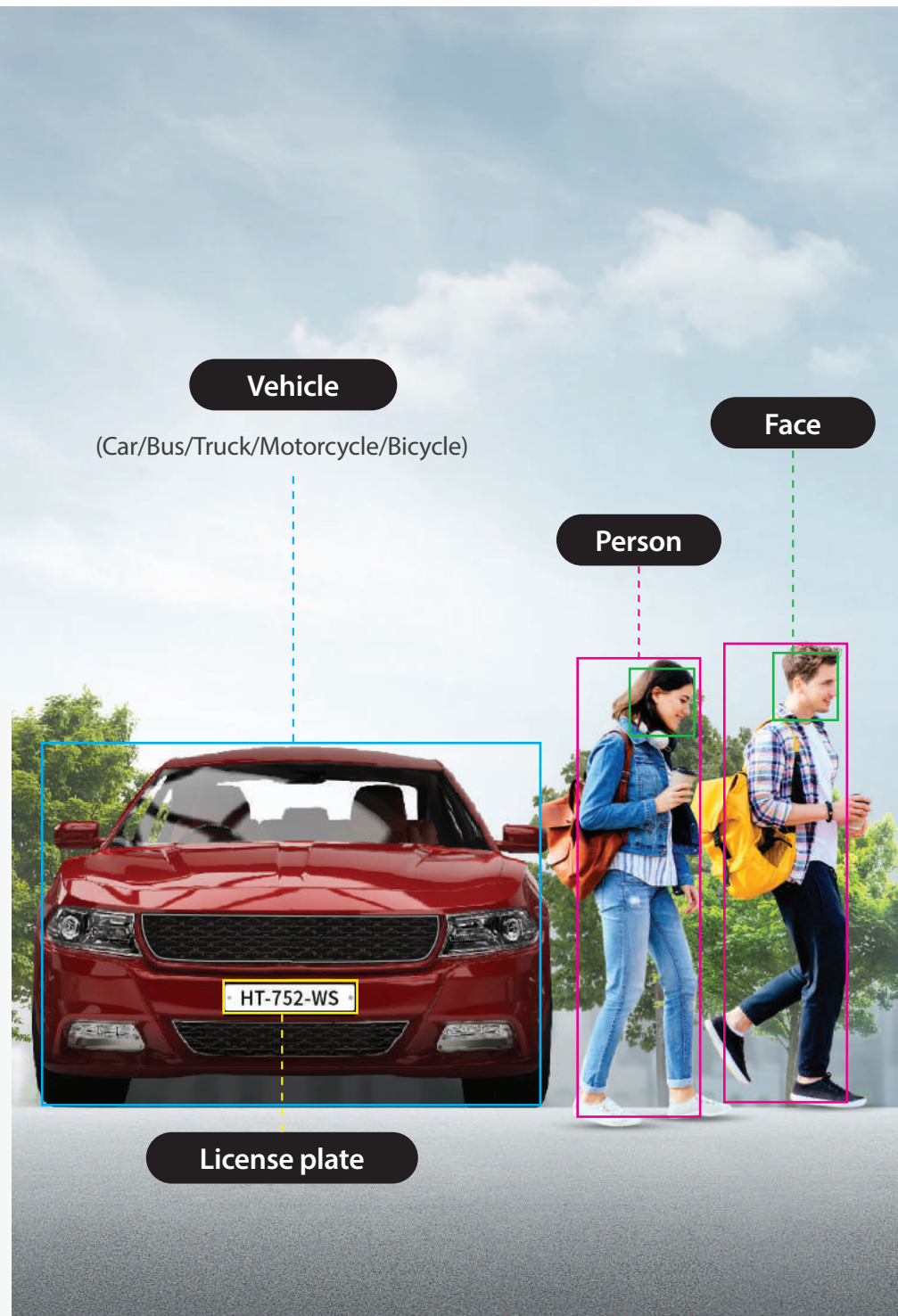
XNB-9003/8003/6003

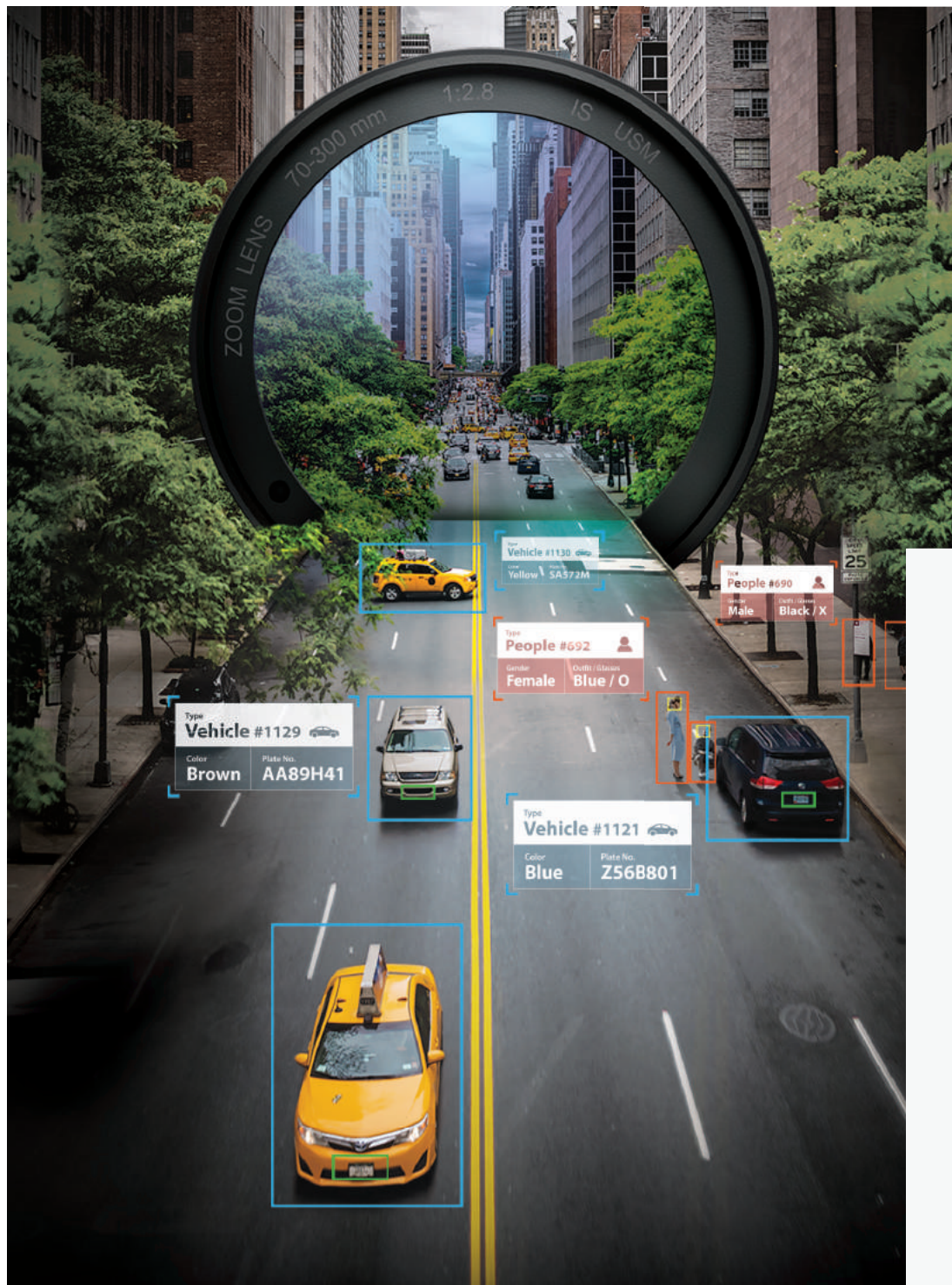
X Core

XNO-C9083R/C8083R/C7083R/C6083R

XNV-C9083R/C8083R/C7083R/C6083R

XND-C9083RV/C8083RV/C7083RV/C6083RV





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 2MP

PNO-A9081R/A6081R, PNV-A9081R/A6081R, PND-A9081RV/A6081RV, PND-A9081RF/A6081RF, PNB-A9001/A6001

* See more at P20



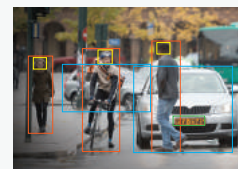
AI NVR Series

PRN-6400DB4/6400B4, PRN-3200B4/3200B2/1600B2

* See more at P72

Wisenet AI Camera

Detect and classify objects real-time



* Person, face, vehicle, license plate

Wisenet AI Search

Quickly search based on attributes

VMS Plug-in for improved AI search



* AI plug-ins offer seamless integration with VMS from Milestone and Genetec

Touchless
Network Intercom Station

TID-600R

Touchless call as an essential post COVID-19 protocol

The ToF sensor of TID-600R allows touchless call, where users simply present their palm within 6 inches of the station to initiate a call.



Various mounting options for a greater versatility

With multiple mounting options, covers and skin, it fits perfectly with its surroundings



AI-based COVID-19 Solution

Social Distancing Detection

Effectively comply with the social distancing guidelines by monitoring the proximity of people in public spaces.

Face Mask Detection

Protect staff and visitors by identifying uncovered or partially exposed faces with Hanwha Techwin's edge-based AI cameras.

- **High accuracy with AI cameras** (Detection accuracy is not affected by hats, glasses or head scarves)
- **Plug-and-play system, no dedicated analytic server required** (Edge-based feature)
- **Instant alarm** (Customizable audio alarm)

Occupancy Monitoring Application

Keep your customers and employees safe while remaining compliant with the government's Social Distancing guidelines.



- When the building occupancy reaches the preset limit
A screen at the entrance turns to red, indicating customers to wait until someone leaves a building.

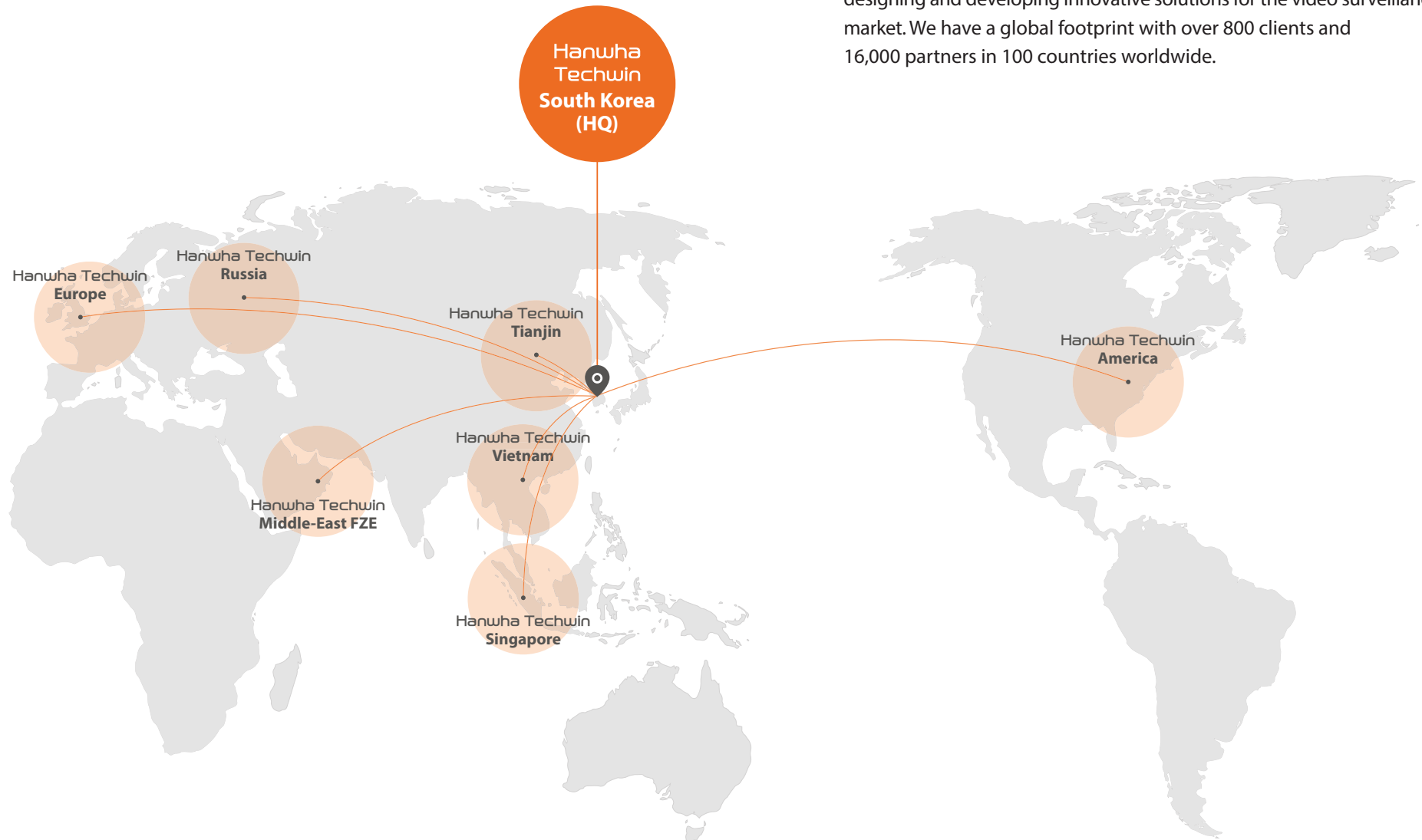


- When the building occupancy is below the preset limit
A screen at the entrance turns to green, allowing customers to enter a building.

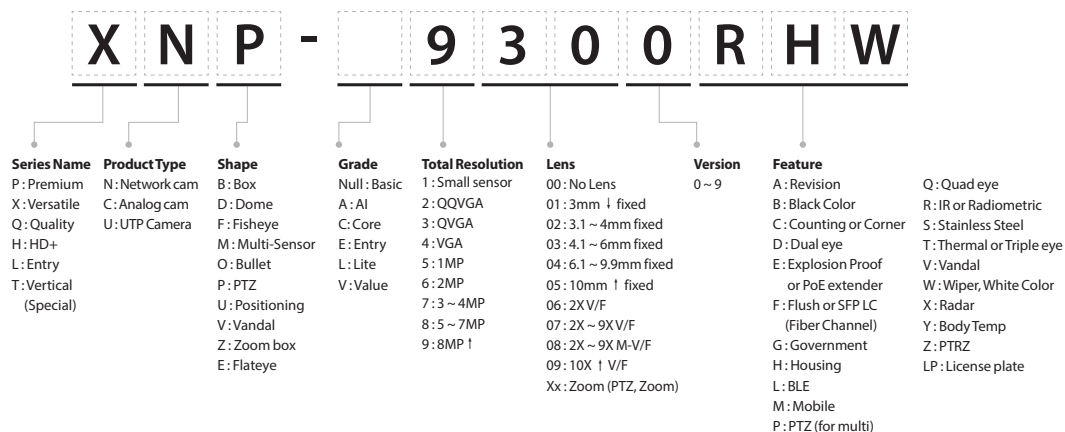


Hanwha Techwin Global network

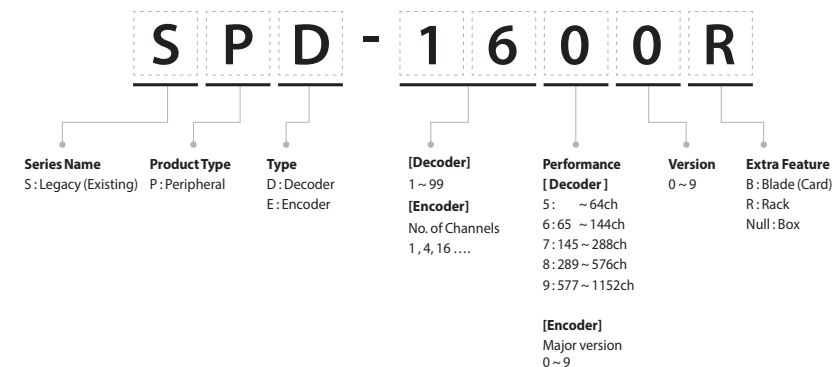
Hanwha Techwin is a Korean company with a long legacy of designing and developing innovative solutions for the video surveillance market. We have a global footprint with over 800 clients and 16,000 partners in 100 countries worldwide.



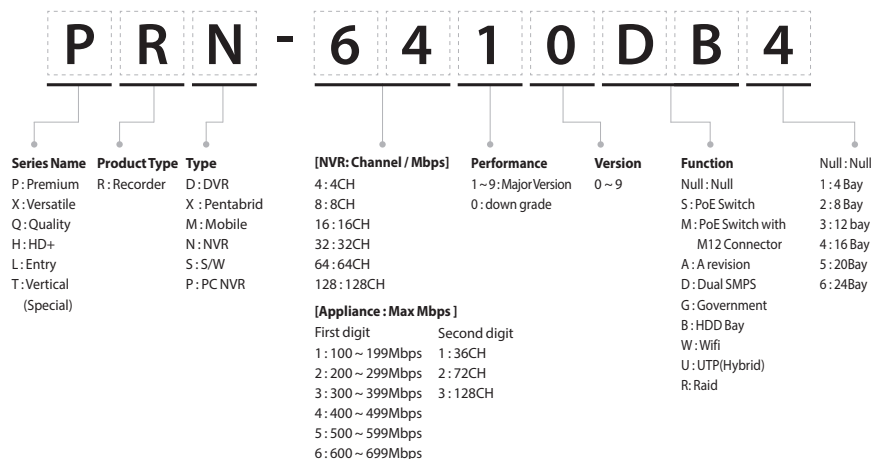
Camera



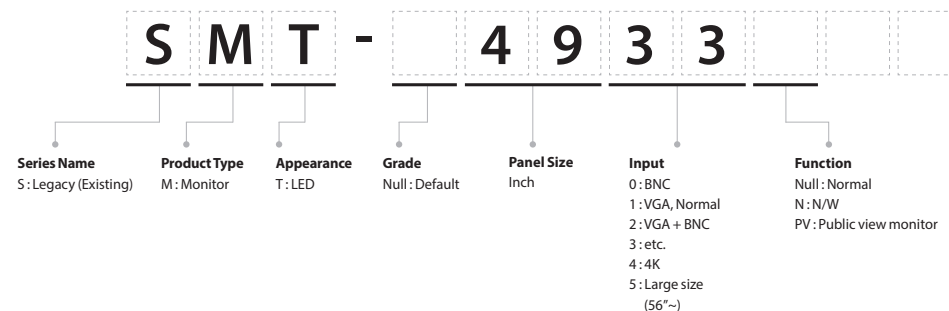
Decoder/Encoder



Recorder



Monitor



CONTENTS

NETWORK

Camera

Wisenet AI X / P series
Wisenet X series
Wisenet P series
Wisenet Q series
Wisenet T series

NVR

Wisenet X / P / Q / T series

Encoder / Decoder / Storage

Software

Access Control

ANALOG

Camera

Wisenet HD+ series

DVR

Wisenet HD+ series

PERIPHERAL

Monitor

Controller

Lens

ACCESSORY

Wisenet Toolbox

**XNO-9083R**

4K AI IR Bullet Camera

**XNV-9083R**

4K AI IR Vandal Dome Camera

**XND-9083RV**

4K AI IR Dome Camera

**XNB-9003**

4K AI Box Camera

	X Plus XNO-9083R 4K AI IR Bullet Camera	X Plus XNV-9083R 4K AI IR Vandal Dome Camera	X Plus XND-9083RV 4K AI IR Dome Camera	X Plus XNB-9003 4K AI Box Camera
Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Min. Illumination	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.2, 1/30sec) BW: 0.003Lux (F1.2, 1/30sec)
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
Focal Length	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	-
Angular Field of View	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	WiselR 50m (164.04ft)	WiselR 50m (164.04ft)	WiselR 50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	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/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	8MP / 30fps	8MP / 30fps	8MP / 30fps	8MP / 30fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
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
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) NEMA TS-2: 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-50°C~+55°C (-58°F ~ +131°F) * Maximum temperature : +60°C (intermittent) NEMA TS-2: 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-25 °C ~ 50 °C (-13°F ~ +122°F) * Maximum temperature : +55°C (intermittent) less than 95% RH (non-condensing) Humidity control /w GORE vent	-10 °C ~ 55°C (-14°F ~ +131°F) less than 95%RH (non-condensing)
Certification	IP66/IP67, NEMA4X, IK10	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	-
Power Consumption	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W
Dimensions (WxHxD) / Weight	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.2kg (4.85 lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.19 lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.53 lb)	81 x 67 x 165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94 lb)
Additional Features	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear

	 X Plus 	 X Plus 	 X Plus 	 X Plus 	 X Plus 
	XNV-8093R 6MP AI IR Vandal Dome Camera	XND-8093RV 6MP AI IR Dome Camera	XNO-8083R 6MP AI IR Bullet Camera	XNV-8083R 6MP AI IR Vandal Dome Camera	XND-8083RV 6MP AI IR Dome Camera
Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Min. Illumination	Color: 0.06Lux (F1.7, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.06Lux (F1.7, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 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: 1.0 Vp-p, Micro USB Type B
Focal Length	10.9~29mm (2.7x) motorized varifocal	10.9~29mm (2.7x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal
Angular Field of View	H : 42.0° (Wide) ~ 15.0° (Tele) V : 22.8° (Wide) ~ 8.4° (Tele) D : 48.7° (Wide) ~ 17.1° (Tele)	H : 42.0° (Wide) ~ 15.0° (Tele) V : 22.8° (Wide) ~ 8.4° (Tele) D : 48.7° (Wide) ~ 17.1° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (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°
IR Viewable Length	WiseIR 70m (229.66ft)	WiseIR 70m (229.66ft)	WiseIR 50m (164.04ft)	WiseIR 50m (164.04ft)	WiseIR 50m (164.04ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
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	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)
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	6MP/30fps	6MP/30fps	6MP/30fps	6MP/30fps	6MP/30fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
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~+55°C (-58°F ~ +131°F) * Maximum temperature : +60°C (intermittent) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-25 °C ~ 50 °C (-13°F ~ +122°F) * Maximum temperature : +55°C (intermittent) less than 95% RH (non-condensing) Humidity control /w GORE vent	-50°C ~ +60°C (-58°F ~ +140°F) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-50°C~+55°C (-58°F ~ +131°F) * Maximum temperature : +60°C (intermittent) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-25 °C ~ 50 °C (-13°F ~ +122°F) * Maximum temperature : +55°C (intermittent) less than 95% RH (non-condensing) Humidity control /w GORE vent
Certification	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	IP66/IP67, NEMA4X, IK10	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10
Power Consumption	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover
Dimensions (WxHxD) / Weight	Ø180 x 125mm (7.09" x 4.92") 1.9kg (4.19 lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.53 lb)	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.2kg (4.85 lb)	Ø180 x 125mm (Ø7.09 x 4.92") 1.9kg (4.19 lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.53 lb)
Additional Features	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear

X Plus



XNB-8003

6MP AI Box Camera

X Plus



XNO-6083R

2MP AI IR Bullet Camera

X Plus



XNV-6083R

2MP AI IR Vandal Dome Camera

X Plus



XND-6083RV

2MP AI IR Dome Camera

X Plus



XNB-6003

2MP AI Box Camera

	XNB-8003	XNO-6083R	XNV-6083R	XND-6083RV	XNB-6003
Imaging Device	1/1.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS
Min. Illumination	Color: 0.03Lux(F1.2, 1/30sec) B/W: 0.003Lux(F1.2, 1/30sec)	Color: 0.01Lux(F1.4, 1/30sec, 30IRE) B/W: 0Lux(IR LED on), 30/25fps	Color: 0.01Lux(F1.4, 1/30sec, 30IRE) B/W: 0Lux(IR LED on)	Color: 0.01Lux(F1.4, 1/30sec, 30IRE) B/W: 0Lux(IR LED on), 30/25fps	Color: 0.007Lux(F1.2, 1/30sec, 30IRE) B/W: 0.0007Lux(F1.2, 1/30sec, 30IRE), 30/25fps
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	-	2.8~12mm(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)	-
Pan / Tilt / Rotate	-	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	-	WiseIR 50m(164.04ft)	WiseIR 50m(164.04ft)	WiseIR 50m(164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (150dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
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	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports
Audio I/O	Selectable(mic in/line in/built-in mic) / Line out	Selectable(mic in/line in) / Line out	Selectable(mic in/line in) / Line out	Selectable(mic in/line in/built-in mic) / Line out	Selectable(mic in/line in/built-in mic) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	6MP/30fps	2MP/120fps	2MP/120fps	2MP/120fps	2MP/120fps
WiseStream	WiseStream II, WiseStream III(Based on AI engine)	WiseStream II, WiseStream III(Based on AI engine)	WiseStream II, WiseStream III(Based on AI engine)	WiseStream II, WiseStream III(Based on AI engine)	WiseStream II, WiseStream III(Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
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	-10℃ ~ 55℃(-14°F ~ +131°F) less than 95%RH(non-condensing)	-50℃ ~ +60℃ (-58°F ~ +140°F) NEMA TS-2: 74℃ * Start up should be done at above -30℃ less than 95%RH(non-condensing) Humidity control /w GORE vent	-50℃ ~ +55℃ (-58°F ~ +131°F) * Maximum temperature : +60℃ (intermittent) NEMA TS-2: 74℃ * Start up should be done at above -30℃ less than 95%RH(non-condensing) Humidity control /w GORE vent	-25℃ ~ 50℃ (-13°F ~ +122°F) * Maximum temperature : +55℃ (intermittent) less than 95% RH (non-condensing) Humidity control /w GORE vent	-10℃ ~ 55℃(-14°F ~ +131°F) less than 95%RH (non-condensing)
Certification	-	IP66/IP67, NEMA4X, IK10	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	None
Power Consumption	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W
Dimensions (WxHxD) / Weight	W81 x H67 x D165mm (Ø3.19" x 2.64" x 6.48") 0.88kg (1.94 lb)	Ø93.4x298.4mm (Ø3.68"x11.75") 2.2kg(4.85 lb)	Ø180x125mm (Ø7.09x4.92") 1.9kg(4.19 lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.53 lb)	W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94 lb)
Additional Features	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear

X Core



XNO-C9083R

4K AI IR Bullet Camera

X Core



XNV-C9083R

4K AI IR Vandal Dome Camera

X Core



XND-C9083RV

4K AI IR Dome Camera

X Core



XNO-C8083R

6MP AI IR Bullet Camera

Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Min. Illumination	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	"Color: 0.04Lux(F1.3, 1/30sec) BW: 0Lux(IR LED on)"	"Color: 0.04Lux(F1.3, 1/30sec, 30IRE) B/W : 0Lux(IR LED on)"
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	4.4~9.3mm(2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm(2.1x) motorized varifocal	4.4~9.3mm(2.1x) motorized varifocal
Angular Field of View	H : 112.1°(Wide) ~ 47.5°(Tele) V : 58.0°(Wide) ~ 26.6°(Tele) D : 137.5°(Wide) ~ 54.6°(Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1°(Wide)~47.5°(Tele) V : 58.0°(Wide)~26.6°(Tele) D : 137.5°(Wide)~54.6°(Tele)	H : 112.1°(Wide)~47.5°(Tele) V : 58.0°(Wide)~26.6°(Tele) D : 137.5°(Wide)~54.6°(Tele)
Pan / Tilt / Rotate	-	0°~360° / -45°~75° / 0°~355°	0°~360° / -45°~75° / 0°~355°	None
IR Viewable Length	WiselR 40m (131.23ft)	WiselR 40m (131.23ft)	WiselR 40m(131.23ft)	WiselR 40m(131.23ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : 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
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	8MP/30fps	8MP/30fps	8MP/30fps	6MP/30fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB
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
Operating Temperature	-40°C~+55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-40°C~+55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-10 °C ~ 50 °C (14°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent	-40°C~+55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent
Certification	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10	IP52, IK08	IP66/IP67/NEMA4X, IK10
Power Consumption	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W
Dimensions (WxHxD) / Weight	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.45kg (3.20 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.35kg (2.98 lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62 lb)
Additional Features	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) - Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear

X Core

**XNV-C8083R**

6MP AI IR Vandal Dome Camera

X Core

**XND-C8083RV**

6MP AI Dome Camera

X Core

**XNO-C7083R**

4MP AI IR Bullet Camera

X Core

**XNV-C7083R**

4MP AI IR Vandal Dome Camera

	XNV-C8083R 6MP AI IR Vandal Dome Camera	XND-C8083RV 6MP AI Dome Camera	XNO-C7083R 4MP AI IR Bullet Camera	XNV-C7083R 4MP AI IR Vandal Dome Camera
Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS
Min. Illumination	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	2.8~10mm (3.6x) motorized varifocal	2.8~10mm (3.6x) motorized varifocal
Angular Field of View	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58.0° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58.0° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 109.7° (Wide) ~ 30.4° (Tele) V: 60.8° (Wide) ~ 17.8° (Tele) D: 131.3° (Wide) ~ 35.3° (Tele)	H: 109.7° (Wide) ~ 30.4° (Tele) V: 60.8° (Wide) ~ 17.8° (Tele) D: 131.3° (Wide) ~ 35.3° (Tele)
Pan / Tilt / Rotate	0°~360° / -45°~75° / 0°~355°	0°~360° / -45°~75° / 0°~355°	-	0°~360° / -45°~75° / 0°~355°
IR Viewable Length	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	WiseIR 40m(131.23ft)	WiseIR 40m(131.23ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	"Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear"	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear"
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : 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
Audio I/O	Selectable(mic in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm	Selectable(mic in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm	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	6MP/30fps	6MP/30fps	4MP/60fps	4MP/60fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB
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
Operating Temperature	-40°C~+55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH(non-condensing) Humidity control /w GORE vent	-10°C ~ 50°C (14°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent	-40°C~+55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-40°C~+55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent
Certification	IP66/IP67/NEMA4X, IK10	IP52, IK08	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10
Power Consumption	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W
Dimensions (WxHxD) / Weight	Ø160 x 118mm (Ø6.30" x 4.65") 1.45kg(3.20 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.35kg (2.98 lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.45kg (3.20 lb)
Additional Features	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) -Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear

X Core



XND-C7083RV

4MP AI IR Dome Camera

X Core



XNO-C6083R

2MP AI IR Bullet Camera

X Core



XNV-C6083R

2MP AI IR Vandal Dome Camera

X Core



XND-C6083RV

2MP AI Dome Camera

Imaging Device	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS
Min. Illumination	Color: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)
Video Output	Micro USB Type B	USB: Micro USB Type B, 1280x720 for installation	Micro USB Type B	Micro USB Type B
Focal Length	2.8~10mm(3.6x) 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: 109.7°(Wide) ~ 30.4°(Tele) V: 60.8°(Wide) ~ 17.8°(Tele) D: 131.3°(Wide) ~ 35.3°(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°~75° / 0°~355°	-	0°~360° / -45°~75° / 0°~355°	0°~360° / -45°~75° / 0°~355°
IR Viewable Length	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)	WiseIR 40m (131.23ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (150dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : 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
Audio I/O	Selectable(mic in/line in) / Line out	Selectable(mic in/line in) / Line out	Selectable(mic in/line in) / Line out	Selectable(mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	4MP/60fps	2MP/60fps	2MP/60fps	2MP/60fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB
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
Operating Temperature	-10°C ~ 50°C (14°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent	-40°C ~ +55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-40°C ~ +55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-10°C ~ 50°C (14°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent
Certification	IP52, IK08	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10	IP52, IK08
Power Consumption	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W
Dimensions (WxHxD) / Weight	Ø160 x 118mm (Ø6.30" x 4.65") 1.35kg (2.98 lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.45kg (3.20 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.35kg (2.98 lb)
Additional Features	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear



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: 1.0 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	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	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
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	- Classified object type: Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine: Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events: Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	- Classified object type: Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine: Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events: Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	- Classified object type: Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine: Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events: Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	- Classified object type: Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine: Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events: Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	- Classified object type: Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine: Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events: Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection
Business Intelligence	Based on AI engine: People counting, Queue management, Heatmap	Based on AI engine: People counting, Queue management, Heatmap	Based on AI engine: People counting, Queue management, Heatmap	Based on AI engine: People counting, Queue management, Heatmap	Based on AI engine: 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 III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
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 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)	W73.1 x H66.6 x D47.8mm 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)



PNO-A6081R
2MP AI IR Bullet Camera



PNV-A6081R
2MP AI IR Vandal Dome Camera



PND-A6081RV
2MP AI IR Dome Camera



PND-A6081RF
2MP AI IR Dome Camera



PNB-A6001
2MP AI Box Camera

Imaging Device	1/2" CMOS	1/2" CMOS	1/2" CMOS	1/2" CMOS	1/2" CMOS
Min. Illumination	Color: 0.008Lux (F1.3) BW : 0Lux (IR LED on)	Color: 0.008Lux (F1.3) BW : 0Lux (IR LED on)	Color: 0.008Lux(F1.3) BW : 0Lux(IR LED on)	Color: 0.008Lux(F1.3) BW : 0Lux(IR LED on)	Color: 0.007Lux(F1.2, 1/30sec)
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	4.38~9.33mm (2.13x) motorized varifocal	4.38~9.33mm (2.13x) motorized varifocal	4.38~9.33mm (2.13x) motorized varifocal	4.38~9.33mm(2.13x) motorized varifocal	-
Angular Field of View	H:103.1° (Wide) ~ 44.5° (Tele) V:54.2° (Wide) ~ 24.9° (Tele) D:124° (Wide) ~ 51.1° (Tele)	H:103.1° (Wide) ~ 44.5° (Tele) V:54.2° (Wide) ~ 24.9° (Tele) D:124° (Wide) ~ 51.1° (Tele)	H:103.1° (Wide) ~ 44.5° (Tele) V:54.2° (Wide) ~ 24.9° (Tele) D:124° (Wide) ~ 51.1° (Tele)	H:103.1°(Wide)~44.5°(Tele) V:54.2°(Wide)~24.9°(Tele) D:124°(Wide)~51.1°(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	WiseNRil (Based on AI engine), SSNR V	WiseNRil (Based on AI engine), SSNR V	WiseNRil (Based on AI engine), SSNR V	WiseNRil (Based on AI engine), SSNR V	WiseNRil (Based on AI engine), SSNR V
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	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : 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	2MP/120fps	2MP/120fps	2MP/120fps	2MP/120fps	2MP/120fps
WiseStream	WiseStreamII, WiseStreamIII (Based on AI engine)	WiseStreamII, WiseStreamIII (Based on AI engine)	WiseStreamII, WiseStreamIII (Based on AI engine)	WiseStreamII, WiseStreamIII (Based on AI engine)	WiseStreamII, WiseStreamIII (Based on AI engine)
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/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C	-25°C ~ +50°C (-13°F ~ +122°F) / Less than 90% RH	-25°C ~ +50°C (-13°F ~ +122°F) / Less than 90% RH	-10°C ~ +55°C(+14°F ~ +131°F) / Less than 90% RH
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, IK10, Plenum rate	-
Power Consumption	PoE+: Max 20.0W, typical 17.00W 12VDC: Max 18.00W, typical 16.00W	PoE+: Max 20.00W, typical 17.00W 12VDC: Max 18.70W, typical 15.00W	PoE+: Max 20.00W, typical 16.00W 12VDC: Max 17.70W, typical 14.00W	PoE+: Max 20.00W, typical 16.00W 12VDC: Max 17.70W, typical 14.00W	PoE+: Max 16.50W, typical 12.50W 12VDC: Max 13.50W, typical 10.80W
Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (3.58" x 14.51") (Without sunshield) 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 4.92") 1.95kg (4.30lb)	W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94lb)
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)



PNO-A9081RLP
4K AI LPR IR Bullet Camera



PNV-A9081RLP
4K AI LPR IR Vandal Dome Camera



PNB-A9001LP
4K AI LPR Box Camera

Imaging Device	1/1.8" CMOS		1/1.8" CMOS		1/1.8" CMOS	
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec), 0Lux (IR LED on)		Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec), 0Lux (IR LED on)		Color: 0.03Lux (F1.2, 1/30sec) B/W : 0.003Lux (F1.2, 1/30sec)	
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	
Focal Length	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)		-	
Pan / Tilt / Rotate	-		0°~360° / -45°~85° / 0°~355°		-	
IR Viewable Length	30m (98.42ft)		30m (98.42ft)		-	
Day & Night	Auto (ICR)		Auto (ICR)		Auto (ICR)	
Wide Dynamic Range	-		-		-	
Digital Noise Reduction	SSNR V		SSNR V		SSNR V	
Digital Image Stabilization	Stabilization Support (built-in gyro sensor)		Stabilization Support (built-in gyro sensor)		Stabilization Support (built-in gyro sensor)	
Analytics	Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection		Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection		Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection	
Business Intelligence	-		-		-	
Alarm I/O	1/1		1/1		1/1	
Audio I/O	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	
Resolution / Max. Frame Rate	8MP/30fps		8MP/30fps		8MP/30fps	
WiseStream	WiseStreamII		WiseStreamII		WiseStreamII	
Streaming	Up to 3 profiles		Up to 3 profiles		Up to 3 profiles	
Edge Storage	Pre-installed with 32GB Micro SD to support 10,000 LPR images		Pre-installed with 32GB Micro SD to support 10,000 LPR images		Pre-installed with 32GB Micro SD to support 10,000 LPR images	
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	
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C		-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C		-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	
Certification	IP66/IP67, IK10, NEMA4X		IP66/IP67/IP6K9K, IK10+, NEMA4X		-	
Power Consumption	PoE+: Max 20.0W, 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 16.50W, typical 12.50W 12VDC: Max 13.50W, typical 10.80W	
Dimensions (WxHxD) / Weight	Ø91 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)		W81x H67 x D165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94lb)	
	Wisenet Road AI		Wisenet Road AI		Wisenet Road AI	
Solution	Community Traffic Observation		Community Traffic Observation		City Traffic Observation	Highways
Speed Description	Moderate Speed		Moderate Speed		Regular Speed	High Speed
Lane Coverage	Up to 2 lanes (5m/18ft Wide)		Up to 2 lanes (5m/18ft Wide)		Up to 2 lanes	Up to 2 lanes
Speed limit	Up to 70kmh (45mph)		Up to 70kmh (45mph)		Up to 100kmh (65mph)	Up to 140kmh (90mph)
Min. Forward Distance	12m (38ft)		12m (38ft)		16m (52ft)	27m (90ft)
Max. Forward Distance	17m (55ft)		17m (55ft)		46m (150ft)	46m (150ft)
Max. Horizontal Angle	25°		25°		25°	15°
Max. Vertical Angle	25°		25°		25°	15°
Horizontal Offset	Up to 5m (18ft)		Up to 5m (18ft)		Up to 7m (24ft)	Up to 4m (12ft)
Camera Height	Up to 5m (18ft)		Up to 5m (18ft)		Up to 7m (24ft)	Up to 7m (24ft)
Vehicle Recognition	Make: 70+ / Model: 600+ / Color: 10		Make: 70+ / Model: 600+ / Color: 10		Make: 70+ / Model: 600+ / Color: 10	



XNO-9082R
4K IR Bullet Camera



XNV-9082R
4K IR Vandal Dome Camera



XND-9082RF
4K IR Dome Camera



XND-9082RV
4K IR Dome Camera



XNB-9002
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	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B	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°	-
IR Viewable Length	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extreme WDR (120dB)	extreme WDR (120dB)	extreme WDR (120dB)	extreme WDR (120dB)	extreme WDR (120dB)
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 (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: Max 12.95W, typical 10.5W 12VDC: Max 12.5W, typical 9.4W 24VAC: Max 14.5W, typical 11.2W	PoE: Max 12.95W, typical 10.5W 12VDC: Max 12.5W, typical 9.4W 24VAC: Max 14.5W, typical 11.2W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9.0W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9.0W	PoE: Max 12.95W, typical 8.2W 12VDC: Max 11.5W, typical 7.5W 24VAC: Max 13.5W, typical 8.9W
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 H67 x D165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94lb)
Additional Features	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default



XNO-8082R
6MP IR Bullet Camera



XNV-8082R
6MP IR Vandal Dome Camera



XND-8082RF
6MP IR Dome Camera



XND-8082RV
6MP IR Dome Camera



XNB-8002
6MP 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	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B	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°	-
IR Viewable Length	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extreme WDR	extreme WDR	extreme WDR	extreme WDR	extreme WDR
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 (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: Max 12.95W, typical 10.5W 12VDC: Max 12.5W, typical 9.4W 24VAC: Max 14.5W, typical 11.2W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9.0W 24VAC: Max 13.5W, typical 11.0W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9.0W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9.0W	PoE: Max 12.95W, typical 8.2W 12VDC: Max 11.5W, typical 7.5W 24VAC: Max 13.5W, typical 8.9W
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 H67 x D165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94lb)
Additional Features	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default

**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

	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	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
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	-	-	-	-	-
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 25.5 W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5 W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5 W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5 W (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



XND-8081FZ
5MP Flush Mount Dome Camera



XND-8081RV
5MP IR Dome Camera



XND-8081RF
5MP IR Flush Mount Dome Camera



XNV-8081Z
5MP Vandal Dome Camera



XNV-8081R
5MP IR Vandal Dome Camera

	XND-8081FZ 5MP Flush Mount Dome Camera	XND-8081RV 5MP IR Dome Camera	XND-8081RF 5MP IR Flush Mount Dome Camera	XNV-8081Z 5MP Vandal Dome Camera	XNV-8081R 5MP IR Vandal 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 (F1.2) 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	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
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	-	-	-	-	-
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) / ine 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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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) / Less than 90% RH	-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



XND-6081V
2MP Dome Camera



XND-6081F
2MP Flush Mount Dome Camera



XND-6081VZ
2MP Dome Camera



XND-6081FZ
2MP Flush Mount Dome Camera



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	-	-	-	-	-
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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

**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 1.0Vp-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	-
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	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
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	-	-	-	-	-
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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)	W73.1 x H66.6 x D147.8mm (2.88" 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	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 x 368.6mm (Ø6.3" x 4.67") 2.18kg (4.81lb)	Ø70 x 296mm (Ø2.76" x 11.65") 1.22kg (2.69lb)	Ø140.8 x 113mm (Ø5.54" x 4.45") 628g (1.38lb) (XND-8080R) 732g (1.61lb) (XND-8080RV)	Ø110 x 90mm (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-8080RSA**

5MP Stainless IR Vandal Dome Camera

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

5MP IR Vandal Dome Camera

**XNF-9010RV/9010RVM**

12MP IR Fisheye Camera

**XNF-9010RS**

12MP Stainless IR Fisheye Camera

Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/2.3" 12MP CMOS	1/2.3" 12MP 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) BW : 0Lux(IR LED on)	Color: 0.39 Lux (F2.2, 1/30sec) BW : 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 : 1.0 Vp-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	1.08mm fixed focal
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: 187° / V: 187° / D: 187°
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	-	-
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)	10m (32.8ft), Wise IR	9m (29.53ft), Wise IR
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	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	2 configured I / O	2 configured I/O
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) / 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	3008 x 3008 / 30fps	3008 x 3008 / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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, 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
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 ~ +140°F) / Less than 95% RH	-40°C ~ +50°C (-40°F ~ +122°F) / Less than 95% RH
Certification	IP67, IP66, NEMA4X, IK10	IP66, NEMA4X, IP6K9K, IK10+	IP66, IP67, IK10	IP66, IK10, NEMA4X, EN50155 class T3 (XNF-9010RVM only)	IP66, IP67, IP6K9K, NEMA4X, IK10, IK10+, NSF/ ANSI Standard 169 – Special Purpose Food Equipment and Devices.
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, typical 11W 12VDC : Max 11W, typical 9.1W	PoE : Max 12.95W, typical 11W 12VDC : Max 11W, typical 9.1W
Dimensions (WxHxD) / Weight	Ø160 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 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)	Ø160 x 72mm (Ø6.38" x 2.83") 1100g (2.43lb)	Ø167.9 x 72.1mm (Ø6.61" x 2.838") 2.980g (6.57lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Various mode support (Original view, Double/ Single panorama, Quad view, Single view) M12 Connector (XNF-9010RVM)	Various mode support (Original view, Double/ Single panorama, Quad view, Single view)



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



XNZ-6320A
2MP 32x Zoom Camera



XNZ-L6320A
2MP 32x Zoom Camera



XNB-6005
2MP Box Camera (extraLUX)



XNB-6000
2MP Box Camera

Imaging Device	1/1.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.1Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)	Color : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)	Color : 0.006Lux (F1.2) B/W : 0.0006Lux (F1.2)	Color : 0.01Lux (F1.2) B/W : 0.001Lux (F1.2)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	1.6mm fixed	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (32x) zoom	-	-
Angular Field of View	H : 192° / V : 192° / D : 192°	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.30° (Tele)	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.30° (Tele)	-	-
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	15m (49.21ft)	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	-	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification Shock detection	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	People counting, Queue management, Heatmap	-	-	-	-
Alarm I/O	1 / 1	1 / 2	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2048 x 2048 / 30fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F) (XNF-8010R) -40°C ~ +55°C (-40°F ~ +131°F) (XNF-8010RV/8010RVM)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IK10 (XNF-8010RV/8010RVM)	-	-	-	-
Power Consumption	PoE : Max 12W, 12VDC : Max 11W (XNF-8010R) PoE : Max 12.95W, 12VDC : Max 12W (XNF-8010RV/8010RVM)	PoE : Max 7W 12VDC : Max 6.7W	PoE : Max 6.8W 12VDC : Max 5.2W	PoE : Max. 8.5W 12VDC : Max 8W 24VAC : Max 9W	PoE : Max 7.5W 12VDC : Max 6.5W 24VAC : Max 8W
Dimensions (WxHxD) / Weight	Ø146 x 54.8mm (Ø5.75" x 2.16") 730g (1.61lb) (XNF-8010R) Ø146 x 65.8mm (Ø5.75" x 2.59") 785g (1.73lb) (XNF-8010RV) 790g (1.74lb) (XNF-8010RVM)	W96 x H76 x D143.5mm (3.78" x 2.99" x 5.65") 578g (1.274lb)	W72 x H63.9 x D135.4mm (2.83" x 2.52" x 5.33") 480g (1.06lb)	W73.1 x H 66.6 x D147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)	W73.1 x H66.6 x D147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)
Additional Features	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarping	Defog, SFP Slot	Defog	Handover, Hallway View	Handover, Hallway View

**XNB-6001**

2MP Remote Head Camera

**SLA-T4680/T4680V**

2MP lens for XNB-6001

**SLA-T2480/T2480V**

2MP lens for XNB-6001

**SLA-T1080FA**

2MP lens for 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	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)
Wide Dynamic Range	120dB	-	-	-
Digital Noise Reduction	SSNR V	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Intelligent analytics Audio detection	-	-	-
Business Intelligence	People counting, Queue management, Heatmap	-	-	-
Alarm I/O	1 / 1	-	-	-
Audio I/O	Selectable (mic in/line in) / Line out	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps	-	-	-
WiseStream	WiseStreamII	-	-	-
Streaming	Up to 10 Profiles	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	-	-	-
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	-	-	-
Power Consumption	PoE : Max 6W 12VDC : Max 6.5W	-	-	-
Dimensions (WxHxD) / Weight	W131.1 x H28 x D86mm (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	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) ~ 5.3° (Tele) V : 32.19° (Wide) ~ 3° (Tele) D : 61.4° (Wide) ~ 6.06° (Tele)	H : 100° (Wide) ~ 26.2° (Tele) V : 54° (Wide) ~ 14.8° (Tele) D : 116° (Wide) ~ 30° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32° (Tele)	H : 109° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132° (Wide) ~ 38° (Tele)	H : 139° / V : 73° / D : 167° (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	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	-	-	-	People counting, Queue management, Heatmap 1 / 1
Alarm I/O	1 / 1	1 / 1	1 / 1	-	Selectable (mic in/line in) / Line out
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 x 368.6mm (Ø3.58" x 14.51") 2.18kg (4.81lb)	Ø91 x 388.6mm (Ø3.58" x 15.30") 2.35kg (5.18lb)	Ø91 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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 x 140mm (Ø6.30" x 5.51") 1.10 kg (2.43lb) (XND-6085) 1.25 kg (2.76lb) (XND-6085V)	Ø140.8 x 113mm (Ø5.54" x 4.45") 610g (1.34lb) (XND-6080) 714g (1.57lb) (XND-6080V)	Ø140.8 x 113mm (Ø5.54" x 4.45") 624g (1.38lb) (XND-6080R) 724g (1.60lb) (XND-6080RV)	Ø140.8 x 113mm (Ø5.54" x 4.45") 580g (1.28lb) (XND-L6080R) 690g (1.52lb) (XND-L6080RV)	Ø140.8 x 113mm (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

Imaging Device	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)
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
Focal Length	4mm fixed	2.8mm fixed	2.4mm fixed	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)
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°
IR Viewable Length	30m (98.43ft)	-	-	70m (229.66ft) (XNV-6120R)
Day & Night	Auto (ICR)	Auto (Electrical)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	-	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support	Support	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
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-
Alarm I/O	1 / 1	-	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Built-in mic / -	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	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
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
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)
Certification	IK08	-	IK08	IP67, 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)
Dimensions (WxHxD) / Weight	Ø110 x 90mm (Ø4.33" x 3.54") 380g (0.84lb)	Ø98.9 x 129mm (Ø3.89" x 5.08") 275g (0.61lb)	Ø140.8 x 113mm (Ø5.54" x 4.45") 610g (1.34lb)	Ø160 x 128.5mm (Ø6.30" x 5.06") 985g (2.17lb) (XNV-6120) 995g (2.19lb) (XNV-6120R)
Additional Features	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-6080RSA**

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-6080RSA 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	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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, IP6K9K, 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 x 140mm (Ø6.30" x 5.51") 1.40kg (3.09lb)	Ø160 x 118.5mm (Ø6.30" x 4.67") 985g (2.17lb)	Ø160 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 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	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 x 118.5mm (Ø6.30" x 4.67") 940g (2.07lb)	W98.9 x H52 x D100mm (3.89" x 2.05" x 3.94") 295g (0.65lb)	Ø120 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)	W103.7 x H72.3 x D126.8mm (4.08" x 2.85" x 4.99") 478g (1.04lb)	W98.9 x H52 x D100mm (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

PTZ PLUS**XNP-9300RW**

4K 30x Wiper + IR PTZ Camera

PTZ PLUS**XNP-8300RW**

6MP 30x Wiper + IR PTZ Camera

PTZ PLUS**XNP-6400RW**

2MP 40x Wiper + IR PTZ Camera

	XNV-6011	XNV-6010	XNP-9300RW	XNP-8300RW	XNP-6400RW
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 : 0.0055Lux (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	-	-	-
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)	200m (656.17ft)
Day & Night	Auto (Electrical)	Auto (ICR)	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/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 (with NW I/O Box : SPM-4210)	Intelligent analytics, *Audio detection, Sound classification (with NW I/O Box : SPM-4210)	Intelligent analytics, *Audio detection, Sound classification (with NW I/O Box : SPM-4210)
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-	-	-
Alarm I/O	-	1 / 1	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)
Audio I/O	-	Selectable (mic in/line in) / Line out	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	Normal: -40°C ~ +55°C (-40°F ~ +131°F) / Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C (+165°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)	Normal: -40°C ~ +55°C (-40°F ~ +131°F) / Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C (+165°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)	Normal: -40°C ~ +55°C (-40°F ~ +131°F) / Maximum Temperature based on NEMA-TS 2(2.2.7): +74°C (+165°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)
Certification	IP66, IK10, NEMA4X	IP67, IP66, IK10	IP66, IK10 (Camera body only), NEMA4X	IP66, IK10 (Camera body only), NEMA4X	IP66, IK10 (Camera body only), NEMA4X
Power Consumption	PoE : Max 6.50W	PoE : Max 6W 12V DC : Max 5.5W	HPoE(Camera only): Max 42W, typical 20W	HPoE (Camera only): Max 42W, typical 20W	HPoE (Camera only): Max 42W, typical 20W
Dimensions (WxHxD) / Weight	Ø112.8 x 63.7mm (Ø4.44" x 2.51") 420g (0.93lb)	Ø120 x 97.5mm (Ø4.72" x 3.84") 625g (1.38lb)	Ø184.9 x 318.8mm (Ø7.28" x 12.55") 5.4kg	Ø184.9 x 318.8mm (Ø7.28" x 12.55") 5.4kg	Ø184.9 x 318.8mm (Ø7.28" x 12.55") 5.4kg
Additional Features	Handover, Hallway View	Handover, Hallway View	1 Terminal & Cable, Upgraded preset accuracy, built-in wiper, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector	1 Terminal & Cable, Upgraded preset accuracy, built-in wiper, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector	1 Terminal & Cable, Upgraded preset accuracy, built-in wiper, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector



XNP-9250R
25x IR PTZ Camera



XNP-8250R
6MP 25x IR PTZ Camera



XNP-6400R
2MP 40x IR PTZ Camera



XNP-9250
4K 25x PTZ Camera



XNP-8250
6MP 25x PTZ Camera



XNP-6400
2MP 40x PTZ Camera

[illegible]

**XNP-6550RH**

2MP 55x IR PTZ Camera

**XNP-6371RH**

2MP 37x IR PTZ Camera

**XNP-6320RH**

2MP 32x IR PTZ Camera

**XNP-6320H/6320**

2MP 32x PTZ Camera

Imaging Device	1/2.8" CMOS	1/2" 2MP CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.02Lux (F1.6) B/W : 0Lux (IR LED on)	Color: 0.01Lux (F1.5, 1/30sec) BW: 0Lux (IR LED)	Color : 0.05Lux (F1.6) B/W : 0Lux (IR LED On)	Color : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)
Video Output	CVBS 1.0 Vp-p	CVBS: 1.0 Vp-p	CVBS: 1.0 Vp-p	CVBS 1.0 Vp-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
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)
Pan / Tilt / Rotate	360° Endless / 95° (-5° ~ 90°) / -	-	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 210° (-15° ~ 195°) / -
IR Viewable Length	500m (1,640.42ft)	350m (1,148.29ft)	200m (656.17ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	150dB	150dB	150dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (built-in gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Shock detection	Intelligent analytics Audio detection Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification Shock detection
Business Intelligence	-	-	-	-
Alarm I/O	4 / 2	4 / 2	4 / 1	4 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	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 (HTTP API) Wisenet open platform	ONVIF profile S/G/T, 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) / Less than 90% RH	HPoE: -40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C 24VAC: -50°C ~ +55°C (-58°F ~ +131°F)	PoE+: -35°C ~ +55°C (-31°F ~ +131°F) 24VAC: -50°C ~ +55°C (-58°F ~ +131°F) (XNP-6320H) -10°C ~ +55°C (-14°F ~ +131°F) (XNP-6320)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10 (XNP-6320H) IK10 (With SHP-3701H) (XNP-6320)
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)
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)
Additional Features	Defog, Auto tracking	Defog, Auto tracking	Defog, Auto tracking, Direction indicator	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	SSNR V	SSNR V	SSNR V
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	WiseStreamII	WiseStreamII	WiseStreamII
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 x 161.5mm (Ø6.61" x 6.36") 1.9kg (4.19 lb)	Ø136.1 x 106.1mm (Ø5.36" x 4.18") 0.78kg (1.72 lb)
Additional Features	Defog, Auto tracking, Direction indicator	Defog, Auto tracking	Defog, Auto tracking

**PNP-9200RH**

4K 20x IR PTZ Camera

**PNM-9031RV**

15MP 192° IR Panoramic Camera

**PNM-9030V**

15MP 180°/220° Panoramic Camera

**PNM-9022V**

8.3MP 180°/209° Panoramic Camera

Imaging Device	1/2.5" CMOS	1/2.8" 5MP CMOS (x4)	1/2.8" 4CH	1/2.8" 4CH
Min. Illumination	Color : 0.1Lux (F1.8) B/W : 0Lux (IR LED on)	Color: 0.1Lux(F1.6, 1/30sec) BW: 0Lux(IR LED on)	Color : 0.15Lux (F2.0) B/W : 0.01Lux (F2.0)	Color: 0.3Lux(F1.6) Color: 0.03Lux(F1.6)
Video Output	CVBS 1.0 Vp-p	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	4.8 ~ 96mm (20x) zoom	4.3mm Fixed	4mm fixed	2.8mm fixed focal
Angular Field of View	H : 65.1° (Wide) ~ 3.8° (Tele) V : 38.4° (Wide) ~ 2.2° (Tele)	192°(H) x 65°(V)	[180° mode] H : 180° / V : 70° [220° mode] H : 220° / V : 52°	H: 209°, V: 83.3°
Pan / Tilt / Rotate	360° Endless / 190° (-5° ~ 185°) / -	0~355° / 0~60° / -	0° ~ 355° / 0° ~ 60° / -	0°~355° / 0°~60° / -
IR Viewable Length	200m (656.17ft)	Wise IR 20m (65.6ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	extreme WDR (120dB)
Digital Noise Reduction	SSNR	SSNR V	SSNR III	SSNR V
Digital Image Stabilization	Support	-	-	-
Analytics	Intelligent analytics Audio detection	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection	Intelligent analytics Audio detection Sound classification	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection
Business Intelligence	-	Heatmap	Heatmap	Heatmap
Alarm I/O	4 / 2	Selectable 2 port	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable(mic in/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
Resolution / Max. Frame Rate	12MP / 20fps, 8MP / 30fps	15MP / 20fps	15.5MP / 30fps	8.3MP / 30fps
WiseStream	WiseStream	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 Profiles	Up to 4 profiles	Up to 5 or 3 profiles for each CH	Up to 10 profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDHC/SDXC 2slots 512GB (256GBx2)	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 (HTTP API)	ONVIF profile S/G, SUNAPI	ONVIF Profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F)	- Normal: -40°C ~ +55°C (-40°F ~ +131°F) / - Intermittent: -40°C ~ +60°C (-40°F ~ +140°F), 8Hrs - Less than 95% RH (Non-condensing) * Startup should be above -30°C	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -30°C (-22°F)	-40°C ~ +60°C (-40°F ~ +131°F) / Less than 95% RH (Non-condensing) * Maximum temperature: +60°C (intermittent)
Certification	IP66, IK10	IP66, IK10, NEMA4X	IP66, IK10	IP66, IK10, NEMA4X
Power Consumption	24VAC: Max 60.0W / 90.0W - Heater off/on, IR on	PoE+: Max 23.5W, Typical 18.0W 12VDC: Max 20.5W, Typical 16.0W	PoE+: Max 25.5W 12VDC: Max 21.0W	PoE+: Max 18W, Typical 10.4W 12VDC: Max 16W, Typical 9W
Dimensions (WxHxD) / Weight	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1kg (15.65lb)	Ø253 x 170mm 2.6kg	Ø253 x 165mm (Ø9.96" x 6.5") 3.2kg (7.1lb)	Ø253 x 165mm (Ø9.96" x 6.5") 3.2kg
Additional Features	Defog	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection	Defog	4CH Stitching


PNM-9085RQZ

5MP x 4CH IR PTRZ Multi-directional Camera


PNM-9084RQZ

2MP x 4CH IR PTRZ Multi-directional Camera


PNM-9084QZ

2MP x 4CH PTRZ Multi-directional Camera


PNM-8082VT

2MP x 3CH Multi-directional Camera

Imaging Device	1/1.8" CH	1/2.8" 4CH	1/2.8" 4CH	1/2.8" CMOS 3CH
Min. Illumination	Color: 0.11lux (F1.6) BW: 0Lux (IR LED on)	Color: 0.05lux (F1.6) BW: 0Lux (IR LED on)	Color: 0.08lux (F2.2) BW: 0.008lux (F2.2)	Color: 0.04lux(F2.2) BW: 0.004lux(F2.2)
Video Output	-	-	-	CVBS: 1.0Vp-p
Focal Length	4.13~9.4mm (2.3x) motorized varifocal	3.2~10mm (3.1x) motorized varifocal	3 ~ 6mm (2x) motorized varifocal	3~6mm (2x) 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: 109.0° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132.0° (Wide) ~ 38.0° (Tele)	H: 107° (Wide) ~ 56.3° (Tele) V: 57° (Wide) ~ 31.5° (Tele) D: 126° (Wide) ~ 64.3° (Tele)	H: 107° (Wide) ~ 56.3° (Tele) V: 57° (Wide) ~ 31.5° (Tele) D: 126° (Wide) ~ 64.3° (Tele)
Pan / Tilt / Rotate	0~360° / 35~80° / 0~90°	0~360° / 30~80° / 0~90°	0° ~ 360° / 0° ~ 90° / 0° ~ 90°	0~360° / 0~73° / 0~90°
IR Viewable Length	30m (98.42ft)	30m (98.42ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	extreme WDR (150dB)
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support	Support
Analytics	Intelligent analytics Audio detection	Intelligent analytics Audio detection	Intelligent analytics Audio detection	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line
Business Intelligence	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	2MP / 60fps	2MP / 60fps	2MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	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/T, SUNAPI, Wisenet Open Platform	ONVIF Profile S/G/T SUNAPI(HTTP API)
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH (Non condensing) * Start up should be above at -35°C
Certification	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	Max 45W, typical 32W	Max 42W, typical 28W	HPoE: Max 33W typical 20W	Max: 16.5W, Typical : 8.2W
Dimensions (WxHxD) / Weight	Ø315 x 145.9mm (Ø12.4" x 5.74") 5.2kg (11.46lb)	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)	Ø251 x 116.5mm (Ø9.88" x 4.59") 3kg (6.6lb)
Additional Features	Motorized PTRZ	Motorized PTRZ	Motorized PTRZ, Hallway view, Defog	3CH Multi-directional

**PNM-9000QB**

2MP x 4CH Remote Head Camera

**SLA-T4680A/T4680VA**

2MP lens for PNM-9000QB

**SLA-T2480A/T2480VA**

2MP lens for PNM-9000QB

**SLA-T1080FA**

2MP lens for PNM-9000QB

	PNM-9000QB	SLA-T4680A/T4680VA	SLA-T2480A/T2480VA	SLA-T1080FA
Imaging Device	-	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	-	Color: 0.06Lux(F2.5)	Color: 0.045Lux(F2.0)	Color: 0.03Lux(F1.6)
Video Output	HDMI(1920x1080, Quad view support)	-	-	-
Focal Length	-	4.6mm fixed focal	2.4mm fixed focal	1.6mm fixed focal
Angular Field of View	-	H: 73° / V: 39° / D: 85°	H: 138° / V: 73° / D: 165°	H: 187° / V: 113.9°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	Auto (electrical)	-	-	-
Wide Dynamic Range	extreme WDR (150dB)	-	-	-
Digital Noise Reduction	SSNR V	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	1 / 1	-	-	-
Audio I/O	Selectable (mic in/line in) / Line out	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	2MP / 30fps	-	-	-
WiseStream	WiseStreamII	-	-	-
Streaming	Up to 10 profiles	-	-	-
Edge Storage	Micro SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API) Wisenet open platform	-	-	-
Operating Temperature	-10°C ~ +45°C (-40°F ~ +113°F) / Less than 95% RH (Non condensing)	-	-	-
Certification	-	-	-	-
Power Consumption	PoE : Max 22.00W, Typical 16.70W DC : Max 19.00W, Typical : 14.00W	-	-	-
Dimensions (WxHxD) / Weight	W200 x H37 x D146mm (7.87" x 1.46" x 5.75") 715g (1.58lbs)	Ø24 x L49.8mm, 310g (SLA-T4681) W30 x H27.9 x D45mm, 321g (SLA-T4681V)	Ø24 x L49.8mm, 318g (SLA-T2481) W30 x H27.9 x D45mm, 328g (SLA-T2481V)	Ø35 x L68.9mm 430g
Additional Features	Optional pinhole/fixed lens			

**PNM-9322VQP**

2MP/5MP x 4CH + 2MP 32 x PTZ

**SLA-5M7000P**

5MP lens for PNM-9320VQP

**SLA-5M4600P**

5MP lens for PNM-9320VQP

**SLA-5M3700P**

5MP lens for PNM-9320VQP

Imaging Device	1/2.8" CMOS (PTZ)	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Min. Illumination	depeding on lens	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	4.44~142.6mm (32x) zoom (PTZ)	7.0mm fixed	4.6mm fixed	3.7mm fixed
Angular Field of View	depeding on lens	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° / +12° ~ +93° / ±180°	±90° / +21° ~ +85° / ±180°	±90° / +36° ~ +73° / ±180°
IR Viewable Length	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	2MP 150dB, 5MP 120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Defocus detection, Directional detection, Face detection, Fog detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	Selectable(mic in/line in) / Line out (PTZ)	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps, 5MP 30fps	-	-	-
WiseStream	WiseStreamII	-	-	-
Streaming	Up to 10 Profiles	-	-	-
Edge Storage	Micro SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S SUNAPI (HTTP API)	-	-	-
Operating Temperature	-35°C ~ +55°C (-31°F ~ +131°F) Less than 90% RH	-	-	-
Certification	IP66, IK10	-	-	-
Power Consumption	HPoE: Max 65W	-	-	-
Dimensions (WxHxD) / Weight	Ø367.8 x 335.7mm (Ø14.48" x 13.22") 7.05kg (16.1 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)
Additional Features	Exchangeable 4ea x 2MP / 5MP lens modules, Hallway view, Defog	-	-	-

**SLA-2M6000P**

2MP lens for PNM-9320VQP

**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	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)	"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	12mm 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°	H : 26.3° / V : 14.9° / D : 30.0°
Pan / Tilt / Rotate	±90° / +10° ~ +95° / ±180°	±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)	Auto (Electrical)
Wide Dynamic Range	150dB	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)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)
Additional Features	-	-	-	-	-


PNM-9002VQ

2MP/5MP x 4CH Multi-directional Camera


SLA-5M7000Q

5MP lens for PNM-9000VQ, PNM-9002VQ


SLA-5M4600Q

5MP lens for PNM-9000VQ, PNM-9002VQ


SLA-5M3700Q

5MP lens for PNM-9000VQ, PNM-9002VQ

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 (Multi)	-	-	-
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	2MP 150dB, 5MP 120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Defocus detection, Directional detection, Face detection, Fog detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	5MP / 30fps, 2MP / 60fps	-	-	-
WiseStream	WiseStreamII	-	-	-
Streaming	Up to 10 profiles	-	-	-
Edge Storage	Micro SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH	-	-	-
Certification	IP66, IK10	-	-	-
Power Consumption	Max 25.5W	-	-	-
Dimensions (WxHxD) / Weight	Ø253 x 130mm (Ø9.96" x 5.11") 3000g (6.61lb)	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	Defog	-	-	-

**SLA-2M6000Q**

2MP lens for PNM-9000VQ, PNM-9002VQ

**SLA-2M3600Q**

2MP lens for PNM-9000VQ, PNM-9002VQ

**SLA-2M2800Q**

2MP lens for PNM-9000VQ, PNM-9002VQ

**SLA-2M2400Q**

2MP lens for PNM-9000VQ, PNM-9002VQ

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 1.0 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° / 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	SSNR V	-	-	-
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	WiseStreamII	-	-	-
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-7002VD**

4MP x 2CH Multi-directional Camera

**SLA-2M2402D**

2MP lens for PNM-7002VD

**SLA-2M2802D**

2MP lens for PNM-7002VD

**SLA-2M3602D**

2MP lens for PNM-7002VD

**SLA-2M6002D**

2MP lens for PNM-7002VD

Imaging Device	-	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	-	Color: 0.055Lux(F2.0, 1/30sec) B/W: 0.055Lux(F2.0, 1/30sec)	Color: 0.055Lux(F2.0, 1/30sec) B/W: 0.055Lux(F2.0, 1/30sec)	Color: 0.055Lux(F2.0, 1/30sec) B/W: 0.055Lux(F2.0, 1/30sec)	Color: 0.055Lux(F2.0, 1/30sec) B/W: 0.055Lux(F2.0, 1/30sec)
Video Output	CVBS 1.0 Vp-p (Multi)	-	-	-	-
Focal Length	-	2.4mm fixed focal	2.8mm fixed focal	3.6mm fixed focal	6.0mm fixed focal
Angular Field of View	-	H:135.4° / V:71.2° / D:161.6°	H:107.4° / V:62.2° / D:122.0°	H:94.8° / V:49.3° / D:114.3°	H:50.4° / V:28.8° / D:58.1°
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (Electrical)	-	-	-	-
Wide Dynamic Range	150dB	-	-	-	-
Digital Noise Reduction	SSNR V	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-
Analytics	Defocus detection, Directional detection, Face detection, Fog detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line	-	-	-	-
Business Intelligence	-	-	-	-	-
Alarm I/O	-	-	-	-	-
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps	-	-	-	-
WiseStream	WiseStreamII	-	-	-	-
Streaming	Up to 10 profiles	-	-	-	-
Edge Storage	Micro SD/SDHC/SDXC	-	-	-	-
Application Programming Interface	ONVIF Profile S/T SUNAPI(HTTP API) Wisenet open platform	-	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH	-	-	-	-
Certification	IP66, IK10	-	-	-	-
Power Consumption	Typical: 12.00W, Max: 12.95W	-	-	-	-
Dimensions (WxHxD) / Weight	Ø197.6 x 84mm (Ø7.78" x 3.31") 1250g (2.76lb)	Ø35.5 x 35.9mm 30g	Ø35.5 x 35.9mm 30g	Ø35.5 x 35.9mm 30g	Ø35.5 x 35.9mm 30g
Additional Features	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 : 0.15Lux (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 : 0.15Lux (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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 x 246mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø70 x 246mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø70 x 246mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø120.3 x 102mm (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



Q mini
QND-8021
5MP Dome Camera



Q mini
QND-8011
5MP Dome Camera

	QND-8030R	QND-8020R	QND-8010R	QND-8021	QND-8011
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 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 1.0Vp-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	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 : 104.7° / V : 76.5° / D : 136.0°	-
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	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 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)	W73.8 x H66.6 x D136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



QNE-8011R
5MP IR Flateye Camera



QNO-7082R
4MP IR Bullet Camera



QNO-7032R
4MP IR Bullet Camera



QNO-7022R
4MP IR Bullet Camera



QNO-7012R
4MP IR Bullet Camera

Imaging Device	1/2.8" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
Min. Illumination	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.1Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) 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
Focal Length	2.8mm fixed	3.2~10mm (3.1x) motorized varifocal	6mm fixed focal	4mm fixed focal	2.8mm fixed focal
Angular Field of View	H : 104.4° V : 76.7° D : 136.1°	H : 98.6° (Wide) ~ 30.8° (Tele) V : 52.3° (Wide) ~ 17.3° (Tele) D : 115.7° (Wide) ~ 35.3° (Tele)	H : 49.0° V : 27.6° D : 55.6°	H : 78.2° V : 41.2° D : 92.0°	H : 107.5° V : 59.7° D : 122.0°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 75° / 0° ~ 360°	-	-	-	-
IR Viewable Length	20m (65.62ft)	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
Audio I/O	-	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	5MP / 30fps	4MP / 30fps	4MP / 30fps	4MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	Unicast (6 users) / Multicast Multiple streaming (Up to 3 profiles)
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 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH * Start up should be done at -30°C or above
Certification	IP67, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 7.4W, typical 5.5W	PoE: Max 11.4W, typical 8W 12VDC: Max 9.6W, typical 7W	PoE: Max 10.7W, typical 8W 12VDC: Max 9.1W, typical 6.8W	PoE: Max 10.7W, typical 8W 12VDC: Max 9.1W, typical 6.8W	PoE: Max 10.7W, typical 8W 12VDC: Max 9.1W, typical 6.8W
Dimensions (WxHxD) / Weight	Ø125 x 87.35mm (Ø4.92" x 3.44") 645g (1.422lb)	Ø78 x 259.8mm (Ø3.07" x 10.23") 900g (1.984 lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543 lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543 lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543 lb)
Additional Features	Hallway View	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line



QNO-6082R/6082R1
2MP IR Bullet Camera



QNO-6072R/6072R1
2MP IR Bullet Camera



QNO-6032R/6032R1
2MP IR Bullet Camera



QNO-6022R/6022R1
2MP IR Bullet Camera



QNO-6012R/6012R1
2MP IR Bullet 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 1.0 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		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	WiseStreamII		WiseStreamII		WiseStreamII		WiseStreamII		WiseStreamII	
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 x 259.8mm (Ø3.07" x 10.23") 900g (1.984lb)		Ø70 x 246mm (Ø2.76" x 9.69") 730g (1.609lb)		Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)		Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)		Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)	
Additional Features	Hallway View		Hallway View		Hallway View		Hallway View		Hallway View	



NEW

QND-7082R
4MP IR Dome Camera



NEW

QND-7032R
4MP IR Dome Camera



NEW

QND-7022R
4MP IR Dome Camera



NEW

QND-7012R
4MP IR Dome Camera

Imaging Device	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
Min. Illumination	Color: 0.1Lux (F1.6, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.15Lux (F2.0, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.15Lux (F2.0, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.15Lux (F2.0, 1/30sec) B/W: 0Lux (IR LED On)
Video Output	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS: 1.0Vpp/75Ω composite, 720x480(N), 720x576(P) for installation
Focal Length	3.2~10mm (3.1x) motorized varifocal	6mm fixed focal	4mm fixed focal	2.8mm fixed focal
Angular Field of View	H: 98.6° (Wide) ~ 30.8° (Tele) V: 52.3° (Wide) ~ 17.3° (Tele) D: 115.7° (Wide) ~ 35.3° (Tele)	H: 49.0° V: 27.6° D: 55.6°	H: 78.2° V: 41.2° D: 92.0°	H: 107.5° V: 59.7° D: 122.0°
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)
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	1/1	1/1
Audio I/O	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
Resolution / Max. Frame Rate	4MP / 30fps	4MP / 30fps	4MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)
Operating Temperature	-10°C~+55°C (+14°F~+131°F) / Less than 95% RH	-10°C~+55°C (+14°F~+131°F) / Less than 95% RH	-10°C~+55°C (+14°F~+131°F) / Less than 95% RH	-10°C~+55°C (+14°F~+131°F) / Less than 95% RH
Certification	-	-	-	-
Power Consumption	PoE: Max 8.6W, typical 6.3W 12VDC: Max 7.6W, typical 5.4W	PoE: Max 7.9W, typical 6.1W 12VDC: Max 7.1W, typical 5.1W	PoE: Max 7.9W, typical 6.1W 12VDC: Max 7.1W, typical 5.1W	PoE: Max 7.9W, typical 6.1W 12VDC: Max 7.1W, typical 5.1W
Dimensions (WxHxD) / Weight	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 320g (0.705 lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562 lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562 lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562 lb)
Additional Features	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line



QND-6082R/6082R1
2MP IR Dome Camera



QND-6072R/6072R1
2MP IR Dome Camera



QND-6032R/6032R1
2MP IR Dome Camera



QND-6022R/6022R1
2MP IR Dome Camera



QND-6012R/6012R1
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	WiseStreamII		WiseStreamII		WiseStreamII		WiseStreamII		WiseStreamII	
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 x 86mm (Ø4.33" x 3.39") 255g (0.562lb)		Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562lb)		Ø110 x 86mm (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-7082R
4MP IR Vandal Dome Camera



QNV-7032R
4MP IR Vandal Dome Camera

	QND-6021 2MP Dome Camera	QND-6011 2MP Dome Camera	QNV-7082R 4MP IR Vandal Dome Camera	QNV-7032R 4MP IR Vandal Dome Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/3" CMOS	1/3" CMOS
Min. Illumination	Color : 0.03Lux (F1.6)	Color : 0.03Lux (F2.0)	Color : 0.1Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)
Video Output	Micro HDMI	Micro HDMI	CVBS 1.0Vp-p	CVBS 1.0Vp-p
Focal Length	4mm fixed	2.8mm fixed	3.2~10mm(3.1x) motorized varifocal	6mm fixed focal
Angular Field of View	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°	H : 98.6° (Wide) ~ 30.8° (Tele) V : 52.3° (Wide) ~ 17.3° (Tele) D : 115.7° (Wide) ~ 35.3° (Tele)	H : 49.0°, V : 27.6°, D : 55.6°
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°
IR Viewable Length	-	-	30m (98.42ft)	30m (98.42ft)
Day & Night	Auto (Electrical)	Auto (Electrical)	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	People counting	People counting	-	-
Alarm I/O	-	-	1 / 1	1 / 1
Audio I/O	-	-	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	2MP / 30fps	2MP / 30fps	4MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB
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 (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH * Start up should be done at -30°C or above
Certification	IP42, IK08	IP42, IK08	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 4.8W, typical 2.8W	PoE : Max 4.8W, typical 2.8W	PoE: Max 11.4W, typical 8.5W 12VDC: Max 9.6W, typical 7.2W	PoE: Max 10.7W, typical 8.1W 12VDC: Max 9.1W, typical 6.5W
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 x 106.1mm (Ø5.39" x 4.18") 710g (1.565 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)
Additional Features	Super compact design, Hallway View	Super compact design, Hallway View	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line



NEW

QNV-7022R

4MP IR Vandal Dome Camera



NEW

QNV-7012R

4MP IR Vandal Dome Camera

**QNV-6082R/6082R1**

2MP IR Vandal Dome Camera

**QNV-6072R/6072R1**

2MP IR Vandal Dome Camera

Imaging Device	1/3" CMOS	1/3" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.15Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) 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
Focal Length	4mm fixed focal	2.8mm fixed focal	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) manual varifocal
Angular Field of View	H : 78.2°, V : 41.2°, D : 92.0°	H : 78.2°, V : 41.2°, D : 92.0°	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)
Pan / Tilt / Rotate	0° ~ 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	25m (82.02ft)	20m (65.62ft)	30m (98.42ft)	30m (98.42ft)
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	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) / -
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	4MP / 30fps	4MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH * Start up should be done at -30°C or above	-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
Power Consumption	PoE: Max 10.7W, typical 8.1W 12VDC: Max 9.1W, typical 6.5W	PoE: Max 10.7W, typical 8.1W 12VDC: Max 9.1W, typical 6.5W	PoE : Max 7.7W, typical 6W 12VDC : Max 6.5W	PoE : Max 7.7W, typical 6W 12VDC : Max 6.5W
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)	Ø137 x 106.1mm (Ø5.39" x 4.18") 710g (1.565lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 710g (1.565lb)
Additional Features	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Hallway View	Hallway View



QNV-6032R/6032R1
2MP IR Vandal Dome Camera



QNV-6022R/6022R1
2MP IR Vandal Dome Camera



QNV-6012R/6012R1
2MP IR Vandal Dome Camera



QNV-6024RM
2MP IR Flat Camera

Imaging Device	1/2.8" CMOS		1/2.8" CMOS		1/2.8" CMOS		1/2.8" CMOS	
Min. Illumination	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)		Color : 0.03Lux (F2.0) 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	
Focal Length	6mm fixed		4mm fixed		2.8mm fixed		3.6mm fixed	
Angular Field of View	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°		H : 94.8° / V : 49.3° / D : 114.3°	
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°		0° ~ 350° / 0° ~ 67° / 0° ~ 355°		0° ~ 350° / 0° ~ 67° / 0° ~ 355°		±5°/0-67°/±90°	
IR Viewable Length	30m (98.42ft)		25m (82.02ft)		20m (65.62ft)		15m (49.21ft)	
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		1 / 1		-	
Audio I/O	Selectable (mic in/line in)	-	Selectable (mic in/line in)	-	Selectable (mic in/line in)	-	Selectable (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 / 30fps		2MP / 30fps		2MP / 30fps		2MP / 30fps	
WiseStream	WiseStreamII		WiseStreamII		WiseStreamII		WiseStreamII	
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/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)	
Certification	IP66, IK10		IP66, IK10		IP66, IK10		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 7.4W, typical 6W 12VDC : Max 6.4W		PoE : Max 6.7W, typical 5W	
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)		Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)		W 98.9 x H 52 x D 100mm (3.89" x 2.05" x 3.94") 295g (0.651lb)	
Additional Features	Hallway View		Hallway View		Hallway View		M12 connector, Hallway View	



QNP-6320
2MP 32x PTZ Camera



QNP-6320H
2MP 32x PTZ Camera



QNP-6320R
2MP 32x IR PTZ Camera



QNP-6250
2MP 25x PTZ Camera



QNP-6250H
2MP 25x PTZ Camera



QNP-6250R
2MP 25x 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	1/2.8" CMOS
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)
Video Output	-	-	-	-	-	-
Focal Length	4.44~142.6mm (32x) zoom	4.44~142.6mm (32x) zoom	4.44~142.6mm (32x) zoom	4.44~111mm (25x) zoom	4.44~111mm (25x) zoom	4.44~111mm (25x) zoom
Angular Field of View	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.30° (Tele)	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.30° (Tele)	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)
Pan / Tilt / Rotate	-	-	-	-	-	-
IR Viewable Length	-	-	100m (328.08ft)	-	-	-
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	SSNRV	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)	Support (built-in gyro sensor)
Analytics	Intelligent analytics	Intelligent analytics * Audio detection (with NW I/O Box)	Intelligent analytics * Audio detection (with NW I/O Box)	Intelligent analytics	Intelligent analytics * Audio detection (with NW I/O Box)	Intelligent analytics * Audio detection (with NW I/O Box)
Business Intelligence	-	-	-	-	-	-
Alarm I/O	4 / 2	-	-	4 / 2	-	-
Audio I/O	Selectable (mic in/line in) / Line out	-	-	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	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles	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 1slot 256GB	Micro SD/SDHC/SDXC 1slot 256GB	Micro SD/SDHC/SDXC 1slot 256GB	Micro SD/SDHC/SDXC 1slot 256GB	Micro SD/SDHC/SDXC 1slot 256GB	Micro SD/SDHC/SDXC 1slot 256GB
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	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-10°C~+55°C (14°F ~ +131°F) / Less than 95% RH	Normal : -35°C~+55°C (-31°F ~ +131°F) / Intermittent : -40°C~+60°C (-40°F ~ +140°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)	Normal : -35°C~+55°C (-31°F ~ +131°F) / Intermittent : -40°C~+60°C (-40°F ~ +140°F) * Start up should be done at above -30°C Less than 95% RH (Non-condensing)	-10°C~+55°C (14°F ~ +131°F) Less than 95% RH	Normal : -35°C~+55°C (-31°F ~ +131°F) / Intermittent : -40°C~+60°C (-40°F ~ +140°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)	Normal : -35°C~+55°C (-31°F ~ +131°F) / Intermittent : -40°C~+60°C (-40°F ~ +140°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)
Certification	-	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	-	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	Max. 14.5W, Typ. 12W	Max. 23W, Typ. 14W	Max. 25.5W, Typ. 14.7W	Max. 14.5W, Typ. 12W	Max. 23W, Typ. 14W	Max. 25.5W, Typ. 14.7W
Dimensions (WxHxD) / Weight	Ø152 x 218mm (Ø5.98" x 8.58") 1.7kg (3.75 lb)	Ø204.3 x 265mm (Ø8.04" x 10.43") 2.7kg (5.95lb)	Ø158 x 293.3mm 3.1kg	Ø152 x 218mm (Ø5.98" x 8.58") 1.7kg (3.75 lb)	Ø204.3 x 265mm (Ø8.04" x 10.43") 2.7kg (5.95lb)	Ø158 x 293.3mm 3.1kg
Additional Features	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection(with NW I/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection(with NW I/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection(with NW I/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection(with NW I/O Box)



QNB-6002
2MP Box Camera



QNP-6230RH
2MP 23x IR PTZ Camera



QNF-9010
12MP Fisheye Camera



QNF-8010
6MP Fisheye Camera

	QNB-6002	QNP-6230RH	QNF-9010	QNF-8010
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.3" CMOS	1/1.8" CMOS
Min. Illumination	Color: 0.01Lux (F1.2)	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 (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: 187° / V: 187° / D: 187°	H: 187° / V: 187° / D: 187°
Pan / Tilt / Rotate	-	-	-	-
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	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	-	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	1 / 1	4 / 2	-	-
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	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	9MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 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/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	-10°C ~ +55°C (-14°F ~ +131°F)	24VAC: -50°C ~ +55°C (-58°F ~ +131°F) HPoE: -40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C	-10°C ~ +40°C (+14°F ~ +104°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	IP66, IK10	-	IP42
Power Consumption	PoE: Max 6.4W, typical 4.6W 12VDC: Max 5.8W, typical 4.1W	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	W73.8 x H66.6 x D136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)	Ø236.9 x 407.7mm (Ø9.33" 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	Hallway View	Defog	Panorama view, Business Intelligence	Panorama view, Business Intelligence

**TNM-3620TDY**

Temperature Detection Thermal Camera

**TNB-9000**

8K Box Camera

**TNV-8011C**

5MP Corner Mount Camera

**TNO-6322ER**

2MP Explosion-proof Camera

Imaging Device	Thermal	Visible	43.3mm Full-frame CMOS	1/2.8" CMOS	1/2.8" CMOS
	Uncooled micro bolometer	1/2.8" CMOS			
Min. Illumination	-	Color: 0.05 lux (F1.6, 1/30sec) B/W: 0.005 lux (F1.6, 1/30sec)	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: 0.05Lux (1/30sec, F1.6) B/W: 0Lux (IR LED on)
Video Output	CVBS: 1.0Vp-p, Micro USB Type B		HDMI	CVBS: 1.0Vp-p/ USB: Micro USB Type B	
Focal Length	4.7mm fixed focal	4mm fixed focal	-	2.3mm fixed	4.44 ~ 142.6mm (Optical 32x)
Angular Field of View	H: 50.0°, V: 36.4°, D: 65.3°	H: 87.6°, V: 46.4°, D: 104.5°	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: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)
Pan / Tilt / Rotate	-		-	-	-
IR Viewable Length	-		-	-	70m (229.66ft)
Day & Night	-	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	extreme WDR	-	120dB	120dB
Digital Noise Reduction	-	SSNR V	SSNR V	SSNR III	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)		-	Support	Support
Analytics	-		Intelligent analytics, Audio detection, Sound classification	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Intelligent analytics, Audio detection
Business Intelligence	Normal mode: Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection, Temperature detection EBT mode: Temperature detection, Blackbody abnormality		-	People counting	-
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) / 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	1280 x 960 / 30fps	1920 x 1080 / 30fps	8K/15fps, 24MP/20fps, 15MP/30fps, 4K/60fps	5MP / 30fps	2MP / 60fps
WiseStream	WiseStreamII		WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 6 Profiles		Up to 3 Profiles	Up to 3 profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC		Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	-
Application Programming Interface	ONVIF Profile S/T, SUNAPI		ONVIF Profile S/G/T SUNAPI	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	EBT mode: +10°C ~ +35°C (+50°F ~ +95°F) / Less than 95% RH Normal mode: -10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH		0°C ~ +45°C (32°F ~ +122°F)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	-		EMC	IP66, IK10	IP67, IK10, ATEX, IECEx
Power Consumption	PoE+: Max. 17.0W, typical 12.5W 12VDC: Max. 14.5W, typical 11.0W		PoE: Max 30W, typical 20W 12VDC: Max 26W, typical 18W	PoE: Max 12W 12VDC: Max 11W	24VAC: Max 45W
Dimensions (WxHxD) / Weight	W135 x H75 x D188.5mm (5.31" x 2.95" x 7.42") 1712g (3.77lb)		W120 x H118.5 x D179mm (4.72" x 4.66" x 7.04") 2.2kg (4.85lb)	W170 x H165 x D78.8mm (6.69" x 6.49" x 3.1") 830g (1.83lb)	W175 x H243.5 x D320mm (6.89" x 9.59" x 12.59") 10.5kg (23.15lb)
Additional Features	Bi-spectrum camera, Two temperature detection mode, Face detection, Blackbody (SPI-35B) is optional		Super high resolution, Canon EF mount	Anti ligature design, Invisible IR LED, Hallway View	Stainless(SUS316L) housing, Built in wiper

**TNO-6321E**

2MP Explosion-proof Camera

**TNU-6322E**

2MP Explosion-proof Camera

**TNU-6322ER**

2MP Explosion-proof IR Camera

**TNU-6320E**

2MP Explosion-proof PTZ Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color: 0.05Lux (1/30sec, F1.6) B/W: 0.005 Lux (1/30sec, F1.6)	Color: 0.05Lux (1/30sec, F1.6) B/W: 0.005 Lux (1/30sec, F1.6)	Color: 0.05Lux (1/30sec, F1.6) B/W: 0Lux (IR LED on)	Color: 015Lux (F1.6) B/W: 0.015Lux (F1.6)
Video Output	-	-	-	-
Focal Length	4.44 ~ 142.6mm(32X) zoom	4.44 ~ 142.6mm(32X) zoom	4.44 ~ 142.6mm(32X) zoom	4.44 ~ 142.6mm (Optical 32x)
Angular Field of View	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	H: 62.8° (Wide) ~ 2.23° (Tele) V: 36.8° (Wide) ~ 1.26° (Tele)
Pan / Tilt / Rotate	-	360° Endless / 180° (-90° ~ 90°) / -	360° Endless / 180° (-90° ~ 90°) / -	360° Endless / 180° (-90° ~ 90°) / -
IR Viewable Length	-	-	200m	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNR III
Digital Image Stabilization	Support	Support	Support	Support
Analytics	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection	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.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	-
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	-	-	-	-
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, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH * Start up should be done at above -30°C	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH	-30°C ~ +60°C (-22°F ~ +140°F)
Certification	IP67, IK10 CE2460, EX II 2 GD, Ex d IIC T6 Gb IP67 Ex tb IIIC T80°C Db	IECEX, ATEX, KCs, KC, CE IP67, IK10	IECEX, ATEX, KCs, KC, CE IP67, IK10	IP67, IK10, CE2460, EX II 2 GD, Ex d IIC T6 Gb IP67, Ex tb IIIC T80°C Db
Power Consumption	24VAC: Max 28W	24VAC: Max. 99W	24VAC: Max. 99W (Camera) 24VAC: Max. 50W (IR)	24VAC : Max 49W
Dimensions (WxHxD) / Weight	Ø162 x 244mm (Ø6.38" x 9.61") 7kg (15.43 lb)	W355 x H427 x D235mm (13.97" x 16.81" x 9.25") 25kg (55.12lb)	W611 x H438 x D235mm (24.06" x 17.24" x 9.25") 36kg (79.37lb)	W384 x H402 x D250mm (15.12" x 15.83" x 9.84") 35kg (77.16lb)
Additional Features	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection	Stainless (SUS316L) housing, Built in wiper


TNU-6321

2MP Positioning PTZ Camera


TNU-4041T / 4051T

VGA Thermal Positioning Camera


TNO-4051T

VGA Thermal Bullet Camera


TNO-4050T

VGA Thermal Bullet Camera

Imaging Device	1/2.8" CMOS	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) B/W: 0.005 Lux (F1.6, 1/30sec)	-	-	-
Video Output	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P), for installation	CVBS : 1.0 Vp-p	CVBS : 1.0 Vp-p	CVBS : 1.0 Vp-p, Micro USB Type B
Focal Length	4.44~142.6mm (32x) zoom	19mm / 35mm fixed	35mm fixed	35mm fixed
Angular Field of View	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (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°
Pan / Tilt / Rotate	360° Endless / (130°) -90°~40° / -	360° Endless / -90° ~ 40° / -	-	-
IR Viewable Length	200m with SPI-50(Optional)	-	-	-
Day & Night	Auto (ICR)	-	-	-
Wide Dynamic Range	120dB	-	-	-
Digital Noise Reduction	SSNRV	-	-	-
Digital Image Stabilization	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 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
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
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/T SUNAPI (HTTP API) 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) / Less than 90% RH	-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, Safety (UL, KC-SDOC), EMC (FCC, CE, VCCI, RCM, KC)	IP66, NEMA 4X, IK10	IP66, NEMA 4X	IP66, NEMA 4X
Power Consumption	Max 100W (Heater On), typical 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
Dimensions (WxHxD) / Weight	W219 x H528.2 x D460mm (8.62" x 20.79" x 18.11") 14kg (30.86lb)	W219 x H528 x D335mm (8.62" x 20.79" x 13.19") 11.7kg (25.79lb)	Ø101.97 x 309mm (Ø4.01" x 12.17") 2.5kg (5.51 lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3.17kg (7.0 lb)
Additional Features	Tampering, Audio detection	Various color palettes	Various color palettes PT type	Various color palettes

**TNO-4041T**

VGA Thermal Bullet Camera

**TNO-4041TR**

VGA Radiometric Thermal Bullet Camera

**TNO-4040T**

VGA Thermal Bullet Camera

**TNO-4040TR**

VGA Radiometric Thermal Bullet Camera

	TNO-4041T	TNO-4041TR	TNO-4040T	TNO-4040TR
Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Min. Illumination	-	-	-	-
Video Output	CVBS : 1.0 Vp-p	CVBS : 1.0 Vp-p	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B
Focal Length	19mm fixed	19mm fixed	19mm fixed	19mm 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 : 32° / V : 24.3° / D : 39.2°
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)
Analytics	Intelligent analytics Audio detection Sound classification Shock detection Temperature change 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
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
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/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)
Certification	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
Dimensions (WxHxD) / Weight	Ø101.97 x 309mm (Ø4.01" x 12.17") 2.5kg (5.51 lb)	Ø101.97 x 309mm (Ø4.0" x 12.17") 2.45kg (5.41 lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3.17kg (7.0 lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3.12kg (6.89 lb)
Additional Features	Various color palettes PT type	Various color palettes Spot temperature reading PT type	Various color palettes	Various color palettes Spot temperature reading

**TNO-4030T**

VGA Thermal Bullet Camera

**TNO-4030TR**

VGA Radiometric Thermal Bullet Camera

**TNO-3010T**

QVGA Thermal Bullet Camera

**TNO-3020T**

QVGA Thermal Bullet Camera

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Min. Illumination	-	-	-	-
Video Output	CVBS : 1.0 Vp-p, 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	13mm fixed	13mm fixed	2.7mm fixed focal	4.7mm fixed focal
Angular Field of View	H : 48.6° / V : 36.4° / D : 61.6°	H : 48.6° / V : 36.4° / D : 61.6°	H : 92.0° / V : 65.5° / D : 125.7°	H : 50.0° / V : 36.4° / D : 65.3°
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)
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
Business Intelligence	-	-	-	-
Alarm I/O	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
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	640 x 480 / 30fps	640 x 480 / 30fps	320 x 240 / 30fps	320 x 240 / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	IP66, NEMA 4X, IK10	IP66, NEMA 4X, 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. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W	PoE : Max. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W
Dimensions (WxHxD) / Weight	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3.17kg (7.0lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3.12kg (6.89lb)	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)
Additional Features	Various color palettes	Various color palettes Spot temperature reading	Various color palettes	Various color palettes

**TNO-3030T**

QVGA Thermal Bullet Camera

**TNO-3040T**

QVGA Thermal Bullet Camera

**TNO-3050T**

QVGA Thermal Bullet Camera

**TID-600R**

2MP Network Intercom Station

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	1/2.8" CMOS
Min. Illumination	-	-	-	Color: 0.018lux (F1.6, 1/30sec) BW: 0 Lux (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 / 75Ω composite, 720x480(N), 720x576(P) for installation
Focal Length	13.7mm fixed focal	19mm fixed focal	35mm fixed focal	1.6mm fixed focal
Angular Field of View	H:16.0° / V:12.0° / D:20.0°	H: 11.5° / V: 8.7° / D: 14.4°	H: 6.3° / V: 4.7° / D: 7.8°	H: 180° / V: 114° / D: 180°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	5m
Day & Night	-	-	-	Auto (ICR)
Wide Dynamic Range	-	-	-	WDR (150dB)
Digital Noise Reduction	-	-	-	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support
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	Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Shock detection, Sound classification
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	1 / 2	1 / 2	Input 2ea / Output 1ea , Relay out 1ea (12VDC Max. 550mA with 2A adapter) Tampering switch, Touchless call
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Built-in mic / Built-in speaker
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	320 x 240 / 30fps	320 x 240 / 30fps	320 x 240 / 30fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStream c	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC 1slot 256GB
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 SUNAPI (HTTP API) 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)	-30°C ~ +55°C (-22°F ~ +131°F) Less than 95% RH
Certification	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X	IP65, IK08, NEMA4X, Safety (UL), EMC (FCC, CE)
Power Consumption	PoE : Max. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W	PoE : Max. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W	PoE : Max. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W	PoE: Max 12.95W, typical 9.1W 12VDC: Max 17.6W, typical 7W * 12VDC power consumption includes 12VDC/550mA relay out
Dimensions (WxHxD) / Weight	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)	Ø147.51 x 401.3mm (Ø5.81" x 15.79") 2.74kg (6.05lb)	W49 x H165 x D48mm (1.93" x 6.5" x 1.89") 490g
Additional Features	Various color palettes	Various color palettes	Various color palettes	SIP, Directional detection, Motion detection, Appear/ Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Shock detection, Sound classification



Established by global leading surveillance companies including **Hanwha Techwin**, Bosch, Milestone, Pelco, and Vivotek, the Open Security & Safety Alliance (OSSA) is a non-profit, non-stock corporation that brings together like-minded organizations in order to create a framework outlining a common standardized platform for security and safety solutions that is accessible for everyone. With the new hardware (cameras) and applications which fit to the OSSA platform, it aims to serve as a new standard to provide the efficient integration of IoT devices in various fields and the demand for big data utilization in a platform scale.

**ONV-9081R**

Driven by OSSA 4K IR Bullet Camera

**ONO-9081R**

Driven by OSSA 4K IR Vandal Dome Camera

	ONV-9081R Driven by OSSA 4K IR Bullet Camera	ONO-9081R Driven by OSSA 4K IR Vandal Dome Camera
Imaging Device	1/1.8" CMOS	1/1.8" CMOS
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	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: 121.7° (Wide) ~ 52.3° (Tele)	H: 101.4° (Wide) ~ 45.5° (Tele) V: 53.6° (Wide) ~ 25.5° (Tele) D: 121.7° (Wide) ~ 52.3° (Tele)
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°
IR Viewable Length	40m (131.23ft)	40m (131.23ft)
Day & Night	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Available by downloading applications from the S&ST App Store	Available by downloading applications from the S&ST App Store
Business Intelligence	Available by downloading applications from the S&ST App Store	Available by downloading applications from the S&ST App Store
Audio I/O	To be supported later	To be supported later
Video Compression	H.265, H.264	H.265, H.264
Resolution / Max. Frame Rate	8MP/30fps	8MP/30fps
Streaming	Up to 8 profiles	Up to 8 profiles
Edge Storage	To be supported later	To be supported later
Application Programming Interface	SUNAPI (HTTP API)	SUNAPI (HTTP API)
Operating Temperature	-50°C ~ +50°C (-58°F ~ +122°F) / Less than 95% RH (non condensing) * Start up should be done at above -30°C	-50°C ~ +50°C (-58°F ~ +122°F) / Less than 95% RH (non condensing) * Start up should be done at above -30°C
Certification	IP66/IP67/IP6K9K, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10, NEMA4X
Power Consumption	PoE+: Max 25.5W, typical 21W 12VDC: Max 23W, typical 19W	PoE+: Max 20.00W, typical 17.00W 12VDC: Max 18.70W, typical 15.00W
Dimensions (WxHxD) / Weight	Ø115 x 373mm (without sunshield) 3.4kg (7.46 lb)	Ø180 x 132mm (Ø7.09" x 5.12") 2.250kg (4.96 lb)
Additional Features	Driven by OSSA Supports applications from the S&ST App Store	Driven by OSSA Supports applications from the S&ST App Store

WISeNET NVR

High resolution and great efficiency. Quick and precise search enabled by Hanwha Techwin NVR

Hanwha Techwin's Wisenet NVR allows recording and streaming of videos in super high resolution and enhanced the efficiency of event and channel management with the new UI. It also offers AI based quick and precise object detection and classification on top of smart search.



Monitor all sub channels without registering them all

With the new Virtual Channel View, user can register only 1 main channel for recording and monitor sub channels without registering them to the NVR. In other words, no need to record every sub channel that needs to be simply streamed for live monitoring.

Registered channel
Recording and monitoring

CAMERA A
Channel #01

Using 1 channel on NVR
(can monitor up to 4CH)

Unregistered channel

Monitoring sub channels without recording

CAMERA A
Channel #02

CAMERA A
Channel #03

CAMERA A
Channel #04

Installation Wizard for easy auto recognition and setup

Local/web based installation wizard with a single UI provides easy and quick auto camera recognition and registration as well as configuration of each channel.



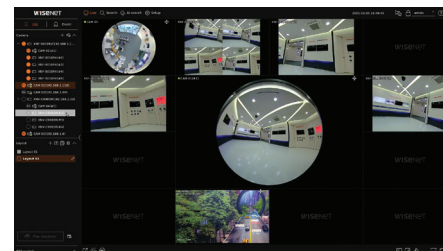
Local

Web



Design your own monitoring channels with the Dynamic layout

Dynamic layout allows users to freely customize the channel display. Set the best channel display and create the most intuitive monitoring environment.



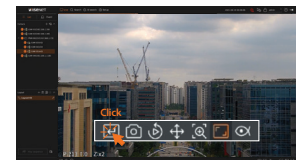
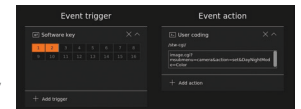
Code your own event action with SUNAPI command and Integrate with the Software Key

Users can code their own event action using SUNAPI commands and integrate it with the Software Key. Then, a simple click on the Software Key appears on the channel display will run the event action. Customized codes will run separately.

- 1 Code event action* and integrate with the Software key

* Simple focus, Day&Night (ICR), Alarm Out, etc.

- 2 Click the Software key to initiate the event action



AI enhances accuracy and efficiency

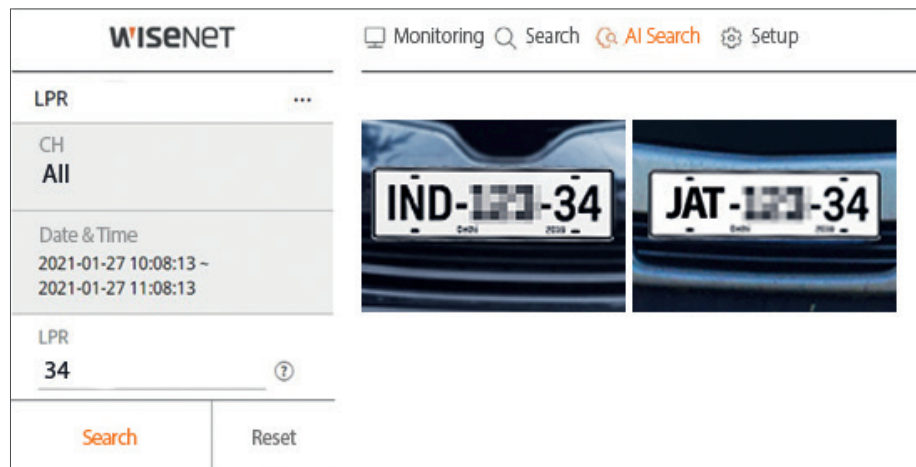
Wisenet AI NVR with AI algorithms provides accurate object detection/classification/search, increasing the efficiency of monitoring operation.



License Plate Recognition LPR (Search)

Through OCR (Optical Character Recognition) processing, the BestShot images of the license plates are converted into machine-readable text and numbers then stored in the Wisenet AI NVR in the form of digital data together with the images of license plates. Users can easily search license plates by typing in the numbers or characters of the license plate.

* Attributes : People (Clothing colors for top and bottom/ Wearing or carrying a bag) / Face (Age group, gender, mask/ glasses wearing) when integrated with Wisenet cameras, Vehicle (Types, colors) / License plate (Optical technology converts images into texts for storage, supporting search in text

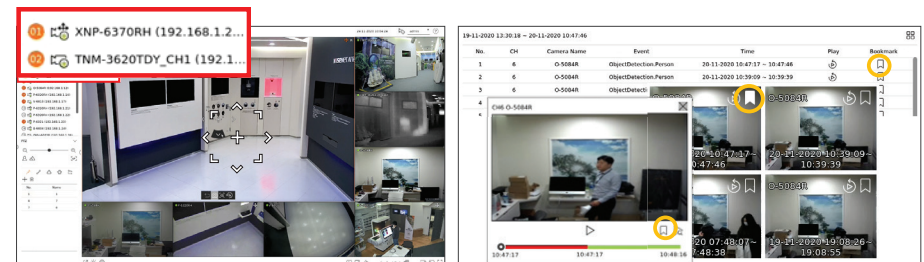


When managing multi channels, the Wisenet AI NVR greatly improves search efficiency by allowing users to preview images and videos by simply hovering mouse cursor on the timeline. Moreover, users can configure event and alarm for all channels within a single page.



Live monitoring and bookmarks

With Live Monitoring, users can configure the split mode as desired to view video footage in real time or find information such as system malfunction, overload or recording status for each channel. In the PTZ control mode, users can click arrow keys to move the PTZ in eight directions or zoom in to a certain area for more detailed monitoring. With Bookmark feature, users can designate up to 100 events for easy and quick event search.





PRN-6400DB4
64CH AI NVR



PRN-6400B4
64CH AI NVR



PRN-3200B4
32CH AI NVR

Os	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps	400Mbps	400Mbps
Max # of Cameras	64CH	64CH	32CH
Network Camera Resolution	32MP~CIF	32MP~CIF	32MP ~ CIF
HDD Slot	Up to 16 SATA (Max. 160TB)	Up to 16 SATA (Max. 160TB)	Up to 16 SATA (Max. 160TB)
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
External Storage	iSCSI	iSCSI	iSCSI
RAID	RAID 5/6	RAID 5/6	RAID 5/6
Hot Swap	Yes	Yes	Yes
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%, 50/60 Hz (Dual SMPS)	100 ~ 240 VAC ±10%, 50/60 Hz	100 ~ 240 VAC ±10% 50/60 Hz
Power Consumption	Max. 265W (16 HDD)	Max. 265W (16 HDD)	Max. 265W (16 HDD)
PoE Budget	-	-	-
Additional Features	• LPR search (English, Numbers) • AI search attribute (Person, Face - with Wisenet AI camera, Vehicle, Liscence plate) • N+1 failover supported • PTZ camera configuration and control • Dynamic layout • Virtual channel view	• LPR search (English, Numbers) • AI search attribute (Person, Face - with Wisenet AI camera, Vehicle, Liscence plate) • N+1 failover supported • PTZ camera configuration and control • Dynamic layout • Virtual channel view	• LPR search (English, Numbers - with Wisenet AI camera) • AI search attribute (Person, Face - with Wisenet AI camera, Vehicle, Liscence plate) • N+1 failover supported • PTZ camera configuration and control • Dynamic layout • Virtual channel view



PRN-3200B2
32CH AI NVR



PRN-1600B2
16CH AI NVR



XRN-6410DB4/6410B4
64CH NVR

Os	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps	250Mbps	400Mbps
Max # of Cameras	32CH	16CH	64CH
Network Camera Resolution	32MP ~ CIF	32MP ~ CIF	32MP~CIF
HDD Slot	Up to 8 SATA (Max. 80TB, Non-RAID mode)	Up to 8 SATA (Max. 80TB, Non-RAID mode)	Up to 16 SATA (Max. 160TB)
Record Mode	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
External Storage	iSCSI storage	iSCSI storage	iSCSI
RAID	RAID 5/6	RAID 5/6	RAID 5/6
Hot Swap	Yes	Yes	Yes
Network Viewer Software	WAVE, SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	WAVE, SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%; 50/60 Hz, 2.1A	100 ~ 240 VAC ±10%; 50/60 Hz, 2.1A	100 ~ 240 VAC ±10%; 50/60 Hz, 2.7A (Dual SMPS / XRN-6410B4)
Power Consumption	Max. 205W (With 10TB HDDs 8EA)	Max. 205W (With 10TB HDDs 8EA)	Max. 265W (16 HDD)
PoE Budget	-	-	-
Additional Features	• LPR search (English, Numbers - with Wisenet AI camera) • AI search attribute (Person, Face - with Wisenet AI camera, Vehicle, Licence plate) • N+1 failover supported • PTZ camera configuration and control • Dynamic layout • Virtual channel view	• LPR search (English, Numbers - with Wisenet AI camera) • AI search attribute (Person, Face - with Wisenet AI camera, Vehicle, Licence plate) • N+1 failover supported • PTZ camera configuration and control • Dynamic layout • Virtual channel view	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Dual SMPS (6410DB4) • Dynamic layout • Virtual channel view • Fisheye dewarping



XRN-6410RB2
64CH AI NVR



XRN-6410B2
64CH AI NVR



XRN-3210B4
32CH NVR

Os	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps	400Mbps	400Mbps
Max # of Cameras	64CH	64CH	32CH
Network Camera Resolution	32MP~CIF	32MP~CIF	32MP~CIF
HDD Slot	Up to 8 SATA (Max. 80TB)	Up to 8 SATA (Max. 80TB)	Up to 16 SATA (Max. 160TB)
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
External Storage	iSCSI	iSCSI	iSCSI
RAID	RAID 5/6	-	RAID 5/6
Hot Swap	Yes	-	Yes
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%; 50/60 Hz	100 ~ 240 VAC ±10%; 50/60 Hz	100 ~ 240 VAC ±10%; 50/60 Hz, 2.7A
Power Consumption	Max. 138W (8 HDD)	Max. 138W (8 HDD)	Max. 265W (16 HDD)
PoE Budget	-	-	-
Additional Features	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Dual SMPS (6410DB4) • Dynamic layout • Virtual channel view • Fisheye dewarping	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Dynamic layout • Virtual channel view • Fisheye dewarping	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Fisheye dewarping



XRN-3210RB2
32CH NVR



XRN-3210B2
32CH NVR



XRN-3010A
64CH NVR

Os	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps	400Mbps	300Mbps
Max # of Cameras	32CH	32CH	64CH
Network Camera Resolution	32MP~CIF	32MP~CIF	-
HDD Slot	Up to 8 SATA (Max. 80TB)	Up to 8 SATA (Max. 80TB)	Up to 8 SATA (Max. 64TB)
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Schedule (Continuous/Event), Event (Pre/Post)
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out
External Storage	iSCSI	iSCSI	iSCSI
RAID	RAID 5/6	-	-
Hot Swap	Yes	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%, 50/60 Hz	100 ~ 240 VAC ±10%, 50/60 Hz	100 ~ 240 VAC ±10%
Power Consumption	Max. 160W (8 HDD)	Max. 138W (8 HDD)	Max. 99W (6 HDD)
PoE Budget	-	-	-
Additional Features	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Fisheye dewarping	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Fisheye dewarping	• N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))



XRN-2011A
32CH NVR



XRN-2010A
32CH NVR



XRN-1620SB1
16CH NVR

Os	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	256Mbps	256Mbps	140Mbps
Max # of Cameras	32CH	32CH	16CH
Network Camera Resolution	8MP~CIF	12MP~CIF	32MP~CIF
HDD Slot	Up to 8 SATA (Max. 48TB)	Up to 8 SATA (Max. 48TB)	Up to 4 SATA (Max. 24TB)
Record Mode	Normal, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post)
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event
Event Action	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
External Storage	iSCSI	iSCSI	-
RAID	RAID 5	-	-
Hot Swap	Yes	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%	100 ~ 240 VAC ±10%	100 ~ 240 VAC ±10%, 50/60 Hz
Power Consumption	Max. 99W (8 HDD)	Max. 99W (8 HDD)	Max. 310W
PoE Budget	-	-	200W
Additional Features	• N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control



XRN-1620B2
16CH NVR



XRN-1610SA
16CH NVR



XRN-1610A
16CH NVR

Os	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	140Mbps	180Mbps	180Mbps
Max # of Cameras	16CH	16CH	16CH
Network Camera Resolution	32MP~CIF	12MP~CIF	12MP~CIF
HDD Slot	Up to 8 SATA (Max. 80TB)	Up to 4 SATA (Max. 24TB)	Up to 8 SATA (Max. 48TB)
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Schedule(Continuous/Event), Event (Pre/Post)	Normal, Schedule (Continuous/Event), Event (Pre/Post)
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
External Storage	-	iSCSI, e-SATA	iSCSI, e-SATA
RAID	-	-	-
Hot Swap	-	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile Support SDK/CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile Support SDK/CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%; 50/60 Hz	100 ~ 240 VAC ±10%	100 ~ 240 VAC ±10%
Power Consumption	Max. 130W	Max. 271.9W (4 HDDs, PoE / PoE+ On) Max. 51.9W (4 HDDs, PoE / PoE+ Off)	Max. 76.3W (8 HDD)
PoE Budget	-	220W	-
Additional Features	• PoE supported • N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control	• PoE+ Switch embedded • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• ARB (Auto Recovery Backup redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))



XRN-820S
8CH NVR



XRN-810S
8CH NVR



XRN-420S
4CH NVR



XRN-410S
4CH NVR

Os	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	100Mbps	100Mbps	50Mbps	50Mbps
Max # of Cameras	8CH	8CH	4CH	4CH
Network Camera Resolution	32MP~CIF	8MP~CIF	8MP ~ CIF	12MP~CIF
HDD Slot	Up to 2 SATA (Max. 12TB)	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark	Normal, Schedule (Continuous/Event), Event (Pre/Post)
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out
External Storage	-	-	-	-
RAID	-	-	-	-
Hot Swap	-	-	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	WAVE, SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	HDMI, VGA	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%, 50/60 Hz	100 ~ 240 VAC ±10%	100 ~ 240 VAC ±10%; 50/60 Hz	54V DC / 1.67A
Power Consumption	Max. 160W	Max. 19W (1 HDD)	Max 67W (1HDD, PoE On)	Max. 13W (1 HDD)
PoE Budget	100W	100W	50W	50W
Additional Features	• PoE supported • N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control	• PoE+ Switch embedded • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE+ Switch embedded • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))



QRN-1620S
16CH NVR



QRN-1610S
16CH NVR



QRN-820S
8CH NVR



QRN-810S
8CH NVR



QRN-810
8CH NVR

Os	Linux	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	H.265, H.264, MJPEG
Max. Recording Bit Rate	128Mbps	128Mbps	80Mbps	80Mbps	100Mbps
Max # of Cameras	16CH	16CH	8CH	8CH	8CH
Network Camera Resolution	8MP~CIF	8MP~CIF	8MP~CIF	8MP~CIF	8MP~CIF
HDD Slot	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)
Record Mode	Normal, Schedule(Continuous/Event), Event (Pre/Post)	Normal, Schedule(Continuous/Event), Event (Pre/Post)	Normal, Schedule(Continuous/Event), Event (Pre/Post), Dual track Recording	Normal, Schedule(Continuous/Event), Event (Pre/Post)	Normal, Schedule(Continuous/Event), Event (Pre/Post)
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out
External Storage	-	-	-	-	-
RAID	-	-	-	-	-
Hot Swap	-	-	-	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	HDMI 1 (Up to 4K)	HDMI 1 (Up to 4K)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%	100 ~ 240 VAC ±10%	54V DC / 1.67A	54V DC / 1.67A	12VDC / 4A
Power Consumption	Max. 158.2W (2 HDDs, PoE On) Max. 34.6W (2 HDDs, PoE Off)	Max. 158.2W (2 HDDs, PoE On) Max. 34.6W (2 HDDs, PoE Off)	Max. 76.2W (1 HDD, PoE On) Max. 8.1W (1 HDD, PoE Off)	Max. 76.2W (1 HDD, PoE On) Max. 8.1W (1 HDD, PoE Off)	MAX. 9W (1 HDD)
PoE Budget	130W	Max. 100W	Max. 65W	Max. 50W	-
Additional Features	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))



QRN-430S
4CH NVR



QRN-420S
4CH NVR



QRN-410S
4CH NVR



QRN-410
4CH NVR

Os	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
Max. Recording Bit Rate	40Mbps	40Mbps	40Mbps	50Mbps
Max # of Cameras	4CH	4CH	4CH	4CH
Network Camera Resolution	8MP ~ CIF	8MP~CIF	8MP~CIF	8MP~CIF
HDD Slot	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
Record Mode	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark	Normal, Schedule(Continuous/Event), Event (Pre/Post)	Normal, Schedule(Continuous/Event), Event (Pre/Post), Dual track Recording	Normal, Schedule(Continuous/Event), Event (Pre/Post)
Event Trigger	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out
External Storage	-	-	-	-
RAID	-	-	-	-
Hot Swap	-	-	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	HDMI 1 (Up to 4K)	HDMI 1 (Up to 4K)	HDMI 1 (Up to 4K)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%; 50/60 Hz	54VDC / 1.20A	54VDC / 1.20A	12VDC / 4A
Power Consumption	Max 52W (1HDD, PoE On)	Max. 47W (1 HDD, PoE On) Max. 7.4W (1 HDD, PoE Off)	Max. 47W (1 HDD, PoE On) Max. 7.4W (1 HDD, PoE Off)	MAX. 9W (1 HDD)
PoE Budget	35W	35W	Max. 30W	-
Additional Features	• PoE supported • N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • PTZ camera configuration and control • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))



LRN-1610S
16CH NVR



LRN-810S
8CH NVR



LRN-410S
4CH NVR

Os	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Max. Recording Bit Rate	100Mbps	50Mbps	40Mbps
Max # of Cameras	16CH	8CH	4CH
Network Camera Resolution	5MP ~ CIF	5MP ~ CIF	5MP ~ CIF
HDD Slot	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
Record Mode	Normal, Schedule (Continuous/Event), Event (Pre/Post), Dual track Recording	Normal, Schedule(Continuous/Event), Event (Pre/Post)	Normal, Schedule(Continuous/Event), Event (Pre/Post), Dual track Recording
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)
Event Action	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out
External Storage	-	-	-
RAID	-	-	-
Hot Swap	-	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	HDMI 1 (Up to 5MP)	HDMI 1 (Up to 5MP)	HDMI 1 (Up to 5MP)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100~240VAC±10%	54VDC / 1.67A	54VDC / 1.20A
Power Consumption	Max. 158.2W (2 HDDs, PoE On) Max. 34.6W (2 HDDs, PoE Off)	Max. 76.2W (1 HDD, PoE On) Max. 8.1W (1 HDD, PoE Off)	Max. 47W (1 HDD, PoE On) Max. 7.4W (1 HDD, PoE Off)
PoE Budget	Max. 130W	Max. 65W	Max. 35W
Additional Features	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Dual tracking recording	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Dual tracking recording	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Dual tracking recording



TAW-4000H16
Wisenet Transportation Appliance



TRM-1610M/1610S
16CH Mobile NVR



TRM-810S
8CH Mobile NVR



TRM-410S
4CH 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)
HDD Slot	16 HDDs(Hot swap), Max. 160TB	Up to 2 SATA (Front-Swap) Max. 4TB (HDD, 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)
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)

Encoder



SPE-1620
16CH/8CH Encoder



SPE-1610
16CH Encoder



SPE-420
4CH Encoder



SPE-410
4CH Encoder



SPE-110
1CH Encoder

Max. # of Cameras	16	16	4	4	1
Supported Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Max. Resolution	5MP/4MP/1080P/720P/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF
Max. Frame Rate per Channel	5MP 5fps, 4MP 7fps, 2MP 15/12fps 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)	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	Support	Support	-
RS-485	Support	Support	Support	Support	Support
Alarm I/O	16 / 4	16 / 4	4 / 2	4 / 2	-
Application Programming Interface	SUNAPI, ONVIF profile S	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI
Power	MAX : 16W (12V, 1.33A)	12VDC : Max 24W	PoE & 12VDC : Max 9.6W	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 Split 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

WISeNET Cloud

Toolbox Project, Install Project Services

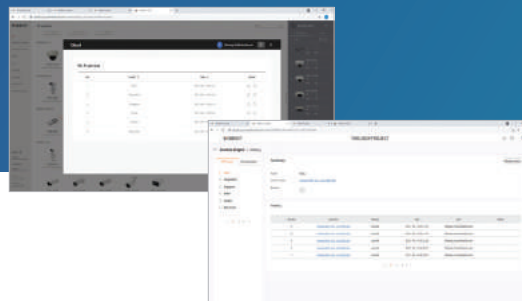
Manage your Toolbox PLUS and Install Projects in cloud

- Save your Wisenet Toolbox PLUS projects and Wisenet QR projects in cloud
- Share your projects with others
- Maintain work history in cloud
- Install configuration easily by using it with Device Manager
- Web and Mobile UI supported
- No Installation needed (a cloud service)



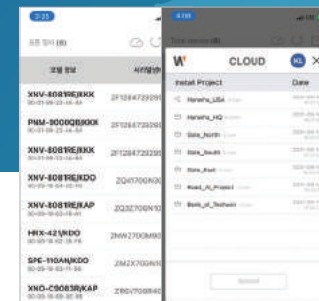
Project Dashboard

Users may see latest project list in one page for both Toolbox PLUS and Install Projects.



Toolbox Project

Create projects in Toolbox PLUS and save the updates to cloud.
The history of your work in Toolbox PLUS is listed and you can go back to the project.
Invite others, maintain and sync your projects.



Install Project

Create projects in Wisenet QR and save the updates to cloud.
The history of your work in Wisenet QR is listed.
Invite others to view device list created from Wisenet QR, map Toolbox PLUS data on to device list and deploy via Device Manager.



Ideal choice for integrated monitoring

Wisenet SSM (Smart Security Manager) is a video monitoring software that maximizes the operational efficiency of Wisenet products (Network camera, Encoder, DVR and NVR). **Hanwha Techwin** provides video surveillance products and also in-house developed Wisenet software to monitor whole systems. It provides seamless system integration and central monitoring with cost effectiveness and reliability.



Cost Competitiveness

Offer major features of video surveillance in reasonable price

One time licensing cost (No cost for upgrades and maintenance)

High quality VMS features for the price

High reliability

Superb device compatibility offered as a VMS of device manufacturer

Integrated operation of H/W and S/W for efficient maintenance and management

Dashboard that can monitor device status

Convenient Operation

A single manufacturer providing unified user experience

Be the first to use the latest device features

Offer various solutions for user environments

AI video search

Connect Wisenet AI cameras to SSM for various search features adopting AI algorithms.

• Best Shot search using unique attributes

System operators can utilize SSM's 'AI video search' feature to easily search specific events in the video by designating distinctive attributes of objects such as persons, faces, and vehicles. If a user searches specific attributes such as red motorcycle or a man wearing short pants, the best still cuts (Best Shot) of the classified objects in the video will be retrieved. Best Shots can be used as forensic data for accident investigations, playing back video that includes Best Shots.



Wisenet SSM search
Support quick search using attributes



Best Shot
Object detection & classification (Person, face, vehicle, license plate)

Parking management solution

Connect ANPR cameras to Wisenet SSM for various parking management features.

• Vehicle management & event search

Wisenet SSM's parking management solution utilizes ANPR (Automatic number plate recognition) cameras offering real-time parking entrance/exit monitoring. Users can register and manage vehicles without additional parking management software, while simple search feature quickly searches and retrieves vehicle footage.

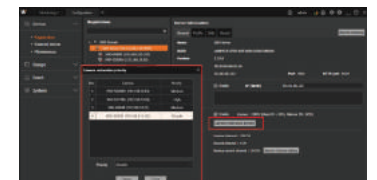


Stable monitoring

Wisenet SSM provides safe and stable monitoring environment through Failover.

• Vehicle management & event search

Failover priority (High, medium, never) can be configured for each channel. If a camera is failed, high priority cameras will be failed over at first. Users can record and save important footages without loss of data.




XRP-4310DB4

128CH Server NVR (SSM Appliance)


XRP-4210B4

72CH Server NVR (SSM Appliance)

Os	Windows 10 IoT Enterprise (SSM preinstalled)	Windows 10 IoT Enterprise (SSM preinstalled)
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps	400Mbps
Max # of Cameras	128CH (If clustering, 132CH)	72CH (If clustering, 132CH)
Network Camera Resolution	32MP ~ CIF	32MP ~ CIF
HDD Slot	SATA 16ea (3.5" 16ea Hot Swap - Volume 2ea)	SATA 16ea (3.5" 16ea Hot Swap - Volume 2ea)
Record Mode	Normal, Schedule (Continuous / Event), Event (Pre / Post), Event Profile, ARB, Dual-Track	Normal, Schedule (Continuous / Event), Event (Pre / Post), Event Profile, ARB, Dual-Track
Event Trigger	Video loss, Camera event(Sensor, MD, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face Detection, Audio Detection, ANPR, Bestshot), AI Event (Face, Appearance, Face mask, Vehicle)	Video loss, Camera event(Sensor, MD, Passing, Entering, Exiting, Disappearing (Appearing), Tampering, Tracking, Face Detection, Audio Detection, ANPR, Bestshot), AI Event (Face, Appearance, Face mask, Vehicle)
Event Action	Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification	Instant Viewer, Preset, Alarm Out, Pop-up, Sound and E-mail notification
External Storage	-	-
RAID	RAID 1 / 5 / 6 / 10 / 50	RAID 1 / 5 / 6 / 10 / 50
Hot Swap	Yes	Yes
Network Viewer Software	SSM Client, SSM Mobile	SSM Client, SSM Mobile
Local Monitor	Dual if Full HD monitor Single if UHD monitor	Dual if Full HD monitor Single if UHD monitor
Network Camera Protocol	Wisenet, ONVIF	Wisenet, ONVIF
Power Input	100 ~ 240VAC, 50 ~ 60Hz	100 ~ 240VAC, 50 ~ 60Hz
Power Consumption	250W Dual	250W Single
PoE Budget	-	-
Additional Features	• SSM Preinstalled • Redundant Power Support • ARB (Auto Recovery Backup) redundancy supported • AI Event (Face, Appearance, Face mask, Vehicle) Trigger	• SSM Preinstalled • ARB (Auto Recovery Backup) redundancy supported • AI Event (Face, Appearance, Face mask, Vehicle) Trigger

Reader


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

Signo 20/20K/40/40K
Card / Keypad Reader

U90
Long Range UHF Reader

BioEntry W2
Fingerprint / Card Reader

5427CK
Card Scanner

BioMini
Fingerprint Scanner

Frequency	13.56Mhz	125KHz/ 13.56Mhz	902 ~ 928 MHz	13.56Mhz	13.56Mhz	-
Communication	Wiegand / Clock & Data (RK40/RK40 Elite / RK40 Mobile)	Wiegand/Clock & Data/BLE/NFC	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	Standard Profile: iClass SE/SEOS, MIFARE (Classic/SIO), HID Prox, Indala, EM4102, MIFARE DESFire EV1/EV2 (CSN/SIO) SEOS Profile: iClass SEOS	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)	No / Yes (6x2) / No / Yes (4x3)	-	-	-	-
Operating Voltage Range	5-16V DC	12V 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° to 66° C (-31° to 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	IP65	IP67	IP54	-
Impact Protection	-	-	-	IK08	-	-
Panel Connection	Pigtail	Pigtail	Pigtail	Pigtail	-	-
Color	Black	Black with silver	Black	Dark Gray	Black	Dark Gray
OSDP	-	Support	-	-	-	-
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	-	-


V2000
Distributed Controller

EH400K
PoE Controller

V1000
Centralized Controller

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

X1100
Hybrid controller

X100/X200/X300
Expansion Reader / Input / Output Module

Communication Port	Ethernet (10 / 100)	Ethernet (10 / 100)	Ethernet (10 / 100) / RS-485	RS-485	Ethernet (10/100) / RS-485	RS-485
Reader interface	2ea	1ea	-	2ea (V100)	2ea	2ea/-
Max. expansion board	-	-	32ea	-	32ea	-
Max. card holders	250,000	125,000	250,000	-	250,000	-
Max. Event buffers	99,999	99,999	99,999	-	50,000	-
Input port	2ea	4ea	2ea	4ea / 16ea / 2ea	7ea	7ea/ 19ea/ 3ea
Output port	4ea	2ea	2ea	4ea / 2ea / 12ea	4ea	4ea/ 2ea/ 12ea
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)	0°~70°C (32°~158°F)	0°~70°C (32°~158°F)
PoE	-	802.af	-	-	-	-
Color	Gray	Black	Gray	Gray	Gray	Gray
OSDP	-	-	-	Gray	Yes	Yes


Face station2
Face Recognition Controller

Peripheral


SSA-X300
Power Package

Card


iCLASS SEOS (Elite)
13.56Mhz

Mobile ID
Mobile Subscription 902-928MHz Card

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

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")

Compatible with R10 Elite / R40 Elite / RK40 Elite	Bluetooth/NFC via mobile device (Android, IOS)	Long range card (3~5m)
Encoded by Hanwha Techwin unique format		

Wisenet Access Software 2.0

Wisenet Access Software is access control management software integrated with Wisenet SSM for Total security solution. It is highly scalable up to unlimited doors system and has robust software architecture.

ACS Monitoring



Fire Alarm



Lift Control



Key Features

• Interlocking

Control the locking of two or more doors
If one door is opened or unlocked, the remaining doors refuse access

• Mustering Report

Provide information of the occupants in the fire grouping area based in Fire event

• Role Based Access

Configure Role-based rules to provide access to a door (Multiple cards access)

• LDAP integration

Synchronize Active Directory "Security group" users to have the same "Access Group", "Company", "Department" in WACS

• Lift access control

Provide Access control for Lift up to 12floors per output board (V300, X300)

• Guard Tour

Provide Guard Tour : Sequential, Time Bound types



Configuration

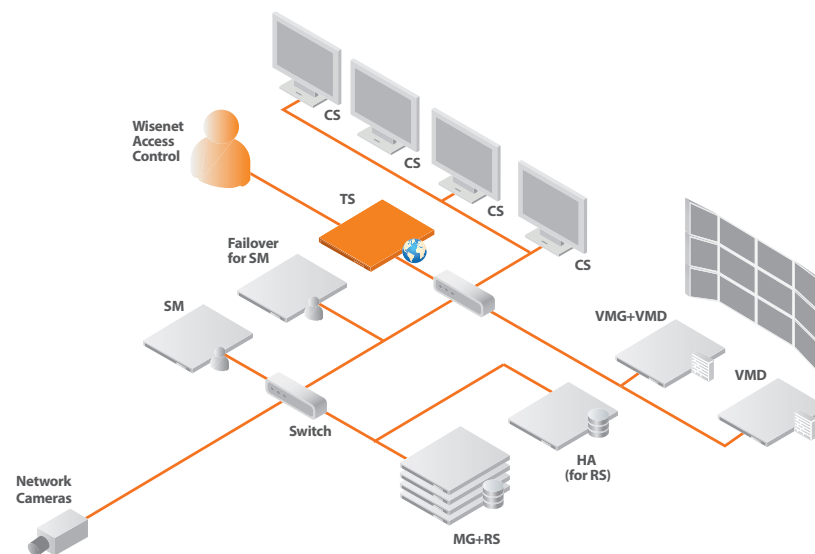


Monitoring



Mustering Report

Integration with Wisenet SSM 2.0



Access Control	Device auto discovery Cardholder management Batch uploads Card (s) pre-registration Lift Control Role based ACS Device maintenance	Unlimited access groups, Time schedules Interlocking Area / Zone management Biometric readers (FP, Face) Visitor Management Global APB, I/O Guard Tour
Monitoring	Real time access events & alarm monitoring Graphic maps Remote door management (Close / Open) I/O monitoring	Mustering Configure Event Specific Instructions for Operators Event Filtering for Monitoring Control Door Monitoring/ Management permissions per User
Card Design and Printing	Create multiple design templates Auto-fill card holder data from system database Print cards	
Fire Groups	Create fire-groups for each fire sensor input	
Advanced Reporting	Extensive reporting options Export to multiple formats (excel, pdf, word etc.) Meal Count Report	
Video Integration with Wisenet SSM	Seamless Integration with Hanwha Techwin's VMS in event monitoring Review video of the access & alarms events Real-time access & alarms events notification to Wisenet SSM	
Maintenance	User group & user privileges Manual & scheduled database backup Database restore	Data export & import Custom fields Auditing & user activity logs
System	Unlimited doors Very simple and intuitive user interface Highly scalable	



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	W68.4 x H59.6 x D92.7mm (2.69" x 2.35" x 3.65") 186g (0.41lb)	Ø78 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02lb)	Ø70 x 246mm (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	SSNR IV	SSNR IV
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 x 86.1mm (Ø4.33" x 3.39") 240g (0.53lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.58lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.12lb)	W73.1 x H67.2 x D123.9mm (2.88" x 2.65" x 4.88") 287g (0.63lb)	W68.4 x H59.6 x D92.7mm (2.69" x 2.35" x 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-6321
1080P HD Box Camera



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

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: 0.2Lux (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)
Focal Length	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 142.6mm (Optical 32x)	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) varifocal	4mm fixed (F1.6)
Angular Field of View	H: 62.8° (Wide) ~ 2.23° (Tele) V: 36.80° (Wide) ~ 1.26° (Tele)	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°
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	-	-	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)
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 III	SSNR IV	SSNR IV	SSNR IV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	12 Zones	12 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	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), 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)
Operating Temperature	-10°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) * 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)
Certification	-	-	IP66, IK10	IP66, IK10	IP66
Power Consumption	12VDC: Max 6W	12VDC: Max 6W	12VDC & 24VAC: Max 6.0W	12VDC & 24VAC: Max 6.0W	12VDC: Max 4.2W
Dimensions (WxHxD) / Weight	W71.8 x H63.9 x D137.25mm (2.83" x 2.52" x 5.40") 451g (0.99lb)	W72.0 x H60 x D137mm (2.83" x 2.36" x 5.39") 476g (1.05lb)	Ø78 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 948g (2.09lb)	Ø78 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)
Additional Features	Defog	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)



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



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

	HCD-6080R/6070R 1080p HD IR Dome Camera	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	1/2.8" CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color: 0.11Lux (F1.6) B/W: 0Lux (IR LED on)	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	3.2 ~ 10mm (3.1x) motorized varifocal (HCD-6080R) varifocal (HCD-6070R)	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: 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: 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°	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	360° Endless / 210° (-15° ~ 195°) / -
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	-	30m (98.43ft)	-
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 IV	SSNR IV	SSNR IV	SSNR IV	SSNR III
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	8 Zones	32 Zones
Alarm I/O	MD Output 1	-	-	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), 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)	-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 & 24VAC: Max 6.0W (HCD-6080R) 12VDC & 24VAC: Max 4.2W (HCD-6070R)	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	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 330g (0.73lb) (HCD-6080R) 320g (0.71lb) (HCD-6070R)	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) (HCV-6080R) 715g (1.58lb) (HCV-6070R)	Ø220 x 293.6mm (Ø8.66" x 11.56") 3.3kg (7.28lb) (HCP-6320HA) Ø152 x 218mm (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)	Video transmission up to 500m (5C2V Coaxial Cable)	Defog



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



SCB-6005
1080p HD Box Camera



SCO-6085R
1080p HD IR Bullet Camera



SCO-6025R
1080p HD IR Bullet 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 : 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)	Color: 0.04Lux (F1.2, 1/30sec) BW: 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) manual varifocal	4mm fixed
Angular Field of View	H : 62.8 °(Wide) ~ 3.14 °(Tele) V : 36.8 °(Wide) ~ 1.76 °(Tele)	-	H : 110.2° (Wide) ~ 32.0° (Tele) V : 55.4° (Wide) ~ 18.0° (Tele) D : 128.4° (Wide) ~ 36.6° (Tele)	H : 87.6° / V : 46.4° / D : 104.5°
Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°) / -	-	-	-
IR Viewable Length	-	-	30m (98.42ft)	30m (98.42ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	BLC, HLC, DWDR	BLC / HLC / DWDR	BLC, HLC, DWDR
Digital Noise Reduction	SSNR III	SSNR IV	SSNR IV	SSNR IV
Motion detection	Support	Support	Support	Support
Privacy Masking	32 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	4 / 2 (Relay)	0 / 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)	ACP (AHD Coax Protocol) CVBS: Pelco-C (Coaxitron)
Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F) (HCP-6230H), -10°C ~ +55°C (+14°F ~ +131°F) (HCP-6230)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH * Start up should be done at above -10°C
Certification	IP66, IK10 (HCP-6230H), IK10 (With SHP-3701H) (HCP-6230)	-	IP66, IK10	IP66
Power Consumption	24VAC : Max. 24.0W / 65.0W - Heater off / on (HCP-6230H) 24VAC : Max 20.0W (HCP-6230)	AC 24V / 0.37A (Max 3.6W) DC 12V / 0.32A (Max 3.5W)	12VDC : Max 5.4W 24VAC : Max 5.4W	DC 12V/0.45A (Max 5.4W)
Dimensions (WxHxD) / Weight	Ø220 x 293.6mm (Ø8.66" x 11.56") 3.3kg (7.28lb) (HCP-6230H) Ø152 x 218mm (Ø5.98" x 8.58") 2.2kg (4.85lb) (HCP-6230)	W68.4 x H59.6 x D92.7mm (2.69" x 2.35" x 3.65") 186g (0.41lb)	Ø78 x 259.8mm (Ø3.07" x 10.23") 887g (1.95lb)	Ø58.6 x 165.2 mm (Ø 2.31" x 6.50") (without sunshield) 279g (0.62lb)
Additional Features	Defog	Defog	Defog	Defog


SCD-6085R

1080p HD IR Dome Camera


SCD-6025R

1080p HD IR Dome Camera


SCD-6023R

1080p HD IR Dome Camera


SCV-6085R

1080p HD IR Vandal Dome Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/3" CMOS	1/2.8" CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color: 0.11Lux (F1.6, 1/30sec) BW: 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)	Color: 0.11Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)
Focal Length	3.2~10mm (3.1x) varifocal	4mm fixed	4mm fixed	3.2~10mm (3.1x) varifocal
Angular Field of View	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: 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)
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)	30m (98.43ft)
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	SSNR IV	SSNR IV	SSNRIV	SSNR IV
Motion detection	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	4 Zones	8 Zones
Alarm I/O	0 / 1	0 / 1	-	-
Protocol	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)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH * Start up should be done at above -10°C
Certification	-	-	-	IP66, IK10
Power Consumption	AC 24V / 0.45A DC 12V / 0.46A	DC 12V/0.45A (Max 5.4W)	12VDC: Max 4.2W	AC 24V / 0.45A DC 12V / 0.46A
Dimensions (WxHxD) / Weight	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g	Ø110 x 86mm (Ø4.33" x 3.39") 227g (0.50lb)	Ø110 x 86mm (Ø4.33" x 3.39") 242g (0.53 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g
Additional Features	Defog	Defog	Defog	Defog

**HRX-1632**

16CH 5MP Pentabrid Recorder

**HRX-1621**

16CH 8MP Pentabrid Recorder

**HRX-1620**

16CH 8MP Pentabrid Recorder

**HRX-835**

8CH 8MP PENTABRID RECORDER

**HRX-821**

8CH 8MP Pentabrid Recorder

	HRX-1632 16CH 5MP Pentabrid Recorder	HRX-1621 16CH 8MP Pentabrid Recorder	HRX-1620 16CH 8MP Pentabrid Recorder	HRX-835 8CH 8MP PENTABRID RECORDER	HRX-821 8CH 8MP Pentabrid Recorder
OS	Linux	Linux	Linux	Linux	Linux
Compression	H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264, H.265, MJPEG
Signal Type	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera
Inputs	Analog 16CH, N/W Camera 8CH (up to 24CH)	Analog 16CH, N/W Camera 2CH (up to 18CH)	Analog 16CH, N/W Camera 2CH (up to 18CH)	Analog 8CH, N/W Camera 2CH (up to 10CH)	Analog 8CH, N/W Camera 2CH (up to 10CH)
Record Rate	4MP 15/12fps, 2MP 15/12fps NTSC/PAL *per CH	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	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
HDD Slot	SATA 4ea (Max. 24TB)	SATA 8ea (Max 48TB)	SATA 2ea (Max 12TB)	SATA 4ea (Max 24TB)	Up to 4 SATA HDDs
Viewer Software	SSM, Webviewer, SmartViewer, Wisenet Mobile Viewer Support SDK/CGI(SUNAPI) for integration to 3rd party VMS	SSM WebViewer SmartViewer Wisenet Mobile	SSM WebViewer SmartViewer Wisenet Mobile	SSM, Webviewer, Smart Viewer, Wisenet mobile Support SDK/CGI(SUNAPI) for integration to 3rd party VMS	SSM WebViewer SmartViewer Wisenet Mobile
Local Display	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)
Audio In/Out	16 / 1	16 / 1	4 / 1	8 / 1	8 / 1
Alarm In/Out	16 / 4	16 / 4	16 / 4	8 / 4	8 / 4
N/W Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	Easy configuration (Setup Wizard, P2P(QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485/422 USB (2ea)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (3ea)	Easy configuration (Setup Wizard, P2P(QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ea)

**HRX-820**

8CH 8MP Pentabrid Recorder

**HRX-435**

4CH 8MP Pentabrid Recorder

**HRX-434**

4CH 8MP Pentabrid Recorder

**HRX-421**

4CH 8MP Pentabrid Recorder

**HRX-420**

4CH 8MP Pentabrid Recorder

	HRX-820 8CH 8MP Pentabrid Recorder	HRX-435 4CH 8MP Pentabrid Recorder	HRX-434 4CH 8MP Pentabrid Recorder	HRX-421 4CH 8MP Pentabrid Recorder	HRX-420 4CH 8MP Pentabrid Recorder
OS	Linux	Linux	Linux	Linux	Linux
Compression	H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264, H.265, MJPEG
Signal Type	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera
Inputs	Analog 8CH, N/W Camera 2CH (up to 10CH)	Analog 4CH, N/W Camera 6CH (up to 10CH)	Analog 4CH, N/W Camera 6CH (up to 10CH)	Analog 4CH, N/W Camera 2CH (up to 6CH)	Analog 4CH, N/W Camera 2CH (up to 6CH)
Record Rate	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	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	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH
HDD Slot	Up to 2 SATA HDDs	SATA 2ea (Max 12TB)	SATA 1ea (Max 6TB)	Up to 2 SATA HDDs	Up to 1 SATA HDD
Viewer Software	SSM WebViewer SmartViewer Wisenet Mobile	SSM, Webviewer, Smart Viewer, Wisenet mobile Support SDK/CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile Support SDK/CGI (SUNAPI) for integration to 3'rd party VMS	SSM WebViewer SmartViewer Wisenet Mobile	SSM WebViewer SmartViewer Wisenet Mobile
Local Display	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA	1 HDMI, 1 VGA
Audio In/Out	4 / 1	4 / 1	1 / 1	4 / 1	1 / 1
Alarm In/Out	8 / 4	4 / 2	4 / 1	4 / 2	4 / 1
N/W Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (3ea)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485/422 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)

LED Monitor



SMT-4033
40" LED Monitor



SMT-3234
32" LED Monitor

NEW



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"	32"	22"	19"	19"	19"
Resolution (pixels HxV)	1,920 x 1,080	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	1	2 / 2	2 / 2	2 / 2	-
VGA	1	1	1	1	1	1	1
DVI / HDMI	1 / 1	1 / 1	1 / 1	0 / 1	0 / 1	0 / 1	-
USB	-	1	-	-	-	-	-
Audio In (Stereo)	1	1	1	2	2	2	-
Contrast Ratio	5,000 : 1	3000 : 1	1,200 : 1	1,000 : 1	1,000 : 1	1,000 : 1	1,000 : 1
Aspect Ratio	16 : 9	16 : 9	16 : 9	16 : 9	4 : 3	16 : 9	4 : 3
Response Time	9.5ms	8ms	8ms	5ms	5ms	5ms	5ms
Brightness	350cd/m ²	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	-	-	-	-	-	-	-
Built-in Speakers	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Stand	Optional	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	100V ~ 240V AC
Additional Features	Remote Controller	Remote Controller	Remote Controller	-	-	-	-

Controller



SPC-7000
System Controller



SPC-2000
Network Controller



SPC-2010
PTZ / DVR System Controller

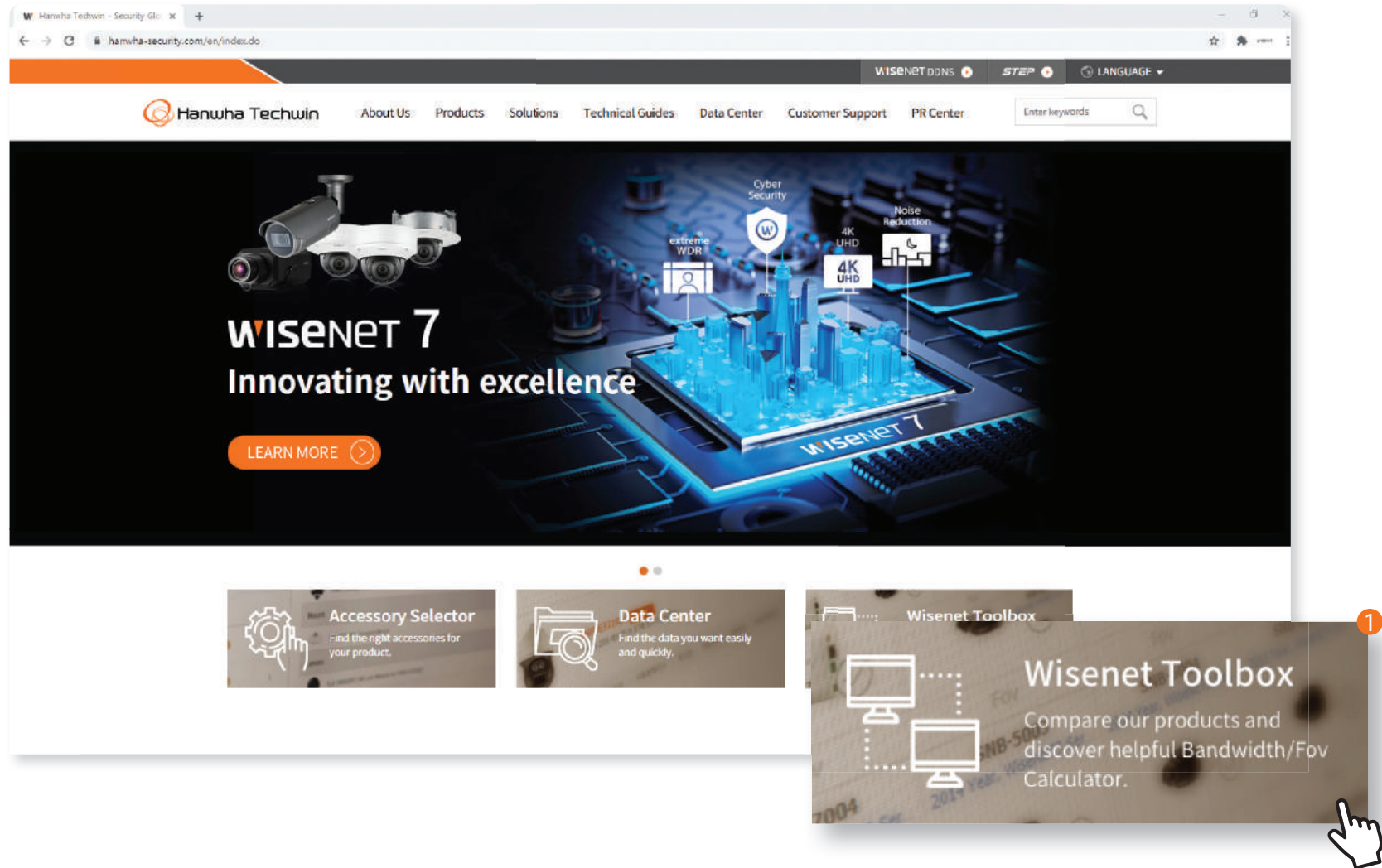


SPC-1010
PTZ Control Keyboard

	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

Lens

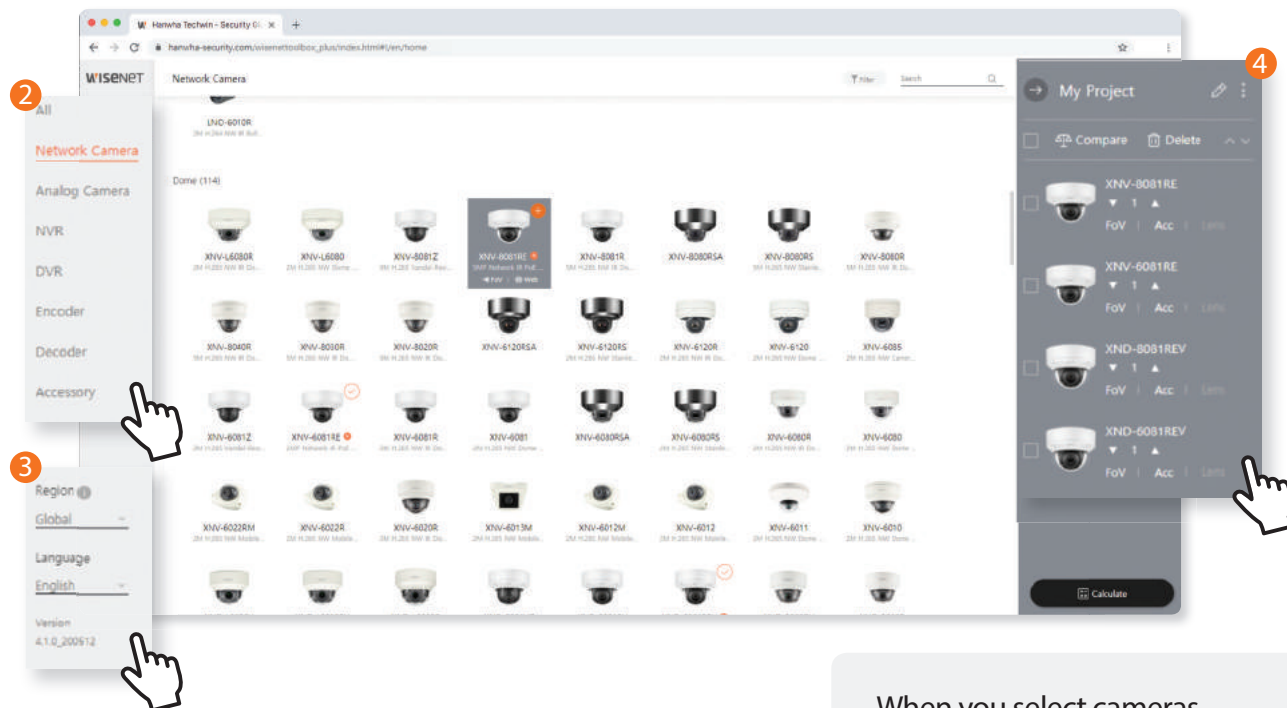
Model	Image	Mount	Image Format	Resolution	Focal Length	Back Focal Length	Zoom Ratio	F. No	Angle of View	Operation			Dimensions W x H x D (mm / inch)	Weight (g / lb)	
										Iris	Focus	Zoom			
SLA-M8550D		CS	1 / 2.8"	3Megapixel	8.5 ~ 50mm (0.33" ~ 1.97")	9.4 ~ 10.7mm (0.37" ~ 0.42")	5.9	F1.6	42.3° ~ 7.5°	DC			46 x 60 x 58.2mm (1.81" x 2.36" x 2.29")	80g (0.17 lb)	
SLA-M2890DN															Manual
SLA-M2890PN								2.8 ~ 9mm (0.11" ~ 0.35")	7.5 ~ 15.9mm (0.30" ~ 0.63")	3.2	1.2	134.2° ~ 42.7°	P-Iris		



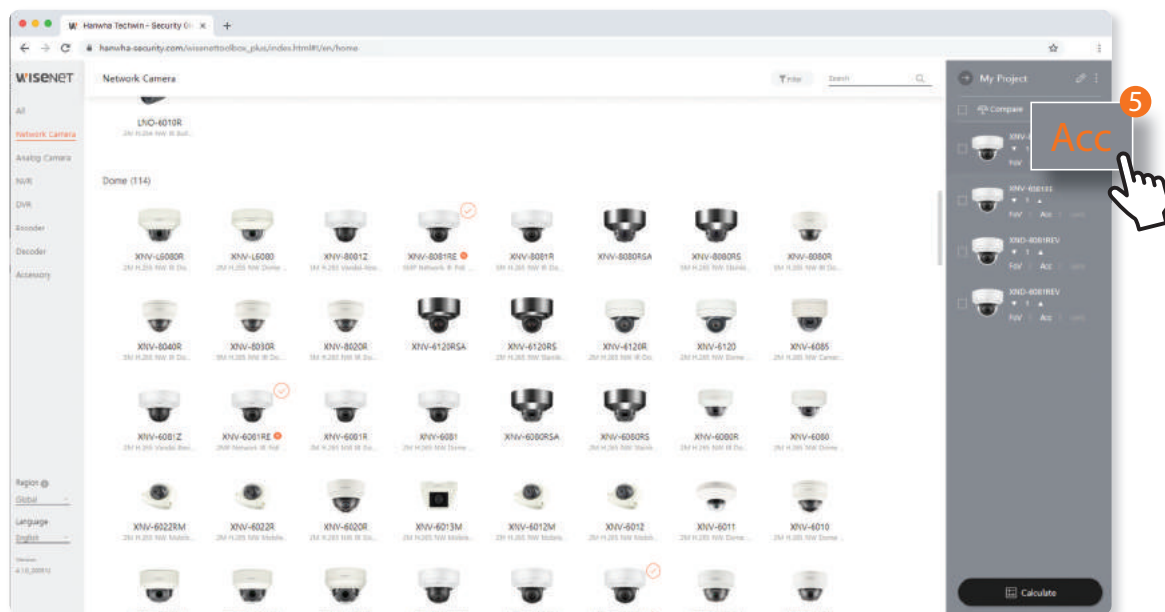
Click the Wisenet Toolbox on
Hanwha-security.com

Choose product you are interested in

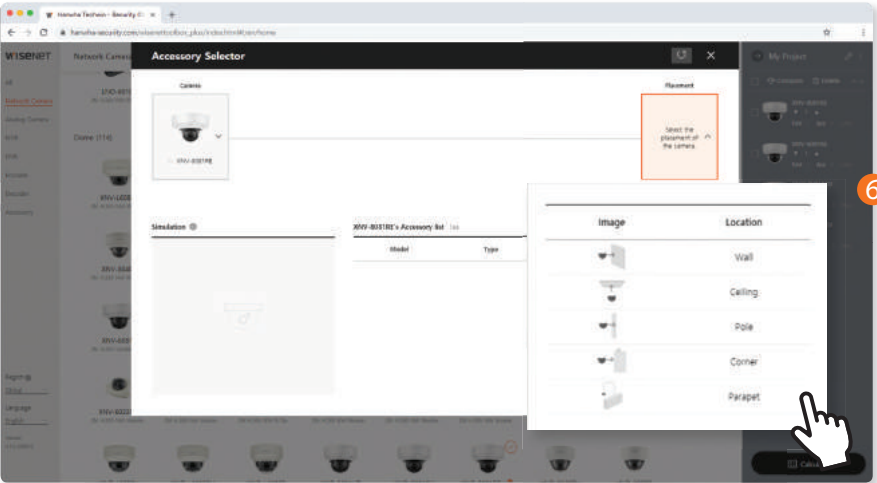
Select region and language
* Now only English available



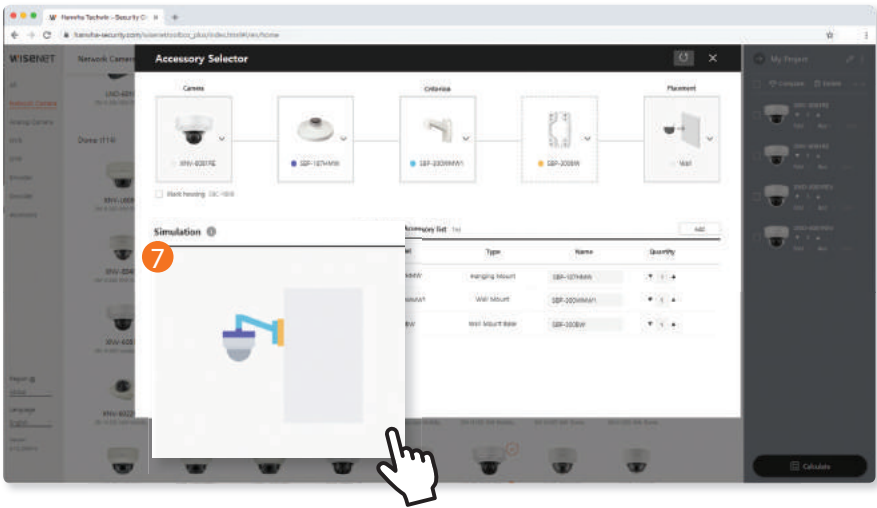
When you select cameras, they will be added on My Project



Click the Acc to find compatible accessories

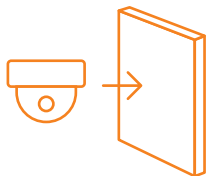


Accessory Selector pops up.
All compatible accessories are shown

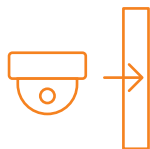


Choose accessories then the simulation
intuitively shows all connected accessories

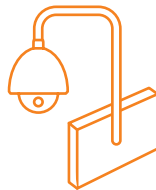
WM Wall mounts



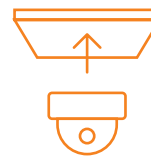
PM Pole mounts



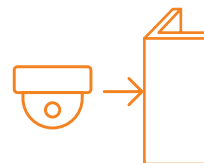
LM Parapet mounts



CM Ceiling mounts



CM Corner mounts



MEMO

MEMO

HEAD OFFICE

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10-2021 (M.H)