Hanwha Techwin

Product line-up

2022

NDAA COMPLIANT

HanwhaSecurity.com

Hanwha Group

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

Hanwha's business scope covers aerospace and mechatronics, chemicals and materials, solar energy, finance, service and leisure and construction. By integrating our growing number of affiliate enterprises worldwide, Hanwha is harnessing the power of sustainable, quality growth to continually increase the value we bring to customers.

Products & Services

Aerospace & Mechatronics

Hanwha Corporation
(Machinery / Explosives)
Hanwha Aerospace
Hanwha Techwin
Hanwha Systems
Hanwha Defense
Hanwha Power Systems
Hanwha Precision Machinery

Solar Energy

Hanwha Q CELLS
Hanwha Energy
Hanwha Solar Power

Services & Leisure

Hanwha Hotels & Resorts
Hanwha Galleria
Hanwha Galleria Timeworld
Hanwha 63 City
Hanwha Station Development

Chemicals & Materials

Hanwha Chemical
Hanwha Total Petrochemical
Hanwha Advanced Materials
Hanwha General Chemical
Yeochun NCC

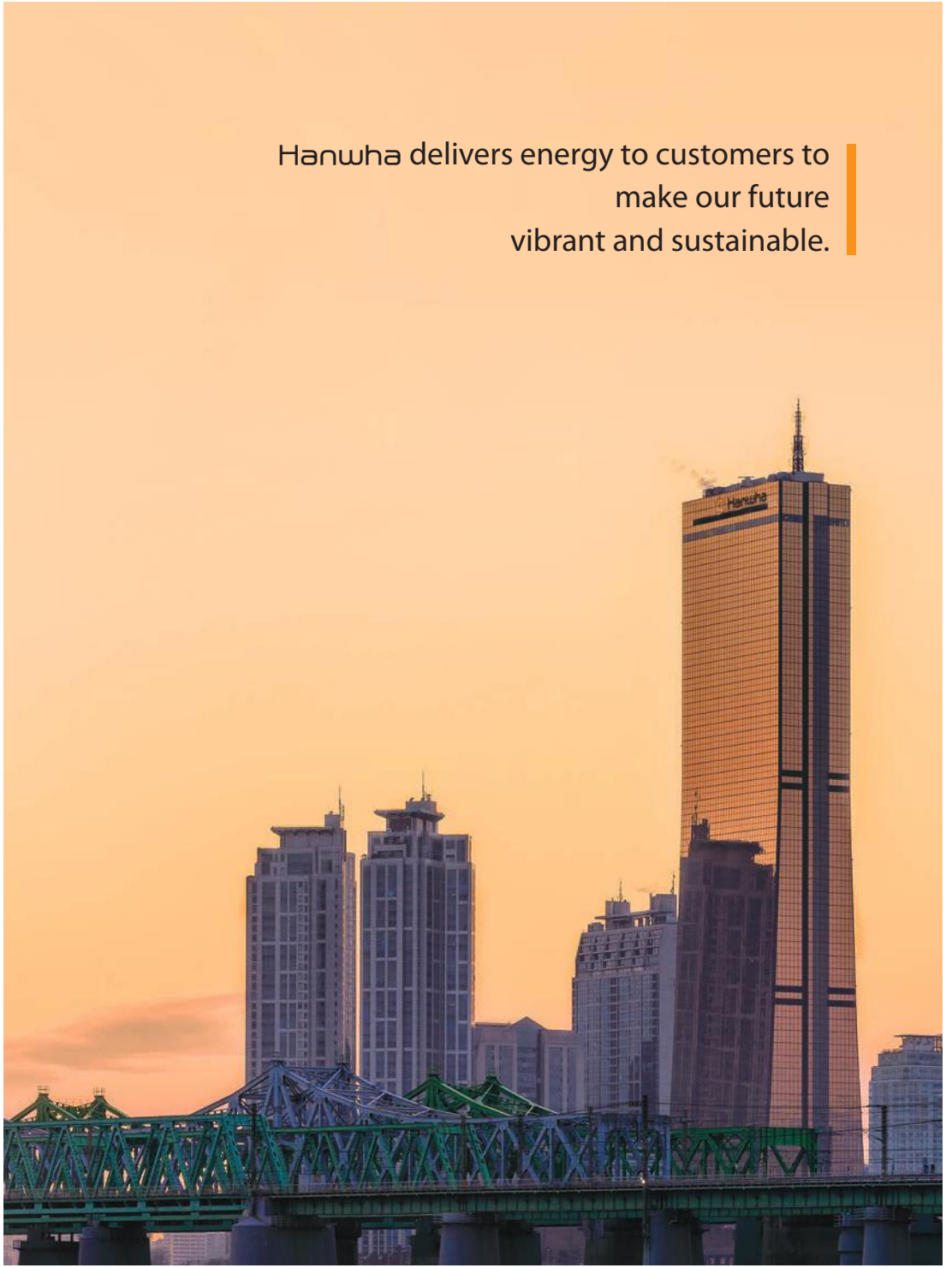
Finance

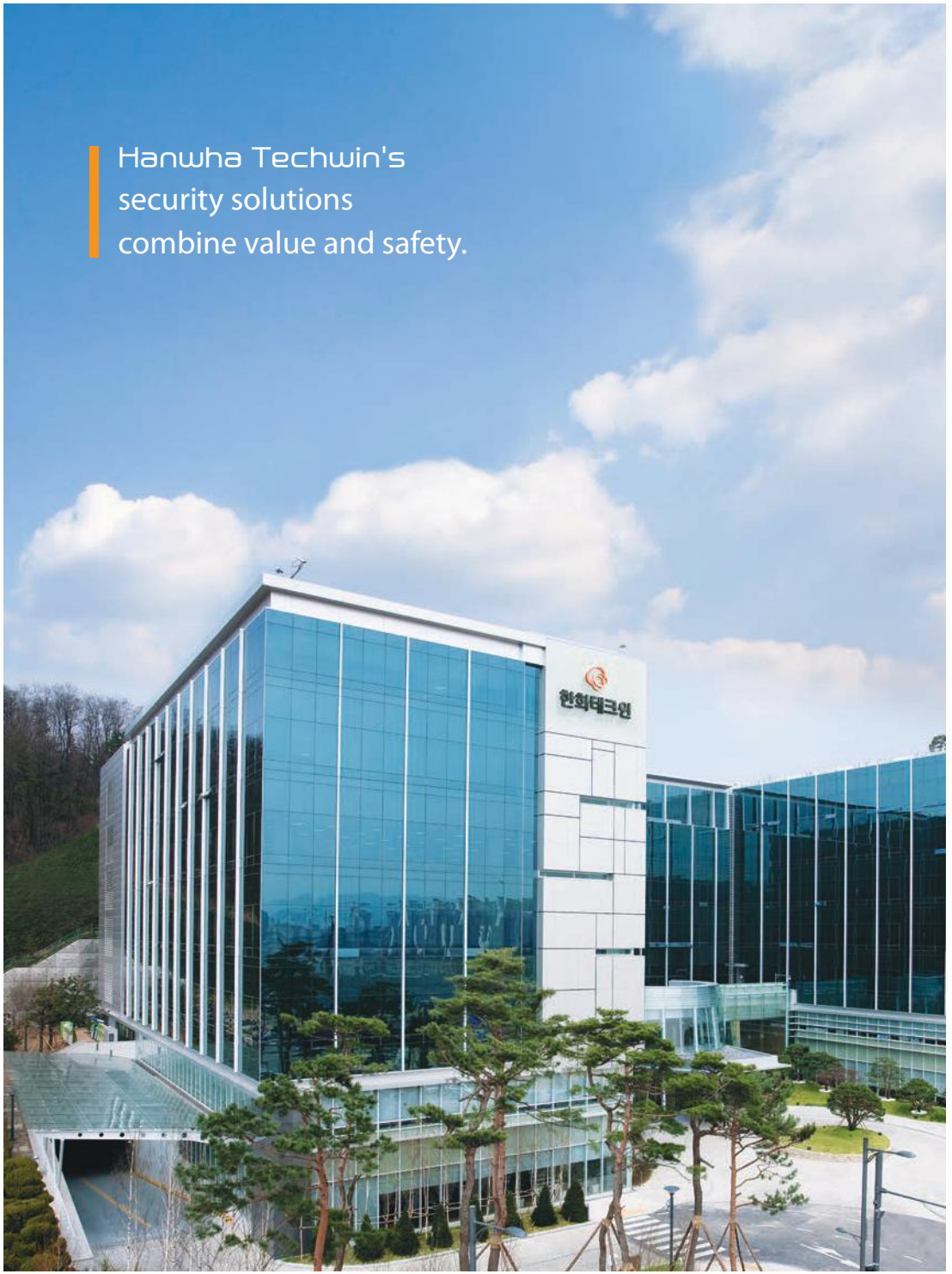
Hanwha Investment & Securities
Hanwha Life
Hanwha General Insurance
Hanwha Asset Management
Hanwha Savings Bank

Construction

Hanwha Engineering & Construction
Hanwha City Development

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





Hanwha Techwin's
security solutions
combine value and safety.

A leading global security company, Hanwha Techwin has continually built its video surveillance expertise based on world-class optical, manufacturing and image processing technologies since the launch of our first surveillance camera in 1991.

We are leading the market by taking advantage of next-generation technologies, such as Deep Learning, Artificial Intelligence (AI) and Business Intelligence (BI). We are also able to offer solutions tailored to meet the requirements of a diverse range of vertical markets.
By offering cybersecurity that customers can trust, we are growing as a total security solutions provider, delivering high satisfaction, value and real-life practical benefits.

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

History

2010 ~ Current

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

1991 ~ 2009

- **2009** - Hanwha Techwin Tianjin and Shanghai subsidiaries established
- **2008** - Korea's first 37X optical AF PTZ camera launched
- **2004** - Wisenet 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
- **1991** - Video surveillance business established

Engineered in Korea

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

Hanwha Techwin's competitive advantage is based on established optical and image-processing technologies, and in the development of System on Chip (SoC) technologies.
As technologies become more advanced and security solutions are leveraged across all aspects of business and life, the role of security goes beyond just monitoring. It is now being applied in many ways to fulfill the growing market demand for built-in analytics and intelligent device functionality.

To provide an agile response to changing market trends, Hanwha Techwin will strive to achieve technological advancement by continuing to develop Deep-Learning and AI solutions.

01. Optical design technology

Our Wisenet series of high-precision, high-resolution cameras are based on world-class optical and image processing technologies.

02. SoC design technology

Hanwha Techwin designs and builds its SoC's (System on Chip) at its own manufacturing facilities. The latest generation, Wisenet 7, is our most technology-intensive, innovative and feature-rich SoC.

03. Intelligent Analytics technology

Hanwha Techwin provides exclusive solutions for business intelligence as a result of its unique analytics algorithms.

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

High-tech Powered in Vietnam

Hanwha Techwin's manufacturing subsidiary in Vietnam (HTSV) has been in operation since 2018 to expand its global production capabilities and increase cost-competitiveness. Through automation and "smart" systems, Hanwha Techwin has built sophisticated and fast-moving manufacturing processes to produce all its product lines including cameras and storage devices.

All products manufactured in HTSV go through a rigorous quality assurance process. These globally sold products represent 75% of Hanwha Techwin's total sales.

End-to-end Cybersecurity

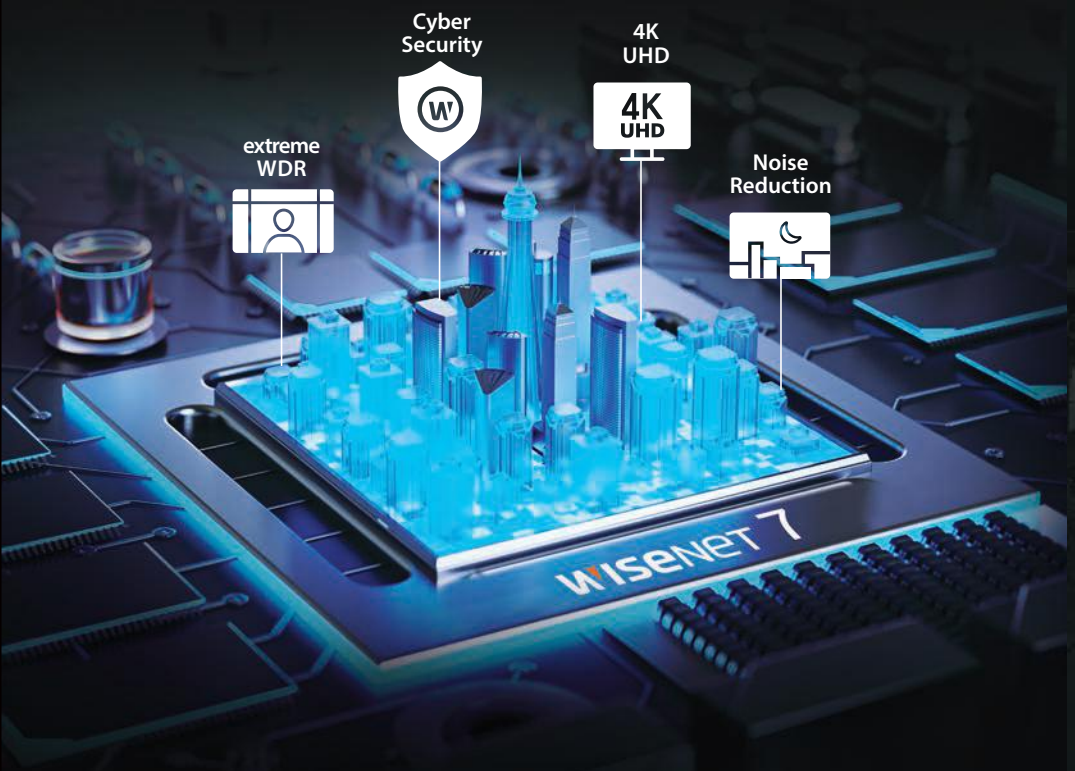
Hanwha Techwin offers cybersecurity with the industry's highest levels of cybersecurity policy with secure boot/OS/storage, a signed firmware/open platform app, secure JTAG and more.
Hanwha Techwin established its own device certificate issuing system to embed certificates into the product not only in the development progress but also in the manufacturing progress.

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

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

Innovating with excellence

WISENET 7



Innovation in Image Quality

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

Innovation in Cybersecurity

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

New Generation PTZ

WISENET PTZ PLUS

Clearer image with WiseIR

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

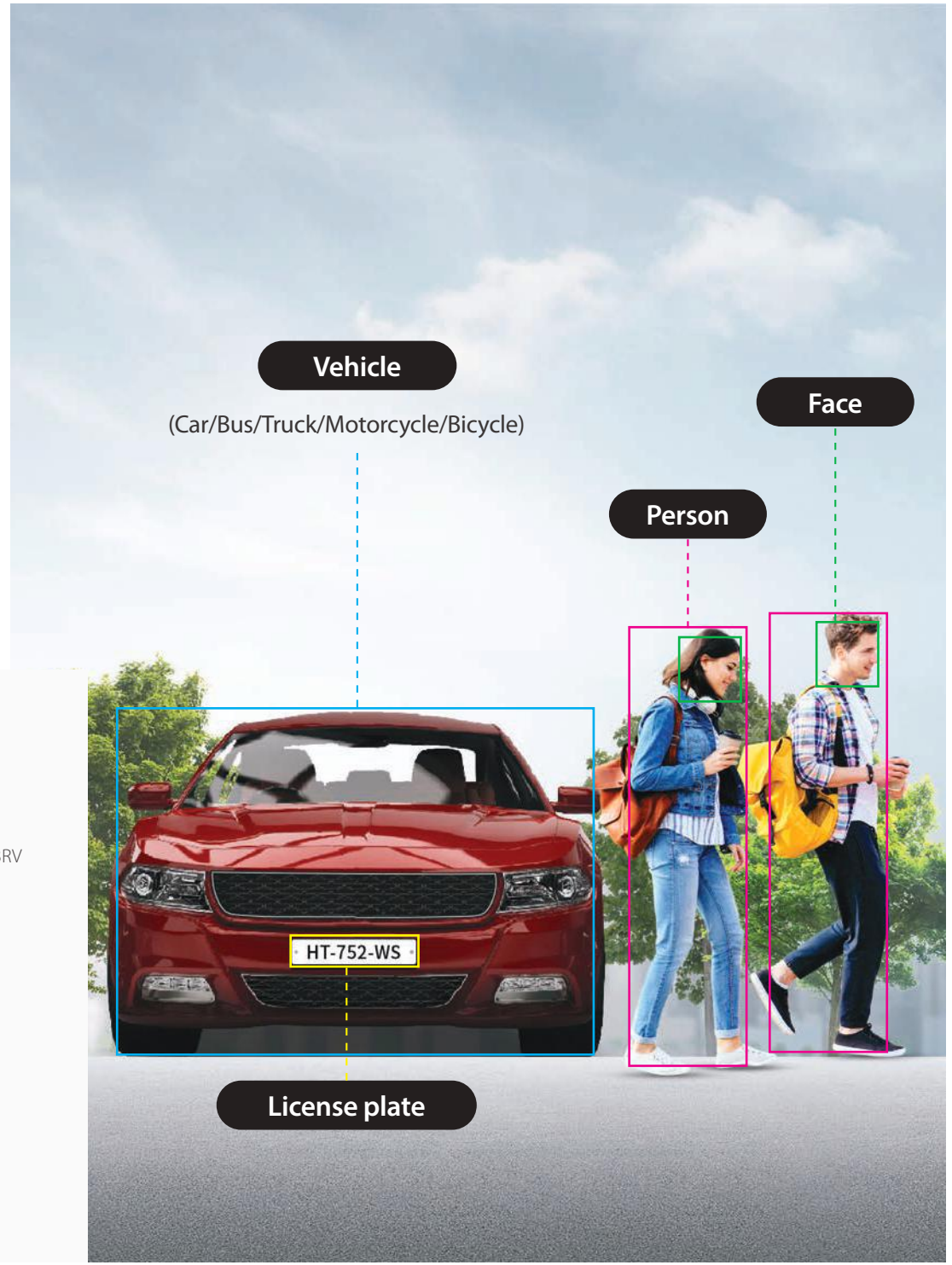
* 4K XNP-9300RW, XNP-9250R, XNP-9250
* 6MP XNP-8300RW, XNP-8250R, XNP-8250
* 2MP XNP-6400RW, XNP-6400R, XNP-6400

The New X series
X Core/X Plus lineup

AI-Enhanced X series Cameras

Object detection | Edge-based business intelligence | Improved image quality | Wisenet7 SoC | Next level cybersecurity | Reinforced durability | User convenience

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



X Plus

XNO-9083R/8083R/6083R/6123R
XNV-9083R/8093R/8083R/6083R/6123R
XND-9083RV/8093RV/8083RV/6083RV
XNB-9003/8003/6003

X Core

XNO-C9083R/C8083R/C7083R/C6083R
XNV-C9083R/C8083R/C7083R/C6083R
XND-C9083RV/C8083RV/C7083RV/C6083RV

WISENET P series

AI Camera

AI-based

COVID-19 Solution

Compatible with Wisenet P series AI 4K / 2MP camera

Precise Object Detection & Classification with AI

Person | Face | Vehicle | License plate

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

AI Camera Series 4K 2MP

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

* See more at P20

Social Distancing Detection

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

Face Mask Detection

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

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

Occupancy Monitoring Application

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

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

TID-600R

Touchless Network Intercom Station

Touchless call as an essential post COVID-19 protocol

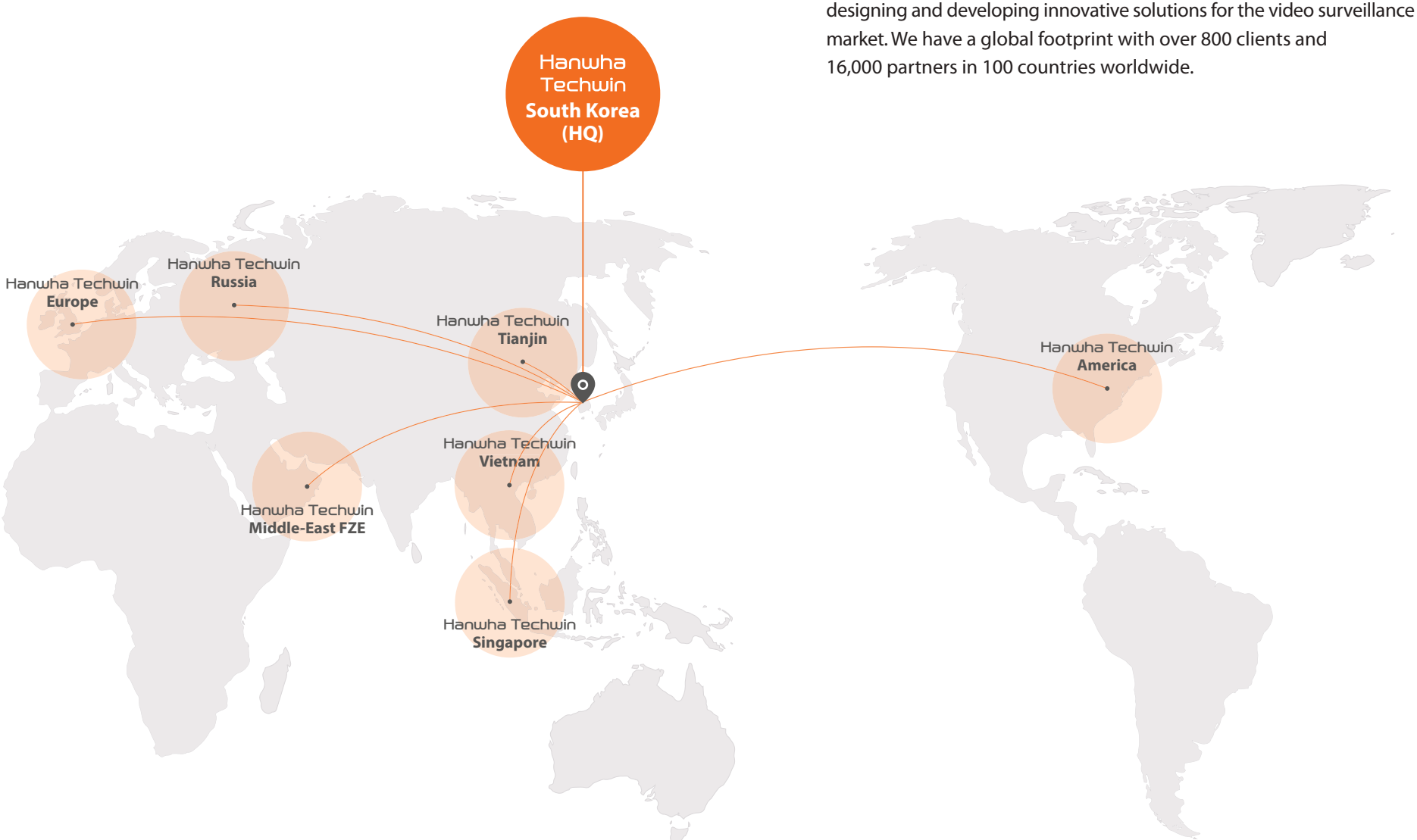
The ToF sensor of TID-600R allows touchless call, where users simply present their palm within 6 inches of the station to initiate a call.

Various mounting options for a greater versatility

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

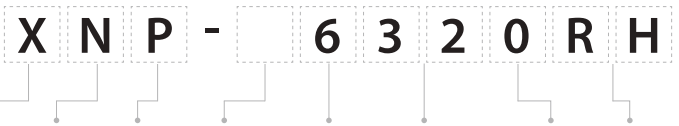
Hanwha Techwin Global network

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



PRODUCT NAMING RULE

Camera



Series Name
P : Premium (4K/AI)
X : Versatile (WN5)
Q : Quality (Entry)
H : Advanced (AHD)
T : Vertical (Special)
S : Legacy (Existing)
L : Low cost

Product Type
N : Network cam
C : Analog cam
U : UTP Camera

Shape
B : Box
D : Dome
F : Fisheye
M : Multi-Sensor
O : Bullet
P : PTZ
U : Positioning
V : Vandal
Z : Zoom box
E : Flateye

Grade
Null : Basic
A : AI
C: Core
E : Entry
L : Lite

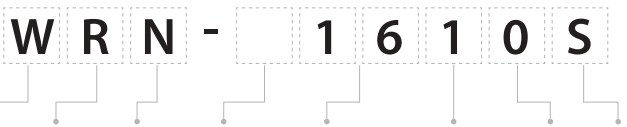
Total Resolution
1 : ~ VGA
2 : BLC CCD
3 : WDR CCD
4 : SVGA, 1/2"
5 : 1MP
6 : 2MP
7 : 3MP ~ 4MP
8 : 5MP ~ 7MP
9 : 8MP ↑

Lens
00 : No Lens
01 : 3mm ↓ fixed
02 : 3.1 ~ 4mm fixed
03 : 4.1 ~ 6mm fixed
04 : 6.1 ~ 9.9mm fixed
05 : 10mm ↑ fixed
06 : 2X V/F
07 : 2X ~ 9X V/F
08 : 2X ~ 9X M-V/F
09 : 10X ↑ V/F
Xx : Zoom (PTZ, Zoom)

Version
0 ~ 9

Feature
A : Revision
B : Black Color
C : Counting or CVBS
E : Explosion Proof
F : Flush
H : Housing
M : Mobile
(M-12 connector)
Q : Quad eye
D : Dual eye
R : IR
S : Stainless Steel
T : Thermal
V : Vandal
W : White color, Wiper
G : Government
Z : PTRZ

Recorder



Series Name
P : Premium
X : Versatile
Q : Quality (16ch ↓)
H : Advanced (AHD)
T : Vertical (Special)
S : Legacy (Existing)
W: WAVE NVR

Product Type
R : Recorder

Shape
D : DVR
X : Hybrid
M : Mobile
N : NVR

Grade
Null : Basic

Channel / Mbps
[~ 16ch : Max CH]
4 : 4CH
8 : 8CH
16 : 16CH

[32ch ~ : Max Mbps]
10 : 100 ~ 199Mbps
20 : 200 ~ 299Mbps
30 : 300 ~ 399Mbps
40 : 400 ~ 499Mbps
50 : 500 ~ 599Mbps
60 : 600 ~ 699Mbps

Major Version
[HD DVR]
1 : SD
2 : Up to 720p
3 : Up to 1080p
4 : Up to 5MP
5 : Up to 8MP

[NVR]
0 ~ 9 : Major Version

MinorVersion
0 ~ 9

Function
Null : Null
A: Revision
C : Coaxial
D : DVD
S : PoE Switch
U : UTP
M : PoE Switch with
M12 Connector

Monitor

Series Name
S : Legacy (Existing)

Product Type
M : Monitor

Appearance
T : LED

Grade
Null : Default

Panel Size
Inch

Input
0 : BNC
1 : VGA
2 : VGA + BNC
3 : etc.

Version
0 ~ 9

Function
Null : Normal
N : N/W

CONTENTS

NETWORK

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

NVR
Wisenet X / Q series

Encoder / Decoder / Storage

Wisenet WAVE

Wisenet SKY

ANALOG

Camera
Wisenet HD+ series

DVR
Wisenet HD+ series

PERIPHERAL

Monitor

PVM Camera

Controller

Lens

ACCESSORY

Accessory & Mount

Selector Tool

AI X series

	X Plus	X Plus	X Plus	X Plus
	XNO-9083R 4K AI IR Bullet Camera	**XNV-9083R** 4K AI IR Vandal Dome Camera	**XND-9083RV** 4K AI IR Dome Camera	**XNB-9003** 4K AI Box Camera
Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Min. Illumination	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.03Lux (F1.2, 1/30sec) BW: 0.003Lux (F1.2, 1/30sec)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm(2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	-
Angular Field of View	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	WiseIR 50m (164.04ft)	WiseIR 50m(164.04ft)	WiseIR 50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/ Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/ Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/ Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/ Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports
Audio I/O	Selectable (mic in/line in) / Line out	Selectable(mic in/line in) / Line out	Selectable (mic in/line in/built-in mic) / Line out	Selectable (mic in/line in/built-in mic) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	8MP / 30fps	8MP / 30fps	8MP / 30fps	8MP / 30fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-50°C~+55°C (-58°F ~ +131°F) * Maximum temperature : +60°C (intermittent) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-25 °C ~ 50 °C (-13°F ~ +122°F) * Maximum temperature : +55°C (intermittent) less than 95% RH (non-condensing) Humidity control /w GORE vent	-10 °C ~ 55°C(-14°F ~ +131°F) less than 95%RH (non-condensing)
Certification	IP66/IP67, NEMA4X, IK10	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	-
Power Consumption	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W
Dimensions (WxHxD) / Weight	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.2kg (4.85 lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.19 lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.53 lb)	81 x 67 x165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94 lb)
Additional Features	AI: Detection Shot, FIPS 140-2	AI: Detection Shot, FIPS 140-2, Modular structure	AI: Detection Shot, FIPS 140-2, Modular structure	AI: Detection Shot, FIPS 140-2

AI X series

	X Plus	X Plus	X Plus	X Plus	X Plus
	XNV-8093R 6MP AI IR Vandal Dome Camera	**XND-8093RV** 6MP AI IR Dome Camera	**XNO-8083R** 6MP AI IR Bullet Camera	**XNV-8083R** 6MP AI IR Vandal Dome Camera	**XND-8083RV** 6MP AI IR Dome Camera
Imaging Device	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Min. Illumination	Color: 0.06Lux (F1.7, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.06Lux (F1.7, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	10.9~29mm (2.7x) motorized varifocal	10.9~29mm (2.7x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal
Angular Field of View	H : 42.0° (Wide) ~ 15.0° (Tele) V : 22.8° (Wide) ~ 8.4° (Tele) D : 48.7° (Wide) ~ 17.1° (Tele)	H : 42.0° (Wide) ~ 15.0° (Tele) V : 22.8° (Wide) ~ 8.4° (Tele) D : 48.7° (Wide) ~ 17.1° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)
Pan / Tilt / Rotate	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°
IR Viewable Length	WiseIR 70m (229.66ft)	WiseIR 70m (229.66ft)	WiseIR 50m (164.04ft)	WiseIR 50m (164.04ft)	WiseIR 50m (164.04ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)
Audio I/O	Selectable (mic in/line in) / Line out	Selectable(mic in/line in/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	6MP/30fps	6MP/30fps	6MP/30fps	6MP/30fps	6MP/30fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-50°C~+55°C (-58°F ~ +131°F) * Maximum temperature : +60°C (intermittent) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-25 °C ~ 50 °C(-13°F ~ +122°F) * Maximum temperature : +55°C (intermittent) less than 95% RH (non-condensing) Humidity control /w GORE vent	-50°C ~ +60°C(-58°F ~ +140°F) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-50°C~+55°C (-58°F ~ +131°F) * Maximum temperature : +60°C (intermittent) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	"-25 °C ~ 50 °C (-13°F ~ +122°F) * Maximum temperature : +55°C (intermittent) less than 95% RH (non-condensing) Humidity control /w GORE vent
Certification	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	IP66/IP67, NEMA4X, IK10	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10
Power Consumption	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover
Dimensions (WxHxD) / Weight	Ø180 x 125mm (7.09" x 4.92") 1.9kg (4.19 lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.53 lb)	Ø93.4 x 298.4mm (Ø3.68" x 11.75") 2.2kg (4.85 lb)	Ø180 x 125mm (Ø7.09 x 4.92") 1.9kg (4.19 lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.53 lb)
Additional Features	AI: Detection Shot, FIPS 140-2, Modular structure	AI: Detection Shot, FIPS 140-2, Modular structure	AI: Detection Shot, FIPS 140-2	AI: Detection Shot, FIPS 140-2, Modular structure	AI: Detection Shot, FIPS 140-2, Modular structure

AI X series

	X Plus	X Plus	X Plus	X Plus	X Plus
	XNB-8003	**XNO-6083R**	**XNV-6083R**	**XND-6083RV**	**XNB-6003**
	6MP AI Box Camera	2MP AI IR Bullet Camera	2MP AI IR Vandal Dome Camera	2MP AI IR Dome Camera	2MP AI Box Camera
Imaging Device	1/1.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS
Min. Illumination	Color: 0.03Lux(F1.2, 1/30sec) BW: 0.003Lux(F1.2, 1/30sec)	Color: 0.01Lux(F1.4, 1/30sec, 30IRE) B/W : 0Lux(IR LED on), 30/25fps	Color: 0.01Lux(F1.4, 1/30sec, 30IRE) B/W: 0Lux(IR LED on)	Color: 0.01Lux(F1.4, 1/30sec, 30IRE) B/W : 0Lux(IR LED on), 30/25fps	Color: 0.007Lux(F1.2, 1/30sec, 30IRE) B/W : 0.0007Lux(F1.2, 1/30sec, 30IRE), 30/25fps
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	-	2.8~12mm(4.3x) motorized varifocal	2.8~12mm(4.3x) motorized varifocal	2.8~12mm(4.3x) motorized varifocal	-
Angular Field of View	-	H : 119.5°(Wide) ~ 27.9°(Tele) V : 62.8°(Wide) ~ 15.7°(Tele) D : 142.1°(Wide) ~ 32.0°(Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) V : 62.8°(Wide) ~ 15.7°(Tele) D : 142.1°(Wide) ~ 32.0°(Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) V : 62.8°(Wide) ~ 15.7°(Tele) D : 142.1°(Wide) ~ 32.0°(Tele)	-
Pan / Tilt / Rotate	-	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	-	WiseIR 50m(164.04ft)	WiseIR 50m(164.04ft)	WiseIR 50m(164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (120dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (150dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports
Audio I/O	Selectable(mic in/line in/built-in mic) / Line out	Selectable(mic in/line in) / Line out	Selectable(mic in/line in) / Line out	Selectable(mic in/line in/built-in mic) / Line out	Selectable(mic in/line in/built-in mic) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	6MP/30fps	2MP/120fps	2MP/120fps	2MP/120fps	2MP/120fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-10 °C ~ 55°C(-14°F ~ +131°F) less than 95%RH(non-condensing)	-50°C ~ +60°C (-58°F ~ +140°F) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH(non-condensing) Humidity control /w GORE vent	-50°C~+55°C (-58°F ~ +131°F) * Maximum temperature : +60°C (intermittent) NEMA TS-2 : 74°C * Start up should be done at above -30°C less than 95%RH (non-condensing) Humidity control /w GORE vent	-25 °C ~ 50 °C (-13°F ~ +122°F) * Maximum temperature : +55°C (intermittent) less than 95% RH (non-condensing) Humidity control /w GORE vent	-10 °C ~ 55°C (-14°F ~ +131°F) less than 95%RH (non-condensing)
Certification	-	IP66/IP67, NEMA4X, IK10	IP66/IP67/IP6K9K, NEMA4X, IK10+	IP52/IK10	None
Power Consumption	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE+: Max 22.5W, typical 17.9W 12VDC: Max 20.0W, typical 15.6W Power redundancy failover	PoE: Max 12.95W, typical 9.8W 12VDC: Max 19W, typical 9.5W
Dimensions (WxHxD) / Weight	W81 x H67 x D165mm (Ø3.19" x 2.64 "x 6.48") 0.88kg (1.94 lb)	Ø93.4x298.4mm (Ø3.68"x11.75") 2.2kg(4.85 lb)	Ø180x125mm (Ø7.09x4.92") 1.9kg(4.19 lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.53 lb)	W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94 lb)
Additional Features	AI: Detection Shot, FIPS 140-2	AI: Detection Shot, FIPS 140-2	AI: Detection Shot, FIPS 140-2, Modular structure	AI: Detection Shot, FIPS 140-2, Modular structure	AI: Detection Shot, FIPS 140-2

AI X series

	XNO-6123R 2MP AI IR Bullet Camera	XNV-6123R 2MP AI IR Vandal Dome Camera	X Core XNV-C9083R 4K AI IR Vandal Dome Camera	X Core XND-C9083RV 4K AI IR Dome Camera	X Core XNV-C8083R 6MP AI IR Vandal Dome Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Min. Illumination	Color: 0.03Lux(F1.6, 1/30sec, 30IRE) B/W: 0.003Lux(IR LED on), 30/25fps	Color: 0.03Lux(F1.6, 1/30sec, 30IRE) B/W: 0.003Lux(IR LED on), 30/25fps	Color: 0.04Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.04Lux(F1.3, 1/30sec) BW: 0Lux(IR LED on)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W : 0Lux (IR LED on)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	5.2~62.4mm(12x) zoom (digital 32x)	5.2~62.4mm(12x) zoom (digital 32x)	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 : 54.58°(Wide) ~ 5.30°(Tele) V : 32.19°(Wide) ~ 3.00°(Tele)	H : 54.58°(Wide) ~ 5.30°(Tele) V : 32.19°(Wide) ~ 3.00°(Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1°(Wide)~47.5°(Tele) V : 58.0°(Wide)~26.6°(Tele) D : 137.5°(Wide)~54.6°(Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide) ~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)
Pan / Tilt / Rotate	-	0°~360°/ -45°~80° / 0°~355°	0°~360° / -45°~75° / 0°~355°	0°~360° / -45°~75° / 0°~355°	0°~360° / -45°~75° / 0°~355°
IR Viewable Length	WiseIR 90m(295.28ft)	WiseIR 90m(295.28ft)	WiseIR 40m (131.23ft)	WiseIR 40m(131.23ft)	WiseIR 40m (131.23ft)
Day & Night	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extremeWDR (150dB)	extremeWDR (150dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports, DC 12V output (Max. 50mA)	2 configurable I/O ports	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	Selectable(mic in/line in)
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP/120fps	2MP/120fps	8MP/30fps	8MP/30fps	6MP/30fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Unicast (20 users), Up to 10 profiles	Unicast (20 users), 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
Edge Storage	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	Micro SD/SDHC/SDXC 2slot Max. 1TB (512GB * 2)	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	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C~+60°C (-40°F ~ +140°F) 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) Humidity control /w GORE vent	-40°C~+60°C (-40°F ~ +140°F) 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) Humidity control /w GORE vent	-40°C~+55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C, NEMA TS-2 : 74°C 0~95%RH (non-condensing) Humidity control /w GORE vent	-10 °C ~ 50 °C (14°F ~ +122°F) * Maximum temperature : +55°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent	-40°C~+55°C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) * Start up should be done at above -20°C NEMA TS-2 : 74°C 0~95%RH(non-condensing) Humidity control /w GORE vent
Certification	IP66/IP67/IK10, NEMA4X, NEMA-TS 2(2.2.8, 2.2.9)	IP66/IP67/IP6K9K, NEMA4X, NEMA-TS 2, IK10+	IP66/IP67/NEMA4X, IK10	IP52, IK08	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 19.5W, typical 15.5W 12VDC: Max 16.5W, typical 13.1W Power redundancy failover	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W
Dimensions (WxHxD) / Weight	Ø93.4x298.4mm (Ø3.68"x11.75") 2300g(5.07 lb)	Ø180x138mm (Ø7.09x5.43") 2130g(4.70 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.45kg (3.20 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.35kg (2.98 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.45kg(3.20 lb)
Additional Features	AI: Detection Shot, FIPS 140-2	AI: Detection Shot, FIPS 140-2, Modular structure	AI: Detection Shot, UL CAP, Secure by Default	AI: Detection Shot, UL CAP, Secure by Default	AI: Detection Shot, UL CAP, Secure by Default

AI X series

	X Core	X Core	X Core	X Core	X Core
	XND-C8083RV	**XNV-C7083R**	**XND-C7083RV**	**XNV-C6083R**	**XND-C6083RV**
	6MP AI Dome Camera	4MP AI IR Vandal Dome Camera	4MP AI IR Dome Camera	2MP AI IR Vandal Dome Camera	2MP AI Dome Camera
Imaging Device	1/1.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/2.8" progressive CMOS
Min. Illumination	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W : 0Lux (IR LED on)	Color: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W : 0Lux (IR LED on)	Color: 0.038Lux (F1.4, 1/30sec, 30IRE) B/W : 0Lux(IR LED on)	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W : 0Lux(IR LED on)	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W : 0Lux(IR LED on)
Video Output	Micro USB Type B	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	2.8~12mm(4.3x) motorized varifocal	2.8~12mm(4.3x) motorized varifocal
Angular Field of View	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide)~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H: 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 : 119.5°(Wide) ~ 27.9°(Tele) V : 62.8°(Wide) ~ 15.7°(Tele) D : 142.1°(Wide) ~ 32.0°(Tele)	H : 119.5°(Wide) ~ 27.9°(Tele) V : 62.8°(Wide) ~ 15.7°(Tele) D : 142.1°(Wide) ~ 32.0°(Tele)
Pan / Tilt / Rotate	0°~360° / -45°~75° / 0°~355°	0°~360° / -45°~75° / 0°~355°	0°~360° / -45°~75° / 0°~355°	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)	WiseIR 40m (131.23ft)
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	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	"Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear"	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection, Appear/Disappear
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports
Audio I/O	Selectable(mic in/line in)	Selectable (mic in/line in) / Line out	Selectable(mic in/line in) / Line out	Selectable(mic in/line in) / Line out	Selectable(mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	6MP/30fps	4MP/60fps	4MP/60fps	2MP/60fps	2MP/60fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 1slot 512GB	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	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	-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	-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	IP52, IK08	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 10.0W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W
Dimensions (WxHxD) / Weight	Ø160 x 118mm (Ø6.30" x 4.65") 1.35kg (2.98 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.45kg (3.20 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.35kg (2.98 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.45kg (3.20 lb)	Ø160 x 118mm (Ø6.30" x 4.65") 1.35kg (2.98 lb)
Additional Features	AI: Detection Shot, UL CAP, Secure by Default	AI: Detection Shot, UL CAP, Secure by Default	AI: Detection Shot, UL CAP, Secure by Default	AI: Detection Shot, UL CAP, Secure by Default	AI: Detection Shot, UL CAP, Secure by Default

AI X series

	X Core	X Core	X Core	X Core
	XNO-C6083R 2MP AI IR Bullet Camera	**XNO-C7083R** 4MP AI IR Bullet Camera	**XNO-C8083R** 6MP AI IR Bullet Camera	**XNO-C9083R** 4K AI IR Bullet Camera
Imaging Device	1/2.8" progressive CMOS	1/2.8" progressive CMOS	1/1.8" progressive CMOS	1/1.8" progressive CMOS
Min. Illumination	Color: 0.01Lux (F1.4, 1/30sec, 30IRE) B/W : 0.001Lux(IR LED on)	Color: 0.038Lux (F1.3, 1/30sec, 30IRE) B/W : 0.0038Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W : 0.004Lux (IR LED on)	Color: 0.04Lux (F1.3, 1/30sec, 30IRE) B/W : 0.004Lux (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	2.8~10mm(3.6x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal	4.4~9.3mm (2.1x) motorized varifocal
Angular Field of View	H : 119.5°(Wide) ~ 27.9°(Tele) V : 62.8°(Wide) ~ 15.7°(Tele) D : 142.1°(Wide) ~ 32.0°(Tele)	H : 109.7° (Wide) ~ 30.4° (Tele) V : 60.8° (Wide)~ 17.8° (Tele) D : 131.3° (Wide) ~ 35.3° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide)~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)	H : 112.1° (Wide) ~ 47.5° (Tele) V : 58.0° (Wide)~ 26.6° (Tele) D : 137.5° (Wide) ~ 54.6° (Tele)
Pan / Tilt / Rotate	-	-	-	-
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 (150dB)	extremeWDR (120dB)	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V	WiseNR II (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, Appear/Disappear, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, Appear/Disappear, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, Appear/Disappear, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection	Analytics events based on AI engine : Object detection (Person/Face/Vehicle(car/truck/bus/bicycle/motorcycle)/ Licence plate), IVA (Virtual line/Area, Enter/Exit, Loitering, direction, Appear/Disappear, intrusion) Analytics events : Defocus detection, Motion detection, Tampering, Fog detection, Audio detection, Sound classification, Shock detection
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
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)
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	4MP/60fps	6MP/30fps	4K/30fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support	Up to 10 profiles, 3 virtual channel support
Edge Storage	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB	Micro SD/SDHC/SDXC 1slot 512GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40 °C ~ +55 °C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent	-40 °C ~ +55 °C (-40°F ~ +131°F) * Maximum temperature : +60°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) 0~95% RH (non-condensing) Humidity control /w GORE vent	-40 °C ~ +55 °C (-40°F ~ +131°F) * Maximum temperature : +60°C (intermittent) 0~95% RH (non-condensing) Humidity control /w GORE vent
Certification	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10	IP66/IP67/NEMA4X, IK10
Power Consumption	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W	PoE: Max 12.95W, typical 10.8W 12VDC: Max 12.5W, typical 10.0W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W	PoE: Max 12.95W, typical 11.2W 12VDC: Max 13.2W, typical 10.8W
Dimensions (WxHxD) / Weight	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1640g (3.62 lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1640g (3.62 lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1640g (3.62 lb)	Ø93.4 x 276.6mm (Ø3.68" x 10.89") 1640g (3.62 lb)
Additional Features	AI: Detection Shot, UL CAP, Secure by Default	AI: Detection Shot, UL CAP, Secure by Default	AI: Detection Shot, UL CAP, Secure by Default	AI: Detection Shot, UL CAP, Secure by Default

AI P series

		X PLUS	X PLUS	X PLUS	
	PNO-A9081R 4K AI IR Bullet Camera	**PNV-A9081R** 4K AI IR Vandal Dome Camera	**PND-A9081RV** 4K AI IR Dome Camera	**PND-A9081RF** 4K AI IR Dome Camera	**PNB-A9001** 4K AI Box Camera
Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Min. Illumination	Color: 0.05Lux(F1.6) BW: 0Lux(IR LED on)	Color: 0.05Lux(F1.6) BW: 0Lux(IR LED on)	Color: 0.05Lux(F1.6) BW: 0Lux(IR LED on)	Color: 0.05Lux(F1.6) BW: 0Lux(IR LED on)	Color: 0.03Lux(F1.2, 1/30sec)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	4.5~10mm (2.2x) motorized varifocal	4.5~10mm (2.2x) motorized varifocal	4.5~10mm (2.2x) motorized varifocal	4.5~10mm (2.2x) motorized varifocal	-
Angular Field of View	H: 101.4 °(Wide) ~ 45.5 °(Tele) V: 53.6 °(Wide)~ 25.5 °(Tele) D: 120.7 °(Wide)~52.3 °(Tele)	H: 101.4 °(Wide) ~ 45.5 °(Tele) V: 53.6 °(Wide) ~ 25.5 °(Tele) D: 120.7 °(Wide) ~ 52.3 °(Tele)	H: 101.4 °(Wide) ~ 45.5 °(Tele) V: 53.6 °(Wide) ~ 25.5 °(Tele) D: 120.7 °(Wide) ~ 52.3 °(Tele)	H: 101.4 °(Wide) ~ 45.5 °(Tele) V: 53.6 °(Wide) ~ 25.5 °(Tele) D: 120.7 °(Wide) ~ 52.3 °(Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	30m (98.42ft)	30m (98.42ft)	30m (98.42ft)	30m (98.42ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	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	WiseNRII (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	- Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	- Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	- Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	- Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	- Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	1/1	1/1	1/1	1/1	1/1
Audio I/O	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	8MP/30fps	8MP/30fps	8MP/30fps	8MP/30fps	8MP/30fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -10°C	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -10°C	-25°C ~ +50°C (-13°F ~ +122°F)	-25°C ~ +50°C (-13°F ~ +122°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, Plenum rate	-
Power Consumption	PoE+: Max 20.00W, typical 17.00W 12VDC: Max 18.00W, typical 16.00W	PoE+: Max 20.00W, typical 17.00W 12VDC: Max 18.70W, typical 15.00W	PoE+: Max 20.00W, typical 16.00W 12VDC: Max 17.70W, typical 14.00W	PoE+: Max 20.00W, typical 16.00W 12VDC: Max 17.70W, typical 14.00W	PoE+: Max 16.50W, typical 12.50W 12VDC: Max 13.50W, typical 10.80W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.58" x 14.51") (Without sunshield) 2.48kg (5.47lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.90kg (4.19lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.60kg (3.53lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95kg (4.30lb)	W73.1 x H66.6 x 1D47.8mm 0.70kg (1.54lb)
Additional Features	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)

AI P series

		X PLUS	X PLUS	X PLUS	
	PNO-A6081R 2MP AI IR Bullet Camera	**PNV-A6081R** 2MP AI IR Vandal Dome Camera	**PND-A6081RV** 2MP AI IR Dome Camera	**PND-A6081RF** 2MP AI IR Dome Camera	**PNB-A6001** 2MP AI Box Camera
Imaging Device	1/2" CMOS	1/2" CMOS	1/2" CMOS	1/2" CMOS	1/2" CMOS
Min. Illumination	Color: 0.008Lux (F1.3) BW : 0Lux (IR LED on)	Color: 0.008Lux (F1.3) BW : 0Lux (IR LED on)	Color: 0.008Lux(F1.3) BW : 0Lux(IR LED on)	Color: 0.008Lux(F1.3) BW : 0Lux(IR LED on)	Color: 0.007Lux(F1.2, 1/30sec)
Video Output	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B	CVBS: 1.0 Vp-p, Micro USB Type B
Focal Length	4.38~9.33mm (2.13x) motorized varifocal	4.38~9.33mm (2.13x) motorized varifocal	4.38~9.33mm(2.13x) motorized varifocal	4.38~9.33mm(2.13x) motorized varifocal	-
Angular Field of View	H:103.1° (Wide) ~ 44.5° (Tele) V:54.2° (Wide) ~ 24.9° (Tele) D:124° (Wide) ~ 51.1° (Tele)	H:103.1° (Wide) ~ 44.5° (Tele) V:54.2° (Wide) ~ 24.9° (Tele) D:124° (Wide) ~ 51.1° (Tele)	H:103.1° (Wide) ~ 44.5° (Tele) V:54.2° (Wide) ~ 24.9° (Tele) D:124° (Wide) ~ 51.1° (Tele)	H:103.1°(Wide)~44.5°(Tele) V:54.2°(Wide)~24.9°(Tele) D:124°(Wide)~51.1°(Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	30m (98.42ft)	30m (98.42ft)	30m (98.42ft)	30m (98.42ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	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	WiseNRII (Based on AI engine), SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection	Classified object type : Person/Face/Vehicle/ License plate with attributes, BestShot per object - Analytics events based on AI engine : Object detection, Face mask detection, Directional detection, Digital auto tracking, Enter/Exit, Loitering, Virtual line, Social distancing detection - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification, Shock detection
Business Intelligence	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap	Based on AI engine : People counting, Queue management, Heatmap
Alarm I/O	1/1	1/1	1/1	1/1	1/1
Audio I/O	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP/120fps	2MP/120fps	2MP/120fps	2MP/120fps	2MP/120fps
WiseStream	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)	WiseStream II, WiseStream III (Based on AI engine)
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform	ONVIF PROFILE S/G/T/M SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C	-40°C ~ +55°C (-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C	-25°C ~ +50°C (-13°F ~ +122°F) / Less than 90% RH	-25°C ~ +50°C (-13°F ~ +122°F) / Less than 90% RH	-10°C ~ +55°C(+14°F ~ +131°F) / Less than 90% RH
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, IK10, Plenum rate	-
Power Consumption	PoE+: Max 20.0W, typical 17.00W 12VDC: Max 18.00W, typical 16.00W	PoE+: Max 20.00W, typical 17.00W 12VDC: Max 18.70W, typical 15.00W	PoE+: Max 20.00W, typical 16.00W 12VDC: Max 17.70W, typical 14.00W	PoE+: Max 20.00W, typical 16.00W 12VDC: Max 17.70W, typical 14.00W	PoE+: Max 16.50W, typical 12.50W 12VDC: Max 13.50W, typical 10.80W
Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (3.58" x 14.51") (Without sunshield) 2.48kg (5.47lb)	Ø180 x125mm (Ø7.09 x 4.92") 1.90kg (4.19lb)	Ø160 x125mm (Ø6.30 x 4.92") 1.60kg (3.53lb)	Ø205 x 163mm (Ø8.07" x 4.92") 1.95kg (4.30lb)	W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94lb)
Additional Features	AI : BestShot, Attributes (Person, Vehicle, Face, License plate) FIPS 140-2	AI : BestShot, Attributes (Person, Vehicle, Face, License plate) FIPS 140-2	AI : BestShot, Attributes (Person, Vehicle, Face, License plate) FIPS 140-2	AI : BestShot, Attributes (Person, Vehicle, Face, License plate) FIPS 140-2	AI : BestShot, Attributes (Person, Vehicle, Face, License plate) FIPS 140-2

Camera X series

		X PLUS	X PLUS	X PLUS	
	XNO-9082R 4K IR Bullet Camera	**XNV-9082R** 4K IR Vandal Dome Camera	**XND-9082RF** 4K IR Dome Camera	**XND-9082RV** 4K IR Dome Camera	**XNB-9002** 4K Box Camera
Imaging Device	1/2.8"CMOS	1/2.8"CMOS	1/2.8"CMOS	1/2.8"CMOS	1/2.8"CMOS
Min. Illumination	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0.005Lux
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	-
Angular Field of View	H: 114° (Wide) ~ 40.2° (Tele) V: 62.0° (Wide) ~ 22.5° (Tele) D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62.0° (Wide) ~ 22.5° (Tele) D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62.0° (Wide) ~ 22.5° (Tele) D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62.0° (Wide) ~ 22.5° (Tele) D: 133.0° (Wide) ~ 46.3° (Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extreme WDR (120dB)	extreme WDR (120dB)	extreme WDR (120dB)	extreme WDR (120dB)	extreme WDR (120dB)
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in/Built-in mic) / Line out	Selectable (mic in/line in/Built-in mic) Supply voltage: 2.5VDC (4mA), Input impedance: 2K Ohm
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	4K / 30fps	4K / 30fps	4K / 30fps	4K / 30fps	4K / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-50°C~+60°C (-58°F ~ +140°F) / Less than 95% RH (non condensing) * Start up should be done at above -30°C	-50°C~+60°C (-58°F ~ +140°F) / Less than 95% RH (non condensing) * Start up should be done at above -30°C	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 95% RH (non condensing)	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 95% RH (non condensing)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH (non condensing)
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, Plenum rate, IK10	IP52, IK10	-
Power Consumption	PoE : Max 12.95W, typical 10.5W 12VDC : Max 12.5W, typical 9.4W 24VAC : Max 14.5W, typical 11.2W	PoE : Max 12.95W, typical 10.5W 12VDC : Max 12.5W, typical 9.4W 24VAC : Max 14.5W, typical 11.2W	PoE : Max 12.95W, typical 10.7W 12VDC : Max 11.5W, typical 9.0W	PoE : Max 12.95W, typical 10.7W 12VDC : Max 11.5W, typical 9.0W	PoE: Max 12.95W, typical 8.2W 12VDC: Max 11.5W, typical 7.5W 24VAC: Max 13.5W, typical 8.9W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.85" x 14.51") 2.2kg (4.85lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.9kg (4.18lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95kg (4.29lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.52lb)	W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94lb)
Additional Features	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default

		X PLUS	X PLUS	X PLUS	
	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	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0Lux (IR LED On)	Color: 0.05Lux (F1.2, 1/30sec) B/W: 0.005Lux
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	2.8 ~ 8.4mm (3x) motorized varifocal	-
Angular Field of View	H: 114° (Wide) ~ 40.2° (Tele) V: 62.0° (Wide) ~ 22.5° (Tele) D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62.0° (Wide) ~ 22.5° (Tele) D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62.0° (Wide) ~ 22.5° (Tele) D: 133.0° (Wide) ~ 46.3° (Tele)	H: 114° (Wide) ~ 40.2° (Tele) V: 62.0° (Wide) ~ 22.5° (Tele) D: 133.0° (Wide) ~ 46.3° (Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	40m (131.23ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	extreme WDR	extreme WDR	extreme WDR	extreme WDR	extreme WDR
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection Face/upper body detection
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports	2 configurable I/O ports
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in/Built-in mic) / Line out	Selectable (mic in/line in/Built-in mic) / Line out	Selectable (mic in/line in/Built-in mic) / Line out	Selectable (mic in/line in/Built-in mic) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	6MP / 30fps	6MP / 30fps	6MP / 30fps	6MP / 30fps	6MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-50°C~+60°C (-58°F ~ +140°F) / Less than 95% RH(non condensing) * Start up should be done at above -30°C	-50°C~+60°C (-58°F ~ +140°F) / Less than 95% RH(non condensing) * Start up should be done at above -30°C	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 95% RH (non condensing)	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 95% RH (non condensing)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH (non condensing)
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, Plenum rate, IK10	IP52, IK10	-
Power Consumption	PoE : Max 12.95W, typical 10.5W 12VDC : Max 12.5W, typical 9.4W 24VAC : Max 14.5W, typical 11.2W	PoE : Max 12.95W, typical 10.7W 12VDC : Max 11.5W, typical 9.0W 24VAC : Max 13.5W, typical 11.0W	PoE : Max 12.95W, typical 10.7W 12VDC : Max 11.5W, typical 9.0W	PoE : Max 12.95W, typical 10.7W 12VDC : Max 11.5W, typical 9.0W	PoE: Max 12.95W, typical 8.2W 12VDC: Max 11.5W, typical 7.5W 24VAC: Max 13.5W, typical 8.9W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø3.85" x 14.51") 2.2kg (4.85lb)	Ø180 x125mm (Ø7.09" x 4.92") 1.9kg (4.18lb)	Ø205 x 163mm (Ø8.07" x 6.42") 1.95kg (4.29lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.6kg (3.52lb)	W81 x H67 x D165mm (3.19" x 2.64" x 6.48") 0.88kg (1.94lb)
Additional Features	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default	UL CAP, Secure by Default

Camera X series

	X PLUS	X PLUS	X PLUS	X PLUS	X PLUS
	XNV-8081RE 5MP IR Vandal Dome Camera	**XND-8081REV** 5MP IR Dome Camera	**XNV-6081RE** 2MP IR Vandal Dome Camera	**XND-6081REV** 2MP IR Dome Camera	**XND-8081VZ** 5MP Dome Camera
Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.8" CMOS
Min. Illumination	Color: 0.07Lux (F1.3, 1/30sec) BW: 0Lux (IR LED)	Color: 0.07Lux (F1.3, 1/30sec) BW: 0Lux (IR LED on)	Color: 0.015Lux (F1.4, 1./30sec) BW: 0Lux (IR LED)	Color: 0.015Lux (F1.4, 1./30sec) BW: 0Lux (IR LED)	Color : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)
Video Output	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B	Micro USB Type B
Focal Length	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.9 ~ 9.4mm (2.4x) motorized varifocal	2.8 ~12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.6 ~ 9.4mm (2.6x) motorized varifocal
Angular Field of View	H: 92.1˚(Wide) ~ 38.7˚(Tele) V: 67.2˚(Wide) ~ 29.0˚(Tele) D: 119.9˚(Wide) ~ 48.6˚(Tele)	H: 92.1˚ (Wide) ~ 38.7˚ (Tele) V: 67.2˚ (Wide) ~ 29.0˚ (Tele) D: 119.9˚ (Wide) ~ 48.6˚ (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32.0° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) V: 62.8° (Wide) ~ 15.7° (Tele) D: 142.1° (Wide) ~ 32.0° (Tele)	H : 102.5 °(Wide) ~ 38.7 °(Tele) V : 74.2 °(Wide) ~ 29.0 °(Tele) D : 135.5 °(Wide) ~ 48.6 °(Tele)
Pan / Tilt / Rotate	0˚~360˚ / -45˚~85˚ / 0˚~355˚	0˚~360˚ / -45˚~85˚ / 0˚~355˚	0˚~360˚ / -45˚~85˚ / 0˚~355˚	0˚~360˚ / -45˚~85˚ / 0˚~355˚	±175˚ / 0 ~ 85˚ / ±175˚ (Remote)
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	50m (164.04ft)	50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	150dB	150dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	2MP / 60fps	2MP / 60fps	5MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH * Start up should be done at above -35°C	-25°C~+60°C (-13°F~+140°F) Less than 90% RH	-50°C ~ +60°C (-58°F ~ +140°F) / Less than 90% RH * Start up should be done at above -35°C	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 90% RH	-25°C ~ +60°C (-13°F ~ +140°F)
Certification	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, IK10
Power Consumption	Max 25.5 W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5 W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5 W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	Max 25.5 W (Main CAM + Extension CAM) Typical 10.2W (Main CAM) * PoE Out: Max 12.95W at 80meters using CAT5/5E cable	PoE : Max 11W 12VDC : Max 9W
Dimensions (WxHxD) / Weight	Ø180 x 125mm (Ø7.09" x 4.92") 1.75kg (3.86lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)	Ø180 x 125mm (Ø7.09" x 4.92") 1.75kg (3.86lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)
Additional Features	PoE Extender Camera	PoE Extender Camera	PoE Extender Camera	PoE Extender Camera	Modular structure, Motorized PTRZ

	X PLUS	X PLUS	X PLUS	X PLUS	X PLUS
	XND-8081FZ 5MP Flush Mount Dome Camera	**XND-8081RV** 5MP IR Dome Camera	**XND-8081RF** 5MP IR Flush Mount Dome Camera	**XNV-8081Z** 5MP Vandal Dome Camera	**XNV-8081R** 5MP IR Vandal Dome Camera
Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Min. Illumination	Color : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.07 Lux (F1.2) B/W : 0.007 Lux (F1.2)	Color: 0.07Lux (F1.3) BW: 0Lux (IR LED)
Video Output	Micro USB Type B	CVBS 1.0 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) ~ 29.0 ° (Tele) D : 135.5 ° (Wide) ~ 48.6 ° (Tele)	H : 92.1° (Wide) ~ 38.7° (Tele) V : 67.2° (Wide) ~ 29.0° (Tele) D : 119.9° (Wide) ~ 48.6° (Tele)	H : 92.1° (Wide) ~ 38.7° (Tele) V : 67.2° (Wide) ~ 29.0° (Tele) D : 119.9° (Wide) ~ 48.6° (Tele)	H : 102.5° (Wide) ~ 38.7° (Tele) V : 74.2° (Wide) ~ 29.0° (Tele) D : 135.5° (Wide) ~ 48.6° (Tele)	H : 92.1° (Wide) ~ 38.7° (Tele) V : 67.2° (Wide) ~ 29.0° (Tele) D : 119.9° (Wide) ~ 48.6° (Tele)
Pan / Tilt / Rotate	±175° / 0 ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	±175° / 0 ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°
IR Viewable Length	-	50m (164.04ft)	50m (164.04ft)	-	50m (164.04ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) /Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) /Line out	Selectable (mic in/line in) /Line out	Selectable (mic in/line in) / ine out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F) / Less than 90% RH	-25°C ~ +60°C (-13°F ~ +140°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)
Certification	IP52, Plenum rate	IP52, IK10	IP52, Plenum rate	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X
Power Consumption	PoE : Max 11W 12VDC : Max 9W	PoE : Max 12.95W 12VDC : Max 11.7W	PoE : Max 12.95W 12VDC : Max 11.7W	PoE : Max 12.3W 12VDC : Max 10W 24VAC : Max 12.3W	PoE : Max 12.95W 12VDC : Max 11.7W 24VAC : Max 14.9W
Dimensions (WxHxD) / Weight	Ø205 x 155mm (Ø8.07" x 6.10") 1.85kg (4.08lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)
Additional Features	Modular structure, Motorized PTRZ	Modular structure	Modular structure	Modular structure, Motorized PTRZ	Modular structure

Camera X series

	X PLUS	X PLUS	X PLUS	X PLUS	X PLUS
	XND-6081V 2MP Dome Camera	**XND-6081F** 2MP Flush Mount Dome Camera	**XND-6081VZ** 2MP Dome Camera	**XND-6081FZ** 2MP Flush Mount Dome Camera	**XND-6081RV** 2MP IR Dome Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal
Angular Field of View	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	±175° / 0 ~ 85° / ±175° (Remote)	±175° / 0 ~ 85° / ±175° (Remote)	0°~360° / -45°~ 85° / 0°~ 355°
IR Viewable Length	-	-	-	-	50m (164.04ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic /Line out	Selectable (mic in/line in) /Line out	Selectable (mic in/line in), Built-in mic /Line out	Selectable (mic in/line in) /Line out	Selectable (mic in/line in), Built-in mic /Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)
Certification	IP52, IK10	IP52, Plenum rate	IP52, IK10	IP52, Plenum rate	IP52, IK10
Power Consumption	PoE : Max 7.0W 12VDC : Max 5.40W	PoE : Max 7.0W 12VDC : Max 5.40W	PoE : Max 10W 12VDC : Max 8.5W	PoE : Max 10W 12VDC: Max 8.5W	PoE : Max 12.95W 12VDC : Max 10.8W
Dimensions (WxHxD) / Weight	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.85kg (4.08lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)
Additional Features	Modular structure	Modular structure	Modular structure, Motorized PTRZ	Modular structure, Motorized PTRZ	Modular design

Camera X series

	X PLUS	X PLUS	X PLUS	X PLUS	
	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	Color : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.015 lux (F1.4) B/W : 0.0015 Lux (F1.4)	Color : 0.015Lux (F1.4) BW : 0Lux (IR LED)	Color : 0.015 Lux (F1.4) B/W : 0.0015 Lux (F1.4)	Color : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB Type B
Focal Length	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~12mm (4.3x) motorized varifocal	2.8 ~12mm (4.3x) motorized varifocal	-
Angular Field of View	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	-
Pan / Tilt / Rotate	0˚~ 360˚ / -45˚~ 85˚ / 0˚~ 355˚	±175˚ / 0 ~ 85˚ / ±175˚ (Remote)	0˚ ~ 360˚ / -45˚ ~ 85˚ / 0˚ ~ 355˚	0˚ ~ 360˚ / -45˚ ~ 85˚ / 0˚ ~ 355˚	-
IR Viewable Length	50m (164.04ft)	-	50m (164.04ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification Audio Playback Shock detection	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	5MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP52, Plenum rate	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X	-
Power Consumption	PoE : Max 12.95W 12VDC : Max 10.8W	PoE : Max 11W 12VDC : Max 9.5W 24VAC : Max 11W	PoE : Max 12.95W 12VDC : Max 10.8W 24VAC : Max 13.3W	PoE : Max 7.0W 12VDC : Max 5.4W 24VAC : Max 7.1W	PoE : Max 8.50W 12VDC : Max 7.50W 24VAC : Max 8.50W
Dimensions (WxHxD) / Weight	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.45kg (3.20lb)	W73.1 x H66.6 x D147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)
Additional Features	Modular design	Modular structure, Motorized PTRZ	Modular structure	Modular structure	Hallway View

Camera X series

	XNO-8080R 5MP IR Bullet Camera	**XNO-8020R/8030R/8040R** 5MP IR Bullet Camera	**XND-8080R/8080RV** 5MP IR Dome Camera	**XND-8020R/8030R/8040R** 5MP IR Dome Camera	**XND-8020F** 5MP Flush Mount Dome Camera
Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS
Min. Illumination	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)
Video Output	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B
Focal Length	3.7 ~ 9.4mm (2.5x) motorized varifocal	3.7mm fixed (XNO-8020R) 4.6mm fixed (XNO-8030R) 7.0mm fixed (XNO-8040R)	3.9 ~ 9.4m (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) ~ 29.0 ° (Tele) D : 119.9 ° (Wide) ~ 48.6 ° (Tele)	H : 97.5˚/ V : 71.9˚/ D : 126.2˚ (XNO-8020R) H : 77.9°/ V : 57.9°/ D : 98.7° (XNO-8030R) H : 50.7˚/ V :37.8˚/ D : 63.8˚ (XNO-8040R)	H : 92.1˚(Wide) ~ 38.7˚(Tele) V : 67.2˚(Wide) ~ 29.0˚(Tele) D : 119.9˚(Wide) ~ 48.6˚(Tele)	H : 97.5°/ V : 71.9°/ D : 126.2° (XND-8020R) H : 77.9°/ V : 57.9°/ D : 98.7° (XND-8030R) H : 50.7°/ V : 37.8°/ D : 63.8° (XND-8040R)	H : 97.5° / V : 71.9° / D : 126.2°
Pan / Tilt / Rotate	-	-	0˚ ~ 354˚ / 0˚ ~ 67˚ / 0˚ ~ 355˚	0° ~ 354° / 0° ~ 67°/ 0° ~ 355°	0°~355°/ 0°~47°/ 0°~353°
IR Viewable Length	50m (164.04ft)	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB	-
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support	Support (Built-in Gyro sensor)	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	People counting, Queue management, Heatmap	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Built-in mic / -
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP67, IP66, NEMA4X, IK10	IP67/IP66/NEMA4X, IK10	IK08	IK08	-
Power Consumption	PoE : Max 12.95W 12VDC : Max 12.5W 24VAC : Max 14.5W	PoE : Max 10.3W 12VDC : Max 9.3W	PoE : Max 10W 12VDC : Max 9W	PoE : Max 9W 12VDC : Max 8W	PoE : Max 4.7W
Dimensions (WxHxD) / Weight	Ø91 x 368.6mm (Ø6.3" x 4.67") 2.18kg (4.81lb)	Ø70 x 296mm (Ø2.76" x 11.65") 1.22kg (2.69lb)	Ø140.8 x 113mm (Ø5.54" x 4.45") 628g (1.38lb) (XND-8080R) 732g (1.61lb) (XND-8080RV)	Ø110 x 90mm (Ø4.33" x 3.54") 380g (0.84lb)	Ø98.9 x 129.1mm (Ø3.89" x 5.08") 275g (0.61lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

	XNV-8080R 5MP IR Vandal Dome Camera	**XNV-8080RSA** 5MP Stainless IR Vandal Dome Camera	**XNV-8020R/8030R/8040R** 5MP IR Vandal Dome Camera	**XNF-9010RV/9010RVM** 12MP IR Fisheye Camera	**XNF-9010RS** 12MP Stainless IR Fisheye Camera
Imaging Device	1/1.8" CMOS	1/1.8" CMOS	1/1.8" CMOS	1/2.3" 12MP CMOS	1/2.3" 12MP CMOS
Min. Illumination	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color: 0.39 Lux (F2.2) BW : 0Lux(IR LED on)	Color: 0.39 Lux (F2.2, 1/30sec) BW : 0Lux(IR LED on)
Video Output	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B
Focal Length	3.9~9.4mm (2.4x) motorized varifocal	3.9~9.4mm (2.4x) motorized varifocal	3.7mm fixed (XNV-8020R) 4.6mm fixed (XNV-8030R) 7.0mm fixed (XNV-8040R)	1.08mm fixed focal	1.08mm fixed focal
Angular Field of View	H : 92.1° (Wide) ~ 38.7° (Tele) V : 67.2° (Wide) ~ 29.0° (Tele) D : 119.9° (Wide) ~ 48.6° (Tele)	H : 92.1° (Wide) ~ 38.7° (Tele) V : 67.2° (Wide) ~ 29.0° (Tele) D : 119.9° (Wide) ~ 48.6° (Tele)	H : 97.5°/ V : 71.9°/ D : 126.2° (XNV-8020R) H : 77.9°/ V : 57.9°/ D : 98.7° (XNV-8030R) H : 50.7°/ V : 37.8°/ D : 63.8° (XNV-8040R)	H: 187° / V: 187° / D: 187°	H: 187° / V: 187° / D: 187°
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	-	-
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)	10m (32.8ft), Wise IR	9m (29.53ft), Wise IR
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	extremeWDR (120dB)	extremeWDR (120dB)
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support (Built-in Gyro sensor)	-	-
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 /1	1 /1	1 /1	2 configured I / O	2 configured I/O
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable(mic in/line in), Built-in mic / Line out	Selectable(mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	3008 x 3008 / 30fps	3008 x 3008 / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI Wisenet open platform	ONVIF profile S/G, SUNAPI Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH	-40°C ~ +50°C (-40°F ~ +122°F) / Less than 95% RH
Certification	IP67, IP66, NEMA4X, IK10	IP66, NEMA4X, IP6K9K, IK10+	IP66, IP67, IK10	IP66, IK10, NEMA4X, EN50155 class T3 (XNF-9010RVM only)	IP66, IP67, IP6K9K, NEMA4X, IK10, IK10+, NSF/ ANSI Standard 169 – Special Purpose Food Equipment and Devices.
Power Consumption	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 9.00W 12VDC: Max 8.00W	PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W	PoE: Max 12.95W, typical 11W 12VDC: Max 11W, typical 9.1W
Dimensions (WxHxD) / Weight	Ø160 x 118.5mm (Ø6.3" x 4.67") 1.01kg (2.23lb)	Ø160 X 120.5mm (Ø6.38" x 4.74") 2.8kg (6.17lb)	Ø120 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)	Ø160 x 72mm (Ø6.38" x 2.83") 1100g (2.43lb)	Ø167.9 x 72.1mm (Ø66.1" x 28.38") 2.980g (6.57lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Various mode support (Original view, Double/ Single panorama, Quad view, Single view) M12 Connector (XNF-9010RVM)	Various mode support (Original view, Double/ Single panorama, Quad view, Single view)

Camera X series

	XNF-8010R/8010RV/8010RVM/8010RW 6MP IR Fisheye Camera	**XNZ-6320** 2MP 32x Zoom Camera	**XNZ-L6320** 2MP 32x Zoom Camera	**XNB-6005** 2MP Box Camera (extraLUX)	**XNB-6000** 2MP Box Camera
Imaging Device	1/1.8" CMOS	1/2.8"CMOS	1/2.8" CMOS	1/2" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.1Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)	Color : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)	Color : 0.006Lux (F1.2) B/W : 0.0006Lux (F1.2)	Color : 0.01Lux (F1.2) B/W : 0.001Lux (F1.2)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0 Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Focal Length	1.6mm fixed	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (32x) zoom	-	-
Angular Field of View	H : 192° / V : 192° / D : 192°	H: 64.66˚(Wide) ~ 2.29˚(Tele) V: 38.08˚(Wide) ~ 1.30˚(Tele)	H: 64.66˚(Wide) ~ 2.29˚(Tele) V: 38.08˚(Wide) ~ 1.30˚(Tele)	-	-
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	15m (49.21ft)	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification Shock detection	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	People counting, Queue management, Heatmap	-	-	-	-
Alarm I/O	1 / 1	1 / 2	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2048 x 2048 / 30fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F) (XNF-8010R) -40°C ~ +55°C (-40°F ~ +131°F) (XNF-8010RV/8010RVM)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IK10 (XNF-8010RV/8010RVM)	-	-	-	-
Power Consumption	PoE : Max 12W,12VDC : Max 11W (XNF-8010R/8010RW) PoE : Max 12.95W, 12VDC : Max 12W (XNF-8010RV/8010RVM)	PoE : Max 7W 12VDC : Max 6.7W	PoE : Max 6.8W 12VDC : Max 5.2W	PoE : Max. 8.5W 12VDC : Max 8W 24VAC : Max 9W	PoE : Max 7.5W 12VDC : Max 6.5W 24VAC : Max 8W
Dimensions (WxHxD) / Weight	Ø146 x 54.8mm (Ø5.75" x 2.16") 730g (1.61lb) (XNF-8010R/8010RW) Ø146 x 65.8mm (Ø5.75" x 2.59") 785g (1.73lb) (XNF-8010RV) 790g (1.74lb) (XNF-8010RVM)	W96 x H76 x D143.5mm (3.78″x 2.99″x 5.65″) 578g (1.274lb)	W72 x H63.9 x D135.4mm (2.83" x 2.52" x 5.33") 480g (1.06lb)	W73.1 x H 66.6 x D147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)	W73.1 x H66.6 x D147.8mm (2.88" x 2.62" x 5.82") 420g (0.93lb)
Additional Features	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarpping	SFP Slot	-	Handover, Hallway View	Handover, Hallway View

	XNB-6001 2MP Remote Head Camera	**SLA-T4680** 2MP lens for XNB-6001	**SLA-T4680V** 2MP lens for XNB-6001	**SLA-T2480** 2MP lens for XNB-6001	**SLA-T2480V** 2MP lens for XNB-6001	**SLA-T1080F** 2MP lens for XNB-6001
Imaging Device	-	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	-	Color : 0.06Lux (F2.5) B/W: 0.06Lux (F2.5)	Color : 0.06Lux (F2.5) B/W: 0.06Lux (F2.5)	Color : 0.45Lux (F2.0) B/W : 0.45Lux (F2.0)	Color : 0.45Lux (F2.0) B/W : 0.45Lux (F2.0)	Color : 0.03Lux (F1.6)
Video Output	CVBS 1.0Vp-p, Micro USB type B	-	-	-	-	-
Focal Length	-	4.6mm Pinhole	4.6mm Pinhole	2.4mm fixed	2.4mm fixed	1.6mm fisheye
Angular Field of View	-	H : 73° / V : 39° / D : 85°	H : 73° / V : 39° / D : 85°	H : 138° / V : 73° / D : 168°	H : 138° / V : 73° / D : 168°	H : 187° / V : 113.9°
Pan / Tilt / Rotate	-	-	-	-	-	-
IR Viewable Length	-	-	-	-	-	-
Day & Night	-	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	-	-	-	-	-
Digital Noise Reduction	SSNRV	-	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-	-
Analytics	Intelligent analytics Audio detection	-	-	-	-	-
Business Intelligence	People counting, Queue management, Heatmap	-	-	-	-	-
Alarm I/O	1 / 1	-	-	-	-	-
Audio I/O	Selectable (mic in/line in) / Line out	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps	-	-	-	-	-
WiseStream	WiseStream II	-	-	-	-	-
Streaming	Up to 10 Profiles	-	-	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-	-	-
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	-	-	-	-	-
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	-	-	-	-	-
Power Consumption	PoE : Max 6W 12VDC : Max 6.5W	-	-	-	-	-
Dimensions (WxHxD) / Weight	131.1 x 28 x 86mm (5.16" x 1.10" x 3.39") 245g (0.54 lb)	Ø24 x 42mm (Ø0.94" x 1.65") (Lens) 8m (314.96") (Cable) 310g (0.68 lb)	30 x 20.2 x 45mm (1.18" x 0.80" x 1.77") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)	Ø24 x 49.8mm (Ø0.94" x 1.96") (Lens) 8m (314.96") (Cable) 318g (0.70 lb)	30 x 27.9 x 45mm (1.18" x 0.10" x 1.77") (Lens) 8m (314.96") (Cable) 328g (0.72 lb)	Ø35 x 68.9mm (Ø1.38" x 2.71") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)
Additional Features	Handover, Hallway View	-	-	-	-	-

Camera X series

	XNB-H6240A 2MP Network ATM Camera Kit	XNB-H6241A ATM Camera Kit	XNB-H6461H Height Strip	XNB-H6280B Bandit Barrier	SLA-T4680D/T4680DW/T4680DS 2MP Door Jamb Lens
Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	-
Resolution / Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	-
Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	-
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	
Min. Illumination	Color : 0.45Lux B/W : 0.45Lux	Color : 0.45Lux B/W : 0.45Lux	0.06Lux	Color : 0.03 Lux (F1.6, 1/30sec)	0.06Lux
Video Output	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	-
Lens	2.4mm Fixed focal	2.4mm Fixed focal	4.6mm Fixed focal	2.8mm Fixed focal	4.6mm Pinhole (F2.5)
Angular Field of View	H : 138° /V : 73° / D : 168°	H : 138° /V : 73° / D : 168°	H : 73° / V : 39° / D : 85°	H : 107.4° / V : 62.2° / D : 122.0°	H : 73° / V : 39° / D : 85°
Focus Control	Fixed	Fixed	Fixed	Fixed	Fixed
IR Viewable Length	-	-	-	-	-
Pan / Tilt / Rotate	-	-	-	-	-
Day & Night	Auto (Electrical) / Color / B/W	Auto (Electrical) / Color / B/W	Auto (Electrical) / Color / B/W	Auto (Electrical) / Color / B/W / Schedule	Electrical
Backlight Compensation	Off / BLC / HLC / WDR (120dB)	WDR (120dB)	WDR (120dB)	Off / BLC / HLC (Masking / Dimming) / WDR	WDR (120dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	-
Digtial Image Stabilization	Off / On	Off / On	Off / On	Off / On	-
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog & Dust detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, People counting, Heatmap, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog & Dust detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, People counting, Heatmap, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog & Dust detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, People counting, Heatmap, Queue management	Tampering, Loitering, Directional / Virtual Line detection, Defocus detection, Fog detection, Enter / Exit, (Dis) Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification, People counting, Heatmap, Queue management	-
Protocol	TTCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/ v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour	TTCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/ v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour	TTCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/ v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour	TCP/IP, UDP/IP, RTP (UDP), RTP (TCP), RTCP,RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, PPPoE, FTP, SMTP, ICMP, IGMP, SNMPv1/ v2c/v3 (MIB-2), ARP, DNS, DDNS, QoS, PIM-SM, UPnP, Bonjour	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	-
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	-
Environment Protection	-	-	-	-	-
Operation Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Power Consumption	Max. 6.5W (12V DC) Max. 6W (PoE)	Max. 6.5W (12V DC) Max. 6W (PoE)	Max. 6.5W (12V DC) Max. 6W (PoE)	Max. 6.5W (12V DC) Max. 6W (PoE)	-
Dimensions (WxHxD) /Weight	131.1 x 28 x 86mm (5.16" x 1.10" x 3.39") 245g (0.54 lb)	131.1 x 28 x 86mm (5.16" x 1.10" x 3.39") 245g (0.54 lb)	866.1 x 43.7 x 35.1mm (1.72" x 34.10" x 1.38")	66.5x46x175~737mm (2.6x1.8x6.9~29.0")	Ø24 x 42mm (Ø0.94" x 1.65") (Lens) 8m (314.96") (Cable) 310g (0.68 lb)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Lens module for XNB-6001 SLA-T4680D (Black color) SLA-T4680DW (White color) SLA-T4680DS (Silver color)

	XNO-6120R / LPR 2MP IR Bullet Camera	**XNO-6085R** 2MP IR Bullet Camera (extraLUX)	**XNO-6080R** 2MP IR Bullet Camera	**XNO-L6080R** 2MP IR Bullet Camera	**XNO-6010R/6020R** 2MP IR Bullet Camera
Imaging Device	1/2.8" 2MP CMOS	1/2" 2.17MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.004Lux (F0.94) B/W : 0Lux (IR LED on)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.1Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.055lux (F2.0) (XNO-6010R) Color : 0.015lux (F1.4) (XNO-6020R) B/W: 0 Lux (IR LED On)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	5.2 ~ 62.4mm (Optical 12x)	4.1 ~ 16.4mm (Optical 4x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal	2.4mm fixed (XNO-6010R) 4mm fixed (XNO-6020R)
Angular Field of View	H : 54.58° (Wide) ~ 5.30° (Tele) / V : 32.19° (Wide) ~ 3.00° (Tele) / D : 61.40° (Wide) ~ 6.06° (Tele)	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 109.0° (Wide) ~ 33.2°(Tele) / V : 57.4° (Wide) ~ 18.7°(Tele) / D : 132.0° (Wide) ~ 38.0°(Tele)	H : 139.0° / V : 73.0° / D : 167.0° (XNO-6010R) H : 88.6° / V : 47.5° / D : 104.8° (XNO-6020R)
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	70m (229.66ft)	70m (229.66ft)	50m (164.04ft)	30m (98.42ft)	20m (65.62ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	120dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics	Intelligent analytics Audio detection Sound classification
Business Intelligence	-	-	-	-	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	-	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)"	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C
Certification	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP66, IK10	IP67, IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 12.95W 12VDC : Max 12.5W 24VAC : Max 14.5W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 12.95W	PoE : Max 12.95W 12VDC : Max 12W 24VAC : Max 15W	PoE : Max. 11W	PoE : Max 9.7W 12VDC : Max 8.8W
Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (Ø3.58" x 14.51") 2.18Kg (4.81 lb)	Ø91.0 x 388.6mm (Ø3.58" x 15.30") 2.35Kg (5.18 lb)	Ø91.0 x 368.6.mm (Ø3.58" x 14.51") 2.18Kg (4.81lb)	Ø91 x 322.9mm (Ø3.58" x 12.71") 1.29Kg (4.25 lb)	Ø70 x 301.5mm (Ø2.76" x 11.87") (XNO-6010R) Ø70 x 296mm (Ø2.76" x 11.65") (XNO-6020R) 1.22Kg (2.69 lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

Camera X series

	PTRZ				
	XND-6085 2MP Dome Camera (extraLUX)	**XND-6080V** 2MP Dome Camera	**XND-6080RV** 2MP IR Dome Camera	**XND-L6080RV** 2MP IR Dome Camera	**XND-L6080V** 2MP Dome Camera
Imaging Device	1/2" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.004Lux (F0.94) B/W : 0.0004Lux (F0.94)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0.01Lux (F1.6)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4.1~16.4mm (Optical 4x)	2.8 ~12mm (4.3x) motorized varifocal	2.8 ~12mm (4.3x) motorized varifocal	3.2 ~10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H : 100° (Wide) ~ 26.2° (Tele) V : 54° (Wide) ~14.8° (Tele) D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)
Pan / Tilt / Rotate	±175° / ±73° / ±175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	30m (98.43ft)	30m (98.42ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	150dB	150dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support	Support	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	-	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles	Up to 5 Profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IK08	IK08	IK08	IK08	IK08
Power Consumption	PoE : Max 10.2W 12VDC : Max 8.6W	PoE : Max 6.5W 12VDC : Max 6W	PoE : Max 10W 12VDC : Max 9W	PoE : Max 8W	PoE : Max 6W
Dimensions (WxHxD) / Weight	Ø160 x 140mm (Ø6.30" x 5.51") 1.10 kg (2.43lb) (XND-6085) 1.25 kg (2.76lb) (XND-6085V)	Ø140.8 x 113mm (Ø5.54" x 4.45") 610g (1.34lb) (XND-6080) 714g (1.57lb) (XND-6080V)	Ø140.8 x 113mm (Ø5.54" x 4.45") 624g (1.38lb) (XND-6080R) 724g (1.60lb) (XND-6080RV)	Ø140.8 x 113mm (Ø5.54" x 4.45") 580g (1.28lb) (XND-L6080R) 690g (1.52lb) (XND-L6080RV)	Ø140.8 x 113mm (Ø5.54" x 4.45") 675g (1.49lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Defog, Hallway View	Defog, Hallway View

	XND-6020R 2MP IR Dome Camera	**XND-6011F** 2MP Flush Mount Dome Camera	**XND-6010** 2MP Dome Camera	**XNV-6120/6120R / LPR** 2MP Vandal / IR Vandal Dome Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.03Lux (F1.6), B/W : 0.003Lux (F1.6) (XNV-6120) Color : 0.03Lux (F1.6), B/W : 0Lux (IR LED on) (XNV-6120R)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4mm fixed	2.8mm fixed	2.4mm fixed	5.2 ~ 62.4mm (Optical 12x)
Angular Field of View	H : 88.6° / V : 47.5° / D : 104.8°	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°	H : 54.58° (Wide) ~ 5.30° (Tele) V : 32.19° (Wide) ~ 3.00° (Tele) D : 61.40° (Wide)~ 6.06° (Tele)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67°/ 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 67°/ 0° ~ 355°	0° ~ 354° / 0°~ 75° / 0°~ 355°
IR Viewable Length	30m (98.43ft)	-	-	70m (229.66ft) (XNV-6120R)
Day & Night	Auto (ICR)	Auto (Electrical)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	-	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support	Support	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-
Alarm I/O	1 / 1	-	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Built-in mic / -	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)
Certification	IK08	-	IK08	IP67, IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 9W 12VDC : Max 8W	PoE : Max 4.7W	PoE : Max 6.5W 12VDC : Max 6W	PoE : Max. 7.8W, 12V DC : Max 7W, 24V AC : Max. 8.2W (XNV-6120) PoE : Max. 12.95W, 12V DC : Max. 11.5W, 24V AC : Max. 14W (XNV-6120R)
Dimensions (WxHxD) / Weight	Ø110 x 90mm (Ø4.33" x 3.54") 380g (0.84lb)	Ø98.9 x 129mm (Ø3.89" x 5.08") 275g (0.61lb)	Ø140.8 x 113mm (Ø5.54" x 4.45") 610g (1.34lb)	Ø160 x 128.5mm (Ø6.30" x 5.06") 985g (2.17lb) (XNV-6120) 995g (2.19lb) (XNV-6120R)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

Camera X series

	XNV-6085	XNV-6080	XNV-6080R	XNV-6080RSA	XNV-L6080
	2MP Vandal Dome Camera (extraLUX)	2MP Vandal Dome Camera	2MP IR Vandal Dome Camera	2MP Stainless IR Vandal Dome Camera	2MP Vandal Dome Camera
Imaging Device	1/2" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.004Lux (F0.94) B/W : 0.0004Lux (F0.94)	Color : 0.015Lux (F1.4) B/W : 0.015Lux (F1.4)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0.01Lux (F1.6)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4.1 ~ 16.4mm (Optical 4x)	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H : 100° (Wide) ~ 26.2° (Tele) V : 54° (Wide) ~ 14.8° (Tele) D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8 °(Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)
Pan / Tilt / Rotate	±175° / ±73° / ±175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	50m (164.04ft)	50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support	Support	Support	Support
Analytics	Intelligent analytics Audio detection Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)
Certification	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA4X, IK10	IP67/IP66/NEMA4X, IK10	IP66, NEMA4X, IP6K9K, IK10+	IP66, IK10
Power Consumption	PoE : Max 12.1W 12VDC : Max 11.1W 24VAC : Max 13.5W	PoE : Max 7.8W 12VDC : Max 7W 24VAC : Max 8.2W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 8W
Dimensions (WxHxD) / Weight	Ø160 x 140mm (Ø6.30" x 5.51") 1.40kg (3.09lb)	Ø160 x 118.5mm (Ø6.30" x 4.67") 985g (2.17lb)	Ø160 x 118.5mm (Ø6.30" x 4.67") 995g (2.19lb)	Ø160 x 120.5mm (Ø6.38" x 4.74") 2.8kg (6.17lb)	Ø160 x 118.5mm (Ø6.3" x 4.67") 940g (2.1lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View

	XNV-L6080R 2MP IR Vandal Dome Camera	**XNV-6022R/6022RM** 2MP Mobile IR Flat Camera	**XNV-6020R** 2MP IR Vandal Dome Camera	**XNV-6013M** 2MP Mobile Camera	**XNV-6012M/6012** 2MP Mobile Flat Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.04Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)	Color : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB Type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB Type B	Micro USB type B
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	3.6mm fixed	4mm fixed	2.8mm fixed	2.4mm fixed
Angular Field of View	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)	H : 94.8° / V : 49.3° / D : 114.3°	H : 88.6° / V : 47.5° / D : 104.8°	H : 107.4° / V : 62.2° / D : 122°	H : 135.4° / V : 71.2° / D : 161.6°
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / 0° ~ 67° / ±90°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / ±10° / ±90°	±5° / 0 ~ 67° / ±90°
IR Viewable Length	30m (98.43ft)	15m (49.21ft)	30m (98.43ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics	Intelligent analytics Audio detection Sound classification (w/ external MIC)	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification (w/ external MIC)
Business Intelligence	-	-	People counting, Queue management, Heatmap	-	-
Alarm I/O	-	-	1 / 1	-	-
Audio I/O	-	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 5 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/ SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10, NEMA4X	IP67, IP66, IK10	IP67, IP6K9K, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE : Max 11W	PoE : Max 6.70W	PoE : Max 9W 12V DC : Max 8W	PoE : Max 7.20W	PoE : Max 6.50W
Dimensions (WxHxD) / Weight	Ø160 x 118.5mm (Ø6.30" x 4.67") 940g (2.07lb)	W98.9 x H52 x D100mm (3.89" x 2.05" x 3.94") 295g (0.65lb)	Ø120 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)	W103.7 x H72.3 x D126.8mm (4.08" x 2.85" x 4.99") 478g (1.04lb)	W98.9 x H52 x D100mm (3.89" x 2.05" x 3.94") 295g (0.65lb)
Additional Features	Handover, Hallway View	M12 Connector (XNV-6022RM) Handover, Hallway View	Handover, Hallway View	M12 Connector Handover, Hallway View	M12 Connector (XNV-6012M) Handover, Hallway View

Camera X series

			PTZ PLUS	PTZ PLUS	PTZ PLUS
	XNV-6011/6011W 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	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.0055Lux (F2.0)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	-	-	-
Focal Length	2.8mm fixed	2.4mm fixed	5~150mm (30x) zoom	5~150mm (30x) zoom	4.25~170mm (40x) zoom
Angular Field of View	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°	H: 57.42° (Wide) ~ 2.19° (Tele) V: 33.54° (Wide) ~ 1.25° (Tele)	H: 57.42° (Wide) ~ 2.19° (Tele) V: 33.54° (Wide) ~ 1.25° (Tele)	H: 65.66° (Wide) ~ 1.88° (Tele) V: 39.40° (Wide) ~ 1.09° (Tele)
Pan / Tilt / Rotate	0° ~ 353° / 0°~ 59° / 0°~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / -20°~90° / -	360° Endless / -20°~90° / -	360° Endless / -5° ~ 90° / -
IR Viewable Length	-	-	200m (656.17ft)	200m (656.17ft)	200m (656.17ft)
Day & Night	Auto (Electrical)	Auto (ICR)	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule
Wide Dynamic Range	150dB	150dB	extreme WDR	extreme WDR	extreme WDR
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Intelligent analytics	Intelligent analytics Audio detection, Sound classification	Intelligent analytics, *Audio detection, Sound classification (with NW I/O Box : SPM-4210)	Intelligent analytics, *Audio detection, Sound classification (with NW I/O Box : SPM-4210)	Intelligent analytics, *Audio detection, Sound classification (with NW I/O Box : SPM-4210)
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-	-	-
Alarm I/O	-	1 / 1	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)
Audio I/O	-	Selectable (mic in/line in) / Line out	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265/H.264,MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	4K / 30fps	6MP / 30fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	Normal : -40°C~+55°(-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°(-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°(-40°F ~ +131°F) / Maximum Temperature based on NEMA-TS 2(2.2.7) : +74°C(+165°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)
Certification	IP66, IK10, NEMA4X	IP67, IP66, IK10	IP66, IK10 (Camera body only), NEMA4X	IP66, IK10 (Camera body only), NEMA4X	IP66, IK10 (Camera body only), NEMA4X
Power Consumption	PoE : Max 6.50W	PoE : Max 6W 12V DC : Max 5.5W	HPoE(Camera only): Max 42W, typical 20W	HPoE (Camera only): Max 42W, typical 20W	HPoE (Camera only): Max 42W, typical 20W
Dimensions (WxHxD) / Weight	Ø112.8 x 63.7mm (Ø4.44" x 2.51") 420g (0.93lb)	Ø120 x 97.5mm (Ø4.72" x 3.84") 625g (1.38lb)	Ø184.9 x 318.8mm (Ø7.28" x 12.55") 5.4kg	Ø184.9 x 318.8m (Ø7.28" x 12.55") 5.4kg	Ø184.9 x 318.8mm (Ø7.28" x 12.55") 5.4kg
Additional Features	Handover, Hallway View	Handover, Hallway View	1 Terminal & Cable, Upgraded preset accuracy, built-in wiper, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector	1 Terminal & Cable, Upgraded preset accuracy, built-in wiper, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector	1 Terminal & Cable, Upgraded preset accuracy, built-in wiper, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector

	PTZ PLUS NEW XNP-9250R 4K 25x IR PTZ Camera	PTZ PLUS NEW XNP-8250R 6MP 25x IR PTZ Camera	PTZ PLUS NEW XNP-6400R 2MP 40x IR PTZ Camera	PTZ PLUS NEW XNP-9250 4K 25x PTZ Camera	PTZ PLUS NEW XNP-8250 6MP 25x PTZ Camera	PTZ PLUS NEW XNP-6400 2MP 40x PTZ Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0.01Lux (IR LED On)	Color: 0.1Lux (F1.6, 1/30sec) BW: 0.01Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (IR LED On)
Video Output	-	-	-	-	-	-
Focal Length	5~1250mm(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) ~ 2.19˚ (Tele) V: 33.54˚ (Wide) ~ 1.25˚ (Tele)	H: 57.42˚ (Wide) ~ 2.19˚ (Tele) V: 33.54˚ (Wide) ~ 1.25˚ (Tele)	H: 65.66˚ (Wide) ~ 1.88˚ (Tele) V: 39.40˚ (Wide) ~ 1.09˚ (Tele)	H: 57.42˚ (Wide) ~ 2.19˚ (Tele) V: 33.54˚ (Wide) ~ 1.25˚ (Tele)	H: 57.42˚ (Wide) ~ 2.19˚ (Tele) V: 33.54˚ (Wide) ~ 1.25˚ (Tele)	H: 65.66˚ (Wide) ~ 1.88˚(Tele) V: 39.40˚ (Wide) ~ 1.09˚(Tele)
Pan / Tilt / Rotate	360˚ Endless / 110˚(-20˚~90˚) / -	360˚ Endless / 110˚(-20˚~90˚) / -	360˚ Endless / 110˚(-20˚~90˚) / -	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 (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule	Auto (ICR)/Color/BW/Schedule
Wide Dynamic Range	extreme WDR	extreme WDR	extreme WDR	extreme WDR	extreme WDR (120dB)	extreme WDR
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Intelligent analytics * Audio detection, Sound classification (with NW I/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NW I/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NW I/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NW I/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NW I/O Box : SPM-4210)	Intelligent analytics * Audio detection, Sound classification (with NW I/O Box : SPM-4210)
Business Intelligence	-	-	-	-	-	-
Alarm I/O	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	-
Audio I/O	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	Compatible with NW I/O Box (Optional)	-
Video Compression	H.265/H.264: Main/Baseline/High, MJPEG	H.265/H.264: Main/Baseline/High, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	4K / 30fps	6MP / 30fps	2MP / 60fps	4K / 30fps	6MP / 30fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	Micro SD/SDHC/SDXC	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	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	Normal : -40°C~+55°(-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°(-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°(-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°(-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°(-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°(-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, NEMA TS-2 (2.2.8, 2.2.9)	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	HPoE (Camera only): Max 42W typical 20W	HPoE (Camera only): Max 42W typical 20W	HPoE (Camera only): Max 42W typical 20W	HPoE (Camera only): Max 42W typical 20W	HPoE (Camera only): Max 42W typical 20W	HPoE (Camera only): Max 42W typical 20W
Dimensions (WxHxD) / Weight	Ø158 x 293.3mm (Ø6.22" x11.55") 3.2kg (7.05lb)	Ø158 x 293.3mm (Ø6.22" x11.55") 3.2kg (7.05lb)	Ø158 x 293.3mm (Ø6.22" x11.55") 3.2kg (7.05lb)	Ø158 x 293.3mm (Ø6.22" x11.55") 3.2kg (7.05lb)	Ø158 x 293.3mm (Ø6.22" x11.55") 3.2kg (7.05lb)	Ø158 x 293.3mm (Ø6.22" x11.55") 3.2kg (7.05lb)
Additional Features	1 Terminal & Cable, Upgraded preset accuracy, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector	1 Terminal & Cable, Upgraded preset accuracy, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector	1 Terminal & Cable, Upgraded preset accuracy, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector	1 Terminal & Cable, Upgraded preset accuracy, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector	1 Terminal & Cable, Upgraded preset accuracy, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector	1 Terminal & Cable, Upgraded preset accuracy, Deep learning based object auto tracking, Target lock tracking Included SFP slot in HPoE injector

Camera X series

	XNP-6550RH 2MP 55x IR PTZ Camera	**XNP-6320HS** 2MP 32x IR PTZ Camera	**XNP-6120H** 2MP 12x PTZ Camera	**XNP-6040H** 2MP 4.3x PTZ Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.02Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.05Lux (F1.6) B/W : 0Lux (IR LED On)	Color : 0.03Lux (F1.6) B/W : 0.003Lux (F1.6)	Color : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)
Video Output	CVBS 1.0 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	4.44 ~ 142.6mm (32x) 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 : 61.8˚ (Wide) ~ 2.19˚ (Tele) V : 36.2˚ (Wide) ~ 1.24˚ (Tele)	H : 54.58° (Wide) ~ 5.30 ° (Tele) V : 32.19° (Wide) ~ 3.00° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) V : 62.8° (Wide) ~ 15.7 ° (Tele) D : 142.1° (Wide) ~ 32.0° (Tele)
Pan / Tilt / Rotate	360° Endless / 95° (-5° ~ 90°) / -	360˚ Endless / 95˚(-5˚ ~ 90˚) / -	360° Endless / 190° (-5° ~ 185°) / -	0° ~ 355° / 0° ~ 90°
IR Viewable Length	500m (1,640.42ft)	200m (656.17ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	150dB	150dB	150dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification Shock detection	Intelligent analytics Audio detection, Sound classification	Intelligent analytics Audio detection, Sound classification
Business Intelligence	-	-	-	-
Alarm I/O	4 / 2	4 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	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/SDH C/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-50°C ~ +55°C (-122°F ~ +131°F) * Start up above -30°C (HPoE Mode)	HPoE : -40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C 24VAC : -50°C ~ +55°C (-58°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	HPoE : 60W 24VAC : Max 92W	HPoE : Max 51W, typical 30W 24VAC : Max 83W, typical 30W	PoE, 12VDC : Max 12W	PoE : Max 9.6W 12VDC : Max 8.6W
Dimensions (WxHxD) / Weight	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1kg (15.65lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 6.8kg (14.99lb)	Ø168 x 161.5mm (Ø6.61" x 6.36") 1.9kg (4.19 lb)	Ø136.1 x 106.1mm (Ø5.36"x 4.18") 0.78kg (1.72 lb)
Additional Features	Defog, Auto tracking	Defog, Auto tracking, Direction indicator	Defog, Auto tracking	Defog, Auto tracking

	NEW **PNM-9031RV** 15MP 192˚ IR Panoramic Camera	 **PNM-9022V** 8.3MP 180°/209° Panoramic Camera	 **PNM-9085RQZ** 5MP x 4CH IR PTRZ Multi-directional Camera
Imaging Device	1/2.8" 5MP CMOS (x4)	1/2.8" 4CH	1/1.8" CH
Min. Illumination	Color: 0.1Lux(F1.6, 1/30sec) BW: 0Lux(IR LED on)	Color: 0.3Lux(F1.6) Color: 0.03Lux(F1.6)	Color : 0.11lux (F1.6) BW : 0Lux (IR LED on)
Video Output	Micro USB Type B	Micro USB Type B	-
Focal Length	4.3mm Fixed	2.8mm fixed focal	4.13~9.4mm (2.3x) motorized varifocal
Angular Field of View	192°(H) x 65°(V)	H: 209°, V: 83.3°	H : 87.58° (Wide) ~ 37.34° (Tele) V : 64.58° (Wide) ~ 28.04° (Tele) D : 112.46° (Wide) ~ 46.85° (Tele)
Pan / Tilt / Rotate	0~355˚ / 0~60˚ / -	0°~355° / 0°~60° / -	0~360˚ / 35~80˚ / 0~90˚
IR Viewable Length	Wise IR 20m (65.6ft)	-	30m (98.42ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	extreme WDR (120dB)	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	-	-	Support
Analytics	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection	Intelligent analytics Audio detection
Business Intelligence	Heatmap	Heatmap	-
Alarm I/O	Selectable 2 port	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	15MP / 20fps	8.3MP / 30fps	5MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 4 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	Micro SD/SDHC/SDXC 2slots 512GB (256GBx2)	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, Wisenet open platform	ONVIF profile S/T, SUNAPI, Wisenet Open Platform
Operating Temperature	- Normal : -40°C~+55°(-40°F ~ +131°F) / - Intermittent : -40°C~+60°C(-40°F ~ +140°F), 8Hrs - Less than 95% RH(Non-condensing) * Startup should be above -30°C	-40°C ~ +60°C (-40°F ~ +131°F) / Less than 95% RH (Non-condensing) * Maximum temperature : +60°C (intermittent)	-40°C ~ +55°C (-40°F ~ +131°F)
Certification	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE+: Max 23.5W, Typical 18.0W 12VDC: Max 20.5W, Typical 16.0W	PoE+: Max 18W, Typical 10.4W 12VDC: Max 16W, Typical 9W	Max 45W, typical 32W
Dimensions (WxHxD) / Weight	Ø253 x 170mm 2.6kg	Ø253 x 165mm (Ø9.96" x 6.5") 3.2kg	Ø315 x 145.9mm (Ø12.4" x 5.74") 5.2kg (11.46lb)
Additional Features	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection, 4CH Stitching	4CH Stitching	Motorized PTRZ

Camera P series

PNM-9084RQZ
2MP x 4CH IR PTRZ Multi-directional Camera

PNM-9084QZ
2MP x 4CH PTRZ Multi-directional Camera

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

	PNM-9084RQZ	PNM-9084QZ	PNM-8082VT
Imaging Device	1/2.8" 4CH	1/2.8" 4CH	1/2.8" CMOS 3CH
Min. Illumination	Color : 0.05lux (F1.6) BW : 0Lux (IR LED on)	Color : 0.08lux (F2.2) BW : 0.008lux (F2.2)	Color: 0.04lux(F2.2) BW: 0.004lux(F2.2)
Video Output	-	-	CVBS: 1.0 Vp-p
Focal Length	3.2~10mm (3.1x) motorized varifocal	3 ~ 6mm (2x) motorized varifocal	3~6mm (2x) motorized varifocal
Angular Field of View	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)	H : 107° (Wide) ~ 56.3° (Tele) V : 57° (Wide) ~ 31.5° (Tele) D : 126° (Wide) ~ 64.3° (Tele)	H: 107° (Wide) ~ 56.3° (Tele) V: 57° (Wide) ~ 31.5° (Tele) D: 126° (Wide) ~ 64.3° (Tele)
Pan / Tilt / Rotate	0~360° / 30~80° / 0~90°	0° ~ 360° / 0° ~ 90° / 0° ~ 90°	0~360° / 0~73° / 0~90°
IR Viewable Length	30m (98.42ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	extreme WDR (150dB)
Digital Noise Reduction	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support	Support	Support
Analytics	Intelligent analytics Audio detection	Intelligent analytics Audio detection	Defocus detection, Directional detection, Motion detection, Enter/Exit,Tampering, Virtual line
Business Intelligence	-	-	-
Alarm I/O	1 / 1	1 / 1	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	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	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/T, SUNAPI, Wisenet Open Platform	ONVIF profile S/T, SUNAPI, Wisenet Open Platform	ONVIF Profile S/G/T SUNAPI(HTTP API)
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH (Non condensing) *Start up should be above at -35°C
Certification	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	Max 42W, typical 28W	HPoE : Max 33W typical 20W	Max : 16.5W, Typical : 8.2W
Dimensions (WxHxD) / Weight	Ø315 x 145.9mm (Ø12.4" x 5.74") 5.2kg (11.46lb)	Ø251 x 116.5mm (Ø9.88" x 4.59") 3kg (6.6lb)	Ø251 x 116.5mm (Ø9.88" x 4.59") 3kg (6.6lb)
Additional Features	Motorized PTRZ	Motorized PTRZ, Hallway view, Defog	3CH Multi-directional

	PNM-9322VQP 2MP/5MP x 4CH + 2MP 32 x 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	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)
Video Output	CVBS 1.0 Vp-p	-	-	-
Focal Length	4.44~142.6mm (32x) zoom (PTZ)	7.0mm fixed	4.6mm fixed	3.7mm fixed
Angular Field of View	depeding on lens	H : 50.7˚ / V : 37.8˚ / D : 63.8˚	H : 77.9˚ / V : 57.9˚ / D : 98.7˚	H : 97.5˚ / V : 71.9˚ / D : 126.2˚
Pan / Tilt / Rotate	-	±90° / +12˚ ~ +93˚ / ±180˚	±90° / +21˚ ~ +85˚ / ±180˚	±90° / +36˚ ~ +73˚ / ±180˚
IR Viewable Length	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	2MP 150dB, 5MP 120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Defocus detection, Directional detection, Face detection, Fog detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	Selectable(mic in/line in) / Line out (PTZ)	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps, 5MP 30fps	-	-	-
WiseStream	WiseStreamII	-	-	-
Streaming	Up to 10 Profiles	-	-	-
Edge Storage	Micro SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S SUNAPI (HTTP API)	-	-	-
Operating Temperature	-35°C ~ +55°C (-31°F ~ +131°F) Less than 90% RH	-	-	-
Certification	IP66, IK10	-	-	-
Power Consumption	HPoE: Max 65W	-	-	-
Dimensions (WxHxD) / Weight	Ø367.8 x 335.7mm (Ø14.48" x 13.22") 7.05kg (16.1 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)
Additional Features	Exchangeable 4ea x 2MP / 5MP lens modules, Hallway view, Defog	-	-	-

Camera P series

	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	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	"Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)"
Video Output	-	-	-	-	-
Focal Length	6.0mm fixed	3.6mm fixed	2.8mm fixed	2.4mm fixed	12mm fixed
Angular Field of View	H : 50.4˚ / V : 28.8˚ / D : 58.1˚	H : 94.8˚ / V : 49.3˚ / D : 114.3˚	H : 107.4˚ / V : 62.2˚ / D : 122.0˚	H : 135.4˚ / V : 71.2˚ / D : 161.6˚	H : 26.3˚ / V : 14.9˚ / D : 30.0˚
Pan / Tilt / Rotate	±90˚ / +10˚ ~ +95˚ / ±180˚	±90˚ / +22˚ ~ +84˚ / ±180˚	±90˚ / +26˚ ~ +80˚ / ±180˚	±90˚ / +52˚ ~ +56˚ / ±180˚	±90˚ / +10˚ ~ +97˚ / ±180˚
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	-	-	-	-	-
Digital Image Stabilization	-	-	-	-	-
Analytics	-	-	-	-	-
Business Intelligence	-	-	-	-	-
Alarm I/O	-	-	-	-	-
Audio I/O	-	-	-	-	-
Video Compression	-	-	-	-	-
Resolution / Max. Frame Rate	-	-	-	-	-
WiseStream	-	-	-	-	-
Streaming	-	-	-	-	-
Edge Storage	-	-	-	-	-
Application Programming Interface	-	-	-	-	-
Operating Temperature	-	-	-	-	-
Certification	-	-	-	-	-
Power Consumption	-	-	-	-	-
Dimensions (WxHxD) / Weight	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07lb)
Additional Features	-	-	-	-	-

	PNM-9002VQS 8MP-20MP Stainless Steel Multi-directional	**SLA-5M7000Q** 5MP lens for PNM-9002VQS	**SLA-5M4600Q** 5MP lens for PNM-9002VQS	**SLA-5M3700Q** 5MP lens for PNM-9002VQS
Imaging Device	4ea x 2MP / 5MP	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS
Min. Illumination	Color : 0.05Lux (F1.6) BW : 0.005Lux (F1.6) (PTZ)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	CVBS 1.0 Vp-p	-	-	-
Focal Length	1~4CH: Optional lens 5CH: 4.44~142.6mm (32x) zoom	7.0mm	4.6mm	3.7mm
Angular Field of View	H : 61.8°(Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	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° / +90˚ / 40°~89° / -180˚ / +180˚	-90° / +90˚ / 50°~80° / -180˚ / +180˚	-90° / +90˚ / 59°~66° / -180˚ / +180˚
IR Viewable Length	-	-	-	-
Day & Night	1~4CH: Auto (Electrical), 5CH: Auto (ICR)	Electrical	Electrical	Electrical
Wide Dynamic Range	150dB (2MP), 120dB (5MP)	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Intelligent analytics	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	-	-	-
Audio I/O	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	5MP / 30fps, 2MP / 60fps	-	-	-
WiseStream	WiseStream II	-	-	-
Streaming	Multiple Streaming (Up to 10 Profiles)	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S/T, SUNAPI (HTTP API)	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-	-	-
Certification	IP6K9K, IP66, IK10	-	-	-
Power Consumption	Max 25.5W	-	-	-
Dimensions (WxHxD) /Weight	Ø130 x 253mm (Ø12.375" x 7.52") 1.5" NPT	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)
Additional Features	Stainless steel housing for harsh environments, 1.5" NPT hanging mount	-	-	-

Camera P series

	SLA-2M6000Q 2MP lens for PNM-9002VQS	SLA-2M3600Q 2MP lens for PNM-9002VQS	SLA-2M2800Q 2MP lens for PNM-9002VQS	SLA-2M2400Q 2MP lens for PNM-9002VQS
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	-	-	-	-
Focal Length	6.0mm	3.6mm	2.8mm	2.4mm
Angular Field of View	H : 50.4˚ / V : 28.8˚ / D : 58.1˚	H : 94.8˚ / V : 49.3˚ / D : 114.3˚	H : 107.4˚ / V : 62.2˚ / D : 122.0˚	H : 135.4˚ / V : 71.2˚ / D : 161.6˚
Pan / Tilt / Rotate	-90° / +90˚ / 30°~89° / -180˚ / +180˚	-90° / +90˚ / 37°~89° / -180˚ / +180˚	-90° / +90˚ / 40°~89° / -180˚ / +180˚	-90° / +90˚ / 62° / -180˚ / +180˚
IR Viewable Length	-	-	-	-
Day & Night	Electrical	Electrical	Electrical	Electrical
Wide Dynamic Range	150dB	150dB	150dB	150dB
Digital Noise Reduction	-	-	-	-
Digital Image Stabilization	-	-	-	-
Analytics	-	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	-	-	-	-
Resolution / Max. Frame Rate	-	-	-	-
WiseStream	-	-	-	-
Streaming	-	-	-	-
Edge Storage	-	-	-	-
Application Programming Interface	-	-	-	-
Operating Temperature	-	-	-	-
Certification	-	-	-	-
Power Consumption	-	-	-	-
Dimensions (WxHxD) / Weight	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)
Additional Features	-	-	-	-

	PNM-9000VD 10MP 2CH Multi-directional Camera	**SLA-5M7000D** 5MP lens for PNM-9000VD	**SLA-5M4600D** 5MP lens for PNM-9000VD	**SLA-5M3700D** 5MP lens for PNM-9000VD
Imaging Device	-	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS
Min. Illumination	-	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Color : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)
Video Output	CVBS 1.0 Vp-p	-	-	-
Focal Length	-	7.0mm fixed	4.6mm fixed	3.7mm fixed
Angular Field of View	-	H : 50.7˚ / V : 37.8˚ / D : 63.8˚	H : 77.9˚ / V : 57.9˚ / D : 98.7˚	H : 97.5˚ / V : 71.9˚ / D : 126.2˚
Pan / Tilt / Rotate	-	±90° / 36˚ ~ 73˚ / ±180˚	±90° / 36˚ ~ 73˚ / ±180˚	±90° / 36˚ ~ 73˚ / ±180˚
IR Viewable Length	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Intelligent analytics	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	5MP / 30fps	-	-	-
WiseStream	WiseStream II	-	-	-
Streaming	Up to 10 Profiles	-	-	-
Edge Storage	Micro SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S/G, SUNAPI, Wisenet open platform	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-	-	-
Certification	IP66, IK10	-	-	-
Power Consumption	PoE : 12.95W	-	-	-
Dimensions (WxHxD) / Weight	Ø197.6 x 84mm (Ø7.78" x 3.31") 1250g (2.76 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)
Additional Features	Exchangeable 2ea x 5MP lens modules, Hallway view, Defog	-	-	-

Camera P series

	PNM-7002VD 2MP 2CH Multi-directional Camera	**SLA-2M6002D** 2MP lens for PNM-7002VD	**SLA-2M3602D** 2MP lens for PNM-7002VD	**SLA-2M2802D** 2MP lens for PNM-7002VD	**SLA-2M2402D** 2MP lens for PNM-7002VD
Imaging Device	-	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	-	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Color : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	CVBS 1.0 Vp-p	-	-	-	-
Focal Length	-	6.0mm fixed	3.6mm fixed	2.8mm fixed	2.4mm fixed
Angular Field of View	-	H : 50.4˚ / V : 28.8˚ / D : 58.1˚	H : 94.8˚ / V : 49.3˚ / D : 114.3˚	H : 107.4˚ / V : 62.2˚ / D : 122.0˚	H : 135.4˚ / V : 71.2˚ / D : 161.6˚
Pan / Tilt / Rotate	-	±176° / 0˚ ~ 65˚ / ±90˚	±176° / 0˚ ~ 54˚ / ±90˚	±176° / 0˚ ~ 50˚ / ±90˚	±176° / 0˚ ~ 30˚ / ±90˚
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-
Analytics	Intelligent analytics	-	-	-	-
Business Intelligence	-	-	-	-	-
Alarm I/O	-	-	-	-	-
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps	-	-	-	-
WiseStream	WiseStream II	-	-	-	-
Streaming	Up to 10 Profiles	-	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-	-
Application Programming Interface	ONVIF Profile S/T, SUNAPI	-	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-	-	-	-
Certification	IP66, IK10	-	-	-	-
Power Consumption	PoE : 12.95W	-	-	-	-
Dimensions (WxHxD) / Weight	Ø197.6 x 84.0mm (Ø7.78" x 3.31") 1250g (2.76 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)
Additional Features	Exchangeable 2ea x 2MP lens modules	-	-	-	-

	PNM-9000QB 2MP x 4CH Remote Head Camera	**SLA-T4680VA** 2MP lens for PNM-9000QB	**SLA-T4680A** 2MP lens for PNM-9000QB	**SLA-T2480VA** 2MP lens for PNM-9000QB	**SLA-T2480A** 2MP lens for PNM-9000QB	**SLA-T1080FA** 2MP lens for PNM-9000QB
Imaging Device	2MP x 4CH	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	-	Color : 0.06Lux (F2.5)	Color : 0.06Lux (F2.5)	Color : 0.045Lux (F2.0)	Color : 0.045Lux (F2.0)	Color : 0.03Lux (F1.6)
Video Output	HDMI	-	-	-	-	-
Focal Length	-	4.6mm fixed focal	4.6mm fixed focal	2.4mm fixed focal	2.4mm fixed focal	1.6mm fixed focal
Angular Field of View	-	H : 73˚ / V : 39˚ / D : 85˚	H : 73˚ / V : 39˚ / D : 85˚	H : 138˚ / V : 73˚ / D : 165˚	H : 138˚ / V : 73˚ / D : 165˚	H : 187˚ / V : 118.9˚
Pan / Tilt / Rotate	-	-	-	-	-	-
IR Viewable Length	-	-	-	-	-	-
Day & Night	Auto (Electrical)	-	-	-	-	-
Wide Dynamic Range	120dB	-	-	-	-	-
Digital Noise Reduction	SSNRV	-	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-	-
Analytics	Intelligent analytics	-	-	-	-	-
Business Intelligence	-	-	-	-	-	-
Alarm I/O	2 / 2	-	-	-	-	-
Audio I/O	-	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-	-	-
Resolution / Max. Frame Rate	2MP / 30fps	-	-	-	-	-
WiseStream	WiseStream II	-	-	-	-	-
Streaming	Unicast (20 Users) Multiple streaming (Up to 12 profiles)	-	-	-	-	-
Edge Storage	Micro SD/SDHC/SDXC	-	-	-	-	-
Application Programming Interface	ONVIF Profile S/T, SUNAPI (HTTP API)	-	-	-	-	-
Operating Temperature	-10°C ~ +45°C (-40°F ~ +131°F)	-	-	-	-	-
Certification	-	-	-	-	-	-
Power Consumption	PoE: Max 22W, Typical 16.70W DC: Max 19W, Typical: 14W	-	-	-	-	-
Dimensions (WxHxD) /Weight	7.87" (200mm) W x 1.45" (37mm) H x 5.74" (146mm) D / 1.57lbs (715g)	W30XH27.9xD45mm 321g	Ø24 x L49.8 mm 310g	W30XH27.9xD45mm 328g	Ø24 x L49.8 mm 318g	Ø35 x 68.9 mm 430g
Additional Features	HDMI - Single / Quad view support	Max Aperature Ratio: F2.5, RJ12 connected with main unit	Max Aperature Ratio: F2.5, RJ12 connected with main unit	Max Aperature Ratio: F2.0, RJ12 connected with main unit	Max Aperature Ratio: F2.0, RJ12 connected with main unit	Max Aperature Ratio: F1.6, RJ12 connected with main unit

Camera Q series

	QNO-8080R 5MP IR Bullet Camera	**QNO-8030R** 5MP IR Bullet Camera	**QNO-8020R** 5MP IR Bullet Camera	**QNO-8010R** 5MP IR Bullet Camera	**QND-8080R** 5MP IR Dome Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 0.15 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	6.0mm fixed	4.0mm fixed	2.8mm fixed	3.2 ~10mm (3.1x) motorized varifocal
Angular Field of View	H : 100.3° (Wide) ~ 31.2° (Tele) V : 72.3° (Wide) ~ 23.5° (Tele) D : 133.1° (Wide) ~ 38.8° (Tele)	H : 49.4° / V : 37.4° / D : 61.0°	H : 79.8° / V : 58.1° / D : 105.9°	H : 104.7° / V : 76.5° / D : 136.0°	H : 100.3 °(Wide) ~ 31.2 °(Tele) V : 72.3 °(Wide) ~ 23.5 °(Tele) D : 133.1 °(Wide) ~ 38.8 °(Tele)
Pan / Tilt / Rotate	-	-	-	-	0˚~350˚ / 0˚ ~ 67˚ / 0˚ ~ 355˚
IR Viewable Length	30m (98.43ft)	30m (98.42ft)	25m (82.02ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +50°C (+14°F ~ +122°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	-
Power Consumption	PoE : Max 9.5W, typical 7.3W	PoE : Max 7.5W, typical 6.1W	PoE : Max 7.5W, typical 6.1W	PoE : Max 7.5W, typical 6.1W	PoE : Max 8.9W, typical 6.6W
Dimensions (WxHxD) / Weight	Ø91 x 322.9mm (Ø3.58" x 12.71") 1190g (2.624lb)	Ø70 x 246mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø70 x 246mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø70 x 246mm (Ø2.76" x 9.69") 680g (1.499lb)	Ø120.3 x 102mm (Ø4.74" x 4.02") 430g (0.948lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View

				Q mini	Q mini
	QND-8030R 5MP IR Dome Camera	**QND-8020R** 5MP IR Dome Camera	**QND-8010R** 5MP IR Dome Camera	**QND-8021** 5MP Dome Camera	**QND-8011** 5MP Dome Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6)	Color : 0.15Lux (F2.0)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	Micro HDMI	Micro HDMI
Focal Length	6.0mm fixed	4.0mm fixed	2.8mm fixed	4mm fixed	2.8mm fixed
Angular Field of View	H : 49.4° / V : 37.4° / D : 61.0°	H : 79.8° / V : 58.1° / D : 105.9°	H : 104.7° / V : 76.5° / D : 136.0°	H : 80.1° / V : 58.0° / D : 105.8°	H : 104.4° / V : 76.7° / D : 136.1°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	People counting	People counting
Alarm I/O	1 / 1	1 / 1	1 / 1	-	-
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +40°C (+14°F ~ +104°F)	-10°C ~ +40°C (+14°F ~ +104°F)
Certification	-	-	-	IP42, IK08	IP42, IK08
Power Consumption	PoE : Max 6.8W, typical 5.0W	PoE : Max 6.8W, typical 5.0W	PoE : Max 7.5W, typical 5.8W	PoE : Max 5W, typical 4W	PoE : Max 5W, typical 4W
Dimensions (WxHxD) / Weight	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794lb)	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794lb)	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794lb)	Ø99 x 56mm (Ø3.9" x 2.2") 165g (0.364lb)	Ø99 x 56mm (Ø3.9" x 2.2") 165g (0.364lb)
Additional Features	Hallway View	Hallway View	Hallway View	Super compact design, Hallway View	Super compact design, Hallway View

Camera Q series

	QNV-8080R 5MP IR Vandal Dome Camera	**QNV-8030R** 5MP IR Vandal Dome Camera	**QNV-8020R** 5MP IR Vandal Dome Camera	**QNV-8010R** 5MP IR Vandal Dome Camera	**QNE-8021R** 5MP Box Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" 5MP CMOS
Min. Illumination	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.15Lux (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	CVBS 1.0 Vp-p
Focal Length	3.2 ~10mm (3.1x) motorized varifocal	6.0mm fixed	4.0mm fixed	2.8mm fixed	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 : 49.4° / V : 37.4° / D : 61.0°	H : 79.8° / V : 58.1° / D : 105.9°	H : 104.7° / V : 76.5° / D : 136.0°	H : 80.1° / V : 58.0° / D : 105.8°
Pan / Tilt / Rotate	0°~ 350° / 0°~ 67° / 0°~355°	0°~ 350° / 0°~ 67° / 0°~ 355°	0°~ 350° / 0°~ 67° / 0°~ 355°	0°~ 350° / 0°~ 67° / 0°~ 355°	0° ~ 350° / 0° ~ 75° / 0° ~ 360°
IR Viewable Length	30m (98.42ft)	30m (98.42ft)	25m (82.02ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP67, IK10
Power Consumption	PoE : Max 8.9W, typical 6.6W	PoE : Max 7.2W, typical 5.4W	PoE : Max 7.2W, typical 5.4W	PoE : Max 7.5W, typical 5.8W	PoE : Max 7.4W, typical 5.5W
Dimensions (WxHxD) / Weight	Ø137 x 106.1mm (Ø5.39" x 4.18") 700g (1.543lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	Ø125 x 87.35mm (Ø4.92" x 3.44") 645g (1.422 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View

	QNE-8011R 5MP IR Flateye Camera	**QNO-7082R** 4MP IR Bullet Camera	**QNO-7032R** 4MP IR Bullet Camera	**QNO-7022R** 4MP IR Bullet Camera	**QNO-7012R** 4MP IR Bullet Camera
Imaging Device	1/2.8" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
Min. Illumination	Color : 0.15Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.1Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)
Video Output	-	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	2.8mm fixed	3.2~10mm (3.1x) motorized varifocal	6mm fixed focal	4mm fixed focal	2.8mm fixed focal
Angular Field of View	H : 104.4° V : 76.7° D : 136.1°	H : 98.6°(Wide) ~ 30.8°(Tele) V : 52.3°(Wide) ~ 17.3°(Tele) D : 115.7°(Wide) ~ 35.3°(Tele)	H : 49.0° V : 27.6° D : 55.6°	H : 78.2° V : 41.2° D : 92.0°	H : 107.5° V : 59.7° D : 122.0°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 75° / 0° ~ 360°	-	-	-	-
IR Viewable Length	20m (65.62ft)	30m(98.42ft)	30m(98.42ft)	25m (82.02ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	-	1/1	1/1	1/1	1/1
Audio I/O	-	Line in / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	4MP / 30fps	4MP / 30fps	4MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	Unicast (6 users) / Multicast Multiple streaming (Up to 3 profiles)
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH * Start up should be done at -30°C or above
Certification	IP67, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 7.4W, typical 5.5W	PoE: Max 11.4W, typical 8W 12VDC: Max 9.6W, typical 7W	PoE: Max 10.7W, typical 8W 12VDC: Max 9.1W, typical 6.8W	PoE: Max 10.7W, typical 8W 12VDC: Max 9.1W, typical 6.8W	PoE: Max 10.7W, typical 8W 12VDC: Max 9.1W, typical 6.8W
Dimensions (WxHxD) / Weight	Ø125 x 87.35mm (Ø4.92" x 3.44") 645g (1.422lb)	Ø78 x 259.8mm (Ø3.07" x 10.23") 900g (1.984 lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543 lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543 lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543 lb)
Additional Features	Hallway View	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line

Camera Q series

	QNO-6082R/6082R1 2MP IR Bullet Camera	**QNO-6032R** 2MP IR Bullet Camera	**QNO-6022R** 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	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	6mm fixed	4mm fixed	2.8mm fixed
Angular Field of View	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)	H : 52.8° / V : 30.3° / D : 60.4°	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	30m (98.43ft)	30m (98.43ft)	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 Stabilization	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / -	Selectable (mic in/line in)	Selectable (mic in/line in)	Selectable (mic in/line in) / -
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	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 7W, typical 5.2W 12VDC : Max 6.1W, typical 4.5W	PoE : Max 7W, typical 5.2W 12VDC : Max 6.1W, typical 4.5W	PoE : Max 7W, typical 5.2W 12VDC : Max 6.1W, typical 4.5W
Dimensions (WxHxD) /Weight	Ø78 x 259.8mm (Ø3.07" x 10.23") 900g (1.984lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)	Ø70 x 246mm (Ø2.76" x 9.69") 700g (1.543lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View

	NEW **QND-7082R** 4MP IR Dome Camera	NEW **QND-7032R** 4MP IR Dome Camera	NEW **QND-7022R** 4MP IR Dome Camera	NEW **QND-7012R** 4MP IR Dome Camera
Imaging Device	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
Min. Illumination	Color : 0.1Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS : 1.0 Vpp/75Ω composite, 720x480(N), 720x576(P) for installation
Focal Length	3.2~10mm (3.1x) motorized varifocal	6mm fixed focal	4mm fixed focal	2.8mm fixed focal
Angular Field of View	H : 98.6˚ (Wide) ~ 30.8˚ (Tele) V : 52.3˚ (Wide) ~ 17.3˚ (Tele) D : 115.7˚ (Wide) ~ 35.3˚ (Tele)	H : 49.0˚ V : 27.6˚ D : 55.6˚	H : 78.2˚ V : 41.2˚ D : 92.0˚	H : 107.5˚ V : 59.7˚ D : 122.0˚
Pan / Tilt / Rotate	0°~350° / 0°~67° / 0°~355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-
Alarm I/O	1/1	1/1	1/1	1/1
Audio I/O	Built-in mic / -	Built-in mic / -	Built-in mic / -	Built-in mic / -
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	4MP / 30fps	4MP / 30fps	4MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)
Operating Temperature	-10°C~+55°C (+14°F~+131°F) / Less than 95% RH	-10°C~+55°C (+14°F~+131°F) / Less than 95% RH	-10°C~+55°C (+14°F~+131°F) / Less than 95% RH	-10°C~+55°C (+14°F~+131°F) / Less than 95% RH
Certification	-	-	-	-
Power Consumption	PoE: Max 8.6W, typical 6.3W 12VDC: Max 7.6W, typical 5.4W	PoE: Max 7.9W, typical 6.1W 12VDC: Max 7.1W, typical 5.1W	"PoE: Max 7.9W, typical 6.1W 12VDC: Max 7.1W, typical 5.1W"	PoE: Max 7.9W, typical 6.1W 12VDC: Max 7.1W, typical 5.1W
Dimensions (WxHxD) / Weight	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 320g (0.705 lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562 lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562 lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562 lb)
Additional Features	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line

Camera Q series

	QND-6082R/6082R1 2MP IR Dome Camera	**QND-6032R** 2MP IR Dome Camera	**QND-6022R** 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	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	6mm fixed	4mm fixed	2.8mm fixed
Angular Field of View	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)	H : 52.8° / V : 30.3° / D : 60.4°	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Buit-in mic / -	Buit-in mic	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 7.4W, typical 6W 12VDC : Max 6.4W, typical 5.1W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W, typical 5.1W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W, typical 5.1W
Dimensions (WxHxD) /Weight	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 320g (0.705lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562lb)	Ø110 x 86mm (Ø4.33" x 3.39") 255g (0.562lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View

	Q mini	Q mini	NEW	NEW	NEW
	QND-6021 2MP Dome Camera	**QND-6011** 2MP Dome Camera	**QNV-7082R** 4MP IR Vandal Dome Camera	**QNV-7032R** 4MP IR Vandal Dome Camera	**QNV-7022R** 4MP IR Vandal Dome Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS
Min. Illumination	Color : 0.03Lux (F1.6)	Color : 0.03Lux (F2.0)	Color : 0.1Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.15Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)
Video Output	Micro HDMI	Micro HDMI	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	4mm fixed	2.8mm fixed	3.2~10mm(3.1x) motorized varifocal	6mm fixed focal	4mm fixed focal
Angular Field of View	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°	H : 98.6° (Wide) ~ 30.8° (Tele) V : 52.3° (Wide) ~ 17.3° (Tele) D : 115.7° (Wide) ~ 35.3° (Tele)	H : 49.0°, V : 27.6°, D : 55.6°	H : 78.2°, V : 41.2°, D : 92.0°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0° ~ 350° / 0° ~ 69° / 0° ~ 355°	0°~350° / 0°~67° / 0°~355°	0°~350° / 0°~67° / 0°~355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	-	30m (98.42ft)	30m (98.42ft)	25m (82.02ft)
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	People counting	People counting	-	-	-
Alarm I/O	-	-	1 / 1	1 / 1	1 / 1
Audio I/O	-	-	Line in / -	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	4MP / 30fps	4MP / 30fps	4MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB	Micro SD/SDHC/SDXC 1slot 128GB
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)	ONVIF Profile S/G/T, SUNAPI (HTTP API)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH * Start up should be done at -30°C or above	-40°C~+55°C (-40°F~+131°F) / Less than 95% RH * Start up should be done at -30°C or above
Certification	IP42, IK08	IP42, IK08	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 4.8W, typical 2.8W	PoE : Max 4.8W, typical 2.8W	PoE: Max 11.4W, typical 8.5W 12VDC: Max 9.6W, typical 7.2W	PoE: Max 10.7W, typical 8.1W 12VDC: Max 9.1W, typical 6.5W	PoE: Max 10.7W, typical 8.1W 12VDC: Max 9.1W, typical 6.5W
Dimensions (WxHxD) / Weight	Ø99 x 56mm (Ø3.9" x 2.2") 145g (0.320lb)	Ø99 x 56mm (Ø3.9" x 2.2") 145g (0.320lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 710g (1.565 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)
Additional Features	Super compact design, Hallway View	Super compact design, Hallway View	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line

Camera Q series

	NEW **QNV-7012R** 4MP IR Vandal Dome Camera	 **QNV-6082R/6082R1** 2MP IR Vandal Dome Camera	 **QNV-6032R** 2MP IR Vandal Dome Camera	NEW **QNV-6022R/6022R1** 2MP IR Vandal Dome Camera	 **QNV-6012R/6012R1** 2MP IR Vandal Dome Camera
Imaging Device	1/3" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.15Lux (F2.0, 1/30sec) B/W : 0Lux (IR LED On)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	2.8mm fixed focal	3.2 ~ 10mm (3.1x) motorized varifocal	6mm fixed	4mm fixed	2.8mm fixed
Angular Field of View	H : 78.2˚, V : 41.2˚, D : 92.0˚	H : 109.0° (Wide) ~ 33.2° (Tele) V : 57.4° (Wide) ~ 18.7° (Tele) D : 132.0° (Wide) ~ 38.0° (Tele)	H : 52.8° / V : 30.3° / D : 60.4°	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.74° / V : 61.5° / D : 134.45°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)	30m (98.42ft)	30m (98.42ft)	25m (82.02ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (mic in/line in)	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	4MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC 1slot 128GB	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)	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	-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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE: Max 10.7W, typical 8.1W 12VDC: Max 9.1W, typical 6.5W	PoE : Max 7.7W, typical 6W 12VDC : Max 6.5W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W
Dimensions (WxHxD) / Weight	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 710g (1.565lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)
Additional Features	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Hallway View	Hallway View	Hallway View	Hallway View

			Q mInI	Q mInI	
	QNV-6024RM 2MP IR Flat Camera	**QNV-6023R** 2MP IR Flat Camera	**QNP-6230RH** 2MP 23x IR PTZ Camera	**QNF-9010** 12MP Fisheye Camera	**QNP-6320** 2MP 32x PTZ Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.3" 12MP CMOS	1/2.8" CMOS
Min. Illumination	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.03Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.05Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.19 Lux (F2.2)	Color: 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	CVBS 1.0 Vp-p	-
Focal Length	3.6mm fixed	3.6mm fixed	4.44~102.2mm(23x) optical zoom	1.08mm fixed	4.44~142.6mm (32x) zoom
Angular Field of View	H : 94.8°, V : 49.3°, D : 114.3°	H : 94.8°, V : 49.3°, D : 114.3°	H : 61.8°(Wide)~3.08°(Tele) / V : 36.2°(Wide)~1.73°(Tele)	H : 187° / V : 187° / D : 187°	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.30° (Tele)
Pan / Tilt / Rotate	±5°/0-67°/±90°	±5°/0-67°/±90°	-	-	-
IR Viewable Length	15m(49.21ft)	15m(49.21ft)	100m(328.08ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto(ICR)	Auto (Electrical)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	-	-	Support(built-in gyro sensor)	-	Support (built-in gyro sensor)
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	People counting, Heatmap	-
Alarm I/O	-	-	4 / 2.	-	4 / 2
Audio I/O	Selectable (Built-in mic) / Line out	Line in / -	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 / 30fps	2MP / 30fps	2MP / 30fps	9MP / 30fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStreamII
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 10 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	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, Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	24VAC : -50°C~+55°C (-58°F ~ +131°F) HPoE : -40°C~+55°C (-40°F ~ +131°F) * Start up above -35°C	-10°C ~ +40°C (+14°F ~ +104°F)	-10°C~+55°C (14°F ~ +131°F) / Less than 95% RH
Certification	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10	-	-
Power Consumption	PoE : Max 6.7W, typical 5W	PoE : Max 6.7W, typical 5W	24VAC : Max. 83W, typical : 30W HPoE : Max. 51W, typical : 30W	PoE: Max 7.5W, typical 6.2W	Max. 14.5W, Typ. 12W
Dimensions (WxHxD) / Weight	98.9 x 52.0 x 100.0mm (3.89"x 2.05"x 3.94") 295g(0.65 lb)	98.9 x 52.0 x 100.0mm (3.89"x 2.05"x 3.94") 295g (0.65 lb)	Ø236.9x407.7mm (9.33" x 16.05") 6.8Kg (14.99 lb)	Ø99 x 49 mm (Ø3.9" x 1.93") 370g (0.82lb)	Ø152 x 218mm (Ø5.98" x 8.58") 1.7kg (3.75 lb)
Additional Features	M12 connector, Hallway View	Hallway View	Defog	Panorama view, Busieness Intelligence	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection

Camera Q series

	QNP-6320H 2MP 32x PTZ Camera	**QNP-6320R** 2MP 32x IR PTZ Camera	**QNP-6250** 2MP 25x PTZ Camera	**QNP-6250H** 2MP 25x PTZ Camera	**QNP-6250R** 2MP 25x IR PTZ Camera
Imaging Device	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0.005Lux (F1.6, 1/30sec)	Color: 0.05Lux (F1.6, 1/30sec) BW: 0Lux (IR LED On)
Video Output	-	-	-	-	-
Focal Length	4.44~142.6mm (32x) zoom	4.44~142.6mm (32x) zoom	4.44~111mm (25x) zoom	4.44~111mm (25x) zoom	4.44~111mm (25x) zoom
Angular Field of View	H: 64.66° (Wide) ~ 2.29° (Tele) V: 38.08° (Wide) ~ 1.30° (Tele)	H: 61.8° (Wide) ~ 2.19° (Tele) V: 36.2° (Wide) ~ 1.24° (Tele)	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)	H: 64.66° (Wide) ~ 2.99° (Tele) V: 38.08° (Wide) ~ 1.68° (Tele)
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	-	100m (328.08ft)	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)	Support (built-in gyro sensor)
Analytics	Intelligent analytics * Audio detection (with NW I/O Box)	Intelligent analytics * Audio detection (with NW I/O Box)	Intelligent analytics	Intelligent analytics * Audio detection (with NW I/O Box)	Intelligent analytics * Audio detection (with NW I/O Box)
Business Intelligence	-	-	-	-	-
Alarm I/O	-	-	4 / 2	-	-
Audio I/O	-	-	Selectable (mic in/line in) / -	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII	WiseStreamII
Streaming	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	Micro SD/SDHC/SDXC 1slot 256GB	Micro SD/SDHC/SDXC 1slot 256GB	Micro SD/SDHC/SDXC 1slot 256GB	Micro SD/SDHC/SDXC 1slot 256GB	'Micro SD/SDHC/SDXC 1slot 256GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	Normal : -35°C~+55°(-31°F ~ +131°F) / Intermittent : -40°C~+60°C (-40°F ~ +140°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)	Normal : -35°C~+55° (-31°F ~ +131°F) / Intermittent : -40°C~+60°C (-40°F ~ +140°F) * Start up should be done at above -30°C Less than 95% RH (Non-condensing)	-10°C~+55°C (14°F ~ +131°F) Less than 95% RH	Normal : -35°C~+55°(-31°F ~ +131°F) / Intermittent : -40°C~+60°C (-40°F ~ +140°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)	Normal : -35°C~+55° (-31°F ~ +131°F) / Intermittent : -40°C~+60°C (-40°F ~ +140°F) * Start up should be done at above -30°C Less than 95% RH(Non-condensing)
Certification	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	-	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	Max. 23W, Typ. 14W	Max. 25.5W, Typ. 14.7W	Max. 14.5W, Typ. 12W	Max. 23W, Typ. 14W	Max. 25.5W, Typ. 14.7W
Dimensions (WxHxD) / Weight	Ø204.3 x 265mm (Ø8.04" x 10.43") 2.7kg (5.95lb)	Ø158 x 293.3mm 3.1kg	Ø152 x 218mm (Ø5.98" x 8.58") 1.7kg (3.75 lb)	Ø204.3 x 265mm (Ø8.04" x 10.43") 2.7kg (5.95lb)	Ø158 x 293.3mm 3.1kg
Additional Features	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection(with NW I/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection(with NW I/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line, Audio detection	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection(with NW I/O Box)	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line * Audio detection(with NW I/O Box)

			NEW	NEW	
	TNM-3620TDY Temperature Detection Thermal Camera		**TNB-9000** 8K Box Camera	**TNV-8011C** 5MP Corner Mount Camera	**TNV-7011RC** 3MP Corner Mount Camera
Imaging Device	**Thermal** Uncooled micro bolometer	**Visible** 1/2.8" CMOS	43.3mm Full-frame CMOS	1/2.8" CMOS	1/2.8" CMOS
Min. Illumination	-	Color : 0.05 lux (F1.6, 1/30sec) B/W : 0.005 lux (F1.6, 1/30sec)	Color : 0.015Lux (F1.4) BW : 0.0015Lux (F1.4)	Color: 0.1 lux (F2.3, 1/30sec) B/W: 0.02 lux (F2.3, 1/30sec)	Color : 0.3Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	CVBS : 1.0 Vp-p, Micro USB Type B		HDMI	CVBS: 1.0 Vp-p/ USB: Micro USB Type B	CVBS 1.0 Vp-p
Focal Length	4.7mm fixed focal	4mm fixed focal	-	2.3mm fixed	2.8mm fixed
Angular Field of View	H : 50.0˚, V : 36.4˚, D : 65.3˚	H : 87.6, V : 46.4°, D : 104.5°	Canon 24mm, H: 57.4° Canon 35mm, H: 42.6° Canon 50mm, H: 30.9° Canon 85mm, H: 19.1° Canon 100mm, H: 16.0° Canon 70-200mm, H: 22.8° ~ 8.0°	H: 131° / V: 93.4° / D: 174°	H: 102˚ / V:75˚ / D: 129˚
Pan / Tilt / Rotate	-		-	-	0˚ / ±15˚ / 0˚
IR Viewable Length	-		-	-	10m (32.8ft) with 940nm IR LED
Day & Night	-	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	extreme WDR	-	120dB	120dB
Digital Noise Reduction	-	SSNR V	SSNR V	SSNR III	SSNRV
Digital Image Stabilization	Support (built-in gyro sensor)		-	Support	Support
Analytics	-		Intelligent analytics, Audio detection, Sound classification	Defocus detection, Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line	Intelligent analytics , Audio detection Sound classification, Shock detection
Business Intelligence	Normal mode : Directional detection, Motion detection, Enter/Exit,Tampering,Virtual line, Audio detection, Temperature detection EBT mode : Temperature detection, Blackbody abnormality		-	People counting	-
Alarm I/O	1 / 2		1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out		Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), 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	1280 x 960 / 30fps	1920 x 1080 / 30fps	8K/15fps, 24MP/20fps, 15MP/30fps, 4K/60fps	5MP / 30fps	3MP / 30fps
WiseStream	WiseStream II		WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 6 Profiles		Up to 3 Profiles	Up to 3 profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC		Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/T, SUNAPI		ONVIF Profile S/G/T SUNAPI	ONVIF Profile S/G/T SUNAPI (HTTP API) Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	EBT mode : +10°C~+35°C (+50°F~+95°F) / Less than 95% RH Normal mode : -10°C~+55°C (+14°F~+131°F) / Less than 95% RH		0°C ~ +45°C (32°F ~ +122°F)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 95% RH	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-		EMC	IP66, IK10	IP66, IP6K9K, IK10+
Power Consumption	PoE+: Max. 17.0W, typical 12.5W 12VDC: Max. 14.5W, typical 11.0W		PoE : Max 30W, typical 20W 12VDC : Max 26W, typical 18W	PoE : Max 12W 12VDC : Max 11W	PoE : Max 12W 12VDC : Max 11W
Dimensions (WxHxD) / Weight	W135 x H75 x D188.5mm (5.31" x 2.95" x 7.42") 1712g (3.77lb)		W120 x H118.5 x D179mm (4.72" x 4.66" x 7.04") 2.2kg (4.85lb)	W170 x H165 x D78.8mm (6.69" x 6 .49" x 3.1") 830g (1.83lb)	295.5 x 113.5mm (11.6" x 4.47") 2.1kg (4.63lb)
Additional Features	Bi-spectrum camera, Two temperature detection mode, Face detection, Blackbody (SPI-35B) is optional		Super high resolution, Canon EF mount	Anti ligature design, Invisible IR LED, Hallway View	Anti ligature design, Invisible IR LED, Hallway View

Camera T series

	TNO-X6320E 2MP Explosion-proof Camera	**TNU-X6320E** 2MP Explosion-proof PTZ Camera	**TNU-6321** 2MP 32x Positioning Camera	**TNU-4041T / 4051T** VGA Thermal Positioning Camera
Imaging Device	1/2.8" 2.4M CMOS	1/2.8" 2.4M CMOS	1/2.8" CMOS	Uncooled Micro bolometer
Min. Illumination	Color : 0.05Lux B/W : 0.005Lux	Color : 0.05Lux B/W : 0.005Lux	Color : 005Lux (F1.6) B/W : 0.005Lux (F1.6)	-
Video Output	-	-	CVBS: 1.0Vp-p	CVBS : 1.0 Vp-p
Focal Length	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 142.6mm (32x)	19mm / 35mm fixed
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 : 62.8˚ (Wide) ~ 2.19˚ (Tele) / V : 36.2˚ (Wide) ~ 1.24˚ (Tele)	H : 32˚ / V : 24.3˚ / D : 39.2˚ H : 17.2˚ / V : 13˚ / D : 22˚
Pan / Tilt / Rotate	-	360° Endless / 180°	360˚ Endless (-90˚ ~ 40˚) 0.036° ~ 120°/sec	360˚ Endless / -90˚ ~ 40˚
IR Viewable Length	-	-	-	-
Day & Night	Auto (ICR) / Color / B/W	Auto (ICR) / Color / B/W	Auto (ICR)	-
Wide Dynamic Range	150dB	150dB	120dB	-
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	-
Digital Image Stabilization	On / Off (Built-in gyro sensor)	On / Off (Built-in gyro sensor)	Support	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection, Sound classification, Shock detection	Motion detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Intelligent analytics	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature change detection
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	-	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	-	-	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	Support	H.264, H.265, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	H.264 / H.265 : 60fps Motion JPEG : 30fps	2MP / 60fps	2MP / 60fps	640 x 480 / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Unicast / Multicast	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC, NAS, Local PC	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, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	T1: -40°C ~ +60°C (-40°F ~ +140°F); T2: -60°C ~ +60°C (-76°F ~ +140°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	IP66/67, IP68	IP66/67	IP66, Safety(UL, KC-SDOC), EMC(FCC, CE, VCCI, RCM, KC)	IP66, NEMA 4X, IK10
Power Consumption	PoE: Max 12W	Up to 80W Maximum (depending on model)	24VAC : Max 100W - Heater On Typical 25W - Heater Off	24VAC : Max 84W - Heater On Max 62W - Heater Off
Dimensions (WxHxD) / Weight	Up to 8.54Kg (18.9lb)	Up to 53Kg (117lb)	219.0 x 528.2 x 460.0mm (8.62" x 20.79" x 18.11") 14Kg (30.86 lb)	219 x 528 x 335mm (8.62" x 20.79" x 13.19") 11.7 kg (25.79lb)
Additional Features	Intelligent video/audio analytics, motion detection, day & night (ICR), HLC, auto focus, auto iris, AGC, SSDR, SSNRIII, BLC, Gyro DIS, Defog	Intelligent video analytics, motion detection, day & night (ICR), HLC, auto focus, auto iris, AGC, SSDR, SSNRIII, BLC, Gyro DIS, Defog	Defog, microSD	Various color palettes

Camera T series

	TNO-4051T VGA Thermal Camera	**TNO-4050T** VGA Thermal Camera	**TNO-4041T** VGA Thermal Camera	**TNO-4041TR** VGA Radiometric Thermal 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	CVBS : 1.0 Vp-p
Focal Length	35mm fixed	35mm fixed	19mm fixed	19mm fixed
Angular Field of View	H : 17.2˚ / V : 13˚ / D : 22˚	H : 17.2˚ / V : 13˚ / D : 22˚	H : 32° / V : 24.3° / D : 39.2°	H : 32° / V : 24.3° / D : 39.2°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	-	-	-
Wide Dynamic Range	-	-	-	-
Digital Noise Reduction	-	-	-	-
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature change detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature change detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature change detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	1 / 2	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	IP66, NEMA 4X	IP66, NEMA 4X	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W
Dimensions (WxHxD) / Weight	Ø101.97 x 309mm (Ø4.01" x 12.17") 2,501g (5.51 lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3,175g (7.0 lb)	Ø101.97 x 309mm (Ø4.01" x 12.17") 2,501g (5.51 lb)	Ø101.97 x 309mm (Ø4.01" x 12.17") 2,452g (5.41lb)
Additional Features	Various color palettes, PT type	Various color palettes	Various color palettes, PT type	Various color palettes Spot temperature reading, PT type

Camera T series

TNO-4040T
VGA Thermal Camera

TNO-4040TR
VGA Radiometric Thermal Camera

TNO-4030T
VGA Thermal Camera

TNO-4030TR
VGA Radiometric Thermal Camera

	TNO-4040T VGA Thermal Camera	TNO-4040TR VGA Radiometric Thermal Camera	TNO-4030T VGA Thermal Camera	TNO-4030TR VGA Radiometric Thermal Camera
Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Min. Illumination	-	-	-	-
Video Output	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B
Focal Length	19mm fixed	19mm fixed	13mm fixed	13mm fixed
Angular Field of View	H : 32° / V : 24.3° / D : 39.2°	H : 32° / V : 24.3° / D : 39.2°	H : 48.6° / V : 36.4° / D : 61.6°	H : 48.6° / V : 36.4° / D : 61.6°
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	-	-	-
Wide Dynamic Range	-	-	-	-
Digital Noise Reduction	-	-	-	-
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	1 / 2	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps	640 x 480 / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W
Dimensions (WxHxD) / Weight	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3,175g (7.0 lb)	Φ101.97 x 401.8mm (Φ4.01" x 15.82") 3,124g (6.89lb)	Ø147.51 x 401.8mm (Ø5.81" x 15.82") 3,173g (7.0 lb)	Φ101.97 x 401.8mm (Φ4.01" x 15.82") 3,124g (6.89lb)
Additional Features	Various color palettes	Various color palettes Spot temperature reading	Various color palettes	Various color palettes Spot temperature reading

Camera T series

TNO-3010T
QVGA Thermal Bullet Camera

TNO-3020T
QVGA Thermal Bullet Camera

TNO-3030T
QVGA Thermal Bullet Camera

TNO-3040T
QVGA Thermal Bullet Camera

Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer
Min. Illumination	-	-	-	-
Video Output	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B
Focal Length	2.7mm fixed focal	4.7mm fixed focal	13.7mm fixed focal	19mm fixed focal
Angular Field of View	H :92.0˚, V :65.5˚, D :125.7˚	H :50.0˚ / V :36.4˚ / D :65.3˚	H :16.0˚ / V :12.0˚ / D :20.0˚	H: 11.5˚ / V: 8.7˚ / D: 14.4˚
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	-	-	-	-
Wide Dynamic Range	-	-	-	-
Digital Noise Reduction	-	-	-	-
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics Audio detection Sound classification Shock detection Temperature detection	Intelligent analytics Audio detection Sound classification Shock detection Temperature detection	Intelligent analytics Audio detection Sound classification Shock detection Temperature detection	Intelligent analytics Audio detection Sound classification Shock detection Temperature detection
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	1 / 2	1 / 2	1 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	320 x 240 / 30fps	320 x 240 / 30fps	320 x 240 / 30fps	320 x 240 / 30fps
WiseStream	WiseStreamII	WiseStreamII	WiseStreamII	WiseStream c
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/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10
Power Consumption	PoE : Max. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W	PoE : Max. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W	PoE : Max. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W	PoE : Max. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W
Dimensions (WxHxD) / Weight	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)	Ø147.51 x 375.3mm (Ø5.81x14.78") 2.51kg (5.538lb)	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2.51kg (5.538lb)
Additional Features	Various color palettes	Various color palettes	Various color palettes	Various color palettes

Camera T series

	TNO-3050T QVGA Thermal Bullet Camera	**TNO-6010M** 2MP Front-Facing Mobile Camera	**TNB-6030** Public View Monitoring Camera	**TID-600R** 2MP Network Intercom Station
Imaging Device	Uncooled Micro bolometer	1/2.8" 2MP CMOS	1/2.8" 2 MP CMOS	1/2.8" CMOS
Min. Illumination	-	Color : 0.04Lux (F2.0) B/W : 0.004Lux (F2.0)	Color : 0.06 Lux (1/30sec, F2.5)	Color: 0.018lux (F1.6, 1/30sec) BW: 0 Lux (IR LED On)
Video Output	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	Micro HDMI (Max. 1920 x 1080 60fps)	CVBS: 1.0 Vp-p / 75Ω composite, 720x480(N), 720x576(P) for installation
Focal Length	35mm fixed focal	2.8mm fixed	13mm fixed	1.6mm fixed focal
Angular Field of View	H: 6.3˚ / V: 4.7˚/ D: 7.8˚	H : 113.7˚ / V: 61.5˚ / D: 134.5˚	4.5mm	H: 180˚ / V: 114˚ / D: 180˚
Pan / Tilt / Rotate	-	360˚ / 1st tilt adjustment 0˚ to 120˚, 2nd tilt adjustment -30˚ to 90˚ / ±90˚	-	-
IR Viewable Length	-	-	-	5m
Day & Night	-	Auto (ICR) / Color / B/W / External / Schedule	Auto (Electrical) / Color / B/W	Auto (ICR)
Wide Dynamic Range	-	150dB	150dB	WDR (150dB)
Digital Noise Reduction	-	SSNR V (2D + 3D noise filter) (Off / On)	SSNRV (2D+3D noise lter) (O / On)	SSNR V
Digital Image Stabilization	Support (Built-in Gyro sensor)	Off / On	Off / On	Support
Analytics	Intelligent analytics, Audio detection, Sound classification, Shock detection Temperature detection	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Enter/Exit, (Dis)Appear, Face detection, Motion detection, Digital auto tracking	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Enter/Exit, (Dis)Appear, Face detection, Motion detection, Digital auto tracking	Directional detection, Motion detection, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Shock detection
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	-	1 / 1	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	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	320 x 240 / 30fps	30fps	30fps	2MP / 60fps
WiseStream	WiseStreamII	WiseStream II	WiseStream II	WiseStreamII
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC/NAS	Micro SD/SDHC/SDXC 1slot 256GB
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 SUNAPI (HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-30°C ~ +55°C (-22°F ~ +131°F)	+14°F ~ +122°F (-10°C ~ +50°C)	-30°C~+55°C (-22°F ~ +131°F) Less than 95% RH
Certification	IP66, NEMA 4X	IP66, NEMA 4X, IK10	-	IP65, IK08, NEMA4X, Safety (UL), EMC (FCC, CE)
Power Consumption	PoE : Max. 8.7W, typical 7.5W 12VDC : Max. 7.8W, typical 6.7W 24VAC : Max. 9.2W, typical 8.0W	PoE: Max 8W Typical: 4.3W	PoE : Max 7W 12VDC : Max 6W	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 401.3mm (Ø5.81"x15.79") 2.74kg (6.05lb)	Ø62 x 372mm (2.44Øx14.65") w/o hood, Adjustable length +0-63mm 1170g (2.58lb)	Main unit : 9.45" x 1.81" x 0.98" (240 x 46 x 25mm) Lens: 1.18" x 1.77" x 0.8" (30 x 45 x 20.4mm) 245g (0.64 lb)	W49 x H165 x D48mm (1.93" x 6.5" x 1.89") 490g
Additional Features	Various color palettes	-	Face detection overlay, text overlay, blinking "Recording in progress"	SIP 2.0, Touchless call, Tamper Switch

Camera T series

	TNM-P9022EPT3-Z Explosion Proof Panoramic 209° Camera	**TNP-X6322EPT3-Z** Explosion Proof PTZ Dome Camera	**TNP-Q6232EPT3-Z** Explosion Proof PTZ Dome Camera	**TNO-P9072EPT1-Z** 4K AI Explosion Proof Fixed Camera
Imaging Device	1/2.8" CMOS x 4	1/2.8" 2.4MP CMOS	1/2.8" 2.4MP CMOS	1/1.8" 8MP CMOS
Min. Illumination	Color : 0.1Lux (F1.6), B/W : 0.01Lux (F1.6)	Color : 0.05Lux (F1.6), B/W : 0.005Lux (F1.6)	Color : 0.2Lux (F1.6), B/W : 0.01Lux (F1.6)	Color : 0.03Lux (F1.2), B/W : 0.003Lux (F1.2)
Video Output	Installation : 1280x720, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B
Focal Length	2.8mm fixed focal x 4	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 102.2mm (Optical 23x)	3.9 ~ 10mm
Angular Field of View	H : 209°/180° V : 83°	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	H : 61.8° (Wide) ~ 3.08° (Tele) / V : 36.2° (Wide) ~ 1.73° (Tele)	-
Pan / Tilt / Rotate	0°~355° / 0°~60° / -	360°	360°	-
IR Viewable Length	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR) / Color / B/W / External / Schedule	Auto (ICR) / Color / B/W / External / Schedule	Auto (ICR) / Color / B/W / External / Schedule
Wide Dynamic Range	Extreme WDR (120dB)	150dB	120dB	120dB
Digital Noise Reduction	SSNR V	SSNR V (2D + 3D noise filter) (Off / On)	SSNR V (2D + 3D noise filter) (Off / On)	SSNR V
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Defocus detection, Motion detection, Appear/Disappear, Enter/Exit, Tampering, Virtual line, Audio detection	Tampering, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, (Dis) Appear, Face detection, Motion detection	Tampering detection, Motion detection	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis) Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification
Business Intelligence	Heatmap	-	-	-
Alarm I/O	Selectable 2 Port	1 / 2	4 / 2	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	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 / 60fps	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 / 60fps	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 / 30fps	38240 x 2160, 3072 x 1728, 2592 x 1944, 2688 x 960, 2560 x 1440, 2048 x 1536, 1920 x 1080, 1600 x 1200, 1280 x 1024, 800 x 600, 720 x 576, 640 x 480 / 30fps
WiseStream	-	WiseStream II	WiseStream II	WiseStream II
Streaming	Unicast (20 Users) / Multicast, Multiple streaming (Up to 10 Profiles)	Up to 10 Profiles	Up to 10 Profiles	Up to 3 Profiles
Edge Storage	SD/SDHC/SDXC 2 slots 1TB (512GB x 2)	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	Normal: -40°C ~ +55°C (-40°F ~ +131°F) Intermittent: -40°C ~ +60°C (-40°F ~ +140°F)	-20°C ~ +55°C (-4°F ~ +131°F)	-20°C ~ +55°C (-4°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	-	NEMA 4X, IP66	NEMA 4X, IP66	NEMA 4X, IP66
Power Consumption	PoE+: Max 18W, Typical 10.4W	PoE+: Max 30W, Max 24W (Heater off) Max 65W (Heater on)	PoE+: Max 30W, Max 24W (Heater off) Max 65W (Heater on)	PoE+ : Max 16.50W, Typical 12.50W 12VDC: Max 13.50W, Typical 10.80W
Dimensions (WxHxD) / Weight	Ø8.59" x 13.672") 12.2477kg (27 lb)	Ø8.6" x 15.82") 12.7kg (28 lb)	Ø8.6" x 15.82") 12.7kg (28 lb)	7.2" x 5.97" x 13.85" 6.35kg (14lb)
Additional Features	Aluminum	RAL2000-Yellow Orange / Anodized Aluminum	RAL2000-Yellow Orange / Anodized Aluminum	RAL2000-Yellow Orange / Powder-coated Aluminum

Camera T series

	TNO-X9072EPT1-Z Explosion Proof Fixed Camera	**TNO-X8072EPT1-Z** Explosion Proof Fixed Camera	**TNO-X6322EPT1-Z** Explosion Proof Zoom Camera	**TNO-X6072EPT1-Z** Explosion Proof Fixed Camera
Imaging Device	4K 8MP CMOS	1/1.8" 5MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color : 0.07Lux (F1.2), B/W : 0.007Lux (F1.2)	Color : 0.07Lux (F1.2), B/W : 0.007Lux (F1.2)	Color : 0.05Lux (F1.6), B/W : 0.005Lux (F1.6)	Color : 0.01Lux (F1.2), B/W : 0.001Lux (F1.2)
Video Output	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B	CVBS : 1.0 Vp-p, Micro USB Type B
Focal Length	4.1 ~ 9mm	4.1 ~ 9mm	4.44 ~ 142.6mm (Optical 32x)	2.8 ~ 9mm
Angular Field of View	82° (Wide) ~ 43° (Tele)	82° (Wide) ~ 43° (Tele)	H : 61.8° (Wide) ~ 2.19° (Tele) / V: 36.2° (Wide) ~ 1.24° (Tele)	98° (Wide) ~ 39° (Tele)
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	Auto (ICR) / Color / B/W / External / Schedule	Auto (ICR) / Color / B/W / External / Schedule	Auto (ICR) / Color / B/W / External / Schedule	Auto (ICR) / Color / B/W / External / Schedule
Wide Dynamic Range	120dB	120dB	150dB	150dB
Digital Noise Reduction	SSNR V (2D + 3D noise filter) (Off / On)	SSNR V (2D + 3D noise filter) (Off / On)	SSNR V (2D + 3D noise filter) (Off / On)	SSNRV (2D+3D noise Iter) (O / On)
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital auto tracking, Sound classification
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, Multiple Streaming	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2560 x 1920, 2560 x 1440, 1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 / 30fps	2560 x 1920, 2560 x 1440, 1920 x 1080, 1600 x 1200, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 / 30fps	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 / 30fps	1920 x 1080, 1280 x 1024, 1280 x 960, 1280 x 720, 1024 x 768, 800 x 600, 800 x 448, 720 x 576, 720 x 480, 640 x 480, 640 x 360, 320 x 240 / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC/NAS	SD/SDHC/SDXC/NAS	SD/SDHC/SDXC/NAS	SD/SDHC/SDXC/NAS
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	NEMA 4X, IP66	NEMA 4X, IP66	NEMA 4X, IP66	NEMA 4X, IP66
Power Consumption	PoE : Max 7.5W Heater: 25W	PoE : Max 7.5W Heater: 25W	PoE : Max 7.5W Heater: 25W	PoE : Max 7.5W Heater: 25W
Dimensions (WxHxD) / Weight	7.2" x 5.97" x 13.85" 6.35kg (14lb)	7.2" x 5.97" x 13.85" 6.35kg (14lb)	7.2" x 5.97" x 13.85" 6.35kg (14lb)	7.2" x 5.97" x 13.85" 6.35kg (14lb)
Additional Features	RAL2000-Yellow Orange / Powder-coated Aluminum	RAL2000-Yellow Orange / Powder-coated Aluminum	RAL2000-Yellow Orange / Powder-coated Aluminum	RAL2000-Yellow Orange / Powder-coated Aluminum

	LNO-6072R 2MP IR Bullet Camera	**LNO-6012R** 2MP IR Bullet Camera	**LNO-6022R** 2MP IR Dome Camera	**LNO-6032R** 2MP IR Dome Camera
Imaging Device	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS
Min. Illumination	Color : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.18Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.18Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	-	-	-	-
Focal Length	3.2 ~10mm (3.1x) manual varifocal	3mm / 4mm / 6mm fixed	3.2 ~10mm (3.1x) manual varifocal	3mm / 4mm / 6mm fixed
Angular Field of View	H : 101.6° (Wide) ~ 31.3° (Tele) / V : 54.1° (Wide) ~ 17.8° (Tele) / D : 120.6° (Wide) ~ 36.0° (Tele) /	H : 102.0° / V : 54.0° / D : 120.0° (LNO-6012R) H : 80.0° / V : 43.0° / D : 94.0° (LNO-6022R) H : 51.0° / V : 29.0° / D : 58.0° (LNO-6032R)	H : 101.6° (Wide) ~ 31.3° (Tele) / V : 54.1° (Wide) ~ 17.8° (Tele) / D : 120.6° (Wide) ~ 36.0° (Tele) /	H : 102.0° / V : 54.0° / D : 120.0° (LND-6012R) H : 80.0° / V : 43.0° / D : 94.0° (LND-6022R) H : 51.0° / V : 29.0° / D : 58.0° (LND-6032R)
Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-
Analytics	Tampering, Motion detection	Tampering, Motion detection	Tampering, Motion detection	Tampering, Motion detection
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC	Micro SD/SDHC	Micro SD/SDHC	Micro SD/SDHC
Application Programming Interface	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (-14°F ~ +131°F)	-10°C ~ +55°C (-14°F ~ +131°F)
Certification	IP66	IP66	-	-
Power Consumption	PoE : Max 6.5W	PoE : Max 6.5W	PoE : Max 6.5W	PoE : Max 6.5W
Dimensions (WxHxD) / Weight	Ø78.0 x 262.0mm (Ø3.07" x 10.32") 380g (0.84 lb)	Ø58.6 x 182.0mm (Ø2.31" x 7.17") 240g (0.53 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 274g (0.60 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 230g (0.51 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View

	LND-6072R 2MP IR Dome Camera	**LND-6012R/6022R/6032R** 2MP IR Dome Camera	**LNV-6072R** 2MP IR Vandal Dome Camera	**LNV-6012R/6022R/6032R** 2MP IR Vandal Dome Camera
Imaging Device	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS	1/2.9" 2.19MP CMOS
Min. Illumination	Color : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.18Lux (F2.0) B/W : 0Lux (IR LED on)	Color : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.18Lux (F2.0) B/W : 0Lux (IR LED on)
Video Output	-	-	-	-
Focal Length	3.2 ~10mm (3.1x) manual varifocal	3mm / 4mm / 6mm fixed	3.2 ~10mm (3.1x) manual varifocal	3mm / 4mm / 6mm fixed
Angular Field of View	H : 101.6° (Wide) ~ 31.3° (Tele) / V : 54.1° (Wide) ~ 17.8° (Tele) / D : 120.6° (Wide) ~ 36.0° (Tele) /	H : 102.0° / V : 54.0° / D : 120.0° (LND-6012R) H : 80.0° / V : 43.0° / D : 94.0° (LND-6022R) H : 51.0° / V : 29.0° / D : 58.0° (LND-6032R)	H : 101.6° (Wide) ~ 31.3° (Tele) / V : 54.1° (Wide) ~ 17.8° (Tele) / D : 120.6° (Wide) ~ 36.0° (Tele) /	H : 102.0° / V : 54.0° / D : 120.0° (LNV-6012R) H : 80.0° / V : 43.0° / D : 94.0° (LNV-6022R) H : 51.0° / V : 29.0° / D : 58.0° (LNV-6032R)
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)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-
Analytics	Tampering, Motion detection	Tampering, Motion detection	Tampering, Motion detection	Tampering, Motion detection
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps	2MP / 30fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC	Micro SD/SDHC	Micro SD/SDHC	Micro SD/SDHC
Application Programming Interface	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
Operating Temperature	-10°C ~ +55°C (-14°F ~ +131°F)	-10°C ~ +55°C (-14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	-	-	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 6.5W	PoE : Max 6.5W	PoE : Max 6.5W	PoE : Max 6.5W
Dimensions (WxHxD) / Weight	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 274g (0.60 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 230g (0.51 lb)	Ø137.8 x 106.1mm (Ø5.43" x 4.18") 515g (1.16 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 395g (0.87 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View

WISENET NVR

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

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

Monitor all sub channels without registering them all

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

Registered channel
Recording and monitoring

CAMERA A
Channel #01

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

Unregistered channel
Monitoring sub channels without recording

CAMERA A
Channel #02

CAMERA A
Channel #03

CAMERA A
Channel #04

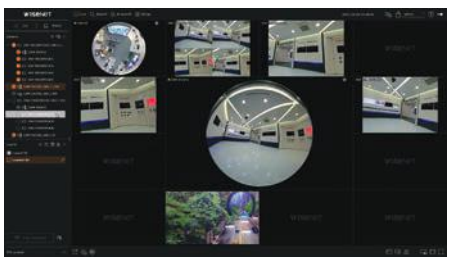
Installation Wizard for easy auto recognition and setup

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

Local Web

Design your own monitoring channels with the Dynamic layout

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

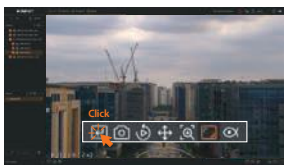


Code your own event action with SUNAPI command and Integrate with the Software Key

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



WISENET AI NVR

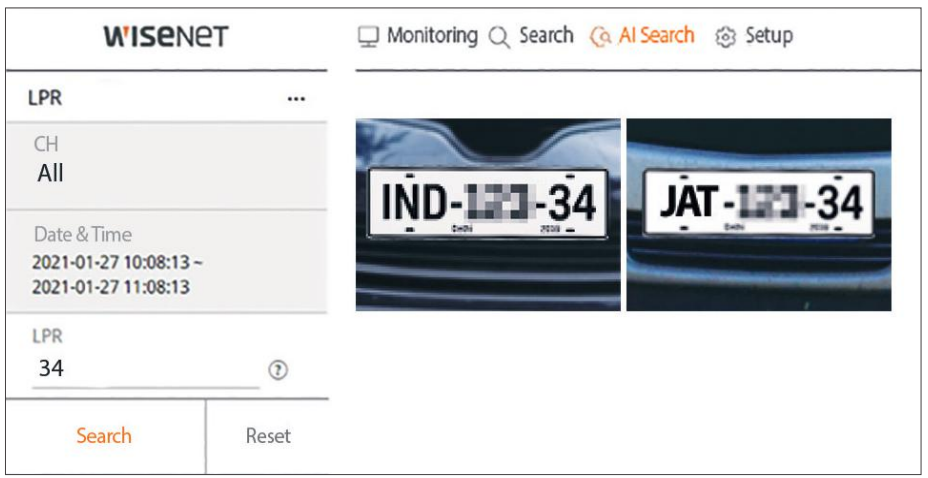
AI enhances accuracy and efficiency

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

License Plate Recognition LPR (Search)

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

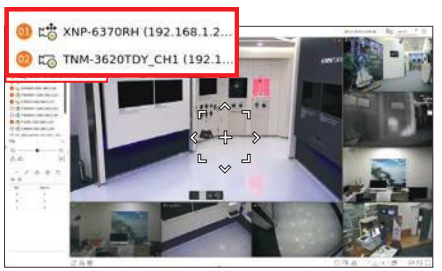
* Attributes : People (Clothing colors for top and bottom/ Wearing or carrying a bag) / Face (Age group, gender, mask/ glasses wearing) when integrated with Wisenet cameras, Vehicle (Types, colors) / License plate (Optical technology converts images into texts for storage, supporting search in text



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

Live monitoring and bookmarks

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



Live monitoring and PTZ control

Bookmark setup and event search

	XRN-6410DB4 64CH NVR	**XRN-6410RB2** 64CH AI NVR	**XRN-6410B2** 64CH AI 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 Even t (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, Shotdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shotdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shotdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shotdown
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, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	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%; 50/60 Hz, 2.7A (Dual SMPS / XRN-6410B4)	100 ~ 240 VAC ±10%; 50/60 Hz	100 ~ 240 VAC ±10%; 50/60 Hz	100 ~ 240 VAC ±10%; 50/60 Hz, 2.7A
Power Consumption	Max. 265W (16 HDD)	Max. 138W (8 HDD)	Max. 138W (8 HDD)	Max. 265W (16 HDD)
PoE Budget	-	-	-	-
Additional Features	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Dual SMPS (6410DB4) • Dynamic layout • Virtual channel view • Fisheye dewarping	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Dual SMPS (6410DB4) • Dynamic layout • Virtual channel view • Fisheye dewarping	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Dynamic layout • Virtual channel view • Fisheye dewarping	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Fisheye dewarping

NVR

	XRN-3210RB2 32CH NVR	**XRN-3210B2** 32CH NVR	**XRN-3010A** 64CH NVR	**XRN-2011A** 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	300Mbps	256Mbps
Max # of Cameras	32CH	32CH	64CH	32CH
Network Camera Resolution	32MP~CIF	32MP~CIF	-	8MP~CIF
HDD Slot	Up to 8 SATA (Max. 80TB)	Up to 8 SATA (Max. 80TB)	Up to 8 SATA (Max. 64TB)	Up to 8 SATA (Max. 48TB)
Record Mode	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post), Bookmark	Normal, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Schedule (Continuous/Event), Event (Pre/Post)
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)
Event Action	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shotdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shotdown	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out
External Storage	iSCSI	iSCSI	iSCSI	iSCSI
RAID	RAID 5/6	-	-	RAID 5
Hot Swap	Yes	-	-	Yes
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%, 50/60 Hz	100 ~ 240 VAC ±10%, 50/60 Hz	100 ~ 240 VAC ±10%	100 ~ 240 VAC ±10%
Power Consumption	Max. 160W (8 HDD)	Max. 138W (8 HDD)	Max. 99W (6 HDD)	Max. 99W (8 HDD)
PoE Budget	-	-	-	-
Additional Features	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Fisheye dewarping	• N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Fisheye dewarping	• N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))

	XRN-2010A 32CH NVR	**XRN-1620SB1** 16CH NVR	**XRN-1620B2** 16CH NVR	**XRN-1610SA** 16CH 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	256Mbps	140Mbps	140Mbps	180Mbps
Max # of Cameras	32CH	16CH	16CH	16CH
Network Camera Resolution	12MP~CIF	32MP~CIF	32MP~CIF	12MP~CIF
HDD Slot	Up to 8 SATA (Max. 48TB)	Up to 4 SATA (Max. 24TB)	Up to 8 SATA (Max. 80TB)	Up to 4 SATA (Max. 24TB)
Record Mode	Normal, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Schedule(Continuous/Event), Event (Pre/Post)
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)
Event Action	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out Buzzer, Monitor Out, FTP, SUNAPI Command, Shotdown	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shotdown	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
External Storage	iSCSI	-	-	iSCSI, e-SATA
RAID	-	-	-	-
Hot Swap	-	-	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile Support SDK/CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	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%	100 ~ 240 VAC ±10%, 50/60 Hz	100 ~ 240 VAC ±10%; 50/60 Hz	100 ~ 240 VAC ±10%
Power Consumption	Max. 99W (8 HDD)	Max. 310W	Max. 130W	Max. 271.9W (4 HDDs, PoE / PoE+ On) Max. 51.9W (4 HDDs, PoE / PoE+ Off)
PoE Budget	-	200W	-	220W
Additional Features	• N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control	• PoE supported • N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control	• PoE+ Switch embedded • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))

NVR

	XRN-1610A 16CH NVR	**XRN-820S** 8CH NVR	**XRN-810S** 8CH NVR	**XRN-420S** 4CH NVR	**XRN-410S** 4CH 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, WiseStream
Max. Recording Bit Rate	180Mbps	100Mbps	100Mbps	50Mbps	50Mbps
Max # of Cameras	16CH	8CH	8CH	4CH	4CH
Network Camera Resolution	12MP~CIF	32MP~CIF	8MP~CIF	8MP ~ CIF	12MP~CIF
HDD Slot	Up to 8 SATA (Max. 48TB)	Up to 2 SATA (Max. 12TB)	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
Record Mode	Normal, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Dual Stream, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Schedule (Continuous/Event), Event (Pre/Post)	Normal, Dual Stream, Schedule(Continuous/Event), Event (Pre/Post), Bookmark	Normal, Schedule (Continuous/Event), Event (Pre/Post)
Event Trigger	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event, User Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio)
Event Action	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out, FTP, SUNAPI Command, Shotdown	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, PTZ Preset, Alarm Out, Buzzer, Monitor Out
External Storage	iSCSI, e-SATA	-	-	-	-
RAID	-	-	-	-	-
Hot Swap	-	-	-	-	-
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile Support SDK/CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	WAVE, SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS
Local Monitor	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)	HDMI, VGA	Support dual monitor HDMI 1 (Up to 4K), HDMI 2 (FHD)
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	100 ~ 240 VAC ±10%	100 ~ 240 VAC ±10%, 50/60 Hz	100 ~ 240 VAC ±10%	100 ~ 240 VAC ±10%; 50/60 Hz	54V DC / 1.67A
Power Consumption	Max. 76.3W (8 HDD)	Max. 160W	Max. 19W (1 HDD)	Max 67W (1HDD, PoE On)	Max. 13W (1 HDD)
PoE Budget	-	100W	100W	50W	50W
Additional Features	• ARB (Auto Recovery Backup redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control	• PoE+ Switch embedded • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • N+1 failover supported • AI search (BestShot, Attribute) - When integrated with Wisenet AI cameras • PTZ camera configuration and control • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE+ Switch embedded • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))

	QRN-820S 8CH NVR	**QRN-430S** 4CH NVR	**XRN-6410DB4** 64CH 32MP NVR	**XRN-3210B4** 32CH 32MP NVR
Os	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	80Mbps	40Mbps	400Mbps	400Mbps
Max # of Cameras	8CH	4CH	64	32
Network Camera Resolution	8MP~CIF	8MP ~ CIF	32MP~CIF	32MP~CIF
HDD Slot	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)	Up to 16 SATA (Max. 160TB)	Up to 16 SATA (Max. 160TB)
Record Mode	Normal, Schedule(Continuous/Event), Event (Pre/Post), Dual track Recording	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)	Alarm Input, Video Loss, Camera Event(Sensor, MD, Video Analytics, Defocus, Audio), Dynamic Event	Alarm Input, Video Loss, Camera Event (Sensor, MD, Video Analytics, Defocus, Audio), Dynamic 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	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out	e-Mail, Event Push, PTZ Preset, Alarm Out, Buzzer, Monitor Out
External Storage	-	-	iSCSI	iSCSI
RAID	-	-	RAID 5/6	RAID 5/6
Hot Swap	-	-	Yes	Yes
Network Viewer Software	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	SSM, Webviewer, Smart Viewer, Wisenet mobile, Support CGI(SUNAPI) for integration to 3'rd party VMS	Wisenet WAVE, WebViewer, SmartViewer, Wisenet Mobile	Wisenet WAVE, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI 1 (Up to 4K)	HDMI 1 (Up to 4K)	HDMI (4K) & HDMI (1080P) Dual / Clone	HDMI (4K) & HDMI (1080P) Dual / Clone
Network Camera Protocol	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Power Input	54V DC / 1.67A	100 ~ 240 VAC ±10%; 50/60 Hz	100 ~ 240 VAC ±10%; 50/60 Hz	100 ~ 240 VAC ±10%; 50/60 Hz
Power Consumption	Max. 76.2W (1 HDD, PoE On) Max. 8.1W (1 HDD, PoE Off)	Max 52W (1HDD, PoE On)	Max 265W (904.2 BTU with HDD 16ea)	Max 265W (904.2 BTU with HDD 16ea)
PoE Budget	Max. 65W	35W	-	-
Additional Features	• PoE supported • ARB (Auto Recovery Backup) redundancy supported • Easy configuration (Setup Wizard, P2P (QR Code))	• PoE supported • N+1 failover supported • ARB (Auto Recovery Backup) redundancy supported • PTZ camera configuration and control • Easy configuration (Setup Wizard, P2P (QR Code))	• Up to 32MP recording resolution • AI search (Wisenet AI cameras) • Dual track recording • N+1 failover • ARB redundancy supported • Dual SMPS	• Up to 32MP recording resolution • AI search (Wisenet AI cameras) • Dual track recording • N+1 failover • ARB redundancy supported

Encoder/Decoder

Encoder

SPE-1620
16CH/8CH Encoder

SPE-1610
16CH Encoder

SPE-420
4CH Encoder

SPE-410
4CH Encoder

SPE-110
1CH Encoder

	SPE-1620 16CH/8CH Encoder	SPE-1610 16CH Encoder	SPE-420 4CH Encoder	SPE-410 4CH Encoder	SPE-110 1CH Encoder
Max. # of Cameras	16	16	4	4	1
Supported Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Max. Resolution	5MP/4MP/1080P/720P/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF
Max. Frame Rate per Channel	5MP 5fps, 4MP 7fps, 2MP 15/12fps 720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)
Bi-Directional Audio	Support	Support	Support	Support	-
RS-485	Support	Support	Support	Support	Support
Alarm I/O	16 / 4	16 / 4	4 / 2	4 / 2	-
Application Programming Interface	SUNAPI, ONVIF profile S	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI
Power	MAX : 16W (12V, 1.33A)	12VDC : Max 24W	PoE & 12VDC : Max 9.6W	PoE & 12VDC : Max 9.6W	PoE : Max 4.0W 12VDC : Max 3.6W

Decoder

SPD-151
48CH Decoder

SPD-150
48CH Decoder

	SPD-151 48CH Decoder	SPD-150 48CH Decoder
Video Out	HDMI, VGA, BNC	HDMI, VGA, BNC
Resolution	HDMI up to 4K, VGA up to 1080p	HDMI up to 4K, VGA up to 1080p
Display	(HDMI) 1 / 2x2 / 3x3 / 4x4 / 5x5 / 6x6 (32Ch Only) (VGA) 1 / 2x2 / 3x3 / 4x4 (BNC) 1 Tile merge support	(HDMI) 1 / 4 / 6 / 8 / 9 / 13 / 16 / 25 / 36(32) / 2V / 3V (VGA) 1 / 4 / 6 / 8 / 9 / 13 / 16 / 2V / 3V Spilt mode, Hallway View mode (Up to 20 layouts and sequence)
Power	12V DC, PoE	12V DC, PoE
Additional Features	Up to 49CH, H.265 / H.264 / MJPEG codec, Layout Sequence Support Management using Web-Viewer	Up to 49CH, H.265 / H.264 / MJPEG codec, Layout sequence support

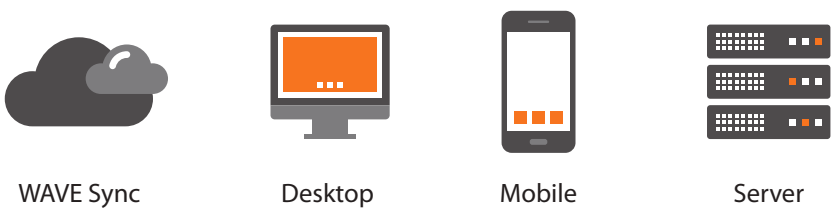
wisenet WAVE

Simple. Scalable. Powerful

Hanwha Techwin's lightweight, scalable, and feature rich video management is capable of supporting up to 128 IP video streams per server and is fully integrated with Wisenet NVRs and IP camera video and audio analytics.

- **Easy setup** – complete system install and configuration in minutes
- **Flexibility** – drag and drop interface with resizable viewing panes for intuitive navigation
- **Compatibility** – full integration with SUNAPI 2.0 Wisenet device features and advanced analytics and other popular 3rd party security solutions
- **Reliability** – robust server hive architecture ensures continuous system uptime
- **Portability** – accessible from anywhere via WAVE Sync with mobile client applications
- **Accessibility** – add an unlimited number of users to a single system, each with custom or preset roles

SUPPORTED BROWSERSS	UPPORTED DESKTOP OSS	UPPORTED MOBILE OS	SUPPORTED SERVER OS



Wisenet WAVE

WRR P series

WRR-P-E200L2/E200W2/E200S2
WAVE Recording Server

WRR-P-S206S
WAVE Recording Server

WRR-P-S202L1/S202W1/S202S1
WAVE Recording Server

	WRR-P-E200L2/E200W2/E200S2 WAVE Recording Server	WRR-P-S206S WAVE Recording Server	WRR-P-S202L1/S202W1/S202S1 WAVE Recording Server
Operating System	Windows 10 / Ubuntu 18.04 LTS / Server 2019	Server 2019	Windows 10 / Ubuntu 18.04 LTS / Server 2019
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max Recording Bit Rate	470Mbps	470Mbps	470Mbps
Max # of Camera Channels	128	128	128
Internal Storage	Up to 3 SATA (Max. 48TB)	Up to 26 SATA (Max. 416TB)	Up to 14 SATA (Max. 224TB)
RAID	RAID 6 Pre-configured	RAID 6 Pre-configured	RAID 6 Pre-configured
Hot Swap	Yes	Yes	Yes
VMS	Wisenet WAVE	Wisenet WAVE	Wisenet WAVE
Local Monitor	mDP / VGA	mDP / VGA	mDP / VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	4 WAVE Professional Licenses Included, 2U Rack Mount Chassis, 5 Year Next Business Day On-site Warranty, Keep your Hard Drive RMA Policy (Storage Disks)	4 WAVE Professional Licenses Included, 2U Rack Mount Chassis, 5 Year Next Business Day On-site Warranty, Keep your Hard Drive RMA Policy (Storage Disks)	4 WAVE Professional Licenses Included, 2U Rack Mount Chassis, 5 Year Next Business Day On-site Warranty, Keep your Hard Drive RMA Policy (Storage Disks)

WRR Q series

WRR-Q-A200W
WAVE Recording Server

WRR-Q-A201W
WAVE Recording Server

	WRR-Q-A200W WAVE Recording Server	WRR-Q-A201W WAVE Recording Server
Operating System	Windows 10	Windows 10
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max Recording Bit Rate	470Mbps	470Mbps
Max # of Camera Channels	128	128
Internal Storage	Up to 7 SATA (Max. 84TB)	Up to 10 SATA (Max. 96TB)
RAID	RAID 5 Pre-configured	RAID 5 Pre-configured
Hot Swap	Yes	Yes
VMS	Wisenet WAVE	Wisenet WAVE
Local Monitor	mDP / VGA	mDP / VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	4 WAVE Professional Licenses Included, 2U Rack Mount Chassis, 3 Year Next Business Day On-site Warranty, Keep your Hard Drive RMA Policy (Storage Disks)	4 WAVE Professional Licenses Included, 2U Rack Mount Chassis, 3 Year Next Business Day On-site Warranty, Keep your Hard Drive RMA Policy (Storage Disks)

WRN series

WRN-810S
WAVE PoE+ Recording Server

WRN-1610S
WAVE PoE+ Recording Server

	WRN-810S	WRN-1610S
Operating System	Ubuntu 18.04 LTS	Ubuntu 18.04 LTS
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max Recording Bit Rate	80Mbps	150Mbps
Max # of Camera Channels	8	16
Internal Storage	Up to 2 SATA (Max. 12TB)	Up to 4 SATA (Max. 24TB)
RAID	No	No
Hot Swap	No	No
VMS	Wisenet WAVE 4.1.0.31400 or greater	Wisenet WAVE 4.1.0.31400 or greater
Local Monitor	HDMI / VGA	HDMI / VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	4 WAVE Professional Licenses Included, 8 PoE / PoE+ Ports (100W power budget), PoE Port Mgmt page for device info + power toggle, Control over internal I/O block & event rule integration	4 WAVE Professional Licenses Included, 16 PoE / PoE+ Ports (200W power budget), PoE Port Mgmt page for device info + power toggle, Control over internal I/O block & event rule integration

WRT P series

WRT-P-3100MW
WAVE Recording Server

WRT-P-3101W / 3101L
WAVE Recording Server

WRT-P-5201W / 5201L
WAVE Recording Server

	WRT-P-3100MW	WRT-P-3101W / 3101L	WRT-P-5201W / 5201L
Operating System	Windows 10	Windows 10 / Ubuntu 18.04 LTS	Windows 10 / Ubuntu 18.04 LTS
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max Recording Bit Rate	45Mbps	170Mbps	470Mbps
Max # of Camera Channels	16 (Suggested Max)	32 (Suggested Max)	64 (Suggested Max)
Internal Storage	Up to 1 SATA (Max. 2TB)	Up to 3 SATA (Max. 16TB)	Up to 3 SATA (Max. 36TB)
RAID	No	No	No
Hot Swap	No	No	No
VMS	Wisenet WAVE	Wisenet WAVE	Wisenet WAVE
Local Monitor	HDMI / DP	Display Port (DP to HDMI adapter included)	Display Port (DP to HDMI adapter included)
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	4 WAVE Professional Licenses Included, Includes USB mouse and keyboard, 5 Year Next Business Day On-site Warranty, Optional VESA mount	4 WAVE Professional Licenses Included, Dual Purpose Mini Tower Recorder / Client, 5 Year Next Business Day On-site Warranty, Keep your Hard Drive RMA Policy (Storage Disks)	4 WAVE Professional Licenses Included, Dual Purpose Mini Tower Recorder / Client, 5 Year Next Business Day On-site Warranty, Keep your Hard Drive RMA Policy (Storage Disks)

Wisenet WAVE

WWT P series

WWT-P-7200MW
WAVE Viewing Workstation

WWT-P-3201W / 3201L
WAVE Viewing Workstation

Operating System	Windows 10	Windows 10 / Ubuntu 18.04 LTS
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Appliance Type	Viewing Workstation	Viewing Workstation
# of Displays	Optimized for 2 monitors	Optimized for 2 monitors
VMS	Wisenet WAVE	Wisenet WAVE
Local Monitor	Display Port (DP to HDMI adapters included)	mDP, HDMI, DP
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	Preloaded and configured with Wisenet WAVE VMS client & tools, 2 DP to HDMI Adapters Included, 5 Year Next Business Day On-site Warranty,	Dedicated GPU, 2 mDP to HDMI Adapters Included, 5 Year Next Business Day On-site Warranty, Keep your Hard Drive RMA Policy (Storage Disks)

WWT-P-7401W / 7401L
WAVE Viewing Workstation

Operating System	Windows 10 / Ubuntu 18.04 LTS
Supported Compression	H.265, H.264, MJPEG, WiseStream
Appliance Type	Viewing Workstation
# of Displays	Optimized for 4 monitors
VMS	Wisenet WAVE
Local Monitor	mDP, HDMI, DP
Camera Support	SUNAPI, ONVIF
Additional Features	Dedicated GPU, 2 mDP to HDMI Adapters Included, 5 Year Next Business Day On-site Warranty, Keep your Hard Drive RMA Policy (Storage Disks)

WWT-P-VESA NEW

WAVE Recording Server Mount

The WWT-P-VESA VESA mount + adapter box for **WWT-P** and **WRT-P** Micro form factor servers allows for convenient mounting behind a monitor for areas that have limited space.

WISENET SKY Cloud VMS

Simple. Scalable. Secure

Traditional video security systems require substantial amounts of hardware, complicated installations and constant software maintenance and management. Wisenet SKY Cloud VMS offers users enterprise-level performance with easy deployment, remote management, and seamless integration with third party systems.

Features

- Single Sign-On
- Two-factor Authentication
- Video Encrypted at Rest and in Transit
- Camera Isolation
- Privacy Mode
- Support PIN Verfication
- Customizable Password Rules
- Key Management

COMPATIBLE BROWSERSA	VAILABLE MOBILE APPS	COMPATIBLE CAMERAS
		WISENET ONVIF profile S
CUSTOM CLOUD RETENTION OPTIONS		**CUSTOM INTEGRATION**
1 day to up to 5 years of cloud storage Hybrid cloud + on-premises storage		API SDK

Wisenet SKY

CMVR

CMVR 324 / 325
SKY Rack Compact Cloud Managed Video Recorder

CMVR 320 / 420
SKY Rack Cloud Managed Video Recorder

CMVR 520 / 620 / 820
SKY Rack Enterprise Cloud Managed Video Recorder

Operating System	Embedded Linux	Embedded Linux	Embedded Linux
Maximum Cameras 1MP	12	15 / 30	50 / 100 / 150
Maximum Cameras 4MP	8	12 / 25	40 / 80 / 120
Maximum Cloud Analytics	5	5 / 10	20 / 30 / 40
Hard Disk Drive	2TB / 2TB	4TB / 10TB	40TB R5 / 64TB R5 / 120TB R6
Network Ports	Dual gigabit / Single gigabit ethernet	Dual gigabit	Dual gigabit
Video Output	HDMI, Display Port	VGA, DVI / VGA, HDMI, Display Port	HDMI, VGA, Display Port
Rack	Included Rack Mount Brackets	1U	1U / 1U / 2U
Indicator Lights	Front panel	Power, Disk activity	Power, Disk activity, Warning
Camera Support	Wisenet, ONVIF	Wisenet, ONVIF	Wisenet, ONVIF
Additional Features	2 Year Warranty, 24/7 email and web support, Supports motion or continuous recording, Complete encryption of video in transit and rest	2 Year Warranty 24/7 email and web support, Supports motion or continuous recording, Complete encryption of video in transit and rest	2 Year Warranty, 24/7 email and web support, Supports motion or continuous recording, Complete encryption of video in transit and rest

Bridge

Bridge 304 / 305
SKY Compact Bridge

Bridge 304+ / 404+
SKY Compact Bridge

Bridge 301 / 401 / 501
SKY Bridge

Operating System	Embedded Linux	Embedded Linux	Embedded Linux
Maximum Cameras 1MP	15	25 / 44	15 / 30 / 50
Maximum Cameras 4MP	12	20 / 35	12 / 25 / 35
Maximum Cloud Analytics	5	5 / 15	5 / 10 / 10
Hard Disk Drive	1TB / 1TB	1TB SSD / 1TB SSD	1TB / 1TB / 1TB
Network Ports	Dual gigabit	Dual gigabit	Dual gigabit
Video Output	HDMI, Display Port	HDMI, Display Port	VGA, DVI / VGA, HDMI, Display Port / VGA
Rack	Included Rack Mount Brackets	Included Rack Mount Brackets	1U Rack
Indicator Lights	Power, Disk activity	Power, Disk activity, Temperature, IP Address & Speed, Serial #, Attach ID	Power, Disk activity
Camera Support	Wisenet, ONVIF	Wisenet, ONVIF	Wisenet, ONVIF
Additional Features	Lifetime Warranty, 24/7 email and web support, Complete encryption of video in transit and at rest	Lifetime Warranty, 24/7 email and web support, Complete encryption of video in transit and at rest, Ruggedized chassis for extened temperature range, solid state disk	Lifetime Warranty, 24/7 email and web support, Complete encryption of video in transit and at rest

Switch

EN-SW05M-001
SKY Smart Managed PoE Switch

EN-SW10M-001
SKY Smart Managed PoE Switch

EN-SW18M-001
SKY Smart Managed PoE Switch

EN-SW26M-001
SKY Smart Managed PoE Switch

Total Number of Ports	5 Ports	10 Ports	18 Ports	26 Ports
PoE Ports	4 PoE	8 PoE	16 PoE	24 PoE
Power Supply	External Power Supply	External Power Supply	Built-In Power Supply	Built-in Power Supply
PoE Power Budget	60W	125W	250W	370W
Uplink Ports	1 Uplink	2 Uplink + 1 Gig Combo + 1 Gig SFP Uplink	2 Uplink + 2 Gig Combo Uplink	2 Uplink + 2 Gig Combo Uplink
Switching Capacity	1G	5.6G	7.2G	8.8G
Temperature Range	-10°C to 55°C / 14F to 131°F	0°C to 40°C / 32°F to 104°F	0°C to 40°C / 32°F to 104°F	0°C to 40°C / 32°F to 104°F
Rack Mountable	No	No	Yes (Mount Ears Included)	Yes (Mount Ears Included)
Dimension	L:119 x W:85 x H:28mm (L:4.7 x W:3.3 x H:1.1in)	L:218 x W:107 x H:29mm (L:8.6 x W:4.2 x H:1.1in)	L:440 x W:200 x H:44mm (L:17.3 x W:7.9 x H:1.7in)	L:440 x W:200 x H:44mm (L:17.3 x W:7.9 x H:1.7in)
Weight	1.35lb (0.61kg)	2.63lb (1.91kg)	6.88lb (3.12kg)	7.33lb (3.32kg)
Additional Features	Configured to use either DHCP or a static IP address, Reports for network traffic information for each port, Enables web management on a port by port basis	Configured to use either DHCP or a static IP address, Reports for network traffic information for each port, Enables web management on a port by port basis	Configured to use either DHCP or a static IP address, Reports for network traffic information for each port, Enables web management on a port by port basis	Configured to use either DHCP or a static IP address, Reports for network traffic information for each port, Enables web management on a port by port basis

Display Station

DS100
SKY Local Display Station Decoder

DS200
SKY Local Display Station Decoder

Operating System	Embedded Linux	Embedded Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max Recording Bit Rate	54Mbps	160Mbps
Streams	32 (Suggested Max)	64 (Suggested Max)
Network Interface	Gigabit	Gigabit
Webpage Tiles	1 (Suggested Max)	3 (Suggested Max)
Rack Mount Brackets	Included	Included
VMS	Wisenet SKY	Wisenet SKY
Local Monitor	Display Port (DP to HDMI adapter included)	2 Display Ports (DP to HDMI adapter included)
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	Ultra compact fanless design, Low power consumption, High performance hardware video decoding, Supports up to 5 configurable static layout views, Supports up to 4 user configurable view sequences	Ultra compact fanless design, Low power consumption, High performance hardware video decoding, Supports up to 5 configurable static layout views, Supports up to 4 user configurable view sequences

EN-SWSFP-001 NEW

SFP Module

The **EN-SWSFP-001** SFP module provides on optical MultiMode Fiber connection for connecting network infrastructure (850nm, 1.25Gbps, 550m).

Camera HD+ series

	HCB-7000A QHD Box Camera	**HCO-7070RA** QHD IR Bullet Camera	**HCO-7010RA/20RA/30RA** QHD IR Bullet Camera	**HCF-8010V** 5MP Analog HD Fisheye Camera	**HCD-7070RA** QHD IR Dome Camera
Imaging Device	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/2.9" CMOS	1/3" 4MP CMOS
Resolution	2560 x 1440	2560 x 1440	2560 x 1440	5MP (2560 x 1944)	2560 x 1440
Min. Illumination	Color : 0.16Lux (F1.2) B/W : 0.009Lux (F1.2)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.26Lux (F1.8) (HCO-7010RA) 0.27Lux (F2.0) (HCO-7020RA/7030RA) B/W : 0Lux (IR LED on)	Color : 0.95Lux (F2.1) B/W : 0.005Lux (F2.1)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)
Focal Length	-	3.2 ~ 10mm (3.1x) varifocal	2.8mm fixed (HCO-7010RA) 4.0mm fixed (HCO-7020RA) 6.0mm fixed (HCO-7030RA)	0.98mm	3.2 ~ 10mm (3.1x) varifocal
Angular Field of View	-	H : 93.48° (Wide) ~ 29.44° (Tele) / V : 50.47° (Wide) ~ 16.64° (Tele) / D : 112.53° (Wide) ~ 33.7° (Tele)	H : 107.48° / V : 59.67° / D : 122.01° (HCO-7010RA) H : 78.22° / V : 41.21° / D : 87.91° (HCO-7020RA) H : 49.01° / V : 27.61° / D : 55.6° (HCO-7030RA)	H : 180°, V : 180°	H : 93.48° (Wide) ~ 29.44° (Tele) / V : 50.47° (Wide) ~ 16.64° (Tele) / D : 112.53° (Wide) ~ 33.7° (Tele)
Pan / Tilt / Rotate	-	-	-	-	0° ~ 350° / 0° ~ 63° / 0° ~ 355°
IR Viewable Length	-	30m (98.43ft)	20m (65.62ft) (HCO-7010RA) 25m (82.02ft) (HCO-7020RA) 30m (98.43ft) (HCO-7030RA)	-	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR	3DNR, 2DNR	BLC/HLC/DWDR
Digital Noise Reduction	2D DNR	2D DNR	2D DNR	-	2D DNR
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	2 Zones	2 Zones	-	2 Zones
Alarm I/O	MD Output 1	MD Output 1	-	-	MD Output 1
Protocol	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron) RS-485 : Samsung T, Pelco D/P	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	IP66, IK10	IP66, IK10	IP66, IK10	-
Power Consumption	12VDC & 24VAC : Max 3.6W	12VDC & 24VAC : Max 5.8W	12VDC : Max 5.0W	12VDC : Max 5.0W	12VDC & 24VAC : Max 5.8W
Dimensions (WxHxD) / Weight	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 186g (0.41 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02 lb)	Ø70.0 x 246.0 mm (Ø2.76" x 9.69") (Without sunshield) 670g (1.48 lb)	Ø120.0 x 63.4 mm (Ø4.72" x 2.50")	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.71 lb)
Additional Features	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Coaxial communication (HD / SD mode)	Video Transmission up to 500m (5C2V Coaxial Cable)

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

HCV-7070RA
QHD IR Vandal Dome Camera

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

HCB-6001
1080p HD Box Camera

HCB-6000
1080p HD Box Camera

Imaging Device	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Resolution	2560 x 1440	2560 x 1440	2560 x 1440	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.26Lux (F1.8) (HCD-7010RA) 0.27Lux (F2.0) (HCD-7020RA/7030RA) B/W : 0Lux (IR LED on)	Color : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.26Lux (F1.8) (HCV-7010RA) 0.27Lux (F2.0) (HCV-7020RA/7030RA) B/W : 0Lux (IR LED on)	Color : 0.09Lux (F1.2) B/W : 0.009Lux (F1.2)	Color : 0.09Lux (F1.2) B/W : 0.009Lux (F1.2)
Focal Length	2.8mm fixed (HCD-7010RA) 4.0mm fixed (HCD-7020RA) 6.0mm fixed (HCD-7030RA)	3.2 ~ 10mm (3.1x) varifocal	2.8mm fixed (HCV-7010RA) 4.0mm fixed (HCV-7020RA) 6.0mm fixed (HCV-7030RA)	-	-
Angular Field of View	H : 107.48° / V : 59.67° / D : 122.01° (HCD-7010RA) H : 78.22° / V : 41.21° / D : 87.91° (HCD-7020RA) H : 49.01° / V : 27.61° / D : 55.6° (HCD-7030RA)	H : 93.48° (Wide) ~ 29.44° (Tele) / V : 50.47° (Wide) ~ 16.64° (Tele) / D : 112.53° (Wide) ~ 33.7° (Tele)	H : 107.48° / V : 59.67° / D : 122.01° (HCV-7010RA) H : 78.22° / V : 41.21° / D : 87.91° (HCV-7020RA) H : 49.01° / V : 27.61° / D : 55.6° (HCV-7030RA)	-	-
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-	-
IR Viewable Length	20m (65.62ft) (HCD-7010RA) 25m (82.02ft) (HCD-7020RA) 30m (98.43ft) (HCD-7030RA)	30m (98.43ft)	20m (65.62ft) (HCV-7010RA) 25m (82.02ft) (HCV-7020RA) 30m (98.43ft) (HCV-7030RA)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	2D DNR	2D DNR	2D DNR	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	2 Zones	2 Zones	4 Zones	8 Zones
Alarm I/O	-	MD Output 1	-	0 / 1, External D/N 1	0 / 1, External D/N 1
Protocol	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), RS-485 : Samsung T/E, Pelco D/P, Panasonic, Bosch, Honeywell, Vicon, GE, AD	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol), RS-485 : Samsung T, Pelco D/P, Panasonic, Bosch , Honeywell, Vicon, GE, AD
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	IP66, IK10	IP66, IK10	-	-
Power Consumption	12VDC : Max 5.0W	12VDC & 24VAC : Max 5.8W	12VDC : Max 5.0W	12VDC & 24VAC : Max 6W	12VDC & 24VAC : Max 3.5W
Dimensions (WxHxD) / Weight	Ø110.1 × 86.1mm (Ø4.33" × 3.39") 240g (0.53 lb)	Ø137 × 106.1mm (Ø5.39" × 4.18") 715g (1.58 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.12 lb)	73.1× 67.2 × 123.9mm (2.88" × 2.65" × 4.88") 287g (0.63 lb)	68.4 × 59.6 × 92.7mm (2.69" × 2.35" × 3.65") 186g (0.41 lb)
Additional Features	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)

Camera HD+ series

	HCZ-6321 2MP 32x AHD Zoom Camera	HCO-6080R 1080p HD IR Bullet Camera	HCO-6070R 1080p HD IR Bullet Camera	HCO-6020R 1080p HD IR Bullet Camera	HCD-6080R/6070R 1080p HD IR Dome Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2 .8" 2MP CMOS	1/2 .8" 2MP CMOS
Resolution	1080p	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.17Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)
Focal Length	4.44 ~ 142.6mm (Optical 32x)	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) varifocal	4mm fixed (F1.6)	3.2 ~ 10mm (3.1x) motorized varifocal (HCD-6080R) varifocal (HCD-6070R)
Angular Field of View	H : 62.8° (Wide) ~ 2.23° (Tele) / V : 36.80° (Wide) ~ 1.26° (Tele)	H : 110.2° (Wide) ~ 32° (Tele) / V : 55.4° (Wide) ~ 18° (Tele) / D : 128.4° (Wide) ~ 36.6° (Tele)	H : 110.2°(Wide) ~ 32°(Tele) / V : 55.4°(Wide) ~ 18°(Tele) / D : 128.4°(Wide) ~ 36.6°(Tele)	H : 87.6° / V : 46.4° / D : 104.5°	H : 110.2° (Wide) ~ 32° (Tele) / V : 55.4° (Wide) ~ 18° (Tele) / D : 128.4° (Wide) ~ 36.6° (Tele)
Pan / Tilt / Rotate	-	-	-		0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC, HLC, WDR, SSDR	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRIII	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	12 Zones	8 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	-	MD Output 1	MD Output 1	-	MD Output 1
Protocol	AHD : ACP (AHD Coax Protocol), RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	IP66, IK10	IP66, IK10	IP66	-
Power Consumption	12VDC : Max 6W	12VDC & 24VAC : Max 6.0W	12VDC & 24VAC : Max 6.0W	12VDC : Max 4.2W	12VDC & 24VAC : Max 6.0W (HCD-6080R) 12VDC & 24VAC : Max 4.2W (HCD-6070R)
Dimensions (WxHxD) / Weight	72.0 x 63.9 x 137.25mm (2.83" x 2.52" x 5.40") 451g (0.99 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 948g (2.09 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02 lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.50") (Without sunshield) 285g (0.62 lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 330g (0.73lb) (HCD-6080R) 320g (0.71lb) (HCD-6070R)
Additional Features	Defog	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)

	HCD-6020R 1080p HD IR Dome Camera	HCD-6010 1080p HD Dome Camera	HCV-6080R/6070R 1080p HD IR Vandal Dome Camera	HCP-6320HA/6320A 1080p HD 32x PTZ Camera	SCB-6003 1080p HD Box Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/3" 2MP CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.17Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.27Lux (F2.0) B/W : 0.017 Lux (F2.0)	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)	Color : 0.04Lux (F1.2) B/W : 0.004Lux (F1.2)
Focal Length	4mm fixed (F1.6)	2.8mm fixed (F2.0)	3.2 ~ 10mm (3.1x) motorized varifocal (HCV-6080R) varifocal (HCV-6070R)	4.44 ~ 142.6mm (Optical 32x)	-
Angular Field of View	H : 87.6° / V : 46.4° / D : 104.5°	H : 113.7° / V : 61.5° / D : 134.5 °	H : 110.2° (Wide) ~ 32° (Tele) / V : 55.4° (Wide) ~ 18° (Tele) / D : 128.4° (Wide) ~ 36.6° (Tele)	H : 62.8° (Wide) ~ 2.23° (Tele) / V : 36.8° (Wide) ~ 1.26° (Tele)	-
Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	360° Endless / 210° (-15° ~ 195°) / -	-
IR Viewable Length	20m (65.62ft)	-	30m (98.43ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	BLC / HLC / DWDR
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIII	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	32 Zones	4 Zones
Alarm I/O	-	-	MD Output 1	4 / 2 (Relay)	0 / 1, External D/N 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), RS-485 : Samsung-T/E, Pelco-P/D, Sungjin, Panasonic, Honeywell, AD, Vicon, Bosch, GE	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), RS-485
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-50°C ~ +55°C (-58°F ~ +131°F) (HCP-6320HA), -10°C ~ +55°C (+14°F ~ +131°F) (HCP-6320A)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	-	IP66, IK10	IP66, IK10 (HCP-6320HA), IK10 (With SHP-3701H) (HCP-6320A)	-
Power Consumption	12VDC : Max 4.2W	12VDC : Max 3.5W	12VDC & 24VAC : Max 4.2W	24VAC : Max 24.0W / 65.0W - Heater off / on (HCP-6320HA) 24VAC : Max 20.0W (HCP-6320A)	12VDC & 24VAC : Max 4.2W
Dimensions (WxHxD) / Weight	Ø110 x 86mm (Ø4.33" x 3.39") 320g (0.71 lb)	Ø110 x 86mm (Ø4.33" x 3.39") 225g (0.49 lb)	Ø137 × 106.1mm (Ø5.39" × 4.18") 725g (1.60lb) 715g (1.58lb)	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb) (HCP-6320HA), Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb) (HCP-6320A)	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 175.5g (0.39 lb)
Additional Features	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Video transmisstion up to 500m (5C2V Coaxial Cable)	Defog	Defog

Camera HD+ series

	SCO-6085R 1080p HD IR Bullet Camera	**SCO-6023R** 1080p HD IR Bullet Camera	**SCD-6083R** 1080p HD IR Dome Camera	**SCV-6083R** 1080p HD IR Vandal Dome Camera
Imaging Device	1/2.8" 2MP CMOS	1/3" 2MP CMOS	1/3" 2MP CMOS	1/3" 2MP CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.25Lux (F2.1) B/W : 0Lux (IR LED on)	Color : 0.11Lux (F1.4) B/W : 0Lux (IR LED on)	Color : 0.11Lux (F1.4) B/W : 0Lux (IR LED on)
Focal Length	3.2 ~ 10mm (3.1x) manual varifocal"	4mm fixed	2.8 ~ 12mm (4.3x) varifocal	2.8 ~ 12mm (4.3x) varifocal
Angular Field of View	H : 110.2° (Wide) ~ 32.0° (Tele) / V : 55.4° (Wide) ~ 18.0° (Tele) / D : 128.4° (Wide) ~ 36.6° (Tele)	H : 80.7° / V : 43.5° / D : 95.8°	H : 102° (Wide) ~ 32.2° (Tele) / V : 54° (Wide) ~ 18.2° (Tele) / D : 121° (Wide) ~ 38 °(Tele)	H : 102° (Wide) ~ 32.2° (Tele) / V : 54° (Wide) ~ 18.2° (Tele) / D : 121° (Wide) ~ 38° (Tele)
Pan / Tilt / Rotate		-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.42ft)	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support
Privacy Masking	8 Zones	4 Zones	4 Zones	4 Zones
Alarm I/O		-	0 / 1	0 / 1
Protocol	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)
Operating Temperature	-30°C ~ +55°C (-22°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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
Certification	IP66, IK10	IP66	-	IP66, IK10
Power Consumption	12VDC : Max 5.4W 24VAC : Max 5.4W	12VDC : Max 4.2W	12VDC & 24VAC : Max 4.2W	12VDC & 24VAC : Max 4.2W
Dimensions (WxHxD) / Weight	Ø78 x 259.8mm (3.07" x 10.23") 887g (1.95 lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.50") (Without Sunshield) 208g (0.46 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 304g (0.67 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 716g (1.58 lb)
Additional Features	Defog	Defog	Defog	Defog

	NEW **HRX-1632** 16CH 5MP Pentabrid Recorder	 **HRX-1621** 16CH 8MP Pentabrid Recorder	 **HRX-1620** 16CH 8MP Pentabrid Recorder	NEW **HRX-835** 8CH 8MP PENTABRID RECORDER	 **HRX-821** 8CH 8MP Pentabrid Recorder
OS	Linux	Linux	Linux	Linux	Linux
Compression	H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264, H.265, MJPEG	H.264, H.265, MJPEG
Signal Type	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera	Analog (AHD, TVI, CVI, CVBS) & N/W Camera
Inputs	Analog 16CH, N/W Camera 8CH (up to 24CH)	Analog 16CH, N/W Camera 2CH (up to 18CH)	Analog 16CH, N/W Camera 2CH (up to 18CH)	Analog 8CH, N/W Camera 2CH (up to 10CH)	Analog 8CH, N/W Camera 2CH (up to 10CH)
Record Rate	4MP 15/12fps, 2MP 15/12fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8/8fps, 5MP 12/12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH
HDD Slot	SATA 4ea (Max. 24TB)	SATA 8ea (Max 48TB)	SATA 2ea (Max 12TB)	SATA 4ea (Max 24TB)	Up to 4 SATA HDDs
Viewer Software	SSM, Webviewer, SmartViewer, Wisenet Mobile Viewer Support SDK/CGI(SUNAPI) for integration to 3'rd party VMS	SSM WebViewer SmartViewer Wisenet Mobile	SSM WebViewer SmartViewer Wisenet Mobile	SSM, Webviewer, Smart Viewer, Wisenet mobile Support SDK/CGI(SUNAPI) for integration to 3'rd party VMS	SSM WebViewer SmartViewer Wisenet Mobile
Local Display	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)	1 HDMI, 1 VGA (Dual Monitor)
Audio In/Out	16 / 1	16 / 1	4 / 1	8 / 1	8 / 1
Alarm In/Out	16 / 4	16 / 4	16 / 4	8 / 4	8 / 4
N/W Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	Easy configuration (Setup Wizard, P2P(QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485/422 USB (2ea)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (3ea)	Easy configuration (Setup Wizard, P2P(QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ports)	Easy configuration (Setup Wizard, P2P (QR Code)) Coaxial Control support (CVBS and AHD/CVI/TVI) RS-485 USB (2ea)

DVR HD+ series

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

Monitor

SMT-4343/4343S
43" 4K LED Monitor

SMT-2410
24" LED Monitor

SMT-3211PVM/
SMT-3211PVM-PIP
32" PVM

Screen Size	43"	24"	32"
Resolution (pixels HxV)	1920 x 1080	1920 x 1080	1920 x 1080
Video In/Out	1	1	2 / 2
VGA	1	1	1
DVI / HDMI	1 / 1	0 / 1	0 / 1
USB	-	-	-
Audio In (Stereo)	1	-	2
Contrast Ratio	5,000 : 1	1,000 : 1	1,200:1
Aspect Ratio	16 : 9	16 : 9	16 : 9
Response Time	9.5mm	5mm	8ms
Brightness	350cd/m²	250cd/m²	300cd/m²
Tempered Glass Screen	-	-	Yes
Picture In Picture	-	-	-
Built-in Speakers	Yes	Yes	Yes
Stand	Optional	Standard	Standard
Power	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC
Additional Features	Remote Controller Desktop Stand (SMT-4343S)	Remote Controller	Public View Monitor, Picture in picture mode (SMT-3211PVM-PIP)

SMT-1030PV
10" PVM w/ 2MP Full HD Network Camera

SMT-2730PV
27" PVM w/ 2MP Full HD Network Camera

SMT-3230PV
32" PVM

Screen Size	10.1" LED Backlight	27" LED Backlight	32" LED Backlight
Resolution (pixels HxV)	1024 x 600	1920 x 1080	1920 x 1080
Viewing Angle (H/V)	140° / 120°	178° / 178°	178° / 178°
Video System	NTSC / PAL	NTSC / PAL	NTSC / PAL
Panel Life	50,000 hours	30,000 hours	30,000 hours
USB	-	-	-
Audio In (Stereo)	-	-	-
Contrast Ratio	500 : 1	500 : 1	1200:1
Aspect Ratio	16 : 9	16 : 9	16 : 9
Response Time	20ms	14ms	8ms
Brightness	500cd/m²	300cd/m²	300cd/m²
Tempered Glass Screen	-	-	-
Picture In Picture	-	-	-
Built-in Speakers	Yes	Yes	Yes
Stand	VESA Mount	VESA Mount	VESA Mount
Power	PoE+ 48V 0.28A 13.44W, DC2 1A	DC12V 2.5A	DC12V 5.1A
Additional Features	Face Detection display for visual deterrent, Customizable text overlay and blinking "Recording in progress", Slide show	Face Detection display for visual deterrent, Customizable text overlay and blinking "Recording in progress", Slide show	Face Detection display for visual deterrent, Customizable text overlay and blinking "Recording in progress", Slide show

PERIPHERAL

PVM Camera

TNB-6030
Public View Monitoring Camera

Features	• Max. 2Megapixel (1920 x 1080)resolution • HDMIOutput(1080p FullHD) • TrueWDR (150dB) • Face detection overlay / text overlay and blinking "Recording in progress" • Max. 60fps@allresolutions, 0.06 Lux@F2.5 (Color) • H.265,H.264, MJPEGcodec supported, Multiple streaming • SD/SDHC/SDXC memory slot(256GB) • Hallway view,WiseStreamII , LDC support • Bi-directional audio support,Alarm I/O(1ea) • PoE, 12VDC

Controller

SPC-2000
Network Controller

SPC-2010
PTZ / DVR System Controller

SPC-1010
PTZ Control Keyboard

Features	• Superior System Compatibility • 3D Joystick Control • Quick and Easy Installation • SSM Support	• Control up to 255 PTZ Cameras / DVRs • Built-in 3 Axis Twist Zoom Joystick • Built-in Jog Shuttle • 16 x 2 Character LCD Display • RS-485 and RS-422 Interface	• Control up to 255 PTZ Cameras • Multi Protocols Supports • OSD Menu, 3D Joystick Control • RS-485 and RS-422 Interface

Lens

Lens Description	Model	Image	Focal Length / Aperature	Lens Construction	Field of View	Angle of View			Max. Diameter and Length	Weight	Lens Cap
						Diagonal	Vertical	Horizontal			
4K Varifocal Lens	**SLA-C-E24**		24mm f/1.4	10 groups, 13 elements	139mm x 208mm (5.5" x 8.2" (0.25m))	84°	53°	74°	83.5mm x 86.9mm (3.3" x 3.4")	650g / 22.9 oz	E-77U/E-77 II
	SLA-C-E50		50mm f/1.2	6 groups, 8 elements	164mm x 250mm (6.5" x 9.8" (0.45m))	46°	27°	40°	85.8mm x 65.5mm (3.4" x 2.6")	590g / 20.8 oz	E-72U/E-72 II
	SLA-C-E85		85mm f/1.2	7 groups, 8 elements	226mm x 339mm (8.9" x 13.3" (0.95m))	28° 30'	16°	24°	91.5mm x 84mm (3.6" x 3.3")	1025g / 36.2 oz	
	SLA-C-E2470		24 - 70mm f/2.8	13 groups, 18 elements	369mm x 554mm - 134mm x 202mm / (14.53" x 21.81" - 5.28" x 7.95" (0.38m/1.25ft))	84° - 34°	53° - 19° 30'	74° - 29°	88.5mm x 113.0mm (3.48" x 4.45")	~805g / 28.4 oz	E-82U/E-82 II
	SLA-C-E70200		70 - 200mm f/2.8	19 groups, 23 elements	308mm x 463mm - 115mm x 171mm / (12.13" x 18.23" - 4.53" x 6.73" (1.2m/3.94ft))	34° - 12°	19° 30' - 7°	29° - 10°	88.8mm x 199mm (3.50" x 7.83")	~1480g / 52.2 oz	E-77 II

PERIPHERAL

Lens

Lens Description	Model	Image	Mount	Resolution	Focal Length	Lens Length	Lens Type	F. No	Field of View for sensor sizes							Operating Temperature
4K Varifocal Lens	**SLA-T-M410DN**		CS	True 4K Up to 12MP	4-10mm	<64mm TTL	DC Auto Iris	F/1.4 @ 4mm - F/2.4 @ 10mm	**Sensor size**	1/1.7"	1/1.8"	1/1.8" 4K	1/2"	1/2.3"	1/2.5"	-20°C ~ +60°C (-4°F ~ + 140°F)
									Horizontal	112° - 44°	110° - 43°	110° - 43°	93° - 37°	90° - 36°	83° - 33°	
									Vertical	81° - 33°	71° - 29°	52° - 21°	68° - 28°	67° - 27°	60° - 25°	
									Diagonal	149° - 55°	139° - 52°	126° - 48°	120° - 46°	117° - 45°	106° - 42°	
	SLA-T-M940DN				9-40mm	<50mm		9-40mm	**Sensor size**	1/3"		1/2.7"		1/2.5"		-20°C ~ +60°C (-4°F ~ + 140°F)
									Horizontal	30° - 7.1°		37° - 8.6°		36° - 8.5°		
									Vertical	22° - 5.3°		20° - 4.8°		27° - 6.3°		
									Diagonal	38° - 8.8°		42° - 9.9°		46° - 10.6°		
	SLA-T-M1250DN				12-50mm	<64mm TTL		F/1.8 @ 12mm - F/2.4 @ 50mm	**Sensor size**	1/1.7"	1/1.8"	1/1.8" 4K	1/2"	1/2.3"	1/2.5"	-20°C ~ +60°C (-4°F ~ + 140°F)
									Horizontal	36° - 8.6°	36° - 8.6°	35° - 8.5°	30° - 7.4°	30° - 7.2°	27° - 6.7°	
									Vertical	26° - 6.5°	23° - 5.8°	17° - 4.3°	23° - 5.6°	22° - 5.5°	20° - 5.0°	
									Diagonal	46° - 11°	44° - 10°	40° - 9.5°	39° - 9.2°	38° - 9°	34° - 8.3°	

Lens Description	Model	Image	Mount	Image Format	Resolution	Focal Length	Back Focal Length	Zoom Ratio	F. No	Angle of View	Operation			Dimensions W x H x D (mm / inch)	Weight (g / lb)
											Iris	Focus	Zoom		
CS-mount Auto Iris Megapixel Lens	**SLA-M2890DN**		CS	1 / 2.8"	3Megapixel	2.8 ~ 9mm (0.11" ~ 0.35")	7.5 ~ 15.9mm (0.30" ~ 0.63")	3.2	1.2	134.2° ~ 42.7°	DC	manual	manual	45.0 x 51.5 x 54.3mm (1.77" x 2.03" x 2.14")	84.0g (0.19 lb)
	SLA-M2890PN										P-Iris				82.1g (0.18 lb)

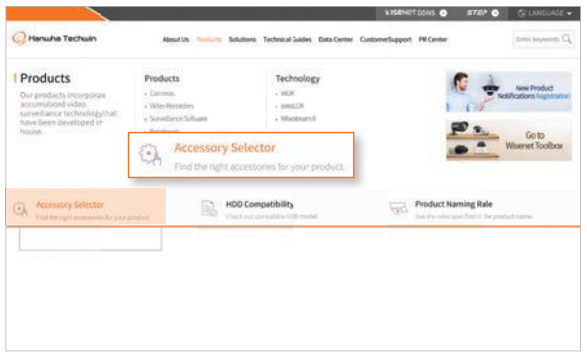
Lens

Lens Description	Model	Image	Mount	Resolution	Focal Length	IR Correction	Lens Type	F. No	Operating Temperature
4K Varifocal Lens	**SLA-C-I3910**		CS	Up to 4K / 8MP	3.9 - 10mm, 108.1° - 41.1° Angle of View, 1/1.8" format	True Day / Night	Stepping Motor Iris, iCS control with compatible camera	F/1.5	-20°C ~ +60°C (-4°F ~ + 140°F)
	SLA-C-I2885				2.8 - 8.5mm, 124.7° - 41.3° Angle of View, 1/2.7" format	True Day / Night	Stepping Motor Iris, iCS control with compatible camera	F/1.2	-20°C ~ +60°C (-4°F ~ + 140°F)

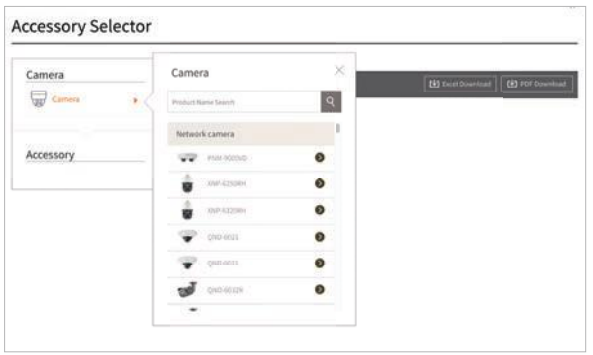
Accessory & Mount Selector Tool

The Hanwha Techwin Mount Selector easily shows compatible mounts and accessories. Simply enter a model number or select one from the drop-down menu. The tool will also display backbox adapters, included or optional, as well as compatibility with various gangboxes (direct-mount & with plate). The mount selector is an Excel Worksheet. Go to our website to access the Mount Selector.

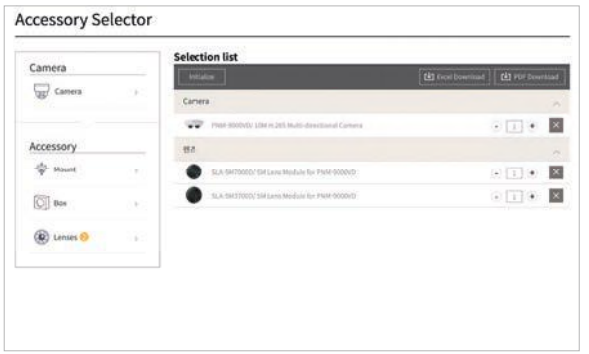
How to use **Accessory Selector**



Step1. Click "Accessory Selector" under "Tools" on hanwhasecurity.com



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



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

NOTES

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