



2023 PRODUCT PORTFOLIO



Hanwha Group

Hanwha Techwin is one of Hanwha Groups' affiliates.

Hanwha Group, founded in 1952, is one of the Top-Ten business group in South Korea and a "FORTUNE Global 500" company.

Hanwha Group has 76 domestic affiliates and 351 global networks in three major sectors: manufacturing and construction, finance, and services and leisure. With more than 60 years track record of industrial leadership, Hanwha provides a range of products and services that enhance the quality of life for customers.

Products & Services

Aerospace & Mechatronics

Financial Services

Solar Energy

Leisure & Lifestyle

Chemicals & Materials

Construction

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



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



With over 30 years in the video-surveillance business, Hanwha Techwin is a top-tier global security company through its world-class optical, manufacturing and image processing technologies.

As the world shifts to the Fourth Industrial Revolution, we are leading the market with next-generation technologies, such as Deep Learning, Artificial Intelligence (AI) and Business Intelligence (BI) and able to offer solutions tailored to meet various vertical-market requirements.

Providing cybersecurity that customers can trust and rely on, we offer total security solutions which provide 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

2013 ~ Current

- 2021 – Winner of Security Today New Product of the Year for Video Surveillance AI Cameras (PNV-A6081R)
- 2021 – The New X series AI cameras (X Core, X Plus) launched
- 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

1990 ~ 2012

- 2012 – Winner of Red Dot Design, CES Innovation Award
- 2012 – World's first 37X IR PTZ camera launched
- 2011 – B2C business began
- 2009 – Hanwha Techwin Tianjin and Shanghai subsidiaries established
- 2008 – Korea's first 37X optical AF PTZ camera launched
- 2004 – Winner III 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.

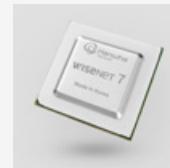
01. Optical design technology

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.

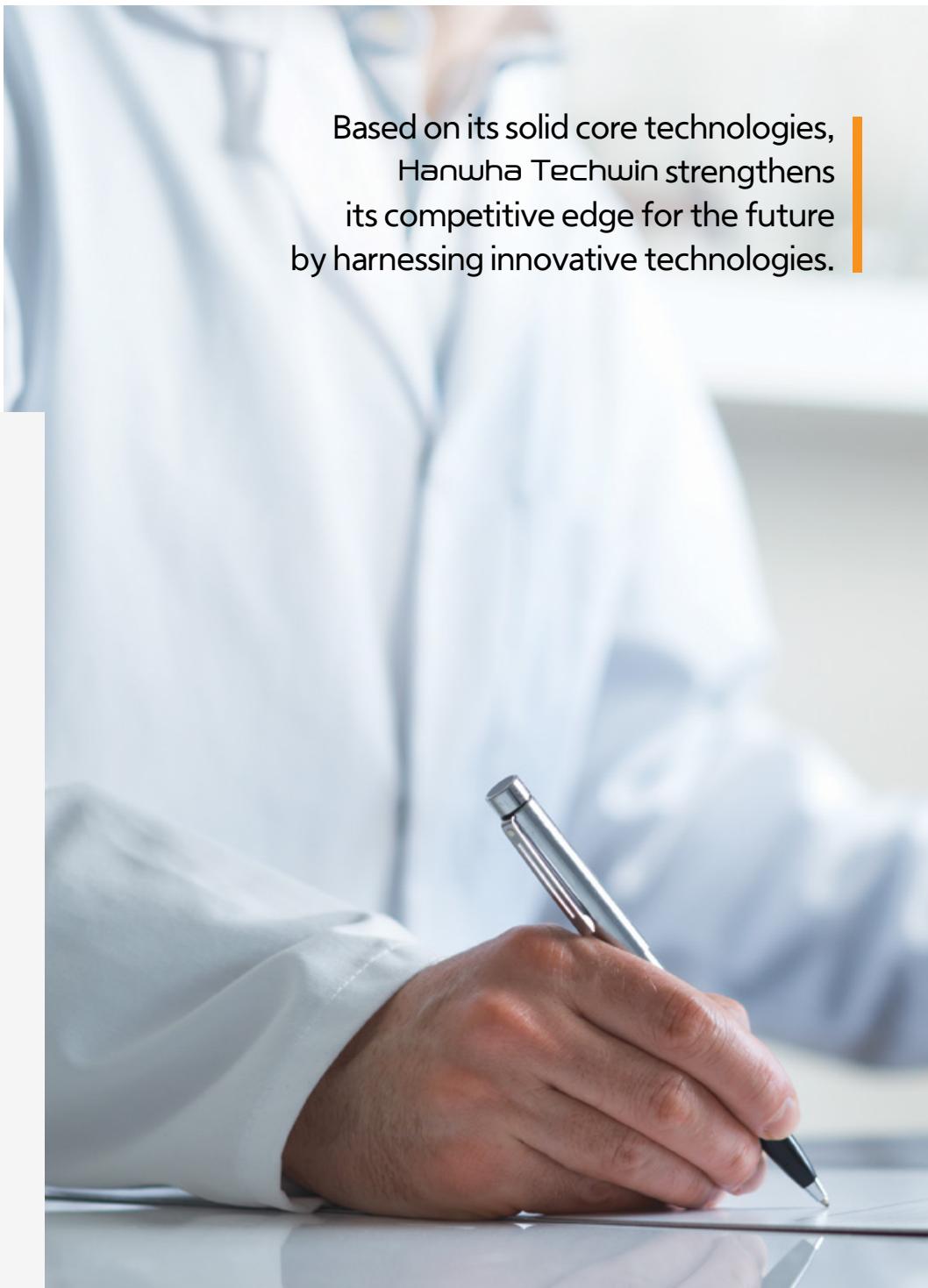


03. Intelligent Analytics technology

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 85% 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



The New X series AI camera X PLUS/X Core lineup

AI-Enhanced X series Cameras

- Accurate Object Detection
- Edge-based business intelligence
- Improved image quality
- Next level cybersecurity
- User convenience
- Reinforced durability

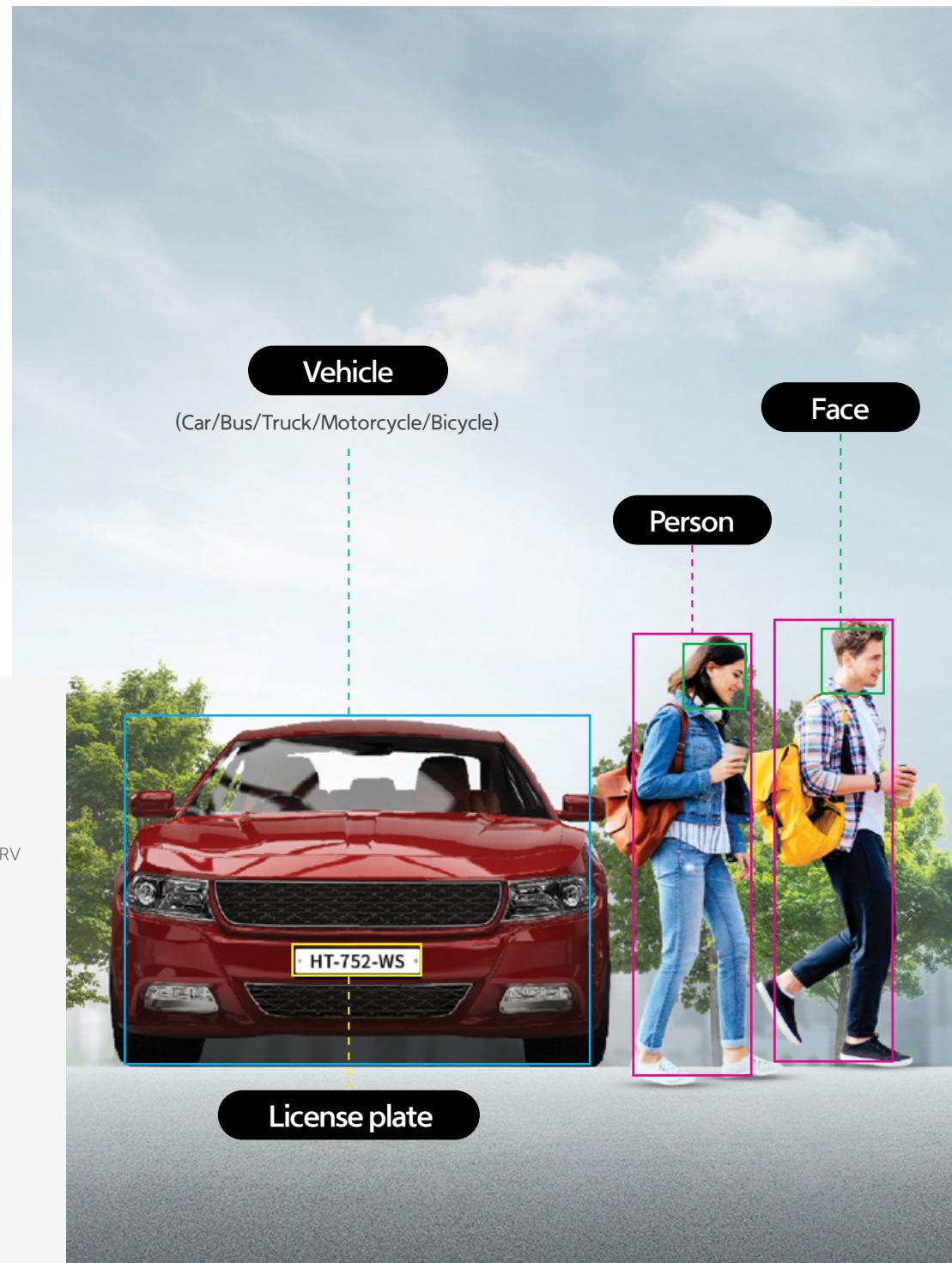
Featuring Hanwha's advanced artificial intelligence (AI) and deep-learning technologies, the New X series cameras offer industry-leading AI-based object detection for false alarm reduction analytics, AI-enhanced image quality and edge-based business intelligence.

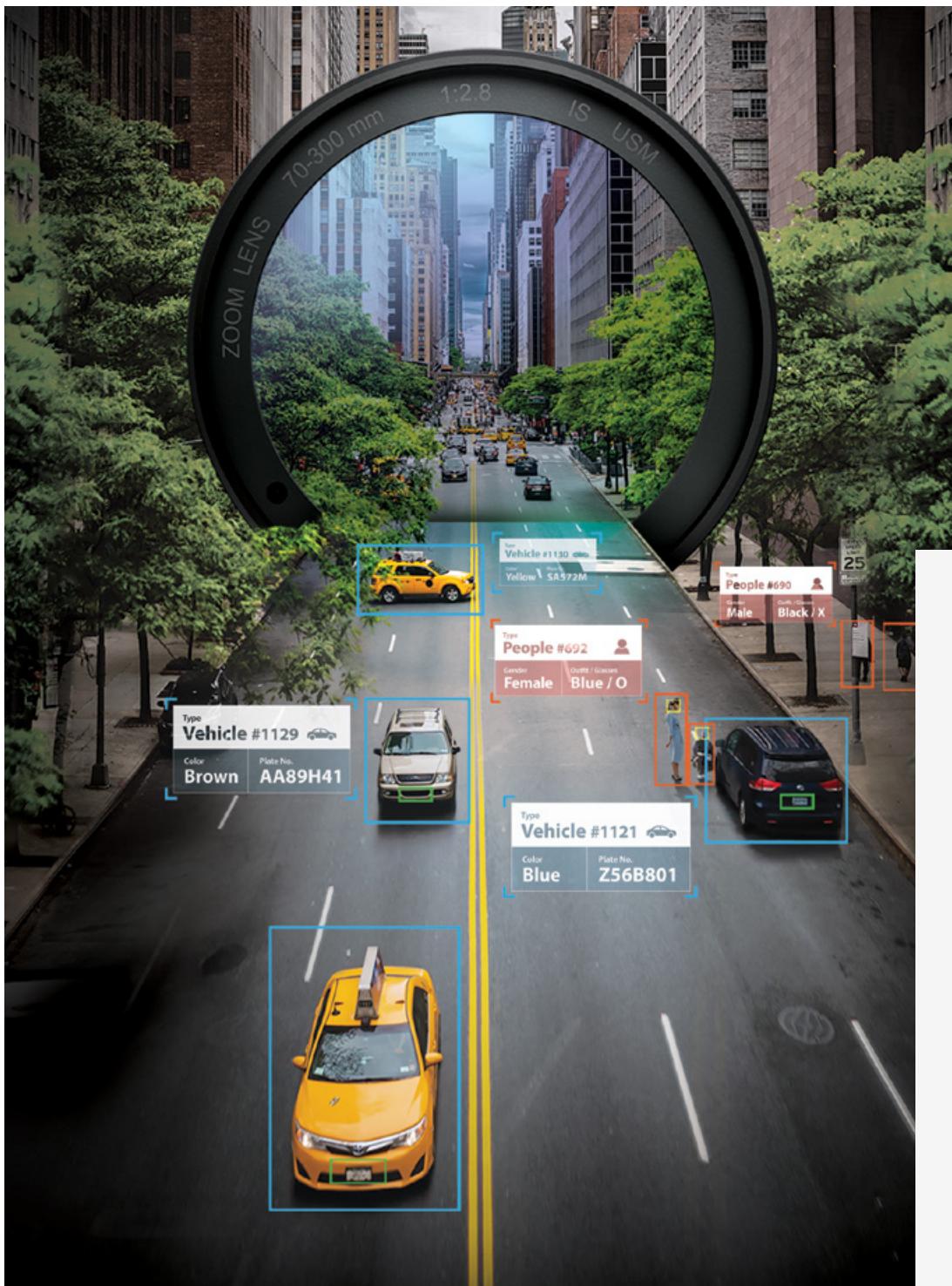
X PLUS

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





P series AI Camera & NVR

Precise Object Detection & Classification with AI

- Person
- Face
- Vehicle
- License plate
- Gender
- Age range
- Colour of clothing
- Face mask
- Glasses/Hat/Bag
- Vehicle time and colour

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 P23, 24



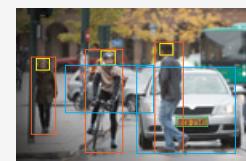
AI NVR Series

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

* See more at P80

Wisenet AI Camera

Detect and classify objects real-time



* Person, face, vehicle, license plate

Wisenet AI Search

Quickly search based on attributes



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

Q series AI Camera

Expand Q series with built-in AI

- AI based Person, Vehicle detection
- AI based directional detection, loitering
- WiseNRII, SSNRV, WiseStreamIII



AI Camera Series
QNV-C9083R, QNV-C8083R, QNO-C9083R, QNO-C8083R



WISENET Road AI

Make, Model, Colour Recognition

Intelligent edge-based ANPR

- Smart search (number plate, country, make, model, colour)
- Vehicle type recognition: car, van, SUV, LCV, truck, bus, motorcycle
- 70+ brands recognised, 600+ models
- Road usage statistics in various display formats
- Supports VMS integrations



Meet our **specialized** cameras
equipped with powerful **AI**

Select the best fit camera for your special safety needs



Bi-Spectrum



TNM-C4940TD, C4950TD, C4960TD



Dual Lens



PNM-C12083RVD, C7083RVD



12X Zoom



XNV-6123R, XNO-6123R



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.



PTZ PLUS

New Generation PTZ

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)

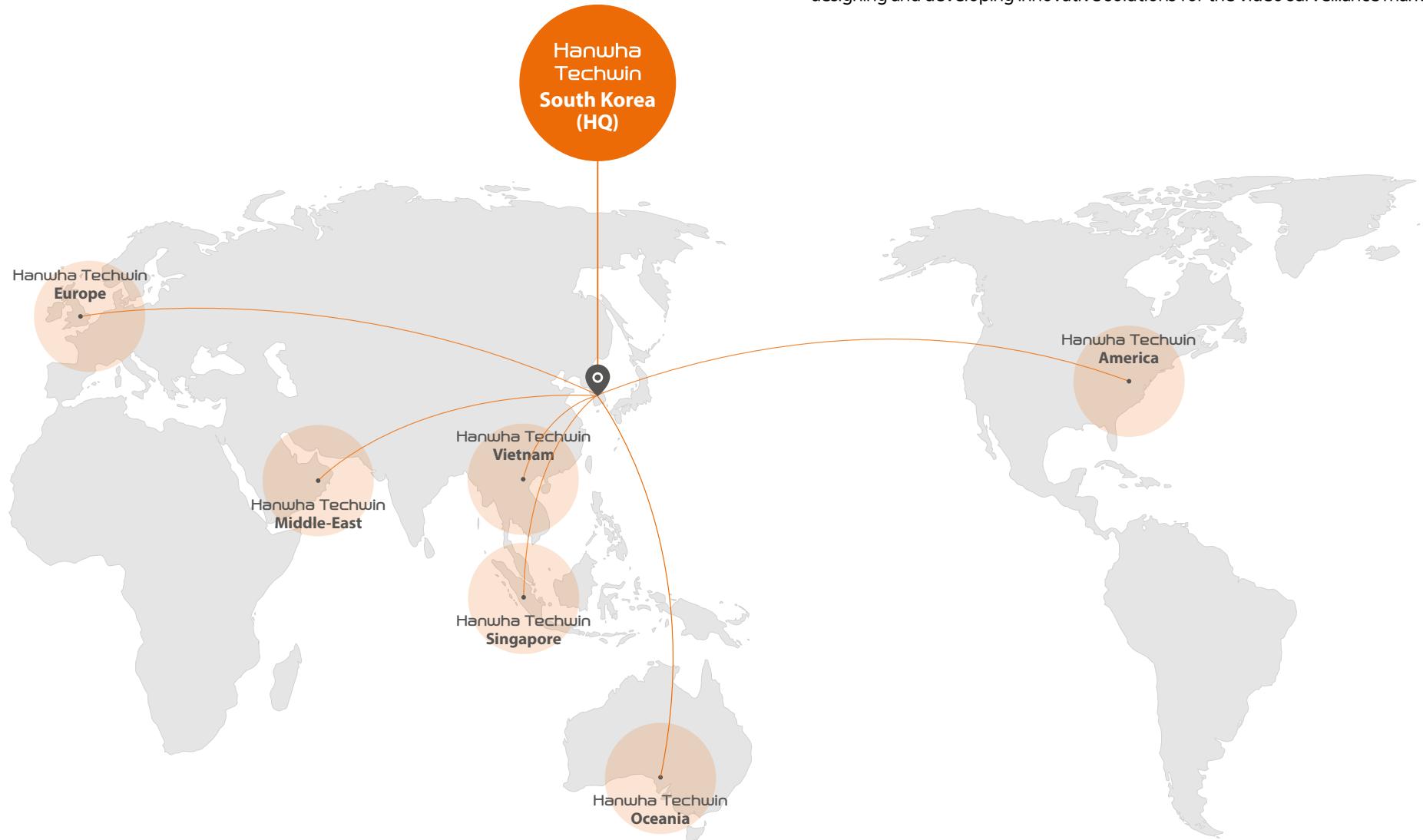
* 4K XNP-9300RW, XNP-9250R, XNP-9250
* 6MP XNP-8300RW, XNP-8250R, XNP-8250
* 2MP XNP-6400RW, XNP-6400R, XNP-6400



GLOBAL NETWORK

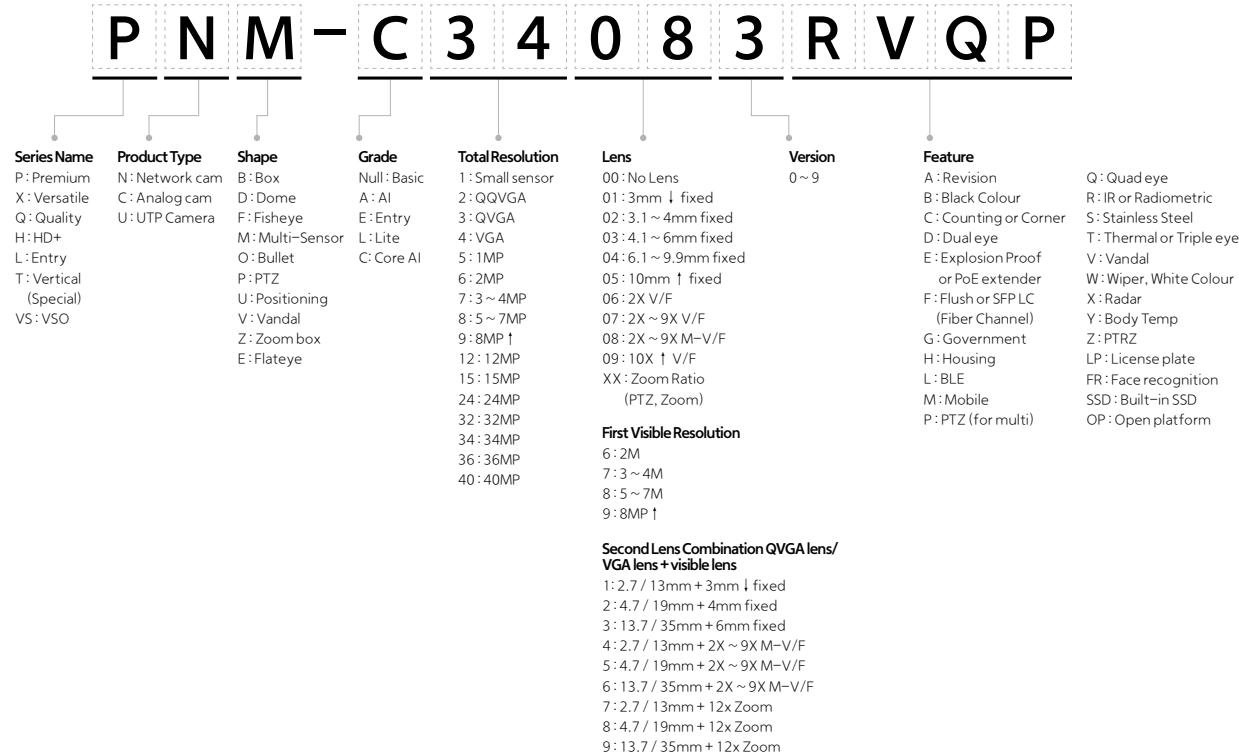
Hanwha Techwin Global network

Hanwha Techwin is a Korean company with a long legacy of designing and developing innovative solutions for the video surveillance market.

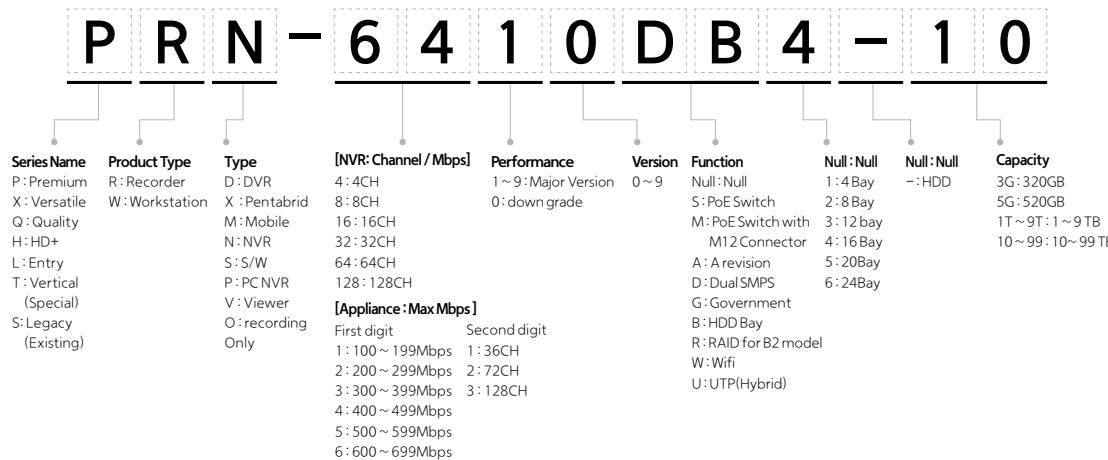


PRODUCT NAMING RULE

Camera

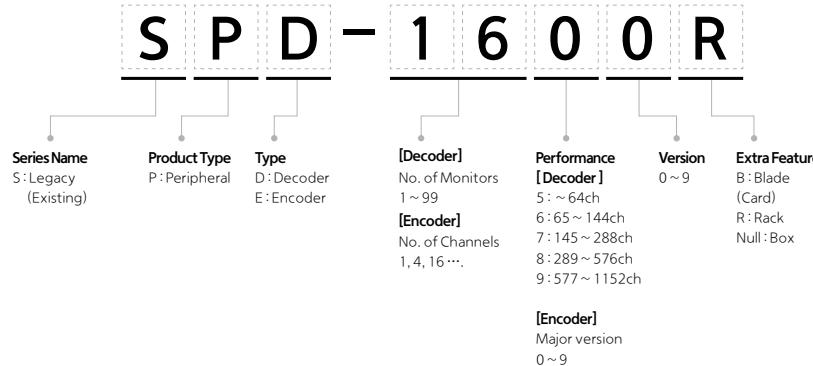


Recorder

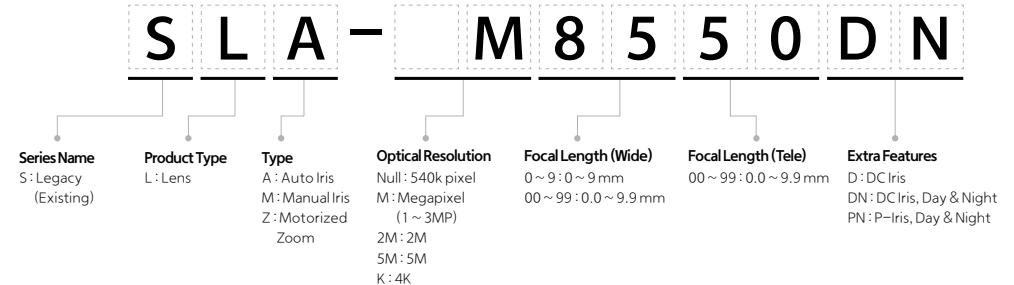


PRODUCT NAMING RULE

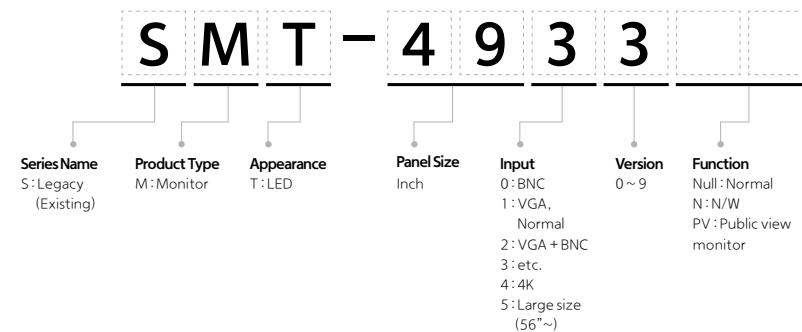
Decoder/Encoder



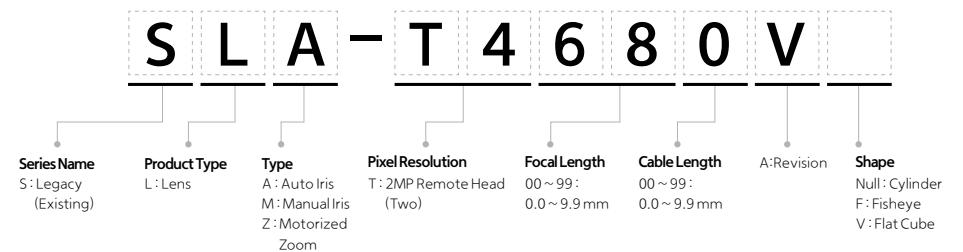
Lens: CS Mount



Monitor



Lens: Remote Head



CONTENTS

NETWORK

Camera

AI Cameras

X series

P series

Q series

T series

NVR

Encoder / Decoder

VMS

ANALOG

Camera

DVR

PERIPHERAL

Monitor

Controller

Lens

ACCESSORY

Wisenet Toolbox Plus

AI Camera

X Plus


XNO-9083R
4K AI IR Bullet Camera

X Plus


XNV-9083R
4K AI IR Vandal Dome Camera

X Plus


XNV-9083RZ
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	1/1.8" progressive CMOS
Min. Illumination	Colour: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.04Lux (F1.3, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Colour: 0.03Lux (F1.3, 1/30sec, 30IRE) BW: 0.003Lux (F1.3, 1/30sec, 30IRE), 0Lux (IR LED on)	Colour: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Colour: 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	4.4~9.3mm(2.1x) motorized varifocal	–
Angular Field of View	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 113° (Wide) ~ 47° (Tele) V: 58° (Wide) ~ 26° (Tele) D: 138° (Wide) ~ 54° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	–
Pan / Tilt / Rotate	–	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 350° / 0° ~ 85° / 0° ~ 340°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	–
IR Viewable Length	WiseIR 50m (164.04ft)	WiseIR 50m (164.04ft)	15m (49.21ft) 30m (98.43ft) based on scene	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	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV
Digital Image Stabilisation	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	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle)</p> <p>Support Detection Shot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit)</p> <p>Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>				
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	H.265 / H.264, MJPEG
Resolution / Max. Frame Rate	8MP / 30fps	8MP / 30fps	4K / 30fps	8MP / 30fps	8MP / 30fps
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 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/M 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	-50°C ~ +55°C (-58°F ~ +131°F) +74°C (165°F) (Max) based on NEMA TS-2(2.2.7) * Start up should be done at above -30°C 0~95%RH(non-condensing) Humidity control / w AIR 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+	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	–
Power Consumption	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+ (IEEE802.3at type 2, Class4)	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, 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)	Ø180 x 135mm (Ø7.09" x 5.31") 2kg (4.41 lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.53 lb)	W 81 x H 67 x D165mm (3.19" x 2.64" x 6.48") 880g (1.94 lb)

AI Camera

	X Plus	X Plus	X Plus	X Plus	X Plus
					NEW
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
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	Colour: 0.06Lux (F1.7, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.06Lux (F1.7, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Colour: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.04Lux(F1.3, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Colour: 0.03Lux (F1.3, 1/30sec, 30IRE) BW: 0.003Lux (F1.3, 1/30sec, 30IRE), 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° (Wide) ~ 15° (Tele) V: 22.8° (Wide) ~ 8.4° (Tele) D: 48.7° (Wide) ~ 17.1° (Tele)	H: 42° (Wide) ~ 15° (Tele) V: 22.8° (Wide) ~ 8.4° (Tele) D: 48.7° (Wide) ~ 17.1° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 113° (Wide) ~ 47° (Tele) V: 58° (Wide) ~ 26° (Tele) D: 138° (Wide) ~ 54° (Tele)
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	–	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 350° / 0° ~ 85° / 0° ~ 340°
IR Viewable Length	WiseIR 70m (229.66ft)	WiseIR 70m (229.66ft)	WiseIR 50m (164.04ft)	WiseIR 50m (164.04ft)	15m (49.21ft), 30m (98.43ft) based on scene
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	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV
Digital Image Stabilisation	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 Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support Detection Shot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (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, DC 12V output (Max. 50mA)	–
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	–
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, 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 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/M 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	-50°C ~ +55°C (-58°F ~ +131°F) +74°C (165°F) (Max) based on NEMA TS-2 (2.2.7) * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control / w AIR vent
Certification	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	IP56/IP67, NEMA4X, IK10	IP66/IP67, NEMA4X, IK10+	IP66/IP67/IP6K9K, NEMA4X, IK10+
Power Consumption	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 12.1W
Dimensions (WxHxD) / Weight	Ø180 x 125mm (7.09" x 4.92") 1.9kg (4.19 lb)	Ø160 x 125mm (Ø6.3" 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)	Ø180 x 135mm (Ø7.09" x 5.31") 2kg (4.41 lb)

AI Camera

X Plus



NEW

X Plus



X Plus

X Plus



X Plus



X Plus

**XNV-8083Z**
6MP AI Vandal Dome Camera**XND-8083RV**
6MP AI IR Dome Camera**XNB-8003**
6MP AI Box Camera**XNO-6123R**
2MP AI IR Bullet Camera**XNO-6083R**
2MP AI IR Bullet Camera

Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/2.8" CMOS	1/2.8" progressive CMOS
Min. Illumination	Colour: 0.03Lux (F1.3, 1/30sec, 30IRE) BW: 0.003Lux (F1.3, 1/30sec, 30IRE)	Colour: 0.04Lux (F1.3, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Colour: 0.03Lux (F1.2, 1/30sec, 30IRE) BW: 0.003Lux (F1.2, 1/30sec, 30IRE)	Colour: 0.03Lux (F1.6, 1/30sec, 30IRE) BW: 0Lux (IR LED on), 30/25fps	Colour: 0.01Lux (F1.4, 1/30sec, 30IRE) BW: 0Lux (IR LED on), 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
Focal Length	4.4~9.3mm(2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	–	5.2~62.4mm (12x) zoom	2.8~12mm (4.3x) motorized varifocal
Angular Field of View	"H: 113° (Wide)~47° (Tele) V: 58° (Wide)~26° (Tele) D: 138° (Wide)~54° (Tele)	H: 112.1° (Wide)~47.5° (Tele) V: 58° (Wide)~26.6° (Tele) D: 137.5° (Wide)~54.6° (Tele)	–	H: 55° (Wide)~5° (Tele) V: 35° (Wide)~3° (Tele) D: 62° (Wide)~6° (Tele)	H: 119.5° (Wide)~27.9° (Tele) V: 62.8° (Wide)~15.7° (Tele) D: 142.1° (Wide)~32° (Tele)
Pan / Tilt / Rotate	0° ~350° / 0° ~85° / 0° ~340°	0° ~360° / -45° ~85° / 0° ~355°	–	–	–
IR Viewable Length	–	WiseIR 50m (164.04ft)	–	WiseIR 90m (295.28ft)	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 (150dB)	extremeWDR (150dB)
Digital Noise Reduction	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV
Digital Image Stabilisation	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	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle)</p> <p>Support Detection Shot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit)</p> <p>Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>				
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
Alarm I/O	–	2 configurable I/O ports, DC 12V output (Max. 50mA)	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)
Audio I/O	–	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) / 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	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 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	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/M 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/M 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) +74°C (165°F) (Max) based on NEMA TS-2 (2.2.7) * Start up should be done at above -30°C 0~95%RH (non-condensing) Humidity control / w AIR 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)	-40°C ~ +60°C (~-40°F ~ +140°F) / Less than 95% RH (Non-condensing) * Startup should be done at above -30°C Maximum Temperature based on NEMA-TS 2 (2.2.7): +74°C (+165°F) 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
Certification	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	–	IP66/67, IK10, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9)	IP66/IP67, NEMA4X, IK10
Power Consumption	PoE+: Max 17.0W, typical 12.1W	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W	PoE+: Max 19.5W, typical 15.5W 12VDC: Max 16.5W, typical 13.1W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover
Dimensions (WxHxD) / Weight	Ø 180 x 135mm (Ø7.09" x 5.31") 2kg (4.41 lb)	Ø 160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.53 lb)	W81 x H67 x D 165mm (Ø3.19" x 2.64" x 6.48") 880g (1.94 lb)	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.3kg (5.07 lb)	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.2kg (4.85 lb)

AI Camera

	X Plus	X Plus	X Plus	X Plus	X Core
					
XNV-6123R 2MP AI IR Vandal Dome Camera	XNV-6083R 2MP AI IR Vandal Dome Camera	XND-6083RV 2MP AI IR Dome Camera	XNB-6003 2MP AI Box Camera	XNO-C9083R 4K AI IR Bullet Camera	
Imaging Device	1/2.8" CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/1.8" progressive CMOS
Min. Illumination	Colour: 0.03Lux (F1.6, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps	Colour: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps	Colour: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps	Colour: 0.007Lux (F1.2, 1/30sec, 30IRE) B/W: 0.0007Lux (F1.2, 1/30sec, 30IRE), 30/25fps	Colour: 0.04Lux (F1.3, 1/30sec, 30IRE) 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	Micro USB Type B
Focal Length	5.2~62.4mm (12x) zoom	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal	–	4.4~9.3mm (2.1x) motorized varifocal
Angular Field of View	H: 55° (Wide) ~ 5° (Tele) V: 33° (Wide) ~ 3° (Tele) D: 62° (Wide) ~ 6° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	–	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)
Pan / Tilt / Rotate	0°~360° / -45°~80° / 0°~355°	0°~360° / -45°~80° / 0°~355°	0°~360° / -45°~85° / 0°~355°	–	–
IR Viewable Length	WiseIR 90m (295.28ft)	WiseIR 50m (164.04ft)	WiseIR 50m (164.04ft)	–	WiseIR 40m (131.23ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV
Digital Image Stabilisation	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 Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support Detection Shot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (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	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	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 / 120fps	2MP / 120fps	2MP / 120fps	2MP / 120fps	8MP / 30fps
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 10 profiles	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 1slot 512GB
Application Programming Interface	ONVIF Profile S/G/T/M 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 ~ +60°C (-40°F ~ +140°F) / Less than 95% RH (Non-condensing) * Start up should be done at above -30°C Maximum Temperature based on NEMA-TS 2 (2.2.7) : +74°C (+165°F) 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)	-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/IP6K9K, NEMA4X, NEMA-TS 2 (2.2.8, 2.2.9), IK10+	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52, IK10	–	IP66/IP67/NEMA4X, IK10
Power Consumption	PoE+: Max 19.5W, typical 15.5W 12VDC: Max 16.5W, typical 13.1W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20W, typical 15.6W Power redundancy failover	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W
Dimensions (WxHxD) / Weight	Ø 180 x 138mm (Ø 7.09" x 5.43") 2.13kg (4.70lb)	Ø 180 x 125mm (Ø 7.09" x 4.92") 1.9kg (4.19lb)	Ø 160 x 125mm (Ø 6.3" x 4.92") 1.6kg (3.53lb)	W 81 x H 67 x D 165mm (3.19" x 2.64" x 6.48") 880g (1.94lb)	Ø 93.4 x 276.6mm (Ø 3.68" x 10.89") 1.64kg (3.62lb)

AI Camera



XNV-C9083R
4K AI IR Vandal Dome Camera



XND-C9083RV
4K AI IR Dome Camera



XNO-C8083R
6MP AI IR Bullet Camera



XNV-C8083R
6MP AI IR Vandal Dome Camera

	X Core	X Core	X Core	X Core
Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Min. Illumination	Colour: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.04Lux (F1.3, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Colour: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Colour: 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° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (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°	-	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	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV
Digital Image Stabilisation	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 Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support Detection Shot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (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	6MP / 30fps	6MP / 30fps
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)
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 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	Ø 160 x 118mm (Ø6.3" x 4.65") 1.45kg (3.2lb)	Ø 160 x 118mm (Ø6.3" x 4.65") 1.35kg (2.98lb)	Ø 93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62lb)	Ø 160 x 118mm (Ø6.3" x 4.65") 1.45kg (3.20 lb)

AI Camera

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	X Core 	X Core 	X Core 	X Core 
	XND-C8083RV 6MP AI Dome Camera	XNO-C7083R 4MP AI IR Bullet Camera	XNV-C7083R 4MP AI IR Vandal Dome Camera	XND-C7083RV 4MP AI IR Dome Camera
Imaging Device	1/1.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS
Min. Illumination	Colour: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Colour: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Colour: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Colour: 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	2.8~10mm (3.6x) 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° (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)	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	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV
Digital Image Stabilisation	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 Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support Detection Shot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (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	6MP / 30fps	4MP / 60fps	4MP / 60fps	4MP / 60fps
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)
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 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W
Dimensions (WxHxD) / Weight	Ø160 x 118mm (Ø6.3" x 4.65") 1.35kg (2.98lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.45kg (3.20lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.35kg (2.98lb)

AI 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

XNF-9013RV
12MP AI Fisheye Camera

Imaging Device	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.3" 12MP CMOS
Min. Illumination	Colour: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Colour: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on)	Colour: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W: 0Lux (IR LED on), 30/25fps	Colour: 0.39Lux (F2.2, 1/30sec) BW: 0Lux(IR LED on)
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	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	1.08mm fixed focal
Angular Field of View	H: 119.5°(Wide) ~ 27.9°(Tele) V: 62.8°(Wide) ~ 15.7°(Tele) D: 142.1°(Wide) ~ 32°(Tele)	H: 119.5°(Wide) ~ 27.9°(Tele) V: 62.8°(Wide) ~ 15.7°(Tele) D: 142.1°(Wide) ~ 32°(Tele)	H: 119.5°(Wide) ~ 27.9°(Tele) V: 62.8°(Wide) ~ 15.7°(Tele) D: 142.1°(Wide) ~ 32°(Tele)	H: 187° / V: 187° / D: 187°
Pan / Tilt / Rotate	–	0° ~ 360° / -45° ~ 75° / 0° ~ 355°	0° ~ 360° / -45° ~ 75° / 0° ~ 355°	Lens Rotation
IR Viewable Length	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 (150dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNRII(Based on AI engine), SSNR V	WiseNRII(Based on AI engine), SSNR V	WiseNRII(Based on AI engine), SSNR V	WiseNRII(Based on AI engine), SSNR V
Digital Image Stabilisation	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	–
Analytics	<p>Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Analytics events: Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (Appear/Disappear)</p>			Classified object type: Person/Face/Vehicle/License plate Support DetectionShot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events: Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Virtual area (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	2MP / 60fps	2MP / 60fps	2MP / 60fps	3008 x 3008 / 30fps
WiseStream	WiseStreamII WiseStreamIII (Based on Alengine)	WiseStreamII WiseStreamIII (Based on AI engine)	WiseStreamII WiseStreamIII (Based on AI engine)	WiseStreamII WiseStreamIII (Based on Alengine)
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, 5 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 2slots 1TB (512Gb x2)
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/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°F ~ +55°F (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°F NEMA TS-2: 74°F 0~95%RH (non-condensing) Humidity control /w GORE vent	-40°F ~ +55°F (-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 ~ +60°C (-40°F ~ +140°F) / Less than 95% RH POE+ Mode 55°C (Hysteresis 5°C)
Certification	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10	IP52, IK08	IP66, IK 10, NEMA4X
Power Consumption	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10W	PoE: Max 12.95W, typical 9.4W, 12VDC: Max 12.9W, typical 9.0W / PoE+: Max 23.0W, typical 9.4W, 12VDC: Max 22.0W, typical 9.0W
Dimensions (WxHxD) / Weight	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1.64kg (3.62 lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.45kg (3.20lb)	Ø160 x 118mm (Ø6.3" x 4.65") 1.35kg (2.98lb)	Ø160 x 72mm (Ø6.23" x 2.84") 1.17kg (2.58lb)

AI Camera



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

	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	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Colour: 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	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV	WiseNRII(Based on AI engine), SSNRV
Digital Image Stabilisation	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 Attributes: Person(Gender, Colour and Bag), Face(Age, Gender, Mask and Glasses), Vehicle(Type:car/bus/truck/motorcycle/bicycle and Colour) Support Bestshot per object Analytics events based on AI engine – Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit), Face mask detection, Digital auto tracking, Social distancing detection Analytics events – Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(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	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	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 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 20W, typical 17W 12VDC: Max 18W, typical 16W	PoE+: Max 20W, typical 17W 12VDC: Max 18.7W, typical 15W	PoE+: Max 20W, typical 16W 12VDC: Max 17.7W, typical 14W	PoE+: Max 20W, typical 16W 12VDC: Max 17.7W, typical 14W	PoE+: Max 16.5W, typical 12.5W 12VDC: Max 13.5W, typical 10.8W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.58" x 14.15") (Without sunshield) 2.48kg (5.47lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.19lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.53lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95kg (4.30lb)	W 73.1 x H 66.6 x D 147.8mm 700g (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)

AI Camera



NETWORK

ANALOG

PERIPHERAL

ACCESSORY

	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	Colour: 0.008Lux (F1.3) BW : 0Lux (IR LED on)	Colour: 0.008Lux (F1.3) BW : 0Lux (IR LED on)	Colour: 0.008Lux (F1.3) BW : 0Lux (IR LED on)	Colour: 0.008Lux (F1.3) BW : 0Lux (IR LED on)	Colour: 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	WiseNRII(Based on AI engine), SSNR	WiseNRII(Based on AI engine), SSNR	WiseNRII(Based on AI engine), SSNR	WiseNRII(Based on AI engine), SSNR	WiseNRII(Based on AI engine), SSNR
Digital Image Stabilisation	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 Attributes: Person(Gender, Colour and Bag), Face(Age, Gender, Mask and Glasses), Vehicle(Type:car/bus/truck/motorcycle/bicycle and Colour) Support Bestshot per object Analytics events based on AI engine – Object detection, Virtual line*(Crossing/Direction), Virtual area*(Loitering/Intrusion/Enter/Exit), Face mask detection, Digital auto tracking, Social distancing detection Analytics events – Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(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	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 20W, typical 17W 12VDC: Max 18W, typical 16W	PoE+: Max 20W, typical 17W 12VDC: Max 18.7W, typical 15W	PoE+: Max 20W, typical 16W 12VDC: Max 17.7W, typical 14W	PoE+: Max 20W, typical 16W 12VDC: Max 17.7W, typical 14W	PoE+: Max 16.5W, typical 12.5W 12VDC: Max 13.5W, typical 10.8W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (3.58" x 14.51") (Without sunshield) 2.48kg (5.47lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.19lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.6kg (3.53lb)	Ø205 x 163mm (Ø8.07" x 6.48") 1.95kg (4.30lb)	W 81 x H 67 x D 165mm (3.19" x 2.64" x 6.48") 880g (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)

AI Camera



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	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec), 0Lux (IR LED on)	Colour: 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	SSNRV	SSNRV	SSNRV		
Digital Image Stabilisation	Stabilisation Support (built-in gyro sensor)	Stabilisation Support (built-in gyro sensor)	Stabilisation Support (built-in gyro sensor)		
Analytics	Attributes: Person(Gender, Colour and Bag), Face(Age, Gender, Mask and Glasses), Vehicle(Type:car/bus/truck/motorcycle/bicycle and Colour) Support Bestshot per object Analytics events based on AI engine – Object detection, Virtual line*(Crossing/Direction), Virtual area * (Loitering/Intrusion/Enter/Exit), Face mask detection, Digital auto tracking, Social distancing detection Analytics events – Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Virtual area(Appear/Disappear)				
Business Intelligence	–	–	–		
Alarm I/O	1/1	1/1	1/1		
Audio I/O	Selectable (mic in/line in/built-in mic) / 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 20W, typical 17W 12VDC: Max 18W, typical 16W	PoE+: Max 20W, typical 17W 12VDC: Max 18.7W, typical 15W	PoE+: Max 16.5W, typical 12.5W 12VDC: Max 13.5W, typical 10.8W		
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") 1.9kg (4.19lb)	W81x H67 x D 165mm, (3.19" x 2.64" x 6.48") 880g (1.94lb)		
Wisenet Road AI		Wisenet Road AI			
Solution	Community Traffic Observation	Parking Application	Community Traffic Observation	Parking Application	City Traffic
Speed Description	Moderate Speed	Low speed	Moderate Speed	Low speed	Regular Speed
Lane Coverage	1 lane (3.6m/12ft Wide)	1 lane (3.6m/12ft Wide)	1 lane (3.6m/12ft Wide)	1 lane (3.6m/12ft Wide)	Up to 2 lanes
Speed limit	Up to 70kmh (45mph)	Up to 70kmh (45mph)	Up to 70kmh (45mph)	Up to 40kmh (25mph)	Up to 100kmh (65mph)
Min. Forward Distance	12m (38ft)	10m (33ft)	12m (38ft)	10m (33ft)	16m (52ft)
Max. Forward Distance	12m (40ft)	13m (45ft)	12m (40ft)	13m (45ft)	36m (120ft)
Max. Horizontal Angle	25°	30°	25°	30°	25°
Max. Vertical Angle	25°	30°	25°	30°	25°
Horizontal Offset	Up to 5m (18ft)	Up to 7m (24ft)	Up to 5m (18ft)	Up to 7m (24ft)	Up to 7m (24ft)
Camera Height	Up to 5m (18ft)	Up to 7m (24ft)	Up to 5m (18ft)	Up to 7m (24ft)	Up to 7m (24ft)
Vehicle Recognition	Make : 70+ / Model : 600+ / Colour : 11		Make : 70+ / Model : 600+ / Colour : 11		Make : 70+ / Model : 600+ / Colour : 11

AI Camera



PNM-C12083RVD
6MP x 2CH AI Multi-directional Camera



PNM-C7083RVD
2MP x 2CH AI Multi-directional Camera



PNM-C9022RV
2MP x 4CH AI Multi-directional Camera

Imaging Device	1/2.8" CMOS x 2CH	1/2.8" CMOS x 2CH	1/2.8" CMOS x 4CH
Min. Illumination	Colour: 0.16Lux (F1.67, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Colour: 0.035Lux (F2.2, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Colour: 0.1Lux (F2.0, 1/30sec) BW: 0.01Lux (F2.0, 1/30sec), 0Lux (IR LED on)
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	3.54 ~ 6.69mm (1.9x) motorized varifocal	3 ~ 6mm (2x) motorized varifocal per CH	2.8mm fixed focal (x4)
Angular Field of View	H: 96° (Wide) ~ 47° (Tele) V: 51° (Wide) ~ 26° (Tele) D: 113° (Wide) ~ 54° (Tele)	H: 107° (Wide) ~ 56° (Tele) V: 57° (Wide) ~ 31° (Tele) D: 126° (Wide) ~ 64° (Tele)	H: 209° , V: 60°
Pan / Tilt / Rotate	0° ~ 355° / 0° ~ 78° / 0° ~ 180°	0° ~ 355° / 0° ~ 78° / 0° ~ 180°	0° ~ 360° / 0° ~ 65° / -
IR Viewable Length	25m (82ft)	25m (82ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNRII (Based on AI engine), SSNRV	WiseNRII (Based on AI engine), SSNRV	WiseNRII (Based on AI engine), SSNRV
Digital Image Stabilisation	-	-	-
Analytics	Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support Bestshot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events*: Defocus detection, Motion detection, Tampering, Virtual area (Appear/Disappear) * Support Audio detection, Sound classification via optional SPM-4210I/O box	Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support Bestshot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events*: Defocus detection, Motion detection, Tampering, Virtual area (Appear/Disappear) * Support Audio detection, Sound classification via optional SPM-4210I/O box	Classified object type: Person/Face/Vehicle/License plate Attributes: Vehicle (Type:car/bus/truck/motorcycle/bicycle) Support Bestshot Analytics events based on AI engine: Object detection, Virtual line (Crossing/Direction), Virtual area (Loitering/Intrusion/Enter/Exit) Analytics events*: Defocus detection, Motion detection, Tampering, Virtual area (Appear/Disappear)
Business Intelligence	-	-	-
Alarm I/O	* Support Alarm via optional SPM-4210I/O box	* Support Alarm via optional SPM-4210I/O box	2 configurable I/O ports
Audio I/O	* Audio in/out via optional SPM-4210I/O box	* Audio in/out via optional SPM-4210I/O box	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	6MP / 15fps	2MP / 30fps	2MP / 20fps
WiseStream	WiseStreamII, WiseStreamIII (Based on AI engine)	WiseStreamII, WiseStreamIII (Based on AI engine)	WiseStreamII, WiseStreamIII (Based on AI engine)
Streaming	Unicast (10 users) / Multicast 5 profiles per channel	Unicast(10 users) / Multicast 5 profiles per channel	Unicast(10 users) / Multicast 3 profiles per channel
Edge Storage	micro SD/SDHC/SDXC 1slot Max. 512GB	micro SD/SDHC/SDXC 1slot Max. 512GB	micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Open platform	ONVIF Profile S/T SUNAPI (HTTP API) 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 95% RH (Non-condensing)	-40°C~+55°C (-40°F ~ +131°F) / Less than 95% RH (Non-condensing)	-40°C ~ +55°C (-40°F ~ +131°F) / 0 ~ 95% RH (non-condensing)
Certification	IP66/IP67, NEMA4X, IK10	IP66/IP67, NEMA4X, IK10	IEC/EN 63000, IEC/EN 60529 IP66, IEC/EN 62262 IK10, NEMA 250 type 4X"
Power Consumption	PoE+: Max 21W, typical 16.5W	PoE+: Max 20W, typical 15.5W	PoE+: Max 24.5W, typical 11.3W 12VDC: Max 22.0W, typical 10.4W Power redundancy failover
Dimensions (WxHxD) / Weight	W 215 x H 135 x D 93.2mm (8.46" x 5.31" x 3.67") 1.33kg (2.93lb)	W 215 x H 135 x D 93.2mm (8.46" x 5.31" x 3.67") 1.33kg (2.93lb)	Ø 253 x 170mm (Ø 9.96" x 6.69") 2.9kg (6.39lb)

AI Camera



TNM-C4960TD
Bi-spectrum AI Thermal Camera

TNM-C4950TD
Bi-spectrum AI Thermal Camera

Imaging Device	Thermal	Visible	Thermal	Visible
	Uncooled micro bolometer	1/1.8" CMOS	Uncooled micro bolometer	1/1.8" CMOS
Min. Illumination	-	Colour: 0.06Lux (F1.7, 1/30sec) BW: 0.005Lux (F1.7, 1/30sec)	-	Colour: 0.06Lux (F1.7, 1/30sec) BW: 0.005Lux (F1.7, 1/30sec)
Video Output	Micro USB Type B			Micro USB Type B
Focal Length	25mm fixed focal	10.9~29mm (2.6x) motorized varifocal	13.5mm fixed focal	10.9~29mm (2.6x) motorized varifocal
Angular Field of View	H: 17.4° / V: 13.1° / D: 21.6°	H:42° (Wide) ~ 15° (Tele) V:22.8° (Wide) ~ 8.4° (Tele) D:48.7° (Wide) ~ 17.1° (Tele)	H:31.9° / V: 24.2° / D: 39.5°	H:42° (Wide) ~ 15° (Tele) V:22.8° (Wide) ~ 8.4° (Tele) D:48.7° (Wide) ~ 17.1° (Tele)
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	Auto (ICR)	-	Auto (ICR)
Wide Dynamic Range	-	WDR (120dB)	-	WDR (120dB)
Digital Noise Reduction	-	SSNRV, WiseNR II	-	SSNR V, WiseNR II
Digital Image Stabilisation	-	Support (built-in gyro sensor)	-	Support (built-in gyro sensor)
Analytics	Analytics events: Directional detection, Motion detection, Enter/Exit, Virtual line, Temperature Change detection	Analytics events based on AI engine (NPU): Object detection (Person/Face/Vehicle (car/truck/bus/ bicycle/motorcycle)/License plate), Bestshot, IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion), Stopped vehicle, Trafficjam Analytics events: Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events: Directional detection, Motion detection, Enter/Exit, Virtual line, Temperature Change detection	Analytics events based on AI engine (NPU): Object detection (Person/Face/Vehicle (car/truck/bus/ bicycle/motorcycle)/License plate), Bestshot, IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion), Stopped vehicle, Trafficjam Analytics events: Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	-		-	-
Alarm I/O	4 configurable I/O ports		4 configurable I/O ports	
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	
Resolution / Max. Frame Rate	640 x 480 (can be scaled up to 1280 x 960) / 30fps	3840 x 2160 / 30fps	640 x 480 (can be scaled up to 1280 x 960) / 30fps	3840 x 2160 / 30fps
WiseStream	WiseStreamII	WiseStreamIII	WiseStreamII	WiseStreamIII
Streaming	Up to 3 profiles		Up to 3 profiles	
Edge Storage	micro SD/SDHC/SDXC 2slots 512GB		micro SD/SDHC/SDXC 2slots 512GB	
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform (visible channel only)		ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform (visible channel only)	
Operating Temperature	-40°C ~ +60°C (-58°F ~ +140°F) * Start up should be done at above -30°C less than 95% RH (non-condensing)		-40°C ~ +60°C (-58°F ~ +140°F) * Start up should be done at above -30°C less than 95% RH (non-condensing)	
Certification	IP66/IP67, IK10, NEMA4X, NEMA TS 2 (2.2.8, 2.2.9)		IP66/IP67, IK10, NEMA4X, NEMA TS 2 (2.2.8, 2.2.9)	
Power Consumption	PoE+ : Max 23.5W 12VDC : Max 19.5W		PoE+ : Max 23.5W 12VDC : Max 19.5W	
Dimensions (WxHxD) / Weight	W 353.4 x H 287.5 x D 191.2mm (13.92" x 11.32" x 7.53") 4.53kg (9.99lb)		W 353.4 x H 287.5 x D 191.2mm (13.92" x 11.32" x 7.53") 4.53kg (9.99lb)	



TNM-C4940TD
Bi-spectrum AI Thermal Camera



TNB-9000
8K Box Camera

Imaging Device	Thermal	Visible	43.3mm Full-frame CMOS
	Uncooled micro bolometer	1/1.8" CMOS	
Min. Illumination	-	Colour: 0.06Lux (F1.7, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.015Lux (F1.4) BW: 0.0015Lux (F1.4)
Video Output	Micro USB Type B		HDMI
Focal Length	9.1mm fixed focal	4.4~9.3mm (2.2x) motorized varifocal	-
Angular Field of View	H: 50° / V: 37° / D: 63.8°	H: 112.1° (Wide) ~ 47.5° (Tele) V: 58° (Wide) ~ 26.6° (Tele) D: 137.5° (Wide) ~ 54.6° (Tele)	Canon 24mm, H: 57.4° Canon 35mm, H: 42.6° Canon 50mm, H: 30.9° Canon 85mm, H: 19.1° Canon 100mm, H: 16° Canon 70~200mm, H: 22.8° ~ 8°
Pan / Tilt / Rotate	-	-	-
IR Viewable Length	-	30m (98.42ft)	-
Day & Night	-	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	WDR (120dB)	-
Digital Noise Reduction	-	SSNRV, WiseNR II	SSNRV
Digital Image Stabilisation	-	Support (built-in gyro sensor)	-
Analytics	Analytics events: Directional detection, Motion detection, Enter/Exit, Virtual line, Temperature Change detection	Analytics events based on AI engine (NPU): Object detection (Person/Face/ Vehicle (car/truck/bus/bicycle/motorcycle)/license plate), Bestshot, IVA (Virtualline/Area, Enter/Exit, Loitering, direction, intrusion), Stopped vehicle, Trafficjam Analytics events: Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Shock detection, Appear/Disappear	Intelligent analytics, Audio detection, Sound classification
Business Intelligence	-	-	-
Alarm I/O	4 configurable I/O ports		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
Resolution / Max. Frame Rate	640 x 480 (can be scaled up to 1280 x 960) / 30fps	3840 x 2160 / 30fps	8K / 15fps
WiseStream	WiseStreamII	WiseStreamIII	WiseStreamII
Streaming	Up to 3 profiles		Up to 3 Profiles
Edge Storage	micro SD/SDHC/SDXC 2slots 512GB		micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform (visible channel only)		ONVIF Profile S/G/T SUNAPI
Operating Temperature	-40°C ~ +60°C (-58°F ~ +140°F) * Start up should be done at above -30°C less than 95% RH (non-condensing)		0°C ~ +45°C (32°F ~ +122°F)
Certification	IP66/IP67, IK10, NEMA4X, NEMA TS 2 (2.2.8, 2.2.9)		EMC
Power Consumption	PoE+: Max 25.5W 12VDC: Max 21.5W		PoE: Max 30W, typical 20W 12VDC: Max 26W, typical 18W
Dimensions (WxHxD) / Weight	W 353.4 x H 287.5 x D 191.2mm (13.92" x 11.32" x 7.53") 4.53kg (9.99lb)		W 120 x H 118.5 x D 179mm (4.72" x 4.66" x 7.04") 2.2kg (4.85lb)
Additional Features	-		Super high resolution, Canon EF mount



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				
Min. Illumination	Colour: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Colour: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Colour: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Colour: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Colour: 0.05Lux (F1.2, 1/30sec) B/W: 0.005Lux
Video Output	Micro USB Type B				
Focal Length	2.8~8.4mm (3x) motorized varifocal	–			
Angular Field of View	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (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)				
Wide Dynamic Range	extremeWDR (120dB)				
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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				
Alarm I/O	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				
Resolution / Max. Frame Rate	4K / 30fps				
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	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	-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 9W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9W	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 (Ø6.3" x 4.92") 1.6kg (3.52lb)	W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 880g (1.94lb)
Additional Features	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
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Colour: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Colour: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Colour: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Colour: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Colour: 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° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62° (Wide) ~ 22.5° (Tele) D: 133° (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	extremeWDR	extremeWDR	extremeWDR	extremeWDR	extremeWDR
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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				
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 9W 24VAC: Max 13.5W, typical 11W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9W	PoE: Max 12.95W, typical 10.7W 12VDC: Max 11.5W, typical 9W	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 (Ø6.3" x 4.92") 1.6kg (3.52lb)	W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 880g (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
Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.8" CMOS
Min. Illumination	Colour: 0.07Lux (F1.3, 1/30sec) BW: 0Lux (IR LED)	Colour: 0.07Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.015Lux (F1.4, 1./30sec) BW: 0Lux (IR LED)	Colour: 0.015Lux (F1.4, 1./30sec) BW: 0Lux (IR LED)	Colour: 0.07Lux (F1.2) B/W: 0.007Lux (F1.2)
Video Output	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° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (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° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 102.5° (Wide) ~ 38.7° (Tele) V: 74.2° (Wide) ~ 29° (Tele) D: 135.5° (Wide) ~ 48.6° (Tele)
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	± 175° / 0 ~ 85° / ± 175° (Remote)
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	50m (164.04ft)	50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	150dB	150dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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			
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out			
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG			
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			
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, 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) / Less than 90% RH -25°C ~ +60°C (-13°F ~ +140°F)
Certification	IP66/IP67/IP6K9K, IK 10+, NEMA4X	IP52, IK 10	IP66/IP67/IP6K9K, IK 10+, NEMA4X	IP52, IK 10	IP52, IK 10
Power Consumption	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25. W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	PoE : Max 11W 12VDC : Max 9W
Dimensions (WxHxD) / Weight	Ø 180 x 125mm (Ø 7.09" x 4.92") 1.75kg (3.86lb)	Ø 160 x 125mm (Ø 6.3" x 4.92") 1.45kg (3.20lb)	Ø 180 x 125mm (Ø 7.09" x 4.92") 1.75kg (3.86lb)	Ø 160 x 125mm (Ø 6.3" x 4.92") 1.45kg (3.20lb)	Ø 160 x 125mm (Ø 6.3" x 4.92") 1.45kg (3.20lb)
Additional Features	PoE Extender Camera	PoE Extender Camera	PoE Extender Camera	PoE Extender Camera	Modular structure, Motorized PTZ, 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

Imaging Device	1/1.8" CMOS				
Min. Illumination	Colour: 0.07Lux (F1.2) B/W: 0.007Lux (F1.2)	Colour: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Colour: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Colour: 0.07 Lux (F1.2) B/W: 0.007 Lux (F1.2)	Colour: 0.07Lux (F1.3) B/W: 0Lux (IR LED)
Video Output	Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	Micro USB Type B	CVBS 1.0 Vp-p, Micro USB type B
Focal Length	3.6~9.4mm (2.6x) motorized varifocal	3.9~9.4mm (2.4x) motorized varifocal	3.9~9.4mm (2.4x) motorized varifocal	3.6~9.4mm (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° (Tele) D: 135.5° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 102.5° (Wide) ~ 38.7° (Tele) V: 74.2° (Wide) ~ 29° (Tele) D: 135.5° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) V: 67.2° (Wide) ~ 29° (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)				
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	Support (Built-in Gyro sensor)				
Analytics	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) / Line out
Video Compression	H.265 / H.264, MJPEG				
Resolution / Max. Frame Rate	5MP / 30fps				
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles				
Edge Storage	micro SD/SDHC/SDXC				
Application Programming Interface	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	Ø 205 x 155mm (Ø 8.07" x 6.1") 1.85kg (4.08lb)	Ø 160 x 125mm (Ø 6.3" x 4.92") 1.45kg (3.20lb)	Ø 205 x 155mm (Ø 8.07" x 6.1") 1.8kg (3.97lb)	Ø 180 x 125mm (Ø 7.1" x 4.9") 1.75kg (3.86lb)	Ø 180 x 125mm (Ø 7.1" 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				
Min. Illumination	Colour: 0.015Lux (F1.4) B/W: 0.0015Lux (F1.4)	Colour: 0.015Lux (F1.4) B/W: 0Lux (IRLED 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				
Angular Field of View	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (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)				
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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				
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				
Resolution / Max. Frame Rate	2MP / 60fps				
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles				
Edge Storage	micro SD/SDHC/SDXC				
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform				
Operating Temperature	-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 7W 12VDC: Max 5.4W	PoE: Max 7W 12VDC: Max 5.4W	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 (Ø6.3" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.1") 1.8kg (3.97lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.1") 1.85kg (4.08lb)	Ø160 x 125mm (Ø6.3" x 4.92") 1.45kg (3.2lb)
Additional Features	Modular structure, Antidust	Modular structure, Antidust	Modular structure, Motorized PTRZ, Antidust	Modular structure, Motorized PTRZ, Antidust	Modular design, Antidust



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 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
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.8" CMOS
Min. Illumination	Colour : 0.015 Lux (F1.4) B/W: 0Lux (IR LED on)	Colour : 0.015 lux (F1.4) B/W: 0.0015 Lux (F1.4)	Colour : 0.015Lux (F1.4) BW: 0Lux (IR LED)	Colour : 0.015 Lux (F1.4) B/W: 0.0015 Lux (F1.4)	Colour : 0.07Lux (F1.2) B/W: 0.007Lux (F1.2)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB Type B
Focal Length	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal	2.8~12mm (4.3x) motorized varifocal	–
Angular Field of View	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	–
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355	± 175° / 0° ~ 85° / ± 175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355	0° ~ 360° / -45° ~ 85° / 0° ~ 355	–
IR Viewable Length	50m (164.04ft)	–	50m (164.04ft)	–	–
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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			
Business Intelligence	–	–	–	–	–
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out			
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG			
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			
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			
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)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°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 7W 12VDC: Max 5.4W 24VAC: Max 7.1W	PoE: Max 8.5W 12VDC: Max 7.5W 24VAC: Max 8.5W
Dimensions (WxHxD) / Weight	Ø205 x 155mm (Ø8.07" x 6.1") 1.8kg (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)	W 73.1 x H 66.6 x D 147.8mm (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	Colour : 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Colour : 0.16Lux (F1.6) B/W: 0Lux (IR LED on)	Colour : 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Colour : 0.16Lux (F1.6) B/W: 0Lux (IR LED on)	Colour : 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)	3.9~9.4m (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° (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° (Tele) D: 119.9° (Wide) ~ 48.6° (Tele)	H: 97.5° / V: 71.9° / D: 126.2° (XND-8020R) H: 77.9° / V: 57.9° / D: 98.7° (XND-8030R) H: 50.7° / V: 37.8° / D: 63.8° (XND-8040R)	H: 97.5° / V: 71.9° / D: 126.2°
Pan / Tilt / Rotate	–	–	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°
IR Viewable Length	50m (164.04ft)	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)	–
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB	–
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-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

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



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

	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
Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/2.3" 12MP CMOS
Min. Illumination	Colour: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Colour: 0.07Lux (F1.3) B/W: 0Lux (IR LED on)	Colour: 0.16Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.39 Lux (F2.2) 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
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
Angular Field of View	H:92.1° (Wide)~38.7° (Tele) V:67.2° (Wide)~29° (Tele) D:119.9° (Wide)~48.6° (Tele)	H:92.1° (Wide)~38.7° (Tele) V:67.2° (Wide)~29° (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°
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
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	extremeWDR (120dB)
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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
Alarm I/O	1 / 1	1 / 1	1 / 1	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
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	3008 x 3008 / 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/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
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
Certification	IP67, IP66, NEMA4X, IK10	IP66, NEMA4X, IP6K9K, IK10+	IP66, IP67, IK10	IP66, IK10, NEMA4X, EN50155 class T3 (XNF-9010RVM only)
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 9W 12VDC: Max 8W	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") 1.1 kg (2.43lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Various mode support (Original, Double panorama, Single panorama, Quad view) M12 Connector (XNF-9010RVM)



XNF-9010RS
12MP Stainless IR Fisheye Camera



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



XNB-6005
2MP Box Camera (extraLUX)



XNB-6000
2MP Box Camera

Imaging Device	1/2.3" 12MP CMOS	1/1.8" CMOS	1/2" CMOS	1/2.8" CMOS
Min. Illumination	Colour: 0.39 Lux (F2.2, 1/30sec) BW: 0Lux (IR LED on)	Colour: 0.1Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.006Lux (F1.2) B/W: 0.006Lux (F1.2)	Colour: 0.01Lux (F1.2) B/W: 0.001Lux (F1.2)
Video Output	CVBS: 1.0Vp-p, Micro USB Type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Focal Length	1.08mm fixed focal	1.6mm fixed	–	–
Angular Field of View	H: 187° / V: 187° / D: 187°	H: 192° / V: 192° / D: 192°	–	–
Pan / Tilt / Rotate	–	–	–	–
IR Viewable Length	9m (29.53ft), Wise IR	15m (49.21ft)	–	–
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	120dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	–	–	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	–	–
Alarm I/O	2 configured 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	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MUPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
Resolution / Max. Frame Rate	3008 x 3008 / 30fps	2048 x 2048 / 30fps	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	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/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 ~ +50°C (-40°F ~ +122°F) / Less than 95% RH	-10°C ~ +55°C (+14°F ~ +131°F) (XNF-8010R) -40°C ~ +55°C (-40°F ~ +131°F) (XNF-8010RV/8010RVM)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IP67, IP6K9K, NEMA4X, IK10, IK10+ (it can resist impacts of 40 joules), NSF/ANSI Standard 169 -Special Purpose Food Equipment and Devices.	IP66, IK10 (XNF-8010RV/8010RVM)	–	–
Power Consumption	PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W	PoE: Max 12W, 12VDC: Max 11W (XNF-8010R) PoE: Max 12.95W, 12VDC: Max 12W (XNF-8010RV/8010RVM)	PoE: Max. 8.5W 12VDC: Max 8W 24VAC: Max 9W	PoE: Max 7.5W 12VDC: Max 6.5W 24VAC: Max 8W
Dimensions (WxHxD) / Weight	Ø 167.9 x 72.1mm (Ø 66.1" x 28.38") 2.98kg (6.57lb)	Ø 146 x 54.8mm (Ø 5.75" x 2.16") 730g (1.61lb) (XNF-8010R) Ø 146 x 65.8mm (Ø 5.75" x 2.59") 785g (1.73lb) (XNF-8010RV) 790g (1.74lb) (XNF-8010RVM)	W 73.1 x H 66.6 x D 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)	W 73.1 x H 66.6 x D 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)
Additional Features	Various mode support (Original, Double panorama, Single panorama, Quad view)	M12 Connector (XNF-8010RVM), Built-in MIC, Onboard dewarping	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

	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	–	Colour: 0.06Lux (F2.5) B/W: 0.06Lux (F2.5)	Colour: 0.45Lux (F2.0) B/W: 0.45Lux (F2.0)	Colour: 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 Stabilisation	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	W 131.1 x H 28 x D 86mm (5.16" x 1.1" x 3.39") 245g (0.54lb)	Ø 24 x 42mm (Ø 0.94" x 1.65") (Lens) 8m (314.96") (Cable) 310g (0.68lb) (SLA-T4680) 30 x 20.2 x 45mm (1.18" x 0.8" x 1.77") (Lens) 8m (314.96") (Cable) 321g (0.71lb) (SLA-T4680V)	Ø 24 x 49.8mm (Ø 0.94" x 1.96") (Lens) 8m (314.96") (Cable) 318g (0.70lb) (SLA-T2480) 30 x 27.9 x 45mm (1.18" x 0.1" x 1.77") (Lens) 8m (314.96") (Cable) 328g (0.72lb) (SLA-T2480V)	Ø 35 x 68.9mm (Ø 1.38" 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	Colour : 0.03Lux (F1.6) B/W: 0Lux (IR LED on)	Colour : 0.004Lux (F0.94) B/W: 0Lux (IR LED on)	Colour : 0.015Lux (F1.4) B/W: 0Lux (IR LED on)	Colour : 0.03ux (F1.6) B/W: 0Lux (IR LED on)	Colour : 0.055lux (F2.0) (XNO-6010R) Colour : 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	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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
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 5 Profiles	Up to 10 Profiles
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, 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 15.3") 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

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



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	Colour : 0.004Lux (F0.94) B/W: 0.0004Lux (F0.94)	Colour : 0.015Lux (F1.4) B/W: 0.0015Lux (F1.4)	Colour : 0.015Lux (F1.4) B/W: 0Lux (IR LED on)	Colour : 0.03Lux (F1.6) B/W: 0Lux (IR LED on)	Colour : 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° (Tele)	H:119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (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: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (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 Stabilisation	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 (Ø6.3" x 5.51") 1.1kg (2.43lb) (XND-6085) 1.25kg (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	Colour : 0.015 Lux (F1.4) B/W: 0Lux (IR LED on)	Colour : 0.055 Lux (F2.0) B/W: 0.055 Lux (F2.0)	Colour : 0.055 Lux (F2.0) B/W: 0.055 Lux (F2.0)	Colour : 0.03 Lux (F1.6), B/W: 0.003 Lux (F1.6) (XNV-6120) Colour : 0.03 Lux (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° / V: 73° / D: 167°	H: 54.58° (Wide) ~ 5.3° (Tele) V: 32.19° (Wide) ~ 3° (Tele) D: 61.4° (Wide) ~ 6.06° (Tele)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 75° / 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 Stabilisation	Support	Support	Support	Support (Built-in Gyro sensor)
Analytics	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			
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	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	Ø 110 x 90mm (Ø 4.33" x 3.54") 380g (0.84lb)	Ø 98.9 x 129mm (Ø 3.89" x 5.08") 275g (0.61lb)	Ø 140.8 x 113mm (Ø 5.54" x 4.45") 610g (1.34lb)	Ø 160 x 128.5mm (Ø 6.3" 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

Imaging Device	1/2" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Colour : 0.004Lux (F0.94) B/W: 0.0004Lux (F0.94)	Colour : 0.015Lux (F1.4) B/W: 0.015Lux (F1.4)	Colour : 0.015Lux (F1.4) B/W: 0Lux (IR LED on)	Colour : 0.015Lux (F1.4) B/W: 0Lux (IR LED on)	Colour : 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° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (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)
Pan / Tilt / Rotate	± 175° / ± 73° / ± 175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	–	–	50m (164.04ft)	50m (164.04ft)	–
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, 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	Ø 160 x 140mm (Ø 6.3" x 5.51") 1.4kg (3.09lb)	Ø 160 x 118.5mm (Ø 6.3" x 4.67") 985g (2.17lb)	Ø 160 x 118.5mm (Ø 6.3" x 4.67") 995g (2.19lb)	Ø 160 x 120.5mm (Ø 6.38" x 4.74") 2.8kg (6.17lb)	Ø 160 x 118.5mm (Ø 6.3" 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	Colour : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.04Lux (F2.0) B/W : 0Lux (IR LED on)	Colour : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)	Colour : 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° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)	H: 94.8° / V: 49.3° / D: 114.3°	H: 88.6° / V: 47.5° / D: 104.8°	H: 107.4° / V: 62.2° / D: 122°	H: 135.4° / V: 71.2° / D: 161.6°
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	± 5° / 0° ~ 67° / ± 90°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	± 5° / ± 10° / ± 90°	± 5° / 0 ~ 67° / ± 90°
IR Viewable Length	30m (98.43ft)	15m (49.21ft)	30m (98.43ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	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	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	-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 6.7W	PoE: Max 9W 12V DC: Max 8W	PoE: Max 7.2W	PoE: Max 6.5W
Dimensions (WxHxD) / Weight	Ø 160 x 118.5mm (Ø 6.3" x 4.67") 940g (2.07lb)	W 98.9 x H 52 x D 100mm (3.89" x 2.05" x 3.94") 295g (0.65lb)	Ø 120 x 97.5mm (Ø 4.72" x 3.84") 615g (1.36lb)	W 103.7 x H 72.3 x D 126.8mm (4.08" x 2.85" x 4.99") 478g (1.04lb)	W 98.9 x H 52 x D 100mm (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

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



XNV-6011
2MP Vandal Dome Camera



XNV-6010
2MP Vandal Dome Camera



XNP-9300RW
4K 30x Wiper + IR PTZ Camera



XNP-8300RW
6MP 30x Wiper + IR PTZ Camera



XNP-6400RW
2MP 40x Wiper + IR PTZ Camera

	XNV-6011 2MP Vandal Dome Camera	XNV-6010 2MP Vandal Dome Camera	XNP-9300RW 4K 30x Wiper + IR PTZ Camera	XNP-8300RW 6MP 30x Wiper + IR PTZ Camera	XNP-6400RW 2MP 40x Wiper + IR PTZ Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Colour : 0.055Lux (F2.0) B/W: 0.055Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W: 0.0055Lux (F2.0)	Colour: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Colour: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Colour: 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° / V: 73° / D: 167°	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: 39.4° (Wide) ~ 1.09° (Tele)
Pan / Tilt / Rotate	0° ~ 353° / 0° ~ 59° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / 110° (~20° ~ 90°) / -	360° Endless / 110° (~20° ~ 90°) / -	360° Endless / 110° (~20° ~ 90°) / -
IR Viewable Length	–	–	200m(656.17ft), Wise IR	200m(656.17ft), Wise IR	200m(656.17ft), Wise IR
Day & Night	Auto (Electrical)	Auto (ICR)	Auto (ICR)/Colour/BW/Schedule	Auto (ICR)/Colour/BW/Schedule	Auto (ICR)/Colour/BW/Schedule
Wide Dynamic Range	150dB	150dB	extremeWDR(120dB)	extremeWDR(120dB)	extremeWDR(150dB)
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	Support	Support	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	–	–	–
Alarm I/O	–	1 / 1	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)
Audio I/O	–	Selectable (mic in/line in) / Line out	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Compatible with NWI/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	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, 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, NEMA4X, NEMA-TS 2(2.2.8, 2.2.9)	IP66, IK10, NEMA4X, NEMA-TS 2(2.2.8, 2.2.9)	IP66, IK10, NEMA4X, NEMA-TS 2(2.2.8, 2.2.9)
Power Consumption	PoE : Max 6.5W	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	Ø 112.8 x 63.7mm (Ø 4.44" x 2.51") 420g (0.93lb)	Ø 120 x 97.5mm (Ø 4.72" x 3.84") 625g (1.38lb)	Ø 184.9 x 318.8mm (Ø 7.28" x 12.55") 5.4kg(11.9lb)	Ø 184.9 x 318.8mm (Ø 7.28" x 12.55") 5.4kg(11.9lb)	Ø 184.9 x 318.8mm (Ø 7.28" x 12.55") 5.4kg(11.9lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	1 Terminal & Cable, Upgraded preset accuracy, built-in wiper, object auto tracking, Target lock tracking Included SFP slot in HPoE injector		

	PTZ PLUS 	PTZ PLUS 	PTZ PLUS 	PTZ PLUS 	PTZ PLUS 	PTZ PLUS 
XNP-9250R 4K 25x IR PTZ Camera		XNP-8250R 6MP 25x IR PTZ Camera		XNP-6400R 2MP 40x IR PTZ Camera		XNP-9250 4K 25x PTZ Camera
Imaging Device	1/2.8" CMOS					
Min. Illumination	Colour: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Colour: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Colour: 0.1Lux (F1.6, 1/30sec) BW: 0.01Lux (IR LED On)	Colour: 0.1Lux (F1.6, 1/30sec) BW: 0.01Lux (IR LED On)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (IR LED On)
Video Output	-	-	-	-	-	-
Focal Length	5~125mm (25x) zoom	5~125mm (25x) zoom	4.25~170mm (40x) zoom	5~125mm (25x) zoom	5~125mm (25x) zoom	4.25~170mm (40x) zoom
Angular Field of View	H: 57.42° (Wide) ~ 2.71° (Tele) V: 33.54° (Wide) ~ 1.55° (Tele)	H: 57.42° (Wide) ~ 2.71° (Tele) V: 33.54° (Wide) ~ 1.55° (Tele)	H: 65.66° (Wide) ~ 1.88° (Tele) V: 39.4° (Wide) ~ 1.09° (Tele)	H: 57.42° (Wide) ~ 2.71° (Tele) V: 33.54° (Wide) ~ 1.55° (Tele)	H: 57.42° (Wide) ~ 2.71° (Tele) V: 33.54° (Wide) ~ 1.55° (Tele)	H: 65.66° (Wide) ~ 1.88° (Tele) V: 39.4° (Wide) ~ 1.09° (Tele)
Pan / Tilt / Rotate	360° Endless / 110° (-20°~90°) / -					
IR Viewable Length	200m (656.17ft), Wise IR	200m (656.17ft), Wise IR	200m (656.17ft), Wise IR	-	-	-
Day & Night	Auto (ICR)/Colour/BW/Schedule					
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (150dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (150dB)
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	Support (built-in gyro sensor)					
Analytics	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NWI/O Box : SPM-4210)
Business Intelligence	-	-	-	-	-	-
Alarm I/O	Compatible with NWI/O Box (Optional)					
Audio I/O	Compatible with NWI/O Box (Optional)					
Video Compression	H.265 / H.264, MJPEG					
Resolution / Max. Frame Rate	4K / 30fps	6MP / 30fps	2MP / 60fps	4K / 30fps	6MP / 30fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles					
Edge Storage	micro SD/SDHC/SDXC					
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform					
Operating Temperature	-40°C ~+55°C (-40°F ~+131°F) / +74°C (+165°F) (MAX) based on NEMA-TS2 (2.2.7) * Start up should be done at above -30°C Less than 95% RH (Non-condensing)	-40°C ~+55°C (-40°F ~+131°F) / +74°C (+165°F) (MAX) based on NEMA-TS2 (2.2.7) * Start up should be done at above -30°C Less than 95% RH (Non-condensing)	-40°C ~+50°C (-40°F ~+122°F) / +74°C (+165°F) (MAX) based on NEMA-TS2 (2.2.7) * Start up should be done at above -30°C Less than 95% RH (Non-condensing)	-40°C ~+55°C (-40°F ~+131°F) / +74°C (+165°F) (MAX) based on NEMA-TS2 (2.2.7) * Start up should be done at above -30°C Less than 95% RH (Non-condensing)	-40°C ~+55°C (-40°F ~+131°F) / +74°C (+165°F) (MAX) based on NEMA-TS2 (2.2.7) * Start up should be done at above -30°C Less than 95% RH (Non-condensing)	-40°C ~+50°C (-40°F ~+122°F) / +74°C (+165°F) (MAX) based on NEMA-TS2 (2.2.7) * Start up should be done at above -30°C Less than 95% RH (Non-condensing)
Certification	IP66, IK10, NEMA4X, NEMA TS-2 (2.2.8, 2.2.9)					
Power Consumption	HPoE (Camera only): Typical 20W, Max 40W	HPoE (Camera only): Typical 20W, Max 40W	HPoE (Camera only): Typical 20W, Max 40W	PoE+ (IEEE802.3at, Class4): Typical 20W, Max 25W	PoE+ (IEEE802.3at, Class4): Typical 20W, Max 25W	PoE+ (IEEE802.3at, Class4): Typical 20W, Max 25W
Dimensions (WxHxD) / Weight	Ø158 x 293.3mm (Ø6.22" x11.55") 3.2kg (7.05lb)					
Additional Features	1 Terminal & Cable, Upgraded preset accuracy, object auto tracking, Target lock tracking Included SFP slot in HPoE injector			1 Terminal & Cable, Upgraded preset accuracy, object auto tracking, Target lock tracking		



XNP-6550RH
2MP 55x IR PTZ Camera



XNP-6371RH
2MP 37x IR PTZ Camera



XNP-6120H
2MP 12x PTZ Camera



XNP-6040H
2MP 4.3x PTZ Camera

	XNP-6550RH 2MP 55x IR PTZ Camera	XNP-6371RH 2MP 37x IR PTZ Camera	XNP-6120H 2MP 12x PTZ Camera	XNP-6040H 2MP 4.3x PTZ Camera
Imaging Device	1/2.8" CMOS	1/2" 2MP CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Colour: 0.02Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.01Lux (F1.5, 1/30sec) B/W: 0Lux (IR LED)	Colour: 0.03Lux (F1.6) B/W: 0.003Lux (F1.6)	Colour: 0.015Lux (F1.4) B/W: 0.0015Lux (F1.4)
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	4.75 ~ 261.4mm (55x) zoom	6 ~ 222mm (37x) zoom	5.2 ~ 62.4mm (12x) zoom	2.8 ~ 12mm (4.3x) 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: 54.58° (Wide) ~ 5.3° (Tele) V: 32.19° (Wide) ~ 3° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32° (Tele)
Pan / Tilt / Rotate	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 190° (-5° ~ 185°) / -	0° ~ 355° / 0° ~ 90°
IR Viewable Length	500m (1,640.42ft)	350m (1,148.29ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	Support (Built-in Gyro sensor)	Support (built-in gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Shock detection	Intelligent analytics Audio detection Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification
Business Intelligence	-	-	-	-
Alarm I/O	4 / 2	4 / 2	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, MUPEG	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	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 (HTTP API) Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-50°C ~ +55°C (-122°F ~ +131°F) * Start up above -30°C (HPoE Mode)	-50°C ~ +55°C (-122°F ~ +131°F) / Less than 90% RH	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	HPoE: 60W 24VAC: Max 92W	24VAC: Max 90W	PoE, 12VDC: Max 12W	PoE: Max 9.6W 12VDC: Max 8.6W
Dimensions (WxHxD) / Weight	Ø 236.9 x 407.7mm (Ø 9.33" x 16.05") 7.1kg (15.65lb)	Ø 236.9 x 407.7mm (9.33" x 16.05") 7.1kg (15.65lb)	Ø 168 x 161.5mm (Ø 6.61" x 6.36") 1.9kg (4.19lb)	Ø 136.1 x 106.1mm (Ø 5.36" x 4.18") 0.78kg (1.72lb)
Additional Features	Defog, Auto tracking	Defog, Auto tracking	Defog, Auto tracking	Defog, Auto tracking



XNZ-6320A
2MP 32x Zoom Camera

XNZ-L6320A
2MP 32x Zoom Camera

PNM-9031RV
15MP 192° IR Panoramic Camera

PNM-9022V
8.3MP 180° /209° Panoramic Camera

	XNZ-6320A 2MP 32x Zoom Camera	XNZ-L6320A 2MP 32x Zoom Camera	PNM-9031RV 15MP 192° IR Panoramic Camera	PNM-9022V 8.3MP 180° /209° Panoramic Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 5MP CMOS (x4)	1/2.8" 4CH
Min. Illumination	Colour: 0.05Lux (1/30sec, F1.6) B/W: 0.005Lux (1/30sec, F1.6)	Colour: 0.05Lux (1/30sec, F1.6) B/W: 0.005Lux (1/30sec, F1.6)	Colour: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IRLED on)	Colour: 0.3Lux (F1.6) Colour: 0.03Lux (F1.6)
Video Output	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p	Micro USB Type B	Micro USB Type B
Focal Length	4.44~142.6mm (Optical 32X) (digital 32x, total 1024x zoom)	4.44~142.6mm (Optical 32X) (digital 32x, total 1024x zoom)	4.3mm Fixed	2.8mm fixed focal
Angular Field of View	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.3° (Tele)	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.3° (Tele)	H: 196° / V: 64° (Min distance 5m) H: 197° / V: 64° (Max distance 100m)	H: 209° / V: 83.3°
Pan / Tilt / Rotate	–	–	0° ~ 355° / 0° ~ 60° / –	0° ~ 355° / 0° ~ 60° / –
IR Viewable Length	–	–	20m (65.62ft)	–
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	extremeWDR (120dB)
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	Support	Support	–	–
Analytics	Intelligent analytics Audio detection Sound classification Shock detection	Intelligent analytics Audio detection Sound classification Shock detection	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtualline, Audio detection	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection
Business Intelligence	–	–	Heatmap	Heatmap
Alarm I/O	1 / 2	1 / 1	2 / 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)	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	15MP / 20fps	8.3MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 3 profiles	Up to 10 profiles
Edge Storage	micro SD/SDHC/SDXC 2slot 512GB	micro SD/SDHC/SDXC 1slot 256GB	micro SD/SDHC/SDXC 2slots 512GB (256GBx2)	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)	ONVIF Profile S/G/T, SUNAPI, Wisenet open platform
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	-40°C ~ +55°C (-40°F ~ +131°F) * Startup should be above -30°C Less than 95% RH (Non-condensing)	-40°C ~ +60°C (-40°F ~ +131°F) / Less than 95% RH (Non-condensing) * Maximum temperature : +60°C (intermittent)
Certification	–	–	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE: Max 7.5W, Typical 4.5W 12VDC: Max 7W, Typical 4W	PoE: Max 7.5W, Typ 5W 12VDC: Max 5.7W, Typ 3.7W	PoE+: Max 23.5W, Typical 18W 12VDC: Max 20.5W, Typical 16W	PoE+: Max 18W, Typical 10.4W 12VDC: Max 16W, Typical 9W
Dimensions (WxHxD) / Weight	W 96 x H 76 x D 143.5mm (3.78" x 2.99" x 5.65") 578g (1.27 lb)	W 72 x H 63.9 x D 135.4mm (2.83" x 2.52" x 5.33") 480g (1.06 lb)	Ø 253 x 170mm 2.6kg (4.7lb)	Ø 253 x 165mm (Ø 9.96" x 6.5") 3.2kg (7.1lb)
Additional Features	Defog	Defog	–	4CH Stitching

**PNM-9085RQZ1****5MP x 4CH IR PTRZ Multi-directional Camera****PNM-9084RQZ1****2MP x 4CH IR PTRZ Multi-directional Camera****PNM-9084QZ1****2MP x 4CH PTRZ Multi-directional Camera**

Imaging Device	1/1.8" 5MP CMOS x 4CH	1/2.8" CMOS x 4CH	1/2.8" CMOS x 4CH
Min. Illumination	Colour: 0.11lux (F1.92, 30IRE) BW: 0Lux (IR LED on)	Colour: 0.05lux (F1.6,30IRE) BW: 0Lux (IR LED on)	Colour: 0.04lux (F2.2, 1/30sec) BW: 0.004lux (F2.2, 1/30sec)
Video Output	-	-	-
Focal Length	4.13 ~ 9.4mm (2.3x) motorized varifocal	3.2 ~ 10mm (3.1x) 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° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)	H: 107° (Wide) ~ 56.3° (Tele) V: 57° (Wide) ~ 31.5° (Tele) D: 126° (Wide) ~ 64.3° (Tele)
Pan / Tilt / Rotate	Remote adjustment (Max. 200cycles) 0 ~ 360° / 35 ~ 80° / 0 ~ 90°	Remote adjustment (Max. 200cycles) 0 ~ 360° / 35 ~ 80° / 0 ~ 90°	Remote adjustment (Max. 200cycles) 0 ~ 360° / 35 ~ 80° / 0 ~ 90°
IR Viewable Length	30m (98.43ft)	30m (98.43ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	Support	Support	Support
Analytics	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	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection
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
Resolution / Max. Frame Rate	8MP / 60Hz	8MP / 60fps	8MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	micro SD/SDHC/SDXC 4slot 256GB (each CH)	micro SD/SDHC/SDXC 4slot 256GB (each CH)	micro SD/SDHC/SDXC 4slot 256GB (each CH)
Application Programming Interface	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH *Start up should be above at -35°C
Certification	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE: Max. 45 W, Typical 33.7 W 12VDC: Max. 42 W, Typical 32 W	PoE: Max. 42 W, Typical 30 W 12VDC: Max. 38 W, Typical 28.2 W	Max. 33W, Typical 20W
Dimensions (WxHxD) / Weight	Ø315 x 145.9 mm (Ø12.4" x 5.74") 5.2 kg (11.5lb)	Ø315 x 145.9 mm (Ø12.4" x 5.74") 5.2 kg (11.5lb)	Ø251 x 116.5mm 3kg (6.6lb)
Additional Features	Motorized PTRZ	Motorized PTRZ	Motorized PTRZ



PNM-8082VT
2MP x 3CH Multi-directional Camera



PNM-12082RVD
6MP x 2CH Multi-directional Camera



PNM-7082RVD
2MP x 2CH Multi-directional Camera

Imaging Device	1/2.8" CMOS 3CH	1/2.8" CMOS x 2CH	1/2.8" CMOS x 2CH
Min. Illumination	Colour: 0.04lux(F2.2) BW: 0.004lux(F2.2)	Colour: 0.16lux (F1.67, 1/30sec, 30IRE) BW: 0Lux (IR LED on)	Colour: 0.035lux (F2.2, 1/30sec, 30IRE) BW: 0lux (IR LED on)
Video Output	CVBS: 1.0 Vp-p	micro USB Type B	micro USB Type B
Focal Length	3~6mm (2x) motorized varifocal	3.54~6.69mm (1.9x) motorized varifocal	3~6mm (2x) motorized varifocal
Angular Field of View	H: 107° (Wide) ~ 56.3° (Tele) V: 57° (Wide) ~ 31.5° (Tele) D: 126° (Wide) ~ 64.3° (Tele)	H: 96° (Wide) ~ 47° (Tele) V: 51° (Wide) ~ 26° (Tele) D: 113° (Wide) ~ 54° (Tele)	H: 107° (Wide) ~ 56° (Tele) V: 57° (Wide) ~ 31° (Tele) D: 126° (Wide) ~ 64° (Tele)
Pan / Tilt / Rotate	0~360° / 0~73° / 0~90°	0~355° / 0~78° / 0~180°	0~355° / 0~78° / 0~180°
IR Viewable Length	-	25m (82ft)	25m (82ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (150dB)	extremeWDR (120dB)	extremeWDR (150dB)
Digital Noise Reduction	SSNRV	WiseNR, SSNRV	WiseNR, SSNRV
Digital Image Stabilisation	Support	-	-
Analytics	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtualline	Analytics events* : Defocus detection, Motion detection, Tampering, Virtualline (Crossing/Direction), Virtual area (Loitering/Enter/Exit) * Support Audio detection, Sound classification via optional SPM-4210I/Obox	Analytics events* : Defocus detection, Motion detection, Tampering, Virtualline (Crossing/Direction), Virtual area (Loitering/Enter/Exit) * Support Audio detection, Sound classification via optional SPM-4210I/Obox
Business Intelligence	-	-	-
Alarm I/O	-	* Support Alarm via optional SPM-4210I/Obox	* Support Alarm via optional SPM-4210I/Obox
Audio I/O	-	* Audio in/out via optional SPM-4210I/Obox	* Audio in/out via optional SPM-4210I/Obox
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps	6MP / 15fps	2MP / 30fps
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 1slot Max. 512GB	micro SD/SDHC/SDXC 1slot Max. 512GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API)	ONVIF Profile S/T SUNAPI (HTTP API) Open platform	ONVIF Profile S/T SUNAPI (HTTP API) Open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH (Non condensing) * Start up should be above at -35°C	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH (Non-condensing) * Start up should be above at -35°C	-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/IP67, NEMA4X, IK10	IP66/IP67, NEMA4X, IK10
Power Consumption	PoE+: Max : 16.5W, Typical : 8.2W	PoE+: Max 18.3W, typical 13.5W	PoE+: Max 17W, typical 12.5W
Dimensions (WxHxD) / Weight	Ø251 x 116.5mm (Ø9.88" x 4.59") 3kg (6.6lb)	W 215 x D 135 x H 93.2mm (8.46" x 5.31" x 3.67") 1.33kg (2.9lb)	W 215 x D 135 x H 93.2mm (8.46" x 5.31" x 3.67") 1.33kg (2.9lb)
Additional Features	3CH Multi-directional	-	-

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



PNM-9000QB
2MP x 4CH Remote Head Camera



XNB-6002
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 2MP x 4CH Remote Head Camera	XNB-6002 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
Imaging Device	–	–	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	–	–	Colour: 0.06Lux (F2.5)	Colour: 0.045Lux (F2.0)	Colour: 0.03Lux (F1.6)
Video Output	HDMI (1920x1080, Quad view support)	CVBS 1.0 Vp-p, Micro USB type B	–	–	–
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)	Auto (electrical)	–	–	–
Wide Dynamic Range	extremeWDR (150dB)	extremeWDR (120dB)	–	–	–
Digital Noise Reduction	SSNRV	SSNRV, WiseNR	–	–	–
Digital Image Stabilisation	Support	Support (Built-in Gyro sensor)	–	–	–
Analytics	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Analytic events – Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Face detection, Virtual areal(Loitering)/Intrusion/Enter/Exit/Appear/Disappear), Virtual line(Crossing/Direction)	–	–	–
Business Intelligence	–	People counting, Queue management, Heatmap	–	–	–
Alarm I/O	1 / 1	1 / 1	–	–	–
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	–	–	–
Video Compression	H.265 / H.264, MJPEG	H.265, H.264, MJPEG	–	–	–
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 60fps	–	–	–
WiseStream	WiseStreamII	WiseStreamII	–	–	–
Streaming	Up to 10 profiles	Up to 10 Profiles	–	–	–
Edge Storage	micro SD/SDHC/SDXC	micro SD/SDHC/SDXC 1slot Max. 1TB	–	–	–
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	–	–	–
Operating Temperature	-10°C ~ +45°C (-40°F ~ +113°F) / Less than 95% RH (Non condensing)	-10°C ~ +55°C (+14°F ~ +131°F) / 0 ~ 90% RH (non-condensing)	–	–	–
Certification	–	–	–	–	–
Power Consumption	PoE : Max 22W, Typical 16.70W DC : Max 19W, Typical : 14W	PoE: Max 10.5W, typical 7.4W 12VDC: Max 8.6W, typical 5.8W Power redundancy failover	–	–	–
Dimensions (WxHxD) / Weight	W 200 x H 37 x D 146mm (7.87" x 1.46" x 5.75") 715g (1.58lb)	W 131.1 x H 33.5 x D 86mm (5.16" x 1.32" x 3.39") 420g	Ø 24 x L49.8mm, 310g (SLA-T4680A) W 30 x H 27.9 x D 45mm, 321g (SLA-T4680VA)	Ø 24 x L49.8mm, 318g (SLA-T2480A) W 30 x H 27.9 x D 45mm, 328g (SLA-T2480VA)	Ø 35 x L68.9mm 430g (0.95lb)
Additional Features	Optional pinhole/fixedlens	compatible lens: SLA-T1080FA, SLA-T2480A, SLA-T2480VA, SLA-T4680A, SLA-T4680VA	–	–	–



PNM-9322VQP
2MP/5MP x 4CH + 2MP 32x PTZ



SLA-5M7000P
5MP lens for PNM-9322VQP



SLA-5M4600P
5MP lens for PNM-9322VQP



SLA-5M3700P
5MP lens for PNM-9322VQP

Imaging Device	1/2.8" CMOS (PTZ)	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Min. Illumination	depeding on lens	Colour: 0.16Lux (F1.6) B/W: 0.16Lux (F1.6)	Colour: 0.16Lux (F1.6) B/W: 0.16Lux (F1.6)	Colour: 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	SSNRV	-	-	-
Digital Image Stabilisation	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 (0.08lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08lb)
Additional Features	Exchangeable 4ea x 2MP / 5MP lens modules, Hallway view, Defog	-	-	-



	SLA-2M6000P 2MP lens for PNM-9322VQP	SLA-2M3600P 2MP lens for PNM-9322VQP	SLA-2M2800P 2MP lens for PNM-9322VQP	SLA-2M2400P 2MP lens for PNM-9322VQP	SLA-2M1200P 2MP lens for PNM-9322VQP
Imaging Device	1/2.8" CMOS				
Min. Illumination	Colour : 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°	H: 135.4° / V: 71.2° / D: 161.6°	H: 26.3° / V: 14.9° / D: 30°
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)				
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	-	-	-	-	-
Digital Image Stabilisation	-	-	-	-	-
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)				
Additional Features	-	-	-	-	-



PNM-9002VQ
2MP/5MP x 4CH Multi-directional Camera

SLA-5M7000Q
5MP lens for PNM-9002VQ

SLA-5M4600Q
5MP lens for PNM-9002VQ

SLA-5M3700Q
5MP lens for PNM-9002VQ

Imaging Device	–	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Min. Illumination	–	Colour: 0.16Lux (F1.6) B/W: 0.16Lux (F1.6)	Colour: 0.16Lux (F1.6) B/W: 0.16Lux (F1.6)	Colour: 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	SSNRV	–	–	–
Digital Image Stabilisation	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	Ø 253 x 130mm (Ø 9.96" x 5.11") 3kg (6.61lb)	Ø 35.5 x 35.9 mm (Ø 1.39" x 1.41") 35g (0.08lb)	Ø 35.5 x 35.9 mm (Ø 1.39" x 1.41") 35g (0.08lb)	Ø 35.5 x 35.9 mm (Ø 1.39" x 1.41") 35g (0.08lb)
Additional Features	Defog	–	–	–



SLA-2M6000Q
2MP lens for PNM-9002VQ



SLA-2M3600Q
2MP lens for PNM-9002VQ



SLA-2M2800Q
2MP lens for PNM-9002VQ



SLA-2M2400Q
2MP lens for PNM-9002VQ

	SLA-2M6000Q 2MP lens for PNM-9002VQ	SLA-2M3600Q 2MP lens for PNM-9002VQ	SLA-2M2800Q 2MP lens for PNM-9002VQ	SLA-2M2400Q 2MP lens for PNM-9002VQ
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Colour : 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°	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 Stabilisation	–	–	–	–
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)			
Additional Features	–	–	–	–



	QNO-8080R 5MP IR Bullet Camera	QNO-8020R 5MP IR Bullet Camera	QNO-8010R 5MP IR Bullet Camera	QND-8080R 5MP IR Dome Camera	QND-8020R 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	Colour : 0.15Lux (F1.6) B/W: 0Lux (IR LED on)	Colour : 0.15Lux (F1.6) B/W: 0Lux (IR LED on)	Colour : 0.15Lux (F2.0) B/W: 0Lux (IR LED on)	Colour : 0.15Lux (F1.6) B/W: 0Lux (IR LED on)	Colour : 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	4.0mm fixed	2.8mm fixed	3.2~10mm (3.1x) motorized varifocal	4.0mm 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: 79.8° / V: 58.1° / D: 105.9°	H: 104.7° / V: 76.5° / D: 136°	H: 100.3° (Wide) ~ 31.2° (Tele) V: 72.3° (Wide) ~ 23.5° (Tele) D: 133.1° (Wide) ~ 38.8° (Tele)	H: 79.8° / V: 58.1° / D: 105.9°
Pan / Tilt / Rotate	–	–	–	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	25m (82.02ft)	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 Stabilisation	–	–	–	–	–
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
Wisenet	WisenetII	WisenetII	WisenetII	WisenetII	WisenetII
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)	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +50°C (+14°F ~ +122°F)
Certification	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 8.9W, typical 6.6W	PoE: Max 6.8W, typical 5W
Dimensions (WxHxD) / Weight	Ø 91 x 322.9mm (Ø 3.58" x 12.71") 1.19kg (2.624lb)	Ø 70 x 246mm (Ø 2.76" x 9.69") 680g (1.499lb)	Ø 70 x 246mm (Ø 2.76" x 9.69") 680g (1.499lb)	Ø 120.3 x 102mm (Ø 4.74" x 4.02") 430g (0.948lb)	Ø 110.6 x 89.5mm (Ø 4.35" x 3.52") 360g (0.794lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



QND-8010R
5MP IR Dome Camera



QND-8021
5MP Dome Camera



QND-8011
5MP Dome Camera



QNV-8080R
5MP IR Vandal Dome Camera

	QND-8010R 5MP IR Dome Camera	Q mini 5MP Dome Camera	Q mini 5MP Dome Camera	QNV-8080R 5MP IR Vandal Dome Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Colour : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Colour : 0.15Lux (F1.6)	Colour : 0.15Lux (F2.0)	Colour : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	Micro HDMI	Micro HDMI	CVBS 1.0 Vp-p
Focal Length	2.8mm fixed	4mm fixed	2.8mm fixed	3.2~10mm (3.1x) motorized varifocal
Angular Field of View	H:104.7° / V:76.5° / D:136°	H:80.1° / V:58° / D:105.8°	H:104.4° / V:76.7° / D:136.1°	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°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0°~67° / 0°~355°
IR Viewable Length	20m (65.62ft)	–	–	30m (98.42ft)
Day & Night	Auto (ICR)	Auto (Electrical)	Auto (Electrical)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilisation	–	–	–	–
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	–	–	–	–
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 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	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +40°C (+14°F ~ +104°F)	-10°C ~ +40°C (+14°F ~ +104°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	–	IP42, IK08	IP42, IK08	IP66, IK10
Power Consumption	PoE : Max 7.5W, typical 5.8W	PoE : Max 5W, typical 4W	PoE : Max 5W, typical 4W	PoE : Max 8.9W, typical 6.6W
Dimensions (WxHxD) / Weight	Ø 110.6 x 89.5mm (Ø 4.35" x 3.52") 360g (0.794lb)	Ø 99 x 56mm (Ø 3.9" x 2.2") 165g (0.364lb)	Ø 99 x 56mm (Ø 3.9" x 2.2") 165g (0.364lb)	Ø 137 x 106.1mm (Ø 5.39" x 4.18") 700g (1.543lb)
Additional Features	Hallway View	Super compact design, Hallway View	Super compact design, Hallway View	Hallway View



QNV-8020R
5MP IR Vandal Dome Camera

QNV-8010R
5MP IR Vandal Dome Camera

QNB-8002
5MP Box Camera

QNE-8011R
5MP IR Flateye Camera

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Colour: 0.15Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.15Lux (F2.0) B/W: 0Lux (IR LED on)	Colour: 0.07Lux (F1.2)	Colour: 0.15Lux (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	-
Focal Length	4.0mm fixed	2.8mm fixed	-	2.8mm fixed
Angular Field of View	H: 79.8° / V: 58.1° / D: 105.9°	H: 104.7° / V: 76.5° / D: 136°	-	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° ~ 75° / 0° ~ 360°
IR Viewable Length	25m (82.02ft)	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 Stabilisation	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-
Alarm I/O	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
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 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)	-10°C ~ +55°C (-14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10	-	IP67, IK10
Power Consumption	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	PoE: Max 7.4W, typical 5.5W
Dimensions (WxHxD) / Weight	Ø 120.3 x 91.7mm (Ø 4.74" x 3.61") 510g (1.124lb)	Ø 120.3 x 91.7mm (Ø 4.74" x 3.61") 510g (1.124lb)	W 73.8 x H 66.6 x D 136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)	Ø 125 x 87.35mm (Ø 4.92" x 3.44") 645g (1.422lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View



QNO-7082R
4MP IR Bullet Camera



QNO-7022R
4MP IR Bullet Camera



QNO-7012R
4MP IR Bullet Camera

Imaging Device	1/3" CMOS	1/3" CMOS	1/3" CMOS
Min. Illumination	Colour : 0.1Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Colour : 0.15Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Colour : 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
Focal Length	3.2~10mm (3.1x) motorized varifocal	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: 78.2° V: 41.2° D: 92°	H: 107.5° V: 59.7° D: 122°
Pan / Tilt / Rotate	-	-	-
IR Viewable Length	30m (98.42ft)	25m (82.02ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR
Digital Image Stabilisation	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-
Alarm I/O	1/1	1/1	1/1
Audio I/O	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
Resolution / Max. Frame Rate	4MP / 30fps	4MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	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
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)
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	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 95% RH * Start up should be done at -30°C or above
Certification	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	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
Dimensions (WxHxD) / Weight	Ø78 x 259.8mm (Ø3.07" x 10.23") 900g (1.984lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)
Additional Features	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtualline	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtualline	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtualline



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

QNO-6072R/6072R1
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
Min. Illumination	Colour: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 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	3.2~10mm (3.1x) motorized varifocal	3.2~10mm (3.1x) manual varifocal	4mm fixed	2.8mm fixed
Angular Field of View	H: 109° (Wide)~33.2° (Tele) V: 57.4° (Wide)~18.7° (Tele) D: 132° (Wide)~38° (Tele)	H: 109° (Wide)~33.2° (Tele) V: 57.4° (Wide)~18.7° (Tele) D: 132° (Wide)~38° (Tele)	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)	25m (82.02ft)	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 Stabilisation	-	-	-	-
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)	-
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) * Start up above -20°C (-4°F)
Certification	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
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)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View



QND-7082R
4MP IR Dome Camera



QND-7022R
4MP IR Dome Camera



QND-7012R
4MP IR Dome Camera

Imaging Device	1/3" CMOS	1/3" CMOS	1/3" CMOS
Min. Illumination	Colour : 0.1Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Colour : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)	Colour : 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
Focal Length	3.2~10mm (3.1x) motorized varifocal	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:78.2° V:41.2° D:92°	H: 107.5° V: 59.7° D: 122°
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)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR
Digital Image Stabilisation	–	–	–
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	–	–	–
Alarm I/O	1/1	1/1	1/1
Audio I/O	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
Resolution / Max. Frame Rate	4MP / 30fps	4MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	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
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)
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
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
Dimensions (WxHxD) / Weight	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)
Additional Features	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-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
Min. Illumination	Colour: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.03Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 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	3.2~10mm (3.1x) motorized varifocal	3.2~10mm (3.1x) manual varifocal	4mm fixed	2.8mm fixed
Angular Field of View	H: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)	H: 109° (Wide) ~ 33.2° (Tele) V: 57.4° (Wide) ~ 18.7° (Tele) D: 132° (Wide) ~ 38° (Tele)	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°
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 Stabilisation	–	–	–	–
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	Buit-in mic	–	Buit-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	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	-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
Dimensions (WxHxD) / Weight	Ø 119.8 x 98.8mm (Ø 4.72" x 3.89") 320g (0.705lb)	Ø 119.8 x 98.8mm (Ø 4.72" x 3.89") 320g (0.705lb)	Ø 110 x 86mm (Ø 4.33" x 3.39") 255g (0.562lb)	Ø 110 x 86mm (Ø 4.33" x 3.39") 255g (0.562lb)
Additional Features	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

Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/3" CMOS
Min. Illumination	Colour: 0.03Lux (F1.6)	Colour: 0.03Lux (F2.0)	Colour: 0.1Lux (F1.6, 1/30sec) B/W: 0Lux (IR LED On)
Video Output	Micro HDMI	Micro HDMI	CVBS 1.0 Vp-p
Focal Length	4mm fixed	2.8mm fixed	3.2~10mm (3.1x) motorized varifocal
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)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	30m (98.42ft)
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR
Digital Image Stabilisation	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	People counting	People counting	-
Alarm I/O	-	-	1 / 1
Audio I/O	-	-	Line in / -
Video Compression	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
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	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
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)
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
Certification	IP42, IK08	IP42, IK08	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
Dimensions (WxHxD) / Weight	Ø 99 x 56mm (Ø 3.9" x 2.2") 145g (0.320lb)	Ø 99 x 56mm (Ø 3.9" x 2.2") 145g (0.320lb)	Ø 137 x 106.1mm (Ø 5.39" x 4.18") 710g (1.565lb)
Additional Features	Super compact design, Hallway View	Super compact design, Hallway View	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line



QNV-7022R
4MP IR Vandal Dome Camera



QNV-7012R
4MP IR Vandal Dome Camera



QNV-6082R/6082R1
2MP IR Vandal Dome Camera



QNV-6072R/6072R1
2MP IR Vandal Dome Camera

	QNV-7022R 4MP IR Vandal Dome Camera	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	Colour : 0.15Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Colour : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)	Colour : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 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°	H:78.2° / V:41.2° / D:92°	H:109° (Wide) ~ 33.2° (Tele) V:57.4° (Wide) ~ 18.7° (Tele) D:132° (Wide) ~ 38° (Tele)	H:109° (Wide) ~ 33.2° (Tele) V:57.4° (Wide) ~ 18.7° (Tele) D:132° (Wide) ~ 38° (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 Stabilisation	-	-	-	-
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, JPEG	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
Resolution / Max. Frame Rate	4MP / 30fps	4MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStreamIII	WiseStreamIII	WiseStreamIII	WiseStreamIII
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	Ø 120.3 x 91.7mm (Ø 4.74" x 3.61") 510g(1.124lb)	Ø 120.3 x 91.7mm (Ø 4.74" x 3.61") 510g(1.124lb)	Ø 137 x 106.1mm (Ø 5.39" x 4.18") 710g(1.565lb)	Ø 137 x 106.1mm (Ø 5.39" 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-6022R/6022R1 2MP IR Vandal Dome Camera	QNV-6012R/6012R1 2MP IR Vandal Dome Camera	QNV-6024RM 2MP IR Flat Camera	QNP-6320 2MP 32x PTZ Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Colour : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Colour : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	-
Focal Length	4mm fixed	2.8mm fixed	3.6mm fixed	4.44~142.6mm (32x) zoom
Angular Field of View	H:87.6° / V:46.4° / D:104.5°	H:113.74° / V:61.5° / D:134.45°	H:94.8° / V:49.3° / D:114.3°	H:64.66° (Wide) ~ 2.29° (Tele) V:38.08° (Wide) ~ 1.30° (Tele)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	±5° / 0~67° / ±90°	-
IR Viewable Length	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	SSNRV
Digital Image Stabilisation	-	-	-	Support (built-in gyro sensor)
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection
Business Intelligence	-	-	-	-
Alarm I/O	1 / 1	1 / 1	-	4 / 2
Audio I/O	Selectable (mic in/line in)	-	Selectable (mic in/line in)	Selectable (mic in/line in) / Line out
Video Compression	H.265 / H.264, MJPEG	H.265 / H.264, JPEG	H.265 / H.264, JPEG	H.265 / H.264, JPEG
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 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	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/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH
Certification	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 6.7W, typical 5W	Max. 14.5W, Typ. 12W
Dimensions (WxHxD) / Weight	Ø 120.3 x 91.7mm (Ø 4.74" x 3.61") 510g(1.124lb)	Ø 120.3 x 91.7mm (Ø 4.74" x 3.61") 510g(1.124lb)	W98.9 x H52 x D100mm (3.89" x 2.05" x 3.94") 295g(0.65lb)	Ø 152 x 218mm (Ø 5.98" x 8.58") 1.7kg(3.75 lb)
Additional Features	Hallway View	Hallway View	M12 connector, Hallway View	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection



QNP-6320R
2MP 32x IR PTZ Camera

QNP-6320H
2MP 32x PTZ Camera

QNP-6250
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
Min. Illumination	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Colour: 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	4.44~111mm (25x) zoom	4.44~111mm (25x) zoom
Angular Field of View	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.3° (Tele)	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.3° (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)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection (with NWI/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection (with NWI/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 NWI/O Box)
Business Intelligence	-	-	-	-
Alarm I/O	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	4 / 2	Compatible with NWI/O Box (Optional)
Audio I/O	Compatible with NWI/O Box (Optional)	Compatible with NWI/O Box (Optional)	Selectable (mic in/line in) / Line out	Compatible with NWI/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
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 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
Operating Temperature	Normal: -35°C ~ +55°C (-31°F ~ +131°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) / * 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) / * 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
Power Consumption	Max. 25.5W, Typ. 14.7W	Max. 23W, Typ. 14W	Max. 14.5W, Typ. 12W	Max. 25.5W, Typ. 14.7W
Dimensions (WxHxD) / Weight	Ø158 x 293.3mm 3.1kg (6.83lb)	Ø204.3 x 265mm (Ø8.04" x 10.43") 2.7kg (5.95lb)	Ø152 x 218mm (Ø5.98" x 8.58") 1.7kg (3.75lb)	Ø158 x 293.3mm 3.1kg (6.83lb)



	QNP-6250H 2MP 25x PTZ Camera	QNP-6320HS 2MP 32x PTZ Camera	QNB-6002 2MP Box Camera	QNF-9010 12MP Fisheye Camera	QNF-8010 6MP Fisheye Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.3" CMOS	1/1.8" CMOS
Min. Illumination	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Colour: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Colour: 0.01Lux (F1.2)	Colour: 0.39 Lux (F2.2, 1/30sec)	Colour: 0.2 Lux (F2.5)
Video Output	-	-	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	4.44~111mm (25x) zoom	4.44~142.6mm (32x) zoom	-	1.08mm fixed	1.14mm fixed
Angular Field of View	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.30° (Tele)	-	H: 187° / V: 187° / D: 187°	H: 187° / V: 187° / D: 187°
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNR	SSNRV	SSNRV
Digital Image Stabilisation	Support (built-in gyro sensor)	Support (built-in gyro sensor)	-	-	-
Analytics	Directional detection, Motion detection, Enter/Exit, Tampering, Virtualline * Audio detection(with NWI/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtualline * Audio detection(with NWI/O Box)	Intelligent analytics	Defocus detection, Motion detection, Tampering	Intelligent analytics
Business Intelligence	-	-	-	People counting, Heatmap	People counting, Heatmap
Alarm I/O	Compatible with NWI/O Box (Optional)	-	1 / 1	-	-
Audio I/O	Compatible with NWI/O Box (Optional)	-	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 / 30fps	9MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 3 Profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	micro SD/SDHC/SDXC 1slot 256GB	micro SD/SDHC/SDXC 1slot 256GB	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, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	Normal: -35°C ~ +55°C (-31°F ~ +131°F) / * Start up should be done at above -30°C Less than 95% RH (Non-condensing)	-35°C ~ +55°C (-31°F ~ +131°F) / * Start up should be done at above -25°C Less than 95% RH (Non-condensing)	-10°C ~ +55°C (-14°F ~ +131°F)	-10°C ~ +40°C (+14°F ~ +104°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IK10, NEMA4X	IP66/IP67, IK10, NEMA4X	-	-	IP42
Power Consumption	Max. 23W, Typ. 14W	Max. 23W, Typ. 14W	PoE: Max 6.4W, typical 4.6W 12VDC: Max 5.8W, typical 4.1W	PoE: Max 7.7W, typical 6.4W	PoE: Max 6.4W, typical 4.6W
Dimensions (WxHxD) / Weight	Ø 204.3 x 265mm (Ø 8.04" x 10.43") 2.7kg (5.95lb)	Ø 227 x 299.2mm (Ø 8.94" x 11.78") 5.4kg (11.93lb)	W 73.8 x H 66.6 x D 136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)	Ø 99 x 49 mm (Ø 3.9" x 1.93") 370g (0.82lb)	Ø 99 x 49 mm (Ø 3.9" x 1.93") 320 g (0.705lb)
Additional Features	-	-	Hallway View	Panorama view, Business Intelligence	Panorama view, Business Intelligence



TNM-3620TDY
Temperature Detection Thermal Camera



TNV-7011RC
3MP Corner Mount Camera



TNV-8011C
5MP Corner Mount Camera

Imaging Device	Thermal	Visible	1/2.8" CMOS	1/2.8" CMOS
	Uncooled micro bolometer	1/2.8" CMOS		
Min. Illumination	-	Colour: 0.05 lux (F1.6, 1/30sec) B/W: 0.005 lux (F1.6, 1/30sec)	Colour: 0.3 lux (F2.0, 1/30sec) B/W: 0 lux (F2.0, 1/30sec)	Colour: 0.1 lux (F2.3, 1/30sec) B/W: 0.02 lux (F2.3, 1/30sec)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B		CVBS: 1.0 Vp-p	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	4.7mm fixed focal	4mm fixed focal	2.8mm fixed focal	2.3mm fixed focal
Angular Field of View	H: 50° / V: 36.4° / D: 65.3°	H: 87.6° / V: 46.4° / D: 104.5°	H: 102° / V: 75° / D: 129°	H: 131° / V: 93.4° / D: 174°
Pan / Tilt / Rotate	-		- / 30° ~ 60° / -	-
IR Viewable Length	-		10m (32.8ft)	-
Day & Night	-	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	extremeWDR (150dB)	120dB	120dB
Digital Noise Reduction	-	SSNRV	SSNRV	SSNR
Digital Image Stabilisation	Support (built-in gyro sensor)		Support	Support
Analytics	Normal mode : Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection, Temperature detection EBT mode : Temperature detection, Blackbody abnormality		Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, Appear/Disappear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification, Shock detection	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection
Business Intelligence	-		-	-
Alarm I/O	1 / 2		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	640 x 480 (can be scaled up to 1280 x 960) / 30fps	1920 x 1080 / 30fps	3MP / 30fps	5MP / 30fps
WiseStream	WiseStreamII		WiseStreamII	WiseStreamII
Streaming	Up to 6 Profiles		Up to 10 profiles	Up to 3 profiles
Edge Storage	micro SD/SDHC/SDXC		micro SD/SDHC/SDXC 1slot 256GB	micro SD/SDHC/SDXC 1slot 128GB
Application Programming Interface	ONVIF Profile S/T, SUNAPI		SUNAPI (HTTP API) Wisenet open platform	SUNAPI (HTTP API) 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		-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH
Certification	-		IP66, IP6K9K, IK10+	IP66, IP6K9K, IK10
Power Consumption	PoE+: Max. 17W, typical 12.5W 12VDC: Max. 14.5W, typical 11W		PoE: Max 12W, typical 10.1W, 12VDC: Max. 11W, typical 8.6W	PoE: Max 6.49W, typical 4.6W
Dimensions (WxHxD) / Weight	W 135 x H 75 x D 188.5mm (5.31" x 2.95" x 7.42") 1.71kg (3.77lb)		Ø 295.5 x 113.5mm (Ø 11.6" x 4.47") 2.1kg(4.63lb)	W 170 x H 165 x D 78.8mm (6.69" x 6.49" x 3.1") 830g (1.83lb)
Additional Features	Bi-spectrum camera, Two temperature detection mode, Face detection, Blackbody (SPI-35B) is optional		-	-



TNU-6322ER
2MP Explosion-proof Camera



TNU-6322E
2MP Explosion-proof Camera



TNU-6322ER
2MP Explosion-proof IR Camera



TNU-6321
2MP Positioning PTZ Camera

	TNU-6322ER 2MP Explosion-proof Camera	TNU-6322E 2MP Explosion-proof Camera	TNU-6322ER 2MP Explosion-proof IR Camera	TNU-6321 2MP Positioning PTZ Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Colour: 0.05Lux (1/30sec, F1.6) B/W: 0Lux (IRLED on)	Colour: 0.05Lux (1/30sec, F1.6) B/W: 0.005 Lux (1/30sec, F1.6)	Colour: 0.05Lux (1/30sec, F1.6) B/W: 0Lux (IRLED on)	Colour: 0.05Lux (F1.6, 1/30sec) B/W: 0.005 Lux (F1.6, 1/30sec)
Video Output	–	–	–	CVBS: 1.0 Vp-p
Focal Length	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 142.6mm (32X) zoom	4.44 ~ 142.6mm (32X) zoom	4.44 ~ 142.6mm (32x) zoom
Angular Field of View	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	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 / 180° (-90° ~ 90°) / –	360° Endless / 180° (-90° ~ 90°) / –	360° Endless / (130°) ~ 90° ~ 40° / –
IR ViewableLength	–	–	200m	200m with SPI-50 (Optional)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilisation	Support	Support	Support	Support
Analytics	Intelligent analytics, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtualline, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtualline, Audio detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtualline, Audio detection
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
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
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH
Certification	IP67, IK10, ATEX, IECEx	IECEx, ATEX, KCs, KC, CE IP67, IK10	IECEx, ATEX, KCs, KC, CE IP67, IK10	IP66, Safety (UL, KC-SDOC), EMC (FCC, CE, VCCI, RCM, KC)
Power Consumption	24VAC: Max 45W	24VAC: Max. 99W	24VAC: Max. 99W (Camera) 24VAC: Max. 50W (IR)	Max 100W (Heater On), typical 25W (Heater Off)
Dimensions (WxHxD) / Weight	W 175 x H 243.5 x D 320mm (6.89" x 9.59" x 12.59") 10.5kg (23.1lb)	W 355 x H 427 x D 235mm (13.97" x 16.81" x 9.25") 25kg (55.12lb)	W 611 x H 438 x D 235mm (24.06" x 17.24" x 9.25") 36kg (79.37lb)	W 219 x H 528.2 x D 460mm (8.62" x 20.79" x 18.11") 14kg (30.86lb)
Additional Features	Stainless(SUS316L) housing, Built in wiper	–	–	Tampering, Audio detection



TNU-4041T / 4051T
VGA Thermal Positioning Camera



TNO-4051T
VGA Thermal Bullet Camera



TNO-4050T
VGA Thermal Bullet Camera



TNO-4041T
VGA Thermal Bullet Camera

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Min. Illumination	-	-	-	-
Video Output	CVBS: 1.0 Vp-p	CVBS: 1.0 Vp-p	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p
Focal Length	19mm / 35mm fixed	35mm fixed	35mm fixed	19mm fixed
Angular Field of View	H:32° / V:24.3° / D:39.2° H:17.2° / V:13° / D:22°	H:17.2° / V:13° / D:22°	H:17.2° / V:13° / D:22°	H:32° / V:24.3° / D:39.2°
Pan / Tilt / Rotate	360° Endless / -90° ~ 40° / -	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	-	-	-
Wide Dynamic Range	-	-	-	-
Digital Noise Reduction	-	-	-	-
Digital Image Stabilisation	Support (Built-in Gyro sensor)			
Analytics	Intelligent analytics Audio detection Sound classification Shock detection Temperature change detection			
Business Intelligence	-	-	-	-
Alarm I/O	1 / 1	1 / 2	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out			
Video Compression	H.265 / H.264, MJPEG			
Resolution / Max. Frame Rate	640 x 480 / 30fps			
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	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			
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)			
Certification	IP66, NEMA 4X, IK10	IP66, NEMA 4X	IP66, NEMA 4X	IP66, NEMA 4X, IK10
Power Consumption	24VAC: Max 84W – Heater On Max 62W – Heater Off	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W
Dimensions (WxHxD) / Weight	W 219 x H 528 x D 335mm (8.62" x 20.79" x 13.19") 11.7kg (25.79lb)	Ø 101.97 x 309mm (Ø 4.01" x 12.17") 2.5kg (5.51 lb)	Ø 147.51 x 401.8mm (Ø 5.81" x 15.82") 3.17kg (7.0lb)	Ø 101.97 x 309mm (Ø 4.01" x 12.17") 2.5kg (5.51 lb)
Additional Features	Various colour palettes	Various colour palettes PT type	Various colour palettes	Various colour palettes PT type



TNO-4041TR
VGA Radiometric Thermal Bullet Camera

TNO-4040T
VGA Thermal Bullet Camera

TNO-4040TR
VGA Radiometric Thermal Bullet Camera

TNO-4030T
VGA Thermal Bullet Camera

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, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	19mm fixed	19mm fixed	19mm fixed	13mm fixed
Angular Field of View	H:32° / V:24.3° / D:39.2°	H:32° / V:24.3° / D:39.2°	H:32° / V:24.3° / D:39.2°	H:48.6° / V:36.4° / D:61.6°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	-	-	-
Wide Dynamic Range	-	-	-	-
Digital Noise Reduction	-	-	-	-
Digital Image Stabilisation	Support (Built-in Gyro sensor)			
Analytics	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			
Video Compression	H.265 / H.264, MJPEG			
Resolution / Max. Frame Rate	640 x 480 / 30fps			
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	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/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
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)			
Certification	IP66, NEMA 4X, IK10			
Power Consumption	PoE: Max 10W 12VDC: Max 9W 24VAC: Max 10.5W			
Dimensions (WxHxD) / Weight	Ø101.97 x 309mm (Ø4" x 12.17") 2.45kg (5.41lb)	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 401.8mm (Ø5.81" x 15.82") 3.17kg (7.0lb)
Additional Features	Various colour palettes Spot temperature reading PT type	Various colour palettes	Various colour palettes Spot temperature reading	Various colour palettes

**TNO-4030TR**

VGA Radiometric Thermal Bullet Camera

TNO-3010T

QVGA Thermal Bullet Camera

TNO-3020T

QVGA Thermal Bullet Camera

TNO-3030T

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			
Focal Length	13mm fixed	2.7mm fixed focal	4.7mm fixed focal	13.7mm fixed focal
Angular Field of View	H: 48.6° / V: 36.4° / D: 61.6°	H: 92° / V: 65.5° / D: 125.7°	H: 50° / V: 36.4° / D: 65.3°	H: 16° / V: 12° / D: 20°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	-	-	-
Wide Dynamic Range	-	-	-	-
Digital Noise Reduction	-	-	-	-
Digital Image Stabilisation	Support (Built-in Gyro sensor)			
Analytics	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			
Video Compression	H.265 / H.264, MJPEG			
Resolution / Max. Frame Rate	640 x 480 / 30fps	320 x 240 / 30fps	320 x 240 / 30fps	320 x 240 / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	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/T, SUNAPI, Wisenet open platform			
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)			
Certification	IP66, NEMA 4X, IK10			
Power Consumption	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 8W	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8W	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8W
Dimensions (WxHxD) / Weight	Ø 101.97 x 401.8mm (Ø 4.01" x 15.82") 3.12kg (6.89lb)	Ø 147.51 x 375.3mm (Ø 5.81" x 14.78") 2.51kg (5.538lb)	Ø 147.51 x 375.3mm (Ø 5.81" x 14.78") 2.51kg (5.538lb)	Ø 147.51 x 375.3mm (Ø 5.81" x 14.78") 2.51kg (5.538lb)
Additional Features	Various colour palettes Spot temperature reading	Various colour palettes	Various colour palettes	Various colour palettes



TNO-3040T
QVGA Thermal Bullet Camera

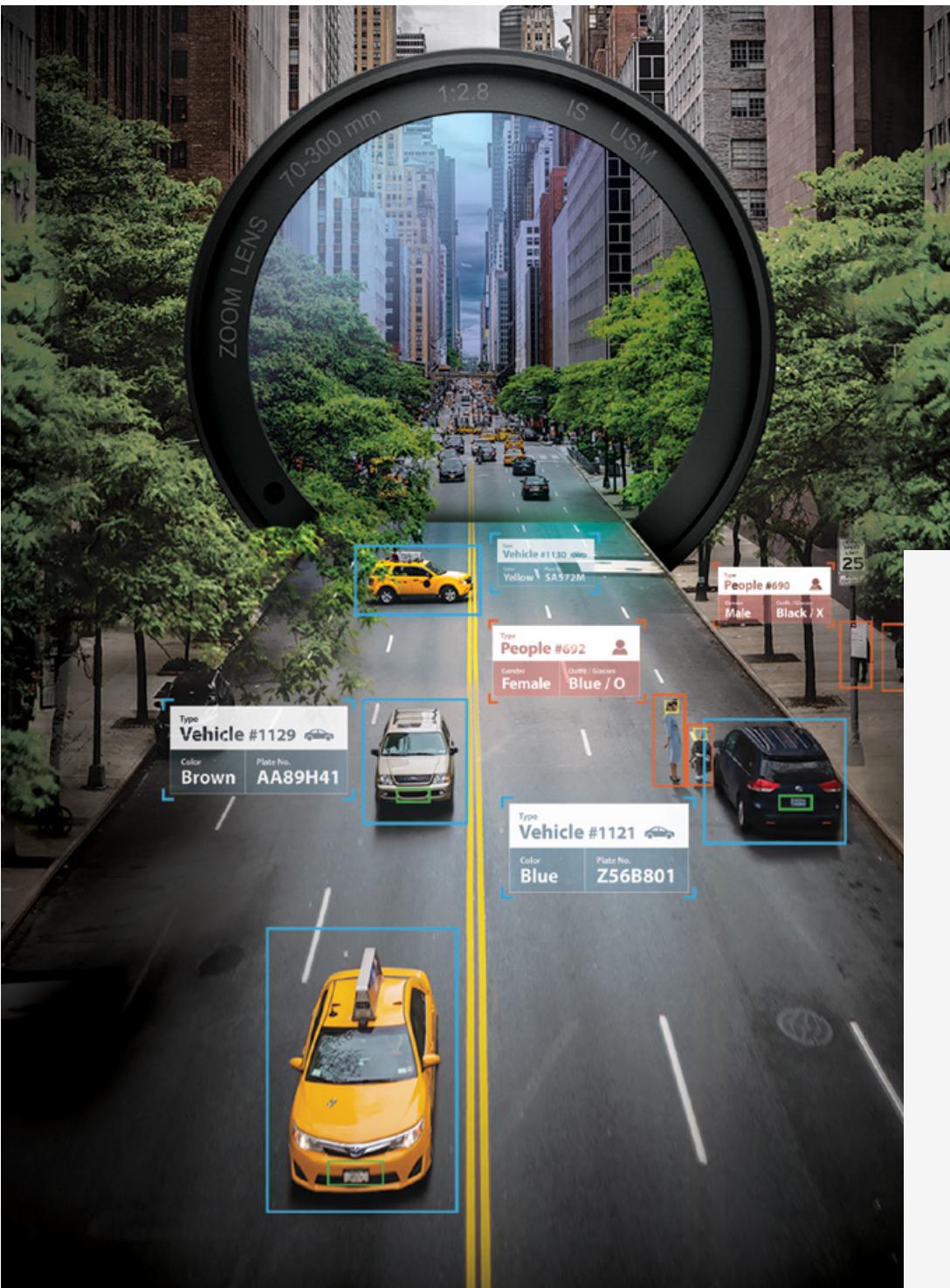


TNO-3050T
QVGA Thermal Bullet Camera



TID-600R
2MP Network Intercom Station

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	1/2.8" CMOS
Min. Illumination	-	-	Colour: 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
Focal Length	19mm fixed focal	35mm fixed focal	1.6mm fixed focal
Angular Field of View	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 Stabilisation	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	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	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	Built-in mic / Built-in speaker
Video Compression	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	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	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 SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-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	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 8W	PoE: Max. 8.7W, typical 7.5W 12VDC: Max. 7.8W, typical 6.7W 24VAC: Max. 9.2W, typical 8W	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 (5.53lb)	Ø147.51 x 401.3mm (Ø5.81" x 15.79") 2.74kg (6.05lb)	W 49 x H 165 x D 48mm (1.93" x 6.5" x 1.89") 490g (1.08lb)
Additional Features	Various colour palettes	Various colour palettes	SIP, Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Shock detection, Sound classification



P series AI Camera & NVR

Precise Object Detection & Classification with AI

- Person
- Face
- Vehicle
- License plate
- Gender
- Age range
- Colour of clothing
- Face mask
- Glasses/Hat/Bag
- Vehicle time and colour

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 P23, 24



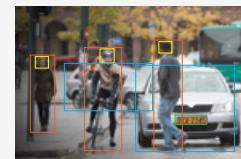
AI NVR Series

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

* See more at P80

Wisenet AI Camera

Detect and classify objects real-time



VMS Plug-in for improved AI search

* Person, face, vehicle, license plate

Wisenet AI Search

Quickly search based on attributes



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

High performance 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

Unregistered channel
Monitoring sub channels without recording

CAMERA A
Channel #02

CAMERA A
Channel #03

CAMERA A
Channel #04

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

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

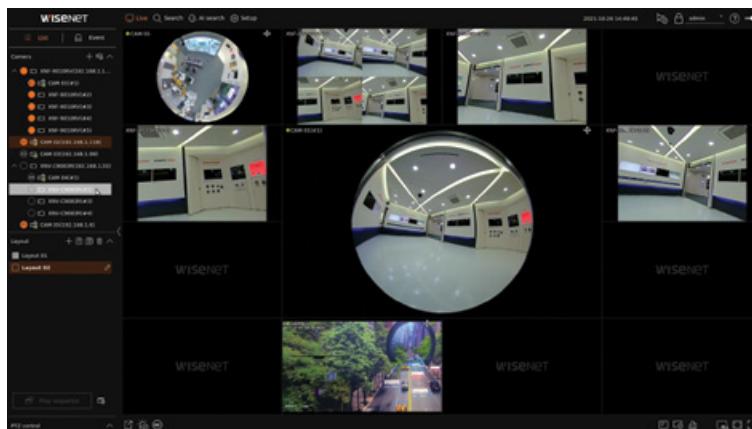


Web



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.



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.



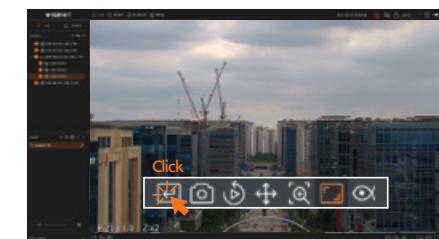
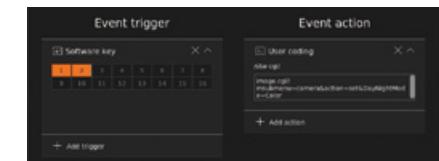
Code your own event action with SUNAPI command and Integrate with the Software Key

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 run separately.

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

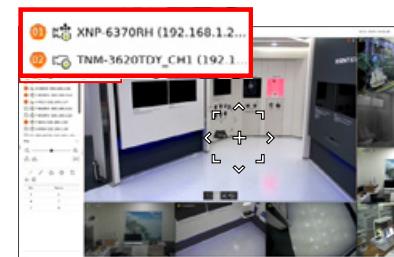
* Simple focus, Day&Night (ICR), Alarm Out, etc.

- 2 Click the Software key to initiate the event action

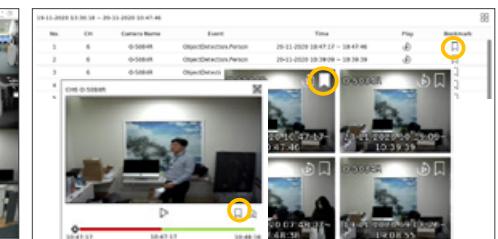


Live monitoring and bookmarks

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.



Live monitoring and PTZ control



Bookmark setup and event search

NETWORK

ANALOG

PERIPHERAL

ACCESSORY

**PRN-6400DB4
64CH AI NVR****PRN-6400B4
64CH AI NVR****PRN-3200B4
32CH AI NVR****PRN-3200B2
32CH AI NVR****PRN-1600B2
16CH AI NVR**

OS	Linux	Linux	Linux	Linux	Linux
Supported Compression	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
Max. Recording Bit Rate	400Mbps	400Mbps	400Mbps	400Mbps	250Mbps
Max # of Cameras	64CH	64CH	32CH	32CH	16CH
Network Camera Resolution	32MP ~ CIF				
HDD Slot	Up to 16 SATA (Max. 160TB)	Up to 16 SATA (Max. 160TB)	Up to 16 SATA (Max. 160TB)	Up to 8 SATA (Max. 80TB, Non-RAID mode)	Up to 8 SATA (Max. 80TB, Non-RAID mode)
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	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	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	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	iSCSI storage	iSCSI storage
RAID	RAID 5/6				
Hot Swap	Yes	Yes	Yes	Yes	Yes
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3rd 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)	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				
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	100 ~ 240 VAC ± 10%; 50/60 Hz, 2.1A	100 ~ 240 VAC ± 10%; 50/60 Hz, 2.1A
Power Consumption	Max. 265W (16 HDD)	Max. 265W (16 HDD)	Max. 265W (16 HDD)	Max. 205W (With 10TB HDDs 8EA)	Max. 205W (With 10TB HDDs 8EA)
PoE Budget	-	-	-	-	-
Additional Features	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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



**XRN-6410DB4/6410B4
64CH NVR**



**XRN-6410RB2
64CH NVR**



**XRN-6410B2
64CH NVR**



**XRN-3210B4
32CH 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, WiseStream	H.265 / H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps	400Mbps	400Mbps	400Mbps
Max # of Cameras	64CH	64CH	64CH	32CH
Network Camera Resolution	32MP ~ CIF	32MP ~ CIF	32MP ~ CIF	32MP ~ CIF
HDD Slot	Up to 16 SATA (Max. 160TB)	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	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	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	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shutdown
External Storage	iSCSI	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, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, 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)	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%; 50/60Hz, 2.7A (Dual SMPS / XRN-6410B4)	100 ~ 240 VAC ± 10%; 50/60Hz	100 ~ 240 VAC ± 10%; 50/60Hz	100 ~ 240 VAC ± 10%; 50/60Hz, 2.7A
Power Consumption	Max. 265W (16 HDD)	Max. 138W (8 HDD)	Max. 138W (8 HDD)	Max. 265W (16 HDD)
PoE Budget	—	—	—	—
Additional Features	<ul style="list-style-type: none"> • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control • Dual SMPS (6410DB4) • Dynamic layout • Virtual channel view • Fisheye dewarping 	<ul style="list-style-type: none"> • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control • Dynamic layout • Virtual channel view • Fisheye dewarping 	<ul style="list-style-type: none"> • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control • Dynamic layout • Virtual channel view • Fisheye dewarping 	<ul style="list-style-type: none"> • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control • Fisheye dewarping

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



XRN-3210RB2
32CH NVR



XRN-3210B2
32CH NVR



XRN-1620SB1
16CH NVR

	XRN-3210RB2 32CH NVR	XRN-3210B2 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	400Mbps	400Mbps	140Mbps
Max # of Cameras	32CH	32CH	16CH
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 4 SATA (Max. 24TB)
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)
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	–
RAID	RAID 5/6	–	–
Hot Swap	Yes	–	–
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, 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%, 50/60Hz	100~240 VAC ± 10%, 50/60Hz	100~240 VAC ± 10%, 50/60Hz
Power Consumption	Max. 160W (8HDD)	Max. 138W (8HDD)	Max. 310W
PoE Budget	–	–	200W
Additional Features	<ul style="list-style-type: none"> • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control • Fisheye dewarping 	<ul style="list-style-type: none"> • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control • Fisheye dewarping 	<ul style="list-style-type: none"> • PoE supported • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control



XRN-1620B2
16CH NVR



XRN-820S
8CH NVR



XRN-815S
8CH NVR

	XRN-1620B2 16CH NVR	XRN-820S 8CH NVR	XRN-815S 8CH NVR
OS	Linux	Linux	Linux
Supported Compression	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG
Max. Recording Bit Rate	140Mbps	100Mbps	100Mbps
Max # of Cameras	16CH	8CH	8CH
Network Camera Resolution	32MP ~ CIF	32MP ~ CIF	12MP ~ CIF
HDD Slot	Up to 8 SATA (Max. 80TB)	Up to 2 SATA (Max. 12TB)	Up to 2 SATA (Max. 20TB)
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post)	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	–	–	–
RAID	–	–	–
Hot Swap	–	–	–
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, 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)	HDMI1: 3840x2160(30Hz), HDMI2: 1920x1080(60Hz)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100~240 VAC ± 10%; 50/60Hz	100~240 VAC ± 10%, 50/60Hz	100~240 VAC ± 10%; 50/60Hz
Power Consumption	Max. 130W	Max. 160W	Max 165W (2HDD, PoE On)
PoE Budget	–	100W	100W
Additional Features	<ul style="list-style-type: none"> • PoE supported • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control 	<ul style="list-style-type: none"> • PoE supported • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control 	<ul style="list-style-type: none"> • PoE supported • N+1 failover supported • AI search (BestShot, Attribute) <ul style="list-style-type: none"> – When integrated with Wisenet AI cameras • PTZ camera configuration and control

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



QRN-1630S
16CH NVR



QRN-830S
8CH NVR



QRN-430S
4CH NVR

	QRN-1630S 16CH NVR	QRN-830S 8CH NVR	QRN-430S 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	128Mbps	Max. 80Mbps	40Mbps
Max # of Cameras	16CH	8CH	4CH
Network Camera Resolution	8MP ~ CIF	8MP ~ CIF	8MP ~ CIF
HDD Slot	Up to 2 SATA (Max. 20TB)	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, 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
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
External Storage	–	–	–
RAID	–	–	–
Hot Swap	–	–	–
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Wisenet Viewer, Support CGI (SUNAPI) for integration to 3'rd party VMS
Local Monitor	HDMI1: 3840 x 2160(30Hz), HDMI2: 1920 x 1080(60Hz)	HDMI: 3840 x 2160 (30Hz)	HDMI 1 (Up to 4K)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ± 10%; 50/60Hz	54VDC / 1.55A	100 ~ 240 VAC ± 10%; 50/60Hz
Power Consumption	Max. 200W (2HDD, PoE ON)	Max 84W (1HDD, PoE ON)	Max 52W (1HDD, PoE On)
PoE Budget	130W	65W	35W
Additional Features	<ul style="list-style-type: none"> • PoE supported • N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • PTZ camera configuration and control • Easy configuration (Setup Wizard, P2P (QR Code)) 	<ul style="list-style-type: none"> • PoE supported • N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • PTZ camera configuration and control • Easy configuration (Setup Wizard, P2P (QR Code)) 	<ul style="list-style-type: none"> • PoE supported • N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • PTZ camera configuration and control • Easy configuration (Setup Wizard, P2P (QR Code))



TRM-810S
8CH Mobile NVR

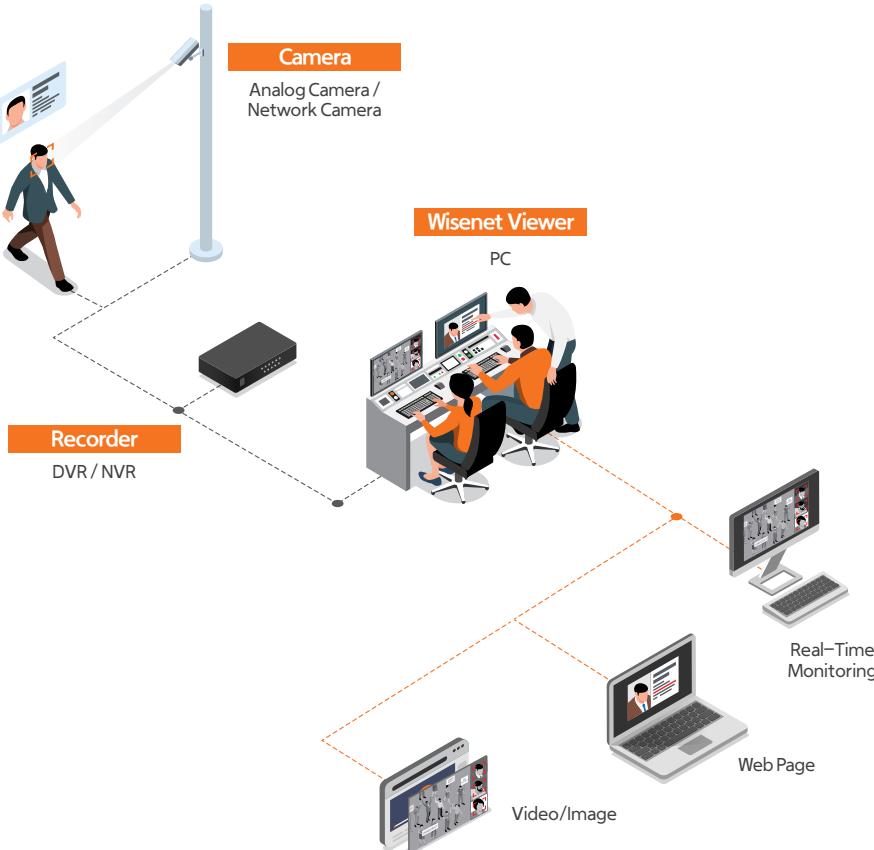


TRM-410S
4CH Mobile NVR

OS	Linux	
Supported Compression	H.265 / H.264, MJPEG, WiseStream	H.265 / H.264, MJPEG, WiseStream
Max. Recording Bit Rate	80Mbps	50Mbps
Max # of Cameras	8 (8 PoE, RJ-45)	4 (4 PoE, RJ-45)
HDD Slot	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 1	–
Hot Swap	Yes (RAID 1)	–
Network Viewer Software	Wisenet TMS, WebViewer, Wisenet Mobile	Wisenet TMS, WebViewer, Wisenet Mobile
Local Monitor	HDMI, VGA	HDMI, VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	<ul style="list-style-type: none"> • GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -25°C to +55°C (-13°F to +13°F) 	
	<ul style="list-style-type: none"> • GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -25°C to +55°C (-13°F to +13°F) 	

WISEnET Viewer

Costless yet powerful NVR·DVR Management Software



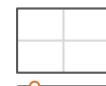
Monitoring with PC gets easier

- Supports multiple OS (Windows, macOS)
- Flexible channel division and custom layout
- AI search (Person, Face, Vehicle, LPR)
- Fisheye de-warping
- Displays web pages (ex. NVR web-viewer) and video tutorials
- Allows videos to be directly saved to PC
- Event trigger and action rule management
- Remote connection (DDNS/P2P)

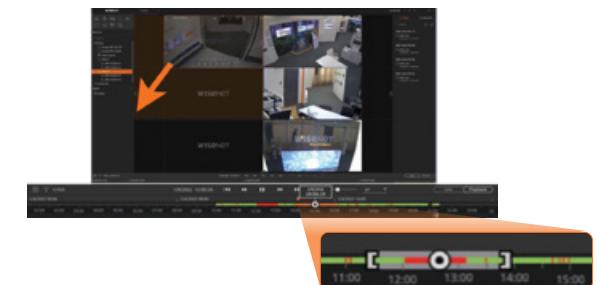


* Available on Windows, macOS

Effective monitoring with essential features



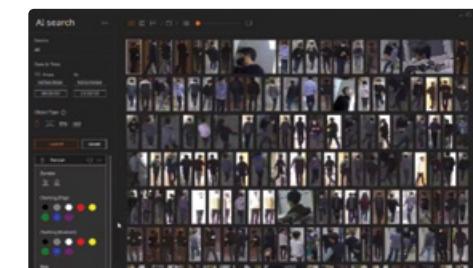
Customizable channel layout & Timeline



Easy monitoring with
Fisheye Dewarping



Intelligent monitoring powered by **AI Search**



Encoder



SPE-1630
16CH Encoder



SPE-420
4CH Encoder

Max. # of Cameras	16	4
Supported Compression	H.265 / H.264, MJPEG	H.265 / H.264, MJPEG
Max. Resolution	5MP/4MP/1080p/720p/WD1/4CIF/CIF	5MP/4MP/1080p/720p/WD1/4CIF/CIF
Max. Frame Rate per Channel	5MP: 12fps/CH, 4MP: 15fps/CH, 1080p/720p/WD1/4CIF/CIF: 30fps/CH(N), 25fps/CH(P)	5MP: 12fps/CH, 4MP: 15fps/CH, 1080p/720p/WD1/4CIF/CIF: 30fps/CH(N), 25fps/CH(P)
Bi-Directional Audio	Support	Support
RS-485	Support	Support
Alarm I/O	4 / 1	4 / 2
Application Programming Interface	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI
Power	MAX: 20W (12V, 1.67A)	MAX: 5W (PoE & 12VDC)

Decoder



SPD-152
1 Monitor Decoder

Video Out	HDMI (2ea)
Resolution	HDMI#1 up to 4K, HDMI#2 up to 1080p
Display	Max. 64ch decoding Decoding performance : 8M@60fps, 2M@360fps
Power	Dual Power : 12VDC, PoE (IEEE802.3af)
Additional Features	Multi adapter for monitor back mount (VESA)

Wisenet WAVE

Wisenet WAVE v5 Open video platform

Intuitive and easy to use

- An intuitive ‘drag & drop’ tool makes it extremely easy for operators to set up a display of live and recorded images on a single screen or video wall, with customisable layouts and sizes.
- A virtual PTZ which, with just simple clicks of a mouse, enables operators to zoom in to see close up detail of any suspicious activity.
- Motion detection and video analytics support can be configured to generate alerts when user defined incidents occur.
- A wide range of smart, keyword, calendar and time-slice search options facilitate rapid retrieval of recorded video.
- Perpetual licence, no recurring fees.

Hanwha Techwin offers an entry level VMS called SSM and for sophisticated Enterprise level VMS projects, the company integrates with leading technology partners. Wisenet WAVE has been launched to answer the needs of projects in the middle ground with an emphasis on simplified user experience.

SUNAPI INTEGRATION

Hanwha Techwin has launched Wisenet WAVE with full SUNAPI integration for WISENET cameras and recorders.

Full SUNAPI driver has been rigorously tested with Wisenet P, X, and Q series cameras resulting in:

- Video/Audio Streaming
- PTZ / AI cameras/ Network Intercom (TID-600)/ Parking Guidance Camera (TNF-9010)
- Event - MD, Alarm
- Edge recording



Hanwha Techwin specific features

NVR monitoring, search & playback; and deep camera integration with:

- Advanced Object Search
- Web Page Proxy via Servers
- Two-Factor Authentication (2FA)
- Resource Grouping
- Audio Mapping
- Desktop Client Automatic Updates
- Encrypted Archives
- Server Web Admin Interface Redesign
- More Secured Connections

An operating system to suit your needs.

Wisenet WAVE has applications for all major operating systems so our users are not limited by what device or operating system they choose to use on their desktops, mobile devices, rack mount servers, or even low-powered embedded devices.



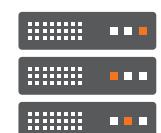
Cloud



Desktop



Mobile



Server

A cloud-based service that enables simple, centralised remote access and insight into any Wisenet WAVE system.

A rich media player designed to view and manage a single Wisenet WAVE system from a desktop or laptop PC.

A mobile app designed for viewing Wisenet WAVE system video and events while on-the-go.

A media server responsible for discovering, connecting to, and managing system devices and data.

Supported Browsers	Desktop OS Support	Mobile OS Support	Server OS Support
Google Chrome	Microsoft Windows	Google Android	Microsoft Windows
Mozilla Firefox	Ubuntu Linux	Apple iOS	Ubuntu Linux
Opera/Opera Neon	Apple / Mac OSX		
Microsoft Edge			
Apple Safari			





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

SCB-6005
1080p HD Box 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	Colour: 0.11Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.17Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.27Lux (F2.0) B/W: 0.017 Lux (F2.0)	Colour: 0.11Lux (F1.6) B/W: 0Lux (IR LED on)	Colour: 0.04Lux (F1.2, 1/30sec) BW: 0.004Lux (F1.2)
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)	-
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)	-
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)	-	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)	BLC, HLC, DWDR
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	MD Output 1	-	-	MD Output 1	0 / 1
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)	ACP (AHD Coax Protocol) CVBS: Pelco-C (Coaxitron)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH
Certification	-	-	-	IP66, IK10	-
Power Consumption	12VDC & 24VAC : Max 5.8W (HCD-6080R) 12VDC & 24VAC : Max 4.2W (HCD-6070R)	12VDC : Max 5.4W	12VDC : Max 3.6W	12VDC & 24VAC : Max 5.8W (HCV-6080R) 12VDC & 24VAC : Max 4.2W (HCV-6070R)	AC 24V / 0.37A (Max 3.6W) DC 12V / 0.32A (Max 3.5W)
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)	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)	Defog			

NETWORK

ANALOG

PERIPHERAL

ACCESSORY



	HRX-1635 16CH 8MP Pentabrid Recorder	HRX-1634 16CH 8MP Pentabrid Recorder	HRX-835 8CH 8MP Pentabrid Recorder	HRX-435 4CH 8MP Pentabrid Recorder	HRX-434 4CH 8MP Pentabrid Recorder
OS	Linux	Linux	Linux	Linux	Linux
Compression	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 2CH (up to 18CH)	Analog 16CH, N/W Camera 2CH (up to 18CH)	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)
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	SATA 8ea (Max 48TB)	SATA 2ea (Max 12TB)	SATA 4ea (Max 24TB)	Up to 2 SATA (Max 12TB)	Up to 1 SATA (Max 6TB)
Viewer Software	SSM, Webviewer, Wisenet Viewer, Smart Viewer, Wisenet mobile SUNAPI for integration to 3'rd party VMS	SSM, WebViewer, Wisenet Viewer, SmartViewer, Wisenet Mobile	SSM, Webviewer, Smart Viewer, Wisenet mobile SUNAPI for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile SUNAPI for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile SUNAPI for integration to 3'rd party VMS
Local Display	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA	1 HDMI, 1 VGA
Audio In/Out	16 / 1	4 / 1	8 / 1	4 / 1	1 / 1
Alarm In/Out	16 / 4	16 / 4	8 / 4	4 / 2	4 / 1
N/W Camera Support	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 USB (3ports)	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 USB (2ports)

LED Monitor

									
Screen Size	43"	32"	32"	24"	22"	19"	32"	27"	10.1"
Max. Resolution	3840 x 2160	3840 x 2160	1920 x 1080	1920 x 1080	1920 x 1080	1280 x 1024	1920 x 1080	1920 x 1080	1024 x 600
Brightness	300 cd/m ²	300 cd/m ²	300 cd/m ²	250 cd/m ²	250 cd/m ²	250 cd/m ²	400cd/m ²	300cd/m ²	500cd/m ²
Contrast Ratio	1000:1	1000:1	2250:1	4000:1	3000:1	1000:1	4000:1	1000:1	500:1
Aspect Ratio	16:9	16:9	16:9	16:9	16:9	4:3	16:9	16:9	16:9
Viewing Angle(H/V)	178° / 178°	178° / 178°	178° / 178°	178° / 178°	178° / 178°	170° / 160°			
Response Time	8.5ms	14ms	8ms	14ms	6.5ms	5ms	8ms	14ms	20ms
Interface	HDMI(1), DP(1)	HDMI 2.0(1), DP1.2(1)	HDMI(1), VGA(1), DVI(1), BNC(1)	HDMI(1), VGA(1)	HDMI(1), VGA(1)	HDMI(1), VGA(1), BNC(2)			
Audio In/Out	-/1	-/1	-/1	-/-	-/-	2/-			
Built-in Speakers	Yes	Yes	Yes	-	-	Yes			
VESA Mount(mm)	100*100/400*200	100*100	100*100	100*100	100*100	100*100			
Power	100V ~ 240V AC	DC 12V 5A	100V ~ 240V AC	DC12V 5.1A	DC12V 2.5A	DC12V 1A, PoE 48V 0.28A			
Stand	Optional	Yes	Optional	Yes	Yes	Yes			
Tempered Glass Screen	-	-	-	-		Yes			
Additional Features	Remote Controller	-	Remote Controller	-	-	-			

Controller



SPC-7000
System Controller

SPC-2000
Network Controller

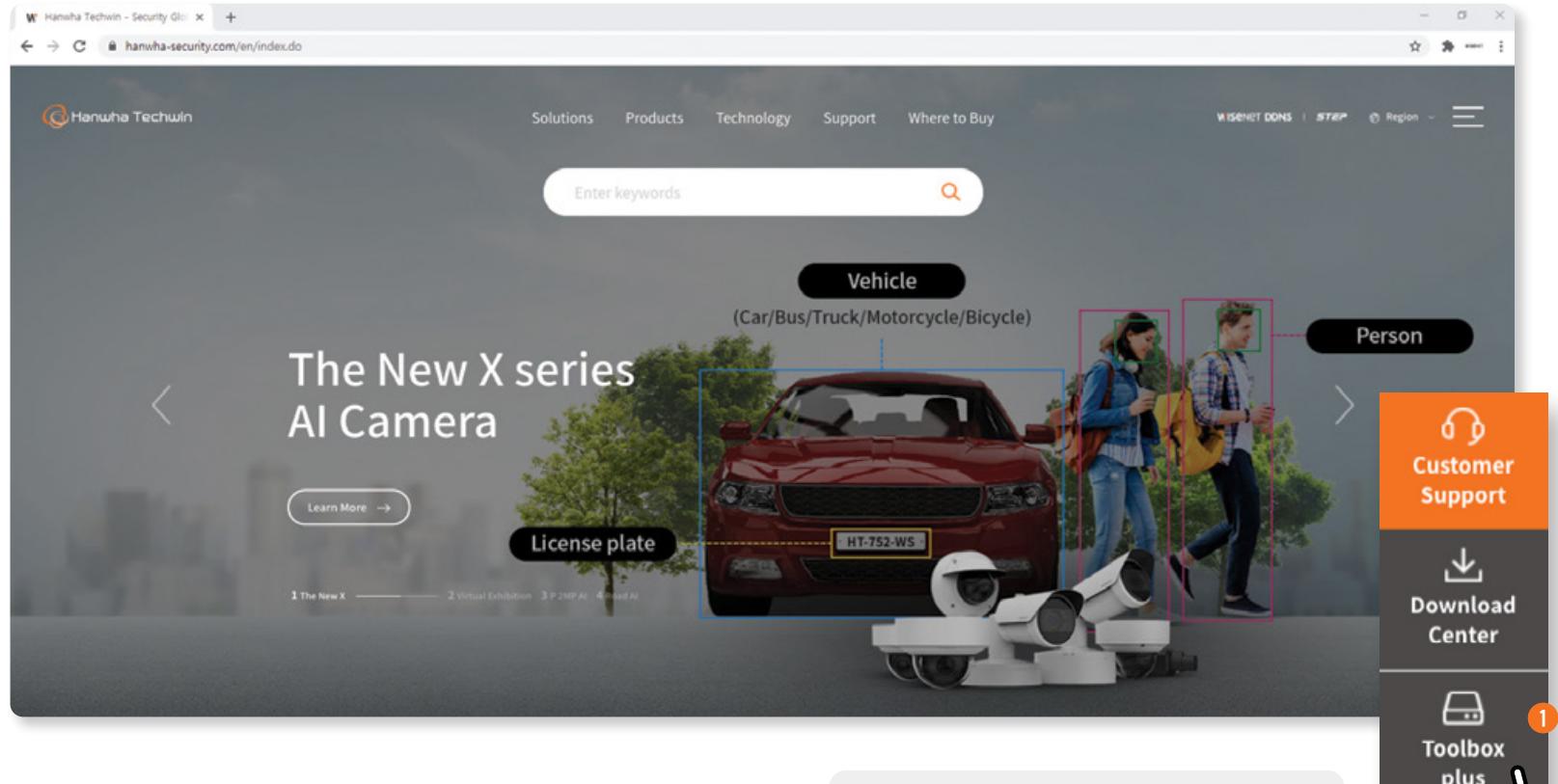
SPC-2010
PTZ / DVR System Controller

SPC-1010
PTZ Control Keyboard

Features	<ul style="list-style-type: none"> 5" TFT Touch LCD Network Camera / SSM / Analog Camera / DVR Control User-Friendly Design and Easy-to-Use Keypad 3 Axis Joystick to Control PTZ Function Detachable Joystick / Jogshuttle for Universe Use (Right / Left Hand Use) USB Interface Support (1ea for SSM, 1ea for Image Snapshot / Upgrade) Fast Camera-Tile Mapping, Config Import / Export 	<ul style="list-style-type: none"> Superior System Compatibility 3D Joystick Control Quick and Easy Installation SSM Support 	<ul style="list-style-type: none"> Control up to 255 PTZ Cameras / DVRs Built-in 3 Axis Twist Zoom Joystick Built-in Jog Shuttle 16 x 2 Character LCD Display RS-485 and RS-422 Interface 	<ul style="list-style-type: none"> Control up to 255 PTZ Cameras Multi Protocols Supports OSD Menu, 3D Joystick Control RS-485 and RS-422 Interface
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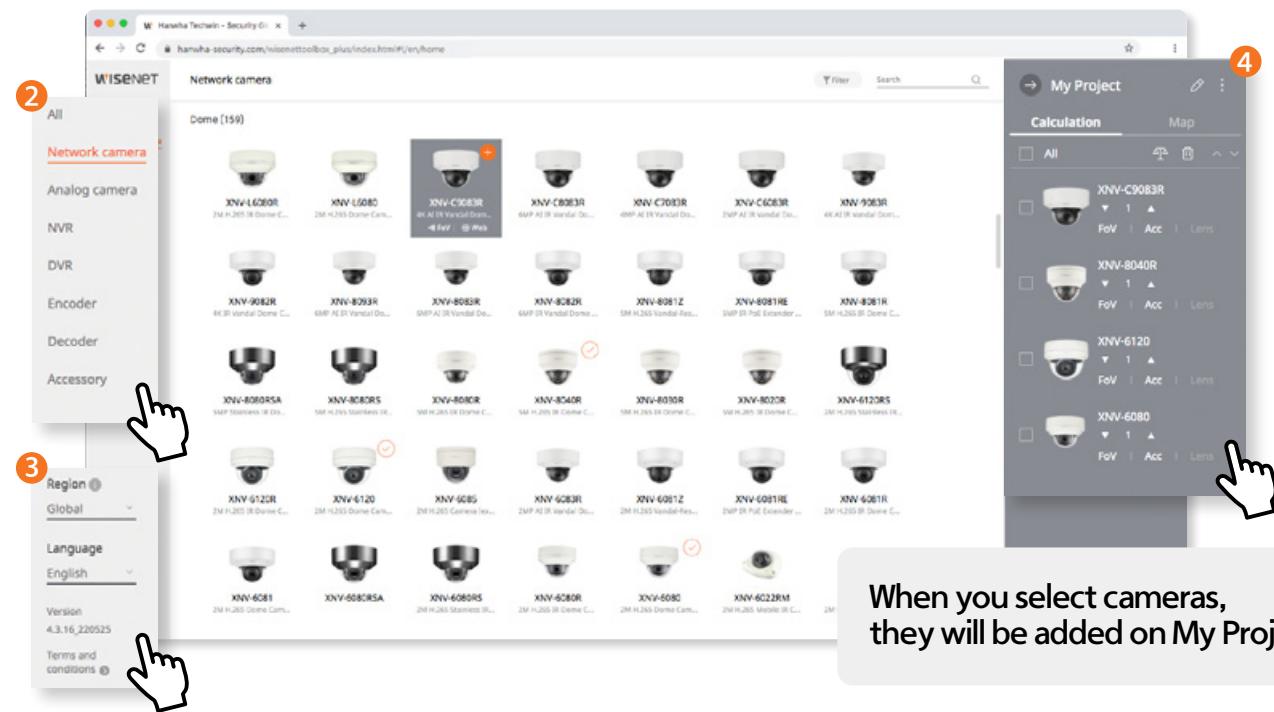
Lens

Model	Image	Mount	Image Format	Resolution	Focal Length	Back Focal Length	Zoom Ratio	F. No	Angle of View	Operation			Dimensions WxHxD(mm/inch)	Weight (g/lb)		
										Iris	Focus	Zoom				
SLA-M8550D					8.5~50mm (0.33"~1.97")	9.4~10.7mm (0.37"~0.42")	5.9	F1.6	42.3° ~ 7.5°				W 46 x H 60 x D 58.2mm (1.81" x 2.36" x 2.29")	80g (0.17lb)		
SLA-M2890DN		CS	1 / 2.8"	3Megapixel									DC	Manual	Manual	84g (0.19lb)
SLA-M2890PN					2.8~9mm (0.11"~0.35")	7.5~15.9mm (0.3"~0.63")	3.2	1.2	134.2° ~ 42.7°				P-Iris	W 45 x H 51.5 x D 54.3mm (1.77" x 2.03" x 2.14")	82.1g (0.18lb)	

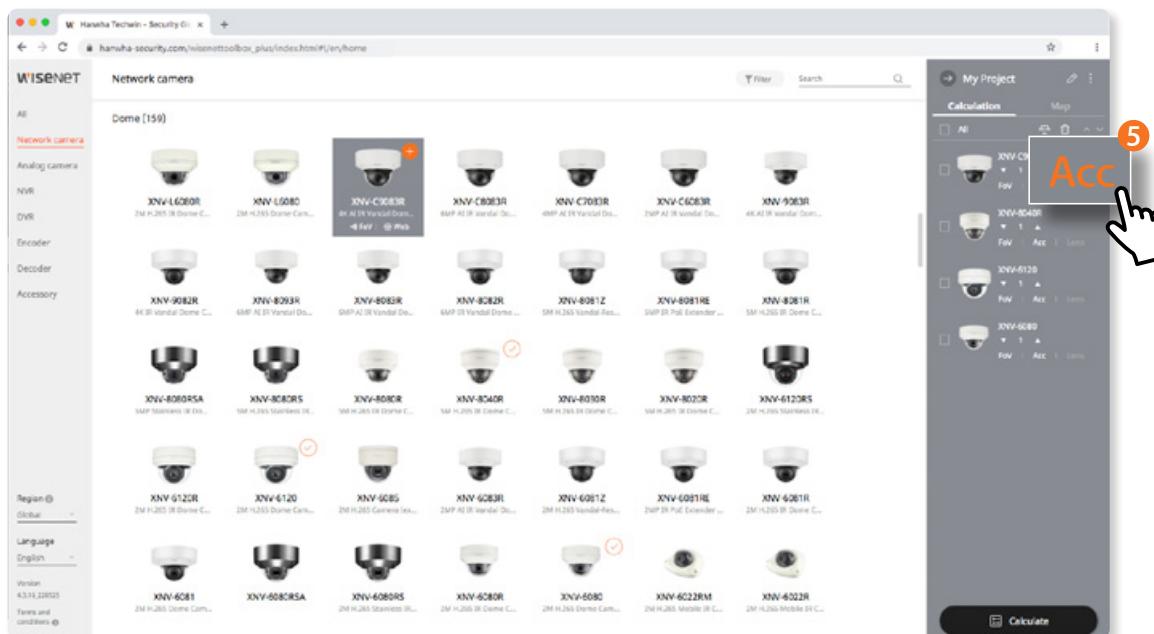


Choose product you are interested in

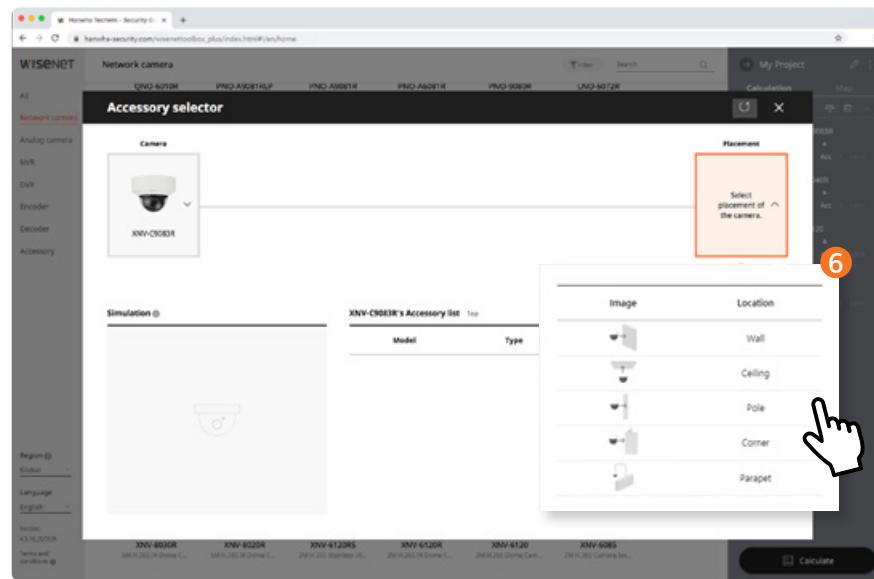
Select region and language



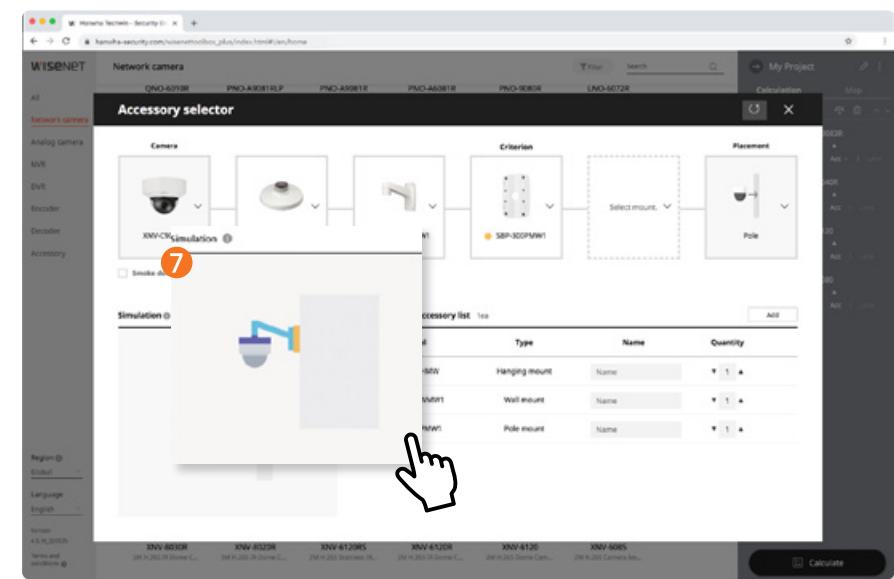
When you select cameras, they will be added on My Project



Click the Acc to find compatible accessories

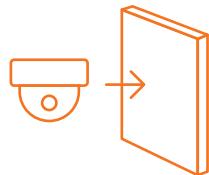


Accessory Selector pops up.
All compatible accessories are shown

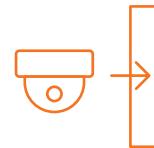


Choose accessories then the simulation
intuitively shows all connected accessories

WM Wall mounts



PM Pole mounts



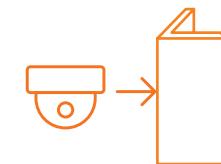
LM Parapet mounts



CM Ceiling mounts

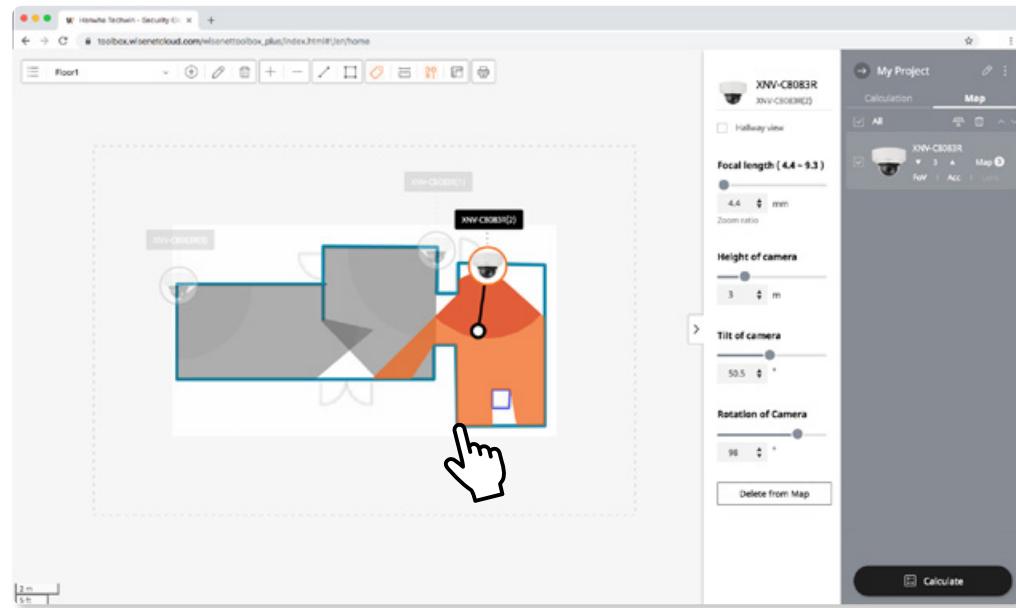
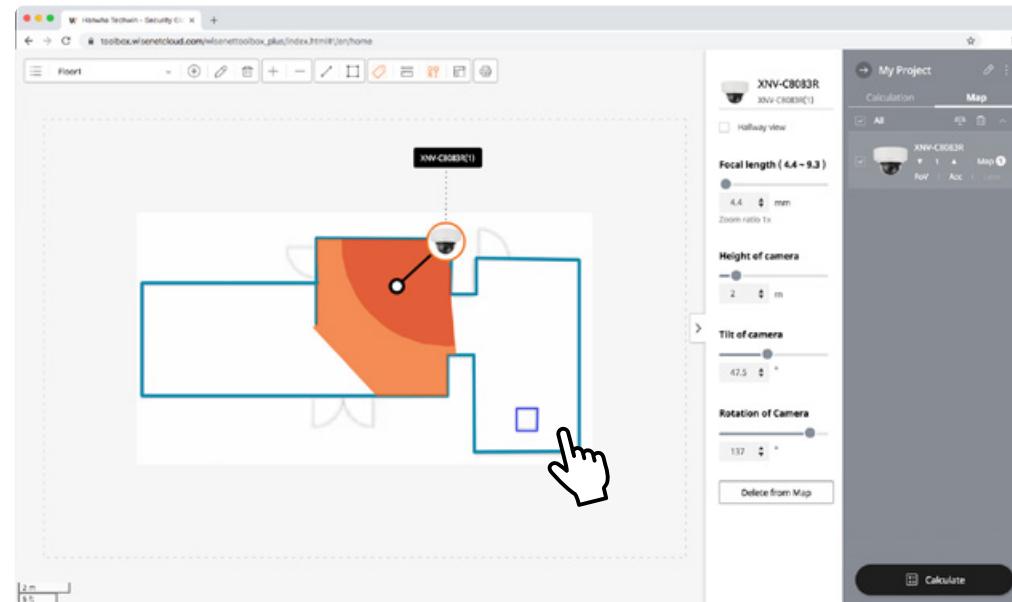


CM Corner mounts



Newly updated in Toolbox Plus: Simulate on the map

Toolbox Plus helps you simulate
the best place for installing cameras.



By uploading your map to Toolbox plus,
you can test how much
cameras can cover in your own space.

It can guide you on how to compose and install
cameras to minimize blind spots in advance.

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