



WISENET



Product Line-up 2020

www.hanwha-security.eu

 **Hanwha**
Techwin Europe

Hanwha

Hanwha is ranked as the 8th largest corporation in South Korea based on asset size, and is a Fortune 500 company. With 70 affiliates and 325 global networks, Hanwha's global businesses span the manufacturing and construction; finance, and service and leisure industries. With its 25 years of technological knowledge and expertise in optical and image processing, Hanwha Techwin is leading the CCTV and video surveillance market.



Hanwha Techwin

- 1977 Established the company
- 1991 Initiation of video surveillance business
- 1993 Development of nation's first iris lens for CCTV
- 2008 Release of world's first 37x PTZ camera
- 2010 Samsung Techwin acquires Samsung's video surveillance business
- 2012 Release of world's first 37x zoom interworking IR PTZ camera
- 2013 Release of Wisenet3 camera
- 2015 Hanwha group acquires Samsung Techwin and Hanwha Techwin is established
- 2016 Development of Wisenet5 ISP Chip (SoC)
- 2017 Release of Wisenet X camera

Based on world class optical image processing technology, Wisenet provides high-resolution cameras, recording devices and enterprise management software. For a complete security solution including intelligent video analytics, Hanwha offers a full lineup of video surveillance solutions.



Wisenet

Wisenet is the signature brand of Hanwha Techwin's security business. It embodies the spirit of building a safe, secure, and connected world.

Core value



Complete

- Seamless Security
- Dependable Quality
- Comprehensive Solutions



Assured

- Partner-assured
- Buyer-assured
- User-assured



Value-added

- Added Usability
- Added Flexibility
- Added Possibility



Optical Design and Image Processing Technologies

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



SoC Design Technology

Outstanding level of SoC design capabilities evident in our Wisenet SoC is equipped with diverse analytics technologies.



Intelligent Analytics

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

WISeNET 7

COMING SOON



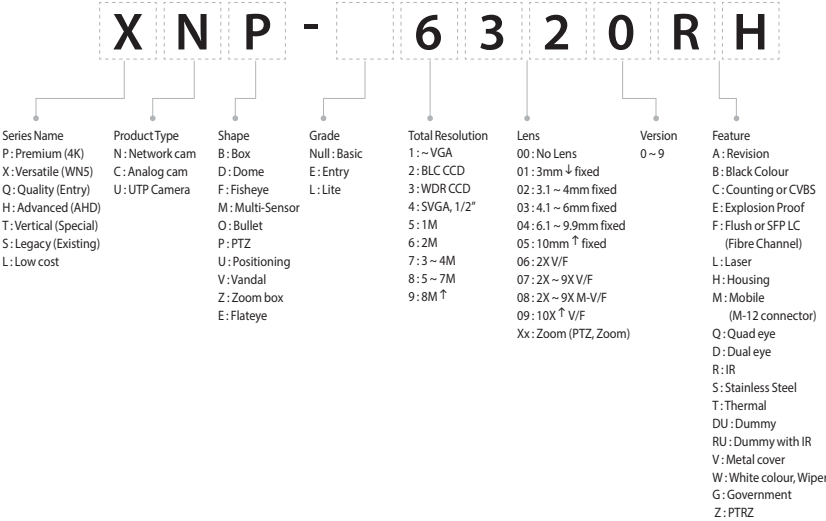
VIEW TO INTELLIGENCE

WISeNET 7 COMBINES THE TECHNOLOGY TO SEE WITH THE INTELLIGENCE TO UNDERSTAND

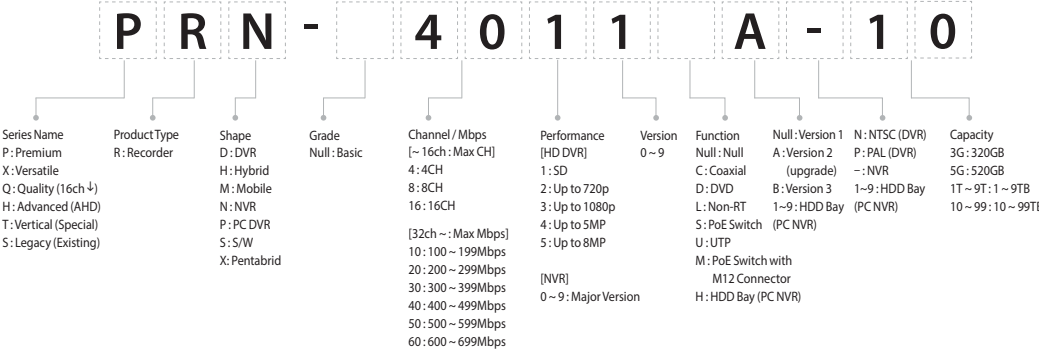
- Next generation AI SoC
- Object Based Video Analytics
- Improved Video Quality and WDR
- Enhanced Cyber Security

PRODUCT NAMING RULE

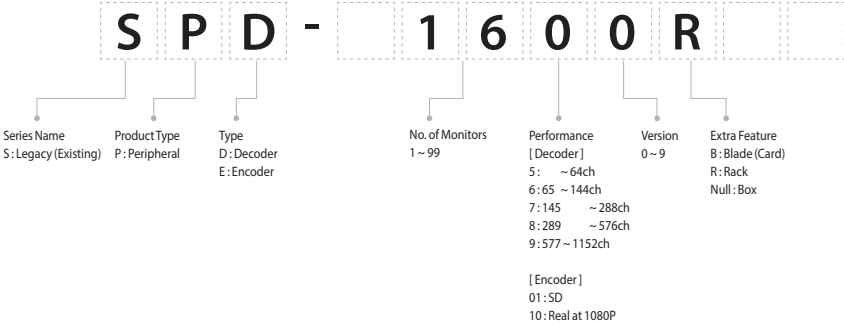
Camera



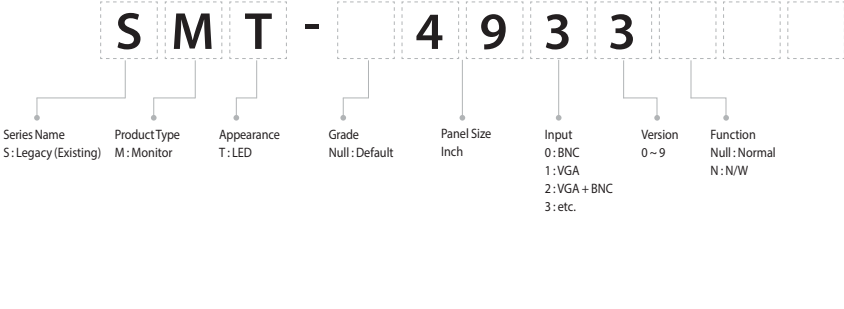
Recorder



Decoder/Encoder



Monitor



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COMING SOON

NETWORK

Camera



TNB-9000
8K Box Camera



QNB-8002/6002
5MP/2MP Box Camera



QNF-9010
12MP Fisheye Camera



XNV-8081RE/6081RE
5MP/2MP IR Vandal Dome Camera
with PoE extender

XND-8081REV/6081REV
5MP/2MP IR Dome Camera
with PoE extender

NVR



WRN-1610S/810S
16CH/8CH WAVE NVR



QRN-1620S
16CH PoE NVR with Dual recording

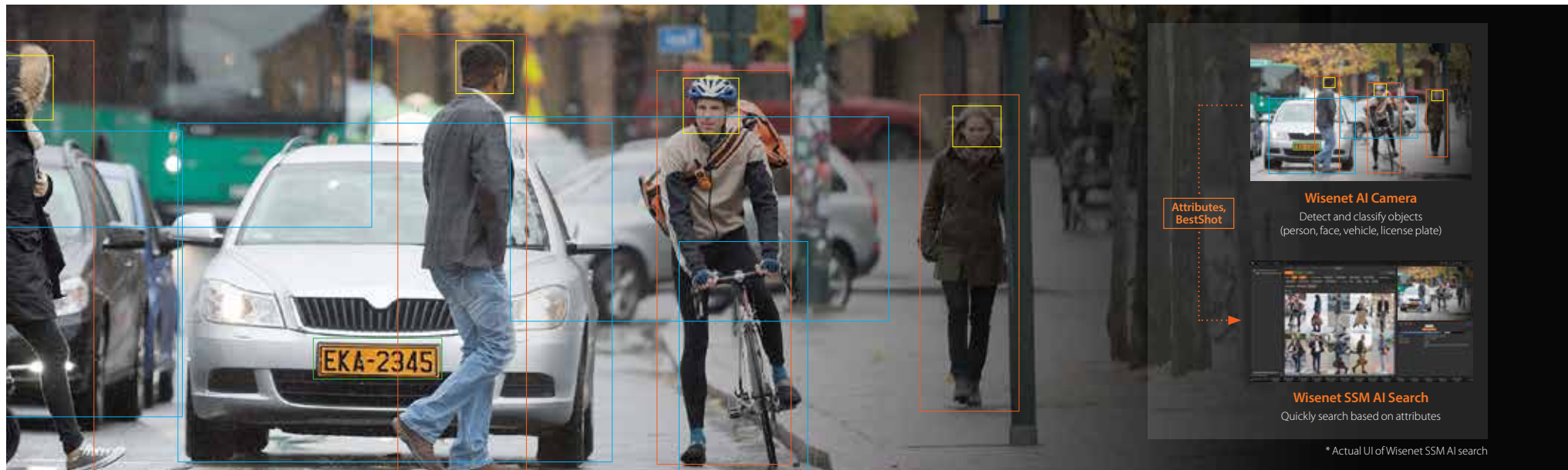
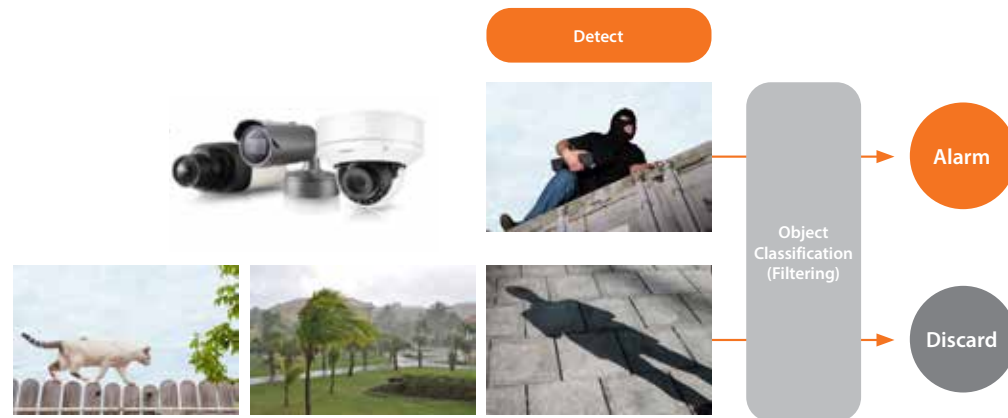


QRN-820S/420S
8CH/4CH PoE NVR
with Dual recording

WISeNET AI Cameras

New deep learning based technology

False alarm reduction through Wisenet's deep learning based algorithm, which supports object classification. It can discard waving trees, video noise, raining, moving shadow, irreverent objects (dog, plastic bag, etc).

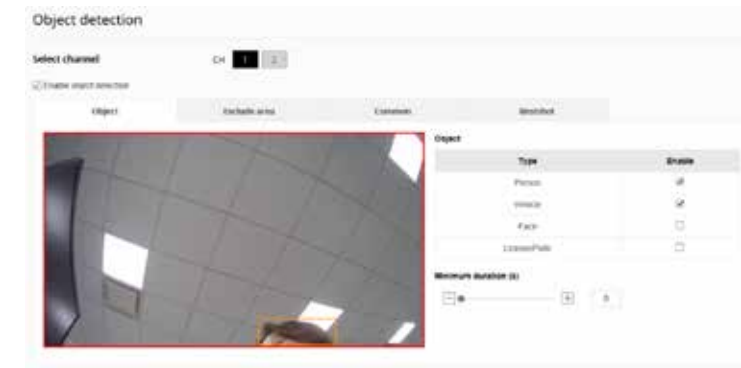


NETWORK

AI camera three main functions

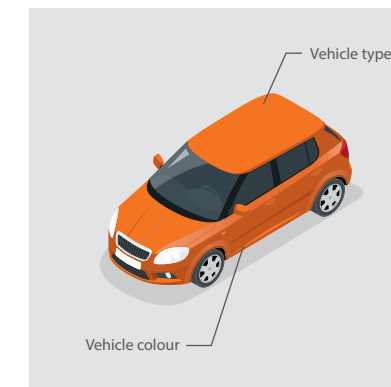
New Object Detection

- New event based on the AI algorithm
- Detection of four object types simultaneously (Person/Vehicle/Face/License plate)
- Real-time event trigger (new SUNAPI protocol)



Attributes for forensic search

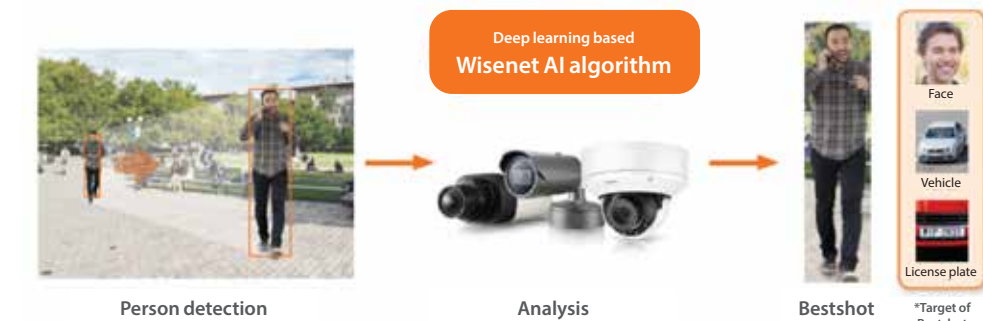
- AI camera sends metadata including attributes of objects, coordinates information and setting value to backend server
- Person, Face, Vehicle category and so on



AI CAMERAS

Real-time object Image capture for re-identification

- BestShot: Best crop image of "Person, Vehicle, Face, License plate" in the scene
- JPEG snapshot type, select option
- This function helps to load distribution of backend analysing server
- Useful with license plate analysing or face analysing server



New AI camera lineup

	4K resolution	4MP resolution	2MP resolution
BOX	PNB-A9001	PNB-A7001	PNB-A6001
BULLET	PNO-A9081R	PNO-A7081R	PNO-A6081R
VANDAL	PNV-A9081R	PNV-A7081R	PNV-A6081R
DOME	PND-A9081RV	PND-A7081RV	PND-A6081RV
DOME (FLUSH)	PND-A9081RF	PND-A7081RF	PND-A6081RF

NETWORK

AI CAMERAS

AI CAMERAS

AI CAMERAS

	 PNO-A9081R 4K AI IR Bullet Camera	 PNV-A9081R 4K AI IR Vandal Dome Camera	 PND-A9081RV 4K AI IR Dome Camera	 PND-A9081RF 4K AI IR Dome Camera	 PNB-A9001 4K AI Box Camera
Imaging Device	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS
Min. Illumination	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.03Lux(F1.2, 1/30sec)
Video Output	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p
Focal Length	4.5~10mm(2.2x) motorized varifocal	4.5~10mm(2.2x) motorized varifocal	4.5~10mm(2.2x) motorized varifocal	4.5~10mm(2.2x) motorized varifocal	-
Angular Field of View	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	-
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
IR Viewable Length	30m(98.42ft)	30m(98.42ft)	30m(98.42ft)	30m(98.42ft)	-
Day & Night	Auto(ICR)	Auto(ICR)	Auto(ICR)	Auto(ICR)	Auto(ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)
Analytics	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	8MP/30fps	8MP/30fps	8MP/30fps	8MP/30fps	8MP/30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -30°C	-40°C ~ +55°C(-40°F ~ +131°F) -40°C ~ +60°C (-13°F ~ +140°F) * Start up above -30°C	-25°C ~ +50°C (-13°F ~ +122°F) / IR LED on -25°C ~ +55°C (-13°F ~ +131°F) / IR LED off	-25°C ~ +50°C (-13°F ~ +122°F) / IR LED on -25°C ~ +55°C (-13°F ~ +131°F) / IR LED off	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, Plenum rate(UL2820)	-
Power Consumption	PoE+ : Max 25.50W, typical 21.00W 12VDC : Max 21.50W, typical 17.00W	PoE+ : Max 25.50W, typical 21.00W 12VDC : Max 21.50W, typical 17.00W	PoE+ : Max 24.50W, typical 20.00W 12VDC : Max 20.50W, typical 16.00W	PoE+ : Max 24.50W, typical 20.00W 12VDC : Max 20.50W, typical 16.00W	PoE+ : Max 19.50W, typical 15.00W 12VDC : Max 16.50W, typical 12.00W
Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (3.58" x 14.51") (Without sunshield), Weight : 2.48Kg (5.47lb)	Ø180 x 125mm(7.09" x 4.92"), Weight : 1.90Kg (4.19lb)	Ø160 x 125mm(6.30" x 4.92"), Weight : 1.60Kg (3.53lb)	Ø205 x 163mm(8.07" x 4.92"), Weight : 1.95Kg (4.30lb)	73.1 x 66.6 x 147.8mm, Weight : 0.70Kg (1.54lb)
Additional Features	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)

AI CAMERAS

	 PNO-A7081R 4MP AI IR Bullet Camera	 PNV-A7081R 4MP AI IR Vandal Dome Camera	 PND-A7081RV 4MP AI IR Dome Camera	 PND-A7081RF 4MP AI IR Dome Camera	 PNB-A7001 4MP AI Box Camera
Imaging Device	1/1.8" 4MP CMOS	1/1.8" 4MP CMOS	1/1.8" 4MP CMOS	1/1.8" 4MP CMOS	1/1.8" 4MP CMOS
Min. Illumination	Color : 0.009Lux(F1.6) BW : 0Lux(IR LED on)"	Color : 0.009Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.009Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.009Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.006Lux(F1.2) BW : 0Lux(IR LED on)
Video Output	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p
Focal Length	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 : 111.6°(Wide) ~ 46.2°(Tele) V : 58.3°(Wide) ~ 26.0°(Tele) D : 135°(Wide) ~ 53.2°(Tele)	H : 111.6°(Wide) ~ 46.2°(Tele) V : 58.3°(Wide) ~ 26.0°(Tele) D : 135°(Wide) ~ 53.2°(Tele)	H : 111.6°(Wide) ~ 46.2°(Tele) V : 58.3°(Wide) ~ 26.0°(Tele) D : 135°(Wide) ~ 53.2°(Tele)	H : 111.6°(Wide) ~ 46.2°(Tele) V : 58.3°(Wide) ~ 26.0°(Tele) D : 135°(Wide) ~ 53.2°(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	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	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)
Analytics	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1/1	1/1	1/1	1/1	1/1
Audio I/O	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	4MP/60fps	4MP/60fps	4MP/60fps	4MP/60fps	4MP/60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C(-40°F ~ +131°F) * Start up above -30°C	-40°C ~ +55°C(-40°F ~ +131°F) -40°C ~ +60°C (-13°F ~ +140°F) * Start up above -30°C"	-25°C ~ +50°C (-13°F ~ +122°F) / IR LED on -25°C ~ +55°C (-13°F ~ +131°F) / IR LED off	-25°C ~ +50°C (-13°F ~ +122°F) / IR LED on -25°C ~ +55°C (-13°F ~ +131°F) / IR LED off	-10°C ~ +55°C(+14°F ~ +131°F)
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, Plenum rate(UL2820)	-
Power Consumption	PoE+ : Max 25.50W, typical 21.00W 12VDC : Max 21.50W, typical 17.00W	PoE+ : Max 25.50W, typical 21.00W 12VDC : Max 21.50W, typical 17.00W	PoE+ : Max 24.50W, typical 20.00W 12VDC : Max 20.50W, typical 16.00W	PoE+ : Max 24.50W, typical 20.00W 12VDC : Max 20.50W, typical 16.00W	PoE+ : Max 19.50W, typical 15.00W 12VDC : Max 16.50W, typical 12.00W
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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)

ANALOG

PERIPHERAL

ACCESSORY

	NEW PNO-A6081R 2MP AI IR Bullet Camera	NEW PNV-A6081R 2MP AI IR Vandal Dome Camera	NEW PND-A6081RV 2MP AI IR Dome Camera	NEW PND-A6081RF 2MP AI IR Dome Camera	NEW PNB-A6001 2MP AI Box Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Color: 0.02Lux(F1.4) BW : 0Lux(IR LED on)	Color : 0.02Lux(F1.4) BW : 0Lux(IR LED on)	Color : 0.02Lux(F1.4) BW : 0Lux(IR LED on)	Color : 0.02Lux(F1.4) BW : 0Lux(IR LED on)	Color : 0.023Lux(F1.2) BW : 0Lux(IR LED on)
Video Output	CVBS: 1.0Vp-p	CVBS: 1.0Vp-p	CVBS: 1.0Vp-p	CVBS: 1.0Vp-p	CVBS: 1.0Vp-p
Focal Length	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°	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°	-
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	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)
Analytics	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1/1	1/1	1/1	1/1	1/1
Audio I/O	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out	Line in / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP/60fps	2MP/60fps	2MP/60fps	2MP/60fps	2MP/60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C(-40°F ~ +131°F) * Start up above -30°C	-40°C ~ +55°C(-40°F ~ +131°F) -40°C ~ +60°C(-13°F ~ +140°F) * Start up above -30°C"	-25°C ~ +50°C (-13°F ~ +122°F) / IR LED on -25°C ~ +55°C (-13°F ~ +131°F) / IR LED off	-25°C ~ +50°C (-13°F ~ +122°F) / IR LED on -25°C ~ +55°C (-13°F ~ +131°F) / IR LED off	-10°C ~ +55°C(+14°F ~ +131°F)
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10	IP52, Plenum rate(UL2820)	-
Power Consumption	PoE+ : Max 25.50W, typical 21.00W 12VDC : Max 21.50W, typical 17.00W	PoE+ : Max 25.50W, typical 21.00W 12VDC : Max 21.50W, typical 17.00W	PoE+ : Max 24.50W, typical 20.00W 12VDC : Max 20.50W, typical 16.00W	PoE+ : Max 24.50W, typical 20.00W 12VDC : Max 20.50W, typical 16.00W	PoE+ : Max 19.50W, typical 15.00W 12VDC : Max 16.50W, typical 12.00W
Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (3.58" x 14.51") (Without sunshield), Weight : 2.48Kg (5.47lb)	Ø180 x 125mm(7.09" x 4.92"), Weight : 1.90Kg (4.19lb)	Ø160 x 125mm(6.30" x 4.92"), Weight : 1.60Kg (3.53lb)	Ø205 x 163mm (8.07" x 4.92") Weight : 1.95Kg (4.30lb)	73.1 x 66.6 x 147.8mm 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)

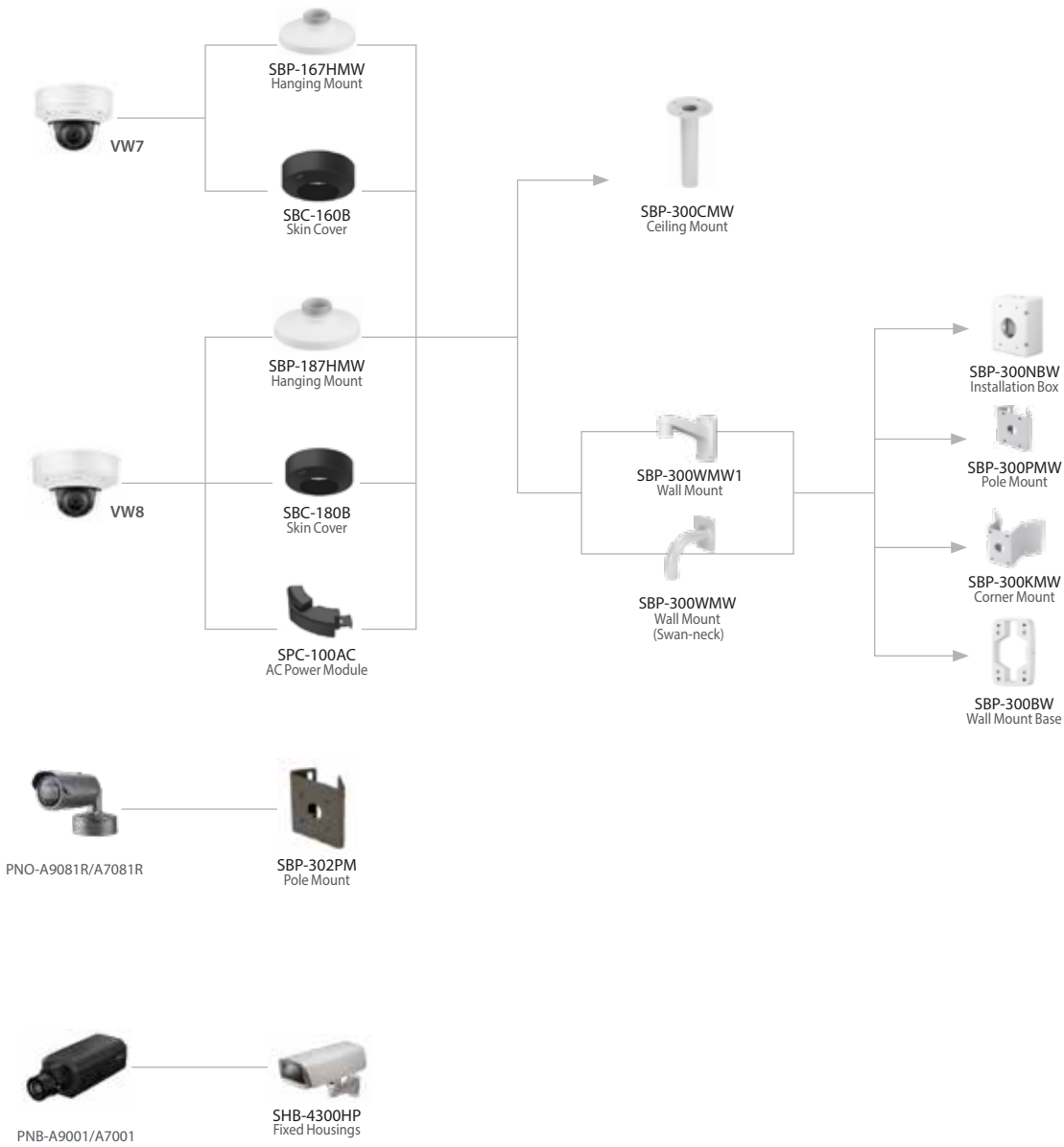
Accessory configuration

Dome

Vandal

Bullet

Box



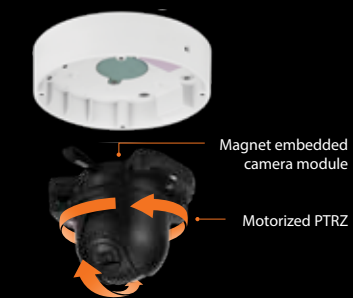
Wisenet X PLUS

2MP/5MP Modular Camera

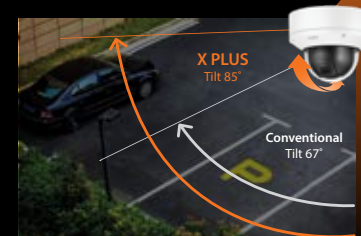
Faster installation x Reduced costs
Advanced performance x Multiplied values

The X Plus cameras feature a modular design that makes installation and maintenance simpler than ever.

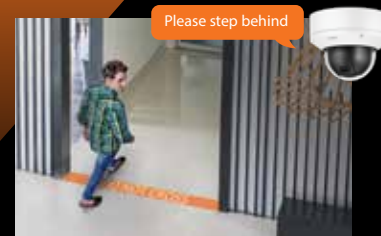
With extended tilt range, motorized PTRZ and optional skin covers, you will soon discover why X Plus is one of the most versatile camera lines on the market.



Modular structure
And motorized PTRZ



Extended tilt range for
greater flexibility



Audio playback on event



Weather Cap Black & Ivory Skin Cover

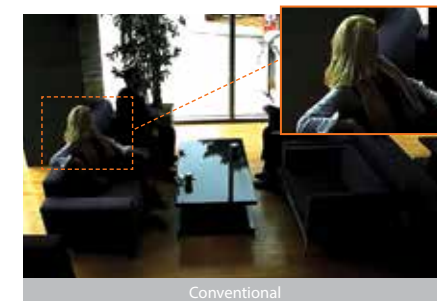
Optional accessories



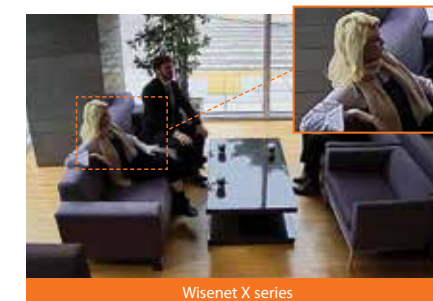
Wisenet X series

True WDR performance(150dB)

Conventional WDR captures images by taking 2 frames taken at different exposures, whereas Wisenet X series cameras utilize 4 frame capture at different exposure levels to create a combined image. With the development of cutting-edge WDR technology, Wisenet X series cameras address a limitation found in conventional WDR cameras while producing clear and vivid images.



Conventional

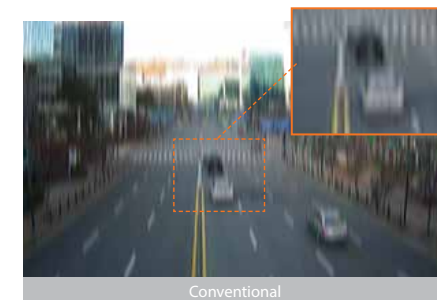


Wisenet X series

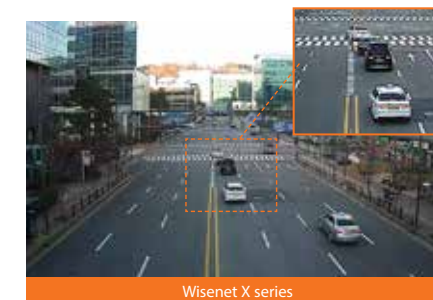
※ 150dB WDR only available in 2MP X series

Digital Image Stabilization(DIS) with built-in Gyro sensor

Advances in Wisenet image stabilization technology allows the reduction of motion blur caused by wind or vibration. A gyroscopic sensor plus DIS technology is specifically added to the Wisenet X series cameras for more accurate stabilization.



Conventional



Wisenet X series

extraLUX provides clear and coloured images, even in low-light environments

Wisenet X series achieves optimal performance in low-light conditions by producing crystal-clear and true-colour images without IR LEDs, regardless of the environment or time of day. The extraLUX series (XNO-6085R, XND/XNV-6085(V)) feature outstanding F0.94 lens with the 1/2" CMOS sensor, capturing vivid colour images even in low-light environments.



Conventional



extraLUX(XNV-6085)

Improve bandwidth by using WiseStream II

Using WiseStream II, Hanwha Techwin's original video compression technology, the Wisenet X series reduces data by up to 99% compared to current H.264 technology, when combined with H.265 compression. System costs are also greatly reduced without comprising image quality.



WiseStream II OFF : 7160kbps WiseStream II ON : 74kbps



WiseStream II OFF : 7260kbps WiseStream II ON : 1817kbps

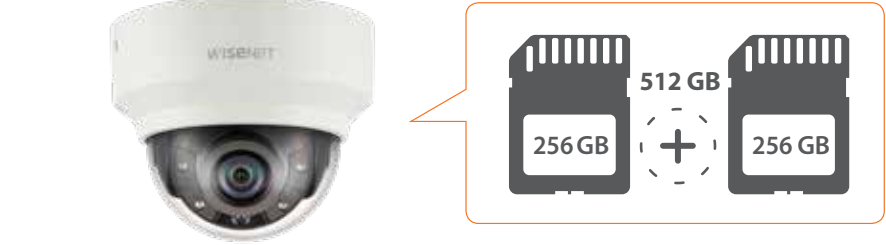
Simple installation with USB

Using the USB port, the installer can easily connect Wisenet X series cameras and mobile devices through Wi-Fi. Viewing and adjusting camera angles can be done immediately after installation by using a smartphone. No additional devices are required, saving both time and money.



Dual SD slots

Keep data safe in the event of an unstable network by saving up to 512 GB automatically to the camera with Dual SD Slots.



Handover to PTZ

The handover feature allows a select camera to receive an alarm (motion detection) from a Wisenet X series camera operating on the same IP video surveillance system. Once the notification is received, the PTZ camera will zoom into the assigned camera pre-set location.

※PNP-9200RH / XNP-6370RH



Fog detection

Wisenet X series delivers outstanding image quality in foggy weather with Fog detection. Any change in an image is automatically detected with the defog function to provide a clear image.



Enhanced Video / Audio Analytics

Wisenet X series support a variety of exclusive Video and Audio Analytics, providing enhanced monitoring solutions and market intelligence.

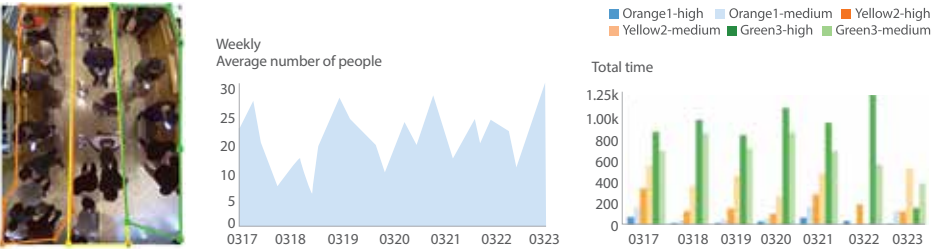
Loitering detection

This feature detects when an object remains in a designated area longer than the time threshold set by the user.



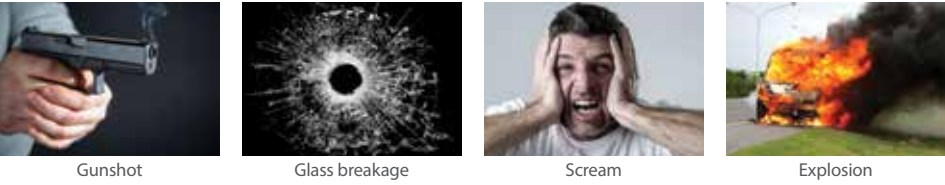
Queue management

This feature provides statistical analysis and measurement for average dwell time and number of people in a queue. This insight is critical for businesses to manage their operations more efficiently, while providing the insight necessary to manage campaigns, displays and promotions throughout retail locations.



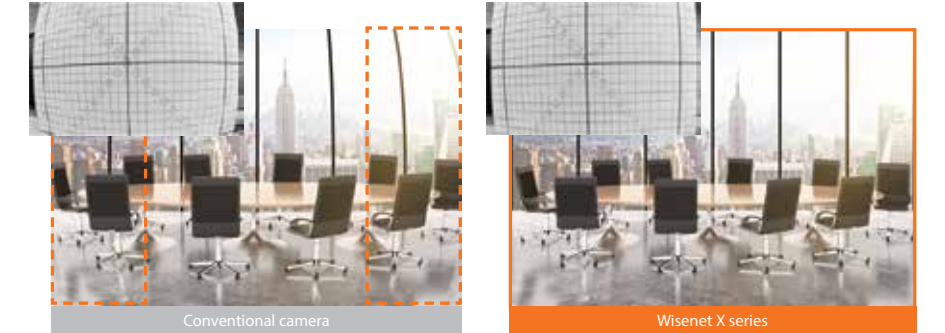
Sound classification

Wisenet X series cameras help users respond immediately in dangerous situations, by classifying sounds such as gunshot, glass breakage, scream and explosion.



Minimise Lens Distortion

Lens Distortion may typically appear in videos causing straight lines close to the edge to curve outwards. With the Lens Distortion Correction technology available on the Wisenet X series, imperfections in images can easily be repaired.



People counting and Heat map

The Wisenet X PLUS cameras have a business intelligence function that offers retailers the opportunity to measure store efficiency. People counting and heat map applications display hotspots within a store, which allow marketing personnel to identify the busiest times of the day, helping them manage customer flow and understand buying patterns.



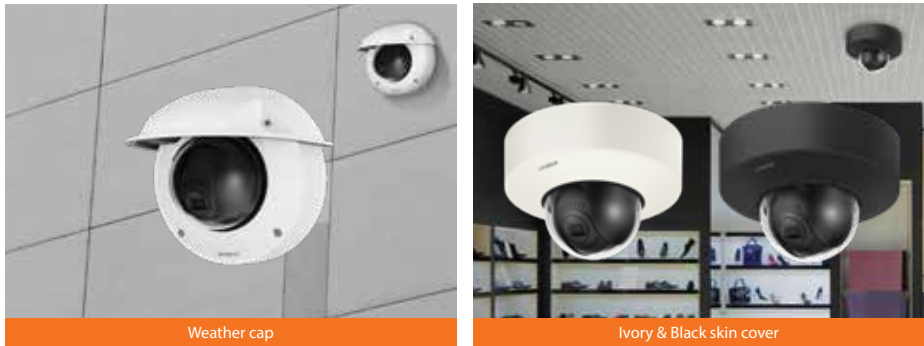
Extended tilt range for greater flexibility

Extended tilt angle has been added for greater flexibility in placement and use cases of Wisenet X PLUS cameras.



Optional accessories for various applications

A weather cap and skin cover, available in black and ivory, allow the cameras to blend in with their surroundings.



- Weather cap (XNV only) and ivory skin cover (XNV and XND) are included in the product package. The weather cap can not be applied with the skin cover on.

SBC-180B	SBC-160B	SPC-100AC	SBP-187HMMW / 187HMM	SBP-167HMMW / 167HMM
Skin cover Compatible with XNV-6081Z/8081Z	Skin cover Compatible with XND-6081Z/8081Z	AC24V power module Compatible with XNV-6081Z/8081Z	Hanging mount Compatible with XNV-6081Z/8081Z	Hanging mount Compatible with XND-6081Z/8081Z
SBP-300WMW1	SBP-300KMW	SBP-300PMW	SBP-300CMW	
Wall mount Compatible with SBP-180HMMW/160HMMW	Corner mount Compatible with SBP-300WMW1	Pole mount Compatible with SBP-300WMW1	Celling mount Compatible with SBP-180HMMW/160HMMW	

	XNB-8000 5MP Box Camera	XNO-8080R 5MP IR Bullet Camera	XNO-8020R/8030R/8040R 5MP IR Bullet Camera	XND-8081VZ 5MP Dome Camera
Imaging Device	1/1.8" 6MP CMOS	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS	1/1.8" 6MP CMOS
Min. Illumination	Colour : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)	Colour : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Colour : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)
Video Output	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	Micro USB Type B
Focal Length	-	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.7mm fixed (XNO-8020R) 4.6mm fixed (XNO-8030R) 7.0mm fixed (XNO-8040R)	3.6 ~ 9.4mm (2.6x) motorized varifocal
Angular Field of View	-	H : 92.1° (Wide) ~ 38.7° (Tele) / V : 67.2° (Wide) ~ 29.0° (Tele) / T : 119.9° (Wide) ~ 48.6° (Tele)	H : 97.5° / V : 71.9° / D : 126.2° (XNO-8020R) H : 77.9° / V : 57.9° / D : 98.7° (XNO-8030R) H : 50.7° / V : 37.8° / D : 63.8° (XNO-8040R)	H : 102.5° (Wide) ~ 38.7° (Tele) / V : 74.2° (Wide) ~ 29.0° (Tele) / D : 135.5° (Wide) ~ 48.6° (Tele)
Pan / Tilt / Rotate	-	-	-	±175° / 0 ~ 85° / ±175° (Remote)
IR Viewable Length	-	50m (164.04ft)	30m (98.43ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	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, Audio Playback Shock detection
Business Intelligence	-	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C	-25°C ~ +60°C (-13°F ~ +140°F)
Certification	-	IP67, IP66, NEMA4X, IK10	IP67/IP66/NEMA4X, IK10	IP52, IK10
Power Consumption	PoE : Max 8.50W 12VDC : Max 7.50W 24VAC : Max 8.50W	PoE : Max 12.95W 12VDC : Max 12.5W 24VAC : Max 14.5W	PoE : Max 10.3W 12VDC : Max 9.3W	PoE : Max 11W 12VDC : Max 9W
Dimensions (WxHxD) / Weight	Ø73.1 x 66.6 x 147.8mm (Ø2.88" x 2.62" x 5.82") 420g (0.93lb)	Ø91.0 x 368.6mm (Ø6.3" x 4.67") 2.18Kg (4.81lb)	Ø70.0 x 296mm (Ø2.76" x 11.65") 1.22kg (2.69lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Modular structure, Motorized PTRZ, Anti dust

X PLUS



XND-8081FZ
5MP Flush Mount Dome Camera

X PLUS



XND-8081RV
5MP IR Dome Camera

X PLUS



XND-8081RF
5MP IR Flush Mount Dome Camera



XND-8080R/8080RV
5MP IR Dome Camera

Imaging Device	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS	1/1.8" 5MP CMOS
Min. Illumination	Colour : 0.07Lux (F1.2) B/W : 0.007Lux (F1.2)	Colour : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Colour : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Colour : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)
Video Output	Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB Type B	CVBS 1.0 Vp-p, Micro USB type B
Focal Length	3.6 ~ 9.4mm (2.6x) motorized varifocal	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.9 ~ 9.4mm (2.4x) motorized varifocal	3.9 ~ 9.4m (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 : 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°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support
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
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), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	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	-25°C ~ +60°C (-13°F ~ +140°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP52, Plenum rate	IP52, IK10	IP52, Plenum rate	IK08
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 10W 12VDC : Max 9W
Dimensions (WxHxD) / Weight	Ø205 x 155mm (Ø8.07" x 6.10") 1.85kg (4.08 lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.20 lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 628g (1.38lb) (XND-8080R) 732g (1.61lb) (XND-8080RV)
Additional Features	Modular structure, Motorized PTRZ, Anti dust	Modular structure, Anti dust	Modular structure, Anti dust	Handover, Hallway View



XND-8020R/8030R/8040R
5MP IR Dome Camera



XND-8020F
5MP Flush Mount Dome Camera

X PLUS



XNV-8081Z
5MP Vandal Dome Camera

X PLUS



XNV-8081R
5MP IR Vandal Dome Camera

Imaging Device	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS
Min. Illumination	Colour : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Colour : 0.07 Lux (F1.2) B/W : 0.007 Lux (F1.2)	Colour : 0.07Lux (F1.3) BW: 0Lux (IR LED)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	Micro USB Type B	CVBS 1.0 Vp-p, Micro USB type B
Focal Length	3.7mm fixed (XND-8020R) 4.6mm fixed (XND-8030R) 7.0mm fixed (XND-8040R)	3.7mm fixed	3.6~9.4mm(2.6x) motorized varifocal	3.9~9.4mm (2.4x) motorized varifocal
Angular Field of View	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°	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	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0°~355° / 0°~47° / 0°~353°	±175° / 0° ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	-	-	50m (164.04ft)
Day & Night	Auto (ICR)	Auto (Electrical)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	-	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification, Audio Playback Shock detection	Intelligent analytics, Audio detection Sound classification, Audio Playback Shock detection
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	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) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°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	IK08	-	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X
Power Consumption	PoE : Max 9W 12VDC : Max 8W	PoE : Max 4.7W	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	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84lb)	Ø98.9 x 129.1mm (Ø3.89" x 5.08") 275g (0.61lb)	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	Handover, Hallway View	Handover, Hallway View	Modular structure, Motorized PTRZ	Modular structure



XNV-8080R
5MP IR Vandal Dome Camera



XNV-8080RS
5MP Stainless IR Vandal Dome Camera



XNV-8020R/8030R/8040R
5MP IR Vandal Dome Camera



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

Imaging Device	1/1.8" 5MP CMOS	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS	1/1.8" 6MP CMOS
Min. Illumination	Colour : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Colour : 0.07Lux (F1.3) B/W : 0Lux (IR LED on)	Colour : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.1Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
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)	1.6mm fixed
Angular Field of View	H : 92.1° (Wide) ~ 38.7° (Tele) / V : 67.2° (Wide) ~ 29.0° (Tele) / D : 119.9° (Wide) ~ 48.6° (Tele)	H : 92.1° (Wide) ~ 38.7° (Tele) / V : 67.2° (Wide) ~ 29.0° (Tele) / D : 119.9° (Wide) ~ 48.6° (Tele)	H : 97.5° / V : 71.9° / D: 126.2° (XNV-8020R) H : 77.9° / V : 57.9° / D: 98.7° (XNV-8030R) H : 50.7° / V : 37.8° / D: 63.8° (XNV-8040R)	H : 192° / V : 192° / D : 192°
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	-
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)	15m (49.21ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image 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
Business Intelligence	-	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	2048 x 2048 / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	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, 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)	-10°C ~ +55°C (+14°F ~ +131°F) (XNF-8010R) -40°C ~ +55°C (-40°F ~ +131°F) (XNF-8010RV/8010RVM)
Certification	IP67, IP66, NEMA4X, IK10	IP66, IK10+, NEMA4X	IP66, IP67, IK10	IP66, IK10 (XNF-8010RV/8010RVM)
Power Consumption	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 9.00W 12VDC : Max 8.00W	PoE : Max 12W, 12VDC : Max 11W (XNF-8010R) PoE : Max 12.95W, 12VDC : Max 12W (XNF-8010RV/8010RVM)
Dimensions (WxHxD) / Weight	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 1.01Kg (2.23lb)	Ø160 X 120.5mm (Ø6.38" x 4.74") 2.8kg (6.17lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36lb)	Ø146 x 54.8mm (Ø5.75" x 2.16"), 730g (1.61 lb) (XNF-8010R) Ø146 x 65.8mm (Ø5.75" x 2.59") 785g (1.73 lb) (XNF-8010RV) 790g (1.74 lb) (XNF-8010RVM)
Additional Features	Handover, Hallway View	Handover, Hallway View SUS316L construction	Handover, Hallway View	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarpping



XNZ-6320
2MP 32x Zoom Camera



XNZ-L6320
2M H.265 NW 32x Zoom Camera



XNB-6005
2MP Box Camera (extraLUX)



XNB-6000
2MP Box Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2" 2.17MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)	Colour : 0.05 lux (F1.6, 1/30sec) B/W : 0.005 lux (F1.6, 1/30sec)	Colour : 0.006Lux (F1.2) B/W : 0.0006Lux (F1.2)	Colour : 0.01Lux (F1.2) B/W : 0.001Lux (F1.2)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS: 1.0Vp-p / 75Ω composite, 720x480(N), 720x576(P), for installation	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Focal Length	4.44 ~ 142.6mm (32x Optical zoom / 32x Digital zoom)	4.44~142.6mm(32x) motorized varifocal	-	-
Angular Field of View	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	H: 61.8°(Wide)~2.19°(Tele) / V: 36.2°(Wide)~1.24°(Tele)	-	-
Pan / Tilt / Rotate	-	-	-	-
IR Viewable Length	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	120dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection Sound classification, Shock detection	Defocus detection, Directional detection, Fog detection, Face detection, Motion detection, Digital auto tracking, Appear/Disappear, Enter/Exit, Loitering, Tampering, Virtual line, Audio detection, Sound classification	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification
Business Intelligence	-	-	-	-
Alarm I/O	1 / 2	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF Profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	-	-	-
Power Consumption	PoE : Max 7W 12VDC : Max 6.7W	PoE : Max 6.8W, Typical 4.8W 12VDC : Max 5.2W, Typical 3.5W	PoE : Max. 8.5W 12VDC : Max 8W 24VAC : Max 9W	PoE : Max 7.5W 12VDC : Max 6.5W 24VAC : Max 8W
Dimensions (WxHxD) / Weight	96 x 76 x 143.5mm (3.78" x 2.99" x 5.65") 578g (1.274 lb)	72x63.9x135.4mm (2.83x2.52x5.33") 480g(1.06 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)
Additional Features	Defog, SFP Slot	Defog, Handover	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	-	Colour : 0.06Lux (F2.5) B/W : 0.06Lux (F2.5)	Colour : 0.06Lux (F2.5) B/W : 0.06Lux (F2.5)	Colour : 0.45Lux (F2.0) B/W : 0.45Lux (F2.0)	Colour : 0.45Lux (F2.0) B/W : 0.45Lux (F2.0)	Colour : 0.03Lux (F1.6)
Video Output	CVBS 1.0Vp-p, Micro USB type B	-	-	-	-	-
Focal Length	-	4.6mm Pinhole	4.6mm Pinhole	2.4mm fixed	2.4mm fixed	1.6mm fisheye No Dewarping
Angular Field of View	-	H : 73° / V : 39° / D : 85°	H : 73° / V : 39° / D : 85°	H : 138° / V : 73° / D : 168°	H : 138° / V : 73° / D : 168°	H : 187° / V : 113.9°
Pan / Tilt / Rotate	-	-	-	-	-	-
IR Viewable Length	-	-	-	-	-	-
Day & Night	-	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	-	-	-	-	-
Digital Noise Reduction	SSNRV	-	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-	-
Analytics	Intelligent analytics Audio detection	-	-	-	-	-
Business Intelligence	People counting, Queue management, Heatmap	-	-	-	-	-
Alarm I/O	1 / 1	-	-	-	-	-
Audio I/O	Selectable (mic in/line in) / Line out	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps	-	-	-	-	-
WiseStream	WiseStream II	-	-	-	-	-
Streaming	Up to 10 Profiles	-	-	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-	-	-
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	-	-	-	-	-
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-	-	-	-	-	-
Power Consumption	PoE : Max 6W 12VDC : Max 6.5W	-	-	-	-	-
Dimensions (WxHxD) / Weight	131.1 x 28 x 86mm (5.16" x 1.10" x 3.39") 245g (0.54 lb)	Ø24 x 42mm (Ø0.94" x 1.65") (Lens) 8m (314.96") (Cable) 310g (0.68 lb)	30 x 20.2 x 45mm (1.18" x 0.80" x 1.77") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)	Ø24 x 49.8mm (Ø0.94" x 1.96") (Lens) 8m (314.96") (Cable) 318g (0.70 lb)	30 x 27.9 x 45mm (1.18" x 0.10" x 1.77") (Lens) 8m (314.96") (Cable) 328g (0.72 lb)	Ø35 x 68.9mm (Ø1.38" x 2.71") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)
Additional Features	Handover, Hallway View	-	-	-	-	-

					
	XNO-6120R 2MP IR Bullet Camera	XNO-6085R 2MP IR Bullet Camera (extraLUX)	XNO-6080R 2MP IR Bullet Camera	XNO-L6080R 2MP IR Bullet Camera	XNO-6010R/6020R 2MP IR Bullet Camera
Imaging Device	1/2.8" 2MP CMOS	1/2" 2.17MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.004Lux (F0.94) B/W : 0Lux (IR LED on)	Colour : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.1Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.051lux (F2.0) (XNO-6010R) Colour : 0.015lux (F1.4) (XNO-6020R) B/W : 0 Lux (IR LED On)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	5.2 ~ 62.4mm (Optical 12x)	4.1 ~ 16.4mm (Optical 4x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal	2.4mm fixed (XNO-6010R) 4mm fixed (XNO-6020R)
Angular Field of View	H : 54.58° (Wide) ~ 5.30° (Tele) / V : 32.19° (Wide) ~ 3.00° (Tele) / D : 61.40° (Wide) ~ 6.06° (Tele)	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 109.0° (Wide) ~ 33.2°(Tele) / V : 57.4° (Wide) ~ 18.7°(Tele) / D : 132.0° (Wide) ~ 38.0°(Tele)	H : 139.0° / V : 73.0° / D : 167.0° (XNO-6010R) H : 88.6° / V : 47.5° / D : 104.8° (XNO-6020R)
Pan / Tilt / Rotate	-	-	-	-	-
IR Viewable Length	70m (229.66ft)	70m (229.66ft)	50m (164.04ft)	30m (98.42ft)	20m (65.62ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	120dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support	Support	Support
Analytics	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics	Intelligent analytics, Audio detection Sound classification
Business Intelligence	-	-	-	-	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	-	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)*	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C
Certification	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP66, IK10	IP67, IP66, NEMA 4X, IK10
Power Consumption	PoE : Max 12.95W 12VDC : Max 12.5W 24VAC : Max 14.5W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 12.95W	PoE : Max 12.95W 12VDC : Max 12W 24VAC : Max 15W	PoE : Max. 11W	PoE : Max 9.7W 12VDC : Max 8.8W
Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (Ø3.58" x 14.51") 2.18Kg (4.81 lb)	Ø91.0 x 388.6mm (Ø3.58" x 15.30") 2.35Kg (5.18 lb)	Ø91.0 x 368.6mm (Ø3.58" x 14.51") 2.18Kg (4.81lb)	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

					
	XND-6085V/6085V 2MP Dome Camera (extraLUX)	XND-6081V 2MP Dome Camera	XND-6081F 2MP Flush Mount Dome Camera	XND-6081VZ 2MP Dome Camera	XND-6081FZ 2MP Flush Mount Dome Camera
Imaging Device	1/2" 2.17MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.004Lux (F0.94) B/W : 0.0004Lux (F0.94)	Colour : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Colour : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Colour : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Colour : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	Micro USB type B
Focal Length	4.1~16.4mm (Optical 4x)	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal
Angular Field of View	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)
Pan / Tilt / Rotate	±175° / ±73° / ±175°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	±175° / 0° ~ 85° / ±175° (Remote)	±175° / 0° ~ 85° / ±175° (Remote)
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	-	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support
Analytics	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection, Sound classification, Audio Playback Shock detection	Intelligent analytics, Audio detection Sound classification, Audio Playback, Shock detection	Intelligent analytics, Audio detection Sound classification, Audio Playback Shock detection	Intelligent analytics, Audio detection Sound classification, Audio Playback Shock detection
Business Intelligence	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)
Certification	IK08	IP52, IK10	IP52, Plenum rate	IP52, IK10	IP52, Plenum rate
Power Consumption	PoE : Max 10.2W 12VDC : Max 8.6W	PoE : Max 7.0W 12VDC : Max 5.40W	PoE : Max 7.0W 12VDC : Max 5.40W	PoE : Max 10W 12VDC : Max 8.5W	PoE : Max 10W 12VDC : Max 8.5W
Dimensions (WxHxD) / Weight	Ø160.0 x 140.0mm (Ø6.30" x 5.51") 1.10 kg (2.43 lb) (XND-6085) 1.25 kg (2.76 lb) (XND-6085V)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97lb)	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.85kg (4.08lb)
Additional Features	Handover, Hallway View	Modular structure, Anti dust	Modular structure, Anti dust	Modular structure, Motorized PTRZ, Anti dust	Modular structure, Motorized PTRZ, Anti dust

					
	XND-6081RV 2MP IR Dome Camera	XND-6081RF 2MP Flush Mount IR Dome Camera	XND-6080/6080V 2MP Dome Camera	XND-6080R/6080RV 2MP IR Dome Camera	XND-L6080R 2MP IR Dome Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Colour : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.1 Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)
Pan / Tilt / Rotate	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	-	30m (98.43ft)	30m (98.42ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support	Support	Support
Analytics	Intelligent analytics, Audio detection Sound classification, Audio Playback Shock detection	Intelligent analytics, Audio detection Sound classification, Audio Playback Shock detection	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification	Intelligent analytics
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in), Built-in mic / Line out	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-25°C ~ +60°C (-13°F ~ +140°F)	-25°C ~ +60°C (-13°F ~ +140°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP52, IK10	IP52, Plenum rate	IK08	IK08	IK08
Power Consumption	PoE : Max 12.95W 12VDC : Max 10.8W	PoE : Max 12.95W 12VDC : Max 10.8W	PoE : Max 6.5W 12VDC : Max 6W	PoE : Max 10W 12VDC : Max 9W	PoE : Max 8W
Dimensions (WxHxD) / Weight	Ø160 x 125mm (Ø6.30" x 4.92") 1.45kg (3.2lb)	Ø205 x 155mm (Ø8.07" x 6.10") 1.80kg (3.97lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34lb) (XND-6080) 714g (1.57lb) (XND-6080V)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 624g (1.38lb) (XND-6080R) 724g (1.60lb) (XND-6080RV)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 580g (1.28 lb) (XND-L6080R) 690g (1.52 lb) (XND-L6080RV)
Additional Features	Modular design, Anti dust	Modular design, Anti dust	Handover, Hallway View	Handover, Hallway View	Defog, Hallway View



XND-6020R
2MP IR Dome Camera



XND-6011F
2MP Flush Mount Dome Camera



XND-6010
2MP Dome Camera



XNV-6120
2MP Vandal Dome Camera



XNV-6120R
2MP IR Vandal Dome Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.015 Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Colour : 0.03Lux (F1.6), B/W : 0.003Lux (F1.6)	Colour : 0.03Lux (F1.6), B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	4mm fixed	2.8mm fixed	2.4mm fixed	5.2 ~ 62.4mm (Optical 12x)	5.2 ~ 62.4mm (Optical 12x)
Angular Field of View	H : 88.6° / V : 47.5° / D : 104.8°	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°	H : 54.58° (Wide) ~ 5.30° (Tele) / V : 32.19° (Wide) ~ 3.00° (Tele) / D : 61.40° (Wide) ~ 6.06° (Tele)	H : 54.58° (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°	0° ~ 354° / 0° ~ 75° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)	-	-	-	70m (229.66ft)
Day & Night	Auto (ICR)	Auto (Electrical)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	-	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	-	-
Alarm I/O	1 / 1	-	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Built-in mic / -	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)
Certification	IK08	-	IK08	IP67, IP66, NEMA 4X, IK10	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	PoE : Max. 12.95W, 12V DC : Max. 11.5W, 24V AC : Max. 14W
Dimensions (WxHxD) / Weight	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84 lb)	Ø98.9 x 129mm (Ø3.89" x 5.08") 275g (0.61 lb)"	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34 lb)	Ø160.0 x 128.5mm (Ø6.30" x 5.06") 985g (2.17 lb)	Ø160.0 x 128.5mm (Ø6.30" x 5.06") 995g (2.19 lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View



XNV-6120RS
2MP Stainless IR Vandal Dome Camera



XNV-6085
2MP Vandal Dome Camera (extraLUX)



XNV-6081Z
2MP Vandal Dome Camera



XNV-6081R
2MP IR Vandal Dome Camera



XNV-6081
2MP Vandal Dome Camera

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	Colour : 0.03Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.004Lux (F0.94) B/W : 0.0004Lux (F0.94)	Colour : 0.015 lux (F1.4) B/W : 0.0015 Lux (F1.4)	Colour : 0.015Lux (F1.4) BW : 0Lux (IR LED)	Colour : 0.015 Lux (F1.4) B/W : 0.0015 Lux (F1.4)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	5.2 ~ 62.4mm (Optical 12x)	4.1 ~ 16.4mm (Optical 4x)	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal
Angular Field of View	H : 54.6° (Wide) ~ 5.30° (Tele) / V : 32.2° (Wide) ~ 3.00° (Tele) / D : 61.40° (Wide) ~ 6.06° (Tele)	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 75° / 0° ~ 355°	±175° / ±73° / ±175°	±175° / 0 ~ 85° / ±175° (Remote)	0° ~ 360° / -45° ~ 85° / 0° ~ 355°	0° ~ 360° / -45° ~ 85° / 0° ~ 355°
IR Viewable Length	70m (229.66ft)	-	-	50m (164.04ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification	Intelligent analytics, Audio detection Sound classification, Shock detection	Intelligent analytics, Audio detection Sound classification, Audio Playback Shock detection	Intelligent analytics, Audio detection Sound classification, Audio Playback Shock detection
Business Intelligence	-	-	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) *Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)	-50°C ~ +60°C (-58°F ~ +140°F) * Start up above -35°C (-31°F)
Certification	IP66, NEMA 4X, IK10+	IP67, IP66, NEMA 4X, IK10	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X	IP67, IP66, IP6K9K, IK10+, NEMA4X
Power Consumption	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 12.1W 12VDC : Max 11.1W 24VAC : Max 13.5W	PoE : Max 11W 12VDC : Max 9.5W 24VAC : Max 11W	PoE : Max 12.95W 12VDC : Max 10.8W 24VAC : Max 13.3W	PoE : Max 7.0W 12VDC : Max 5.4W 24VAC : Max 7.1W
Dimensions (WxHxD) / Weight	Ø162 x 134.5mm (Ø6.38" x 5.3") 2.7Kg (5.95 lb)	Ø160.0 x 140.0mm (Ø6.30" x 5.51") 1.40kg (3.09 lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.75kg (3.86lb)	Ø180 x 125mm (Ø7.1" x 4.9") 1.45kg (3.20lb)
Additional Features	Handover, Hallway View SUS316L	Handover, Hallway View, Digital Pan, Tilt and Zoom (DPTZ)	Modular structure, Motorized PTRZ	Modular structure	Modular structure



XNV-6080
2MP Vandal Dome Camera

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.015Lux (F1.4) B/W : 0.015Lux (F1.4)	Colour : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.1Lux (F1.6) B/W : 0.01Lux (F1.6)	Colour : 0.1Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	50m (164.04ft)	50m (164.04ft)	-	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support	Support	Support	Support	Support
Analytics	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	-	-
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 5 Profiles	Up to 5 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)
Certification	IP67, IP66, NEMA4X, IK10	IP67/IP66/NEMA4X, IK10	IP66, NEMA4X, IK10+	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 7.8W 12VDC : Max 7W 24VAC : Max 8.2W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 12.95W 12VDC : Max 11.5W 24VAC : Max 14W	PoE : Max 8W	PoE : Max 11W
Dimensions (WxHxD) / Weight	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 985g (2.17 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 995g (2.19 lb)	Ø160 x 120.5mm (Ø6.38" x 4.74") 2.8kg (6.17 lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 940g (2.1 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 940g (2.07 lb)
Additional Features	Handover, Hallway View	Handover, Hallway View	Handover, Hallway View SUS3 16L	Handover, Hallway View	Handover, Hallway View



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

Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.04Lux (F2.0) B/W : 0Lux (IR LED on)	Colour : 0.015Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)	Colour : 0.04Lux (F2.0) B/W : 0.04Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	Micro USB Type B	CVBS 1.0Vp-p, Micro USB type B	Micro USB Type B	Micro USB type B	CVBS 1.0Vp-p, Micro USB type B
Focal Length	3.6mm fixed	4mm fixed	2.8mm fixed	2.4mm fixed	2.8mm fixed
Angular Field of View	H : 94.8° / V : 49.3° / D : 114.3°	H : 88.6° / V : 47.5° / D : 104.8°	H : 107.4° / V : 62.2° / D : 122°	H : 135.4° / V : 71.2° / D : 161.6°	H : 112° / V : 62° / D : 130°
Pan / Tilt / Rotate	±5° / 0° ~ 67° / ±90°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±5° / ±10° / ±90°	±5° / 0° ~ 67° / ±90°	0° ~ 353° / 0° ~ 59° / 0° ~ 353°
IR Viewable Length	15m (49.21ft)	30m (98.43ft)	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support
Analytics	Intelligent analytics, Audio detection Sound classification (w/ external MIC)	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection Sound classification (w/ external MIC)	Intelligent analytics
Business Intelligence	-	People counting, Queue management, Heatmap	-	-	People counting, Queue management, Heatmap
Alarm I/O	-	1 / 1	-	-	-
Audio I/O	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/ SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10, NEMA4X	IP67, IP66, IK10	IP67, IP66K9K, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE : Max 6.70W	PoE : Max 9W 12V DC : Max 8W	PoE : Max 7.20W	PoE : Max 6.50W	PoE : Max 6.50W
Dimensions (WxHxD) / Weight	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65 lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36 lb)	103.7 x 72.3 x 126.8mm (4.08" x 2.85" x 4.99") 478g (1.04 lb)	98.9 x 52.0 x 100.0mm (3.89" x 2.05" x 3.94") 295g (0.65 lb)	Ø112.8 x 63.7mm (Ø4.44" x 2.51") 420g (0.93 lb)
Additional Features	M12 Connector (XNV-6022RM) Handover, Hallway View	Handover, Hallway View	M12 Connector Handover, Hallway View	M12 Connector (XNV-6012M) Handover, Hallway View	Handover, Hallway View

			 NEW	 NEW	 NEW
	XNP-6010 2MP Vandal Dome Camera	XNP-6550RH 2MP 55x IR PTZ Camera	XNP-6370RH / XNP-6371RH 2MP 37x IR PTZ Camera	XNP-6320RH 2MP 32x IR PTZ Camera	XNP-6321H / XNP-6321 2M 32x Network PTZ Dome Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/1.9" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2.4M CMOS
Min. Illumination	Colour : 0.055Lux (F2.0) B/W : 0.0055Lux (F2.0)	Colour : 0.02Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.05Lux (F1.5) B/W : 0Lux (IR LED on)	Colour : 0.05Lux (F1.6) B/W : 0Lux (IR LED On)	Colour : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)
Video Output	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS: 1.0Vp-p	CVBS : 1.0Vpp
Focal Length	2.4mm fixed	4.75 ~ 261.4mm (55x) zoom	6 ~ 222mm (37x) zoom	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (Optical 32x)
Angular Field of View	H : 139.0° / V : 73.0° / D : 167.0°	H : 58.6° (Wide) ~ 1.23° (Tele) / V : 34.8° (Wide) ~ 0.71° (Tele)	H : 59.3° (Wide) ~ 1.9° (Tele) / V : 35.8° (Wide) ~ 1.1° (Tele)	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 95° (-5° ~ 90°) / -	360° Endless / 210° (-15° ~ 195°)
IR Viewable Length	-	500m (1,640.42ft)	350m (1,148.29ft)	200m (656.17ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	120dB	120dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNR	SSNRV	SSNRV
Digital Image Stabilization	Support	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection, Sound classification, Shock detection	Intelligent analytics, Audio detection	Intelligent analytics, Audio detection, Sound classification, Shock detection	Tampering, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, (Dis) Appear, Audio detection, Face detection, Motion detection, Sound classification
Business Intelligence	People counting, Queue management, Heatmap	-	-	-	-
Alarm I/O	1 / 1	4 / 2	4 / 2	4 / 2	4 / 2
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	-
WiseStream	WiseStream II	WiseStream II	WiseStream	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 3 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	Micro SD/SDH C/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-50°C ~ +55°C (-122°F ~ +131°F) * Start up above -30°C (HPoE Mode)	-50°C ~ +55°C (-122°F ~ +131°F)	HPoE : -40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C 24VAC : -50°C ~ +55°C (-58°F ~ +131°F)	24V AC : -50°C ~ +55°C (-58°F ~ +131°F) / Less than 90% RH PoE+ : -35°C ~ +55°C (-31°F ~ +131°F) / Less than 90% RH * Start up should be done at above -30°C (-22°F) (XNP-6321H) -10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH (XNP-6321)
Certification	IP67, IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10 (XNP-6321H) / IK10
Power Consumption	PoE : Max 6W 12V DC : Max 5.5W	HPoE : 60W 24VAC : Max 92W	24VAC : Max 90W	HPoE : Max 51W, typical 30W 24VAC : Max 83W, typical 30W	Max. 24W (Heater Off), Max. 65W (Heater on, 24V AC) (XNP-6321H) Max. 20W (XNP-6321)
Dimensions (WxHxD) / Weight	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 625g (1.38 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 6.8Kg (14.99 lb)	Ø223.4 x 293.6mm (8.8" x 11.56") (XNP-6321H) Ø152.0 x 218.0mm (5.98" x 8.58") (XNP-6321)
Additional Features	Handover, Hallway View	Defog, Auto tracking	Defog, Auto tracking	Defog, Auto tracking	Defog

				
	XNP-6320H/6320 2MP PTZ Camera	XNP-6320HS 2MP Stainless 32x PTZ Camera	XNP-6120H 2MP 12x PTZ Camera	XNP-6040H 2MP 4.3x PTZ Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2.16MP CMOS	1/2.8" 2.16MP CMOS
Min. Illumination	Colour : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)	Colour : 0.05Lux (F1.6) B/W : 0.005Lux (F1.6)	Colour : 0.03Lux (F1.6) B/W : 0.003Lux (F1.6)	Colour : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)
Video Output	CVBS 1.0Vp-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	4.44 ~ 142.6mm (32x) zoom	4.44 ~ 142.6mm (32x) zoom	5.2 ~ 62.4mm (12x) zoom	2.8 ~ 12mm (4.3x) zoom
Angular Field of View	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele)	H : 61.8° (Wide) ~ 2.19° (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 / 210° (-15° ~ 195°) / -	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 190° (-5° ~ 185°) / -	0° ~ 355° / 0° ~ 90°
IR Viewable Length	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection, Sound classification, Shock detection	Intelligent analytics, Audio detection, Sound classification, Shock detection	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection, Sound classification
Business Intelligence	-	-	-	-
Alarm I/O	4 / 2	4 / 2	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 60fps	2MP / 60fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	PoE+ : -35°C ~ +55°C (-31°F ~ +131°F) 24VAC : -50°C ~ +55°C (-58°F ~ +131°F) (XNP-6320H) -10°C ~ +55°C (-14°F ~ +131°F) (XNP-6320)	PoE+ : -35°C ~ +55°C (-31°F ~ +131°F) 24VAC : -50°C ~ +55°C (-58°F ~ +131°F) (XNP-6320H) -10°C ~ +55°C (-14°F ~ +131°F) (XNP-6320)	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)
Certification	IP66, IK10 (XNP-6320H) IK10 (With SHP-3701H) (XNP-6320)	IP67, IP66, NEMA4X, IK10	IP66, IK10	IP66, IK10
Power Consumption	PoE+, 24VAC : Max 24W - Heater off 24VAC : Max 65W - Heater on (XNP-6320H) PoE+, 24VAC : Max 20W (XNP-6320)	24VAC : Max 65W	PoE, 12VDC : Max 12W	PoE : Max 9.6W 12VDC : Max 8.6W
Dimensions (WxHxD) / Weight	Ø220 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb) (XNP-6320H) Ø152 x 218mm (Ø5.98" x 8.58") 1.7Kg (3.75 lb) (XNP-6320)	Ø227 x 296mm (Ø8.94" x 11.65") 5.3Kg (11.69 lb)	Ø168.0 x 161.5mm (Ø6.61" x 6.36") 1.9kg (4.19 lb)	Ø136.1 x 106.1mm (Ø5.36" x 4.18") 0.78 kg (1.72 lb)
Additional Features	Defog, Auto tracking	Defog, Auto tracking SUS316L	Defog, Auto tracking	Defog, Auto tracking

Wisenet P series

Premium cameras with the most advanced technology

Wisenet P series, the ultimate premium cameras designed with the most advanced technology, delivers users an outstanding video surveillance solution.

From bullet cameras to multi-sensor cameras, the P series have a wide range of products optimised for applications which require extreme details and wide area coverage.



4K Premium Cameras

Exceptional Image Quality of 4K Ultra HD

The Wisenet P series provides an enhanced surveillance system by producing superior 4K Ultra HD image quality. 4K Ultra HD has four times the resolution of standard 1080p, which means it is able to show more detail.



Digital Auto Tracking

During quieter times, especially at night time, digital auto tracking can be used to detect moving objects, including people. Digital auto tracking is ideal for tracking movement in low traffic areas, such as parks or squares at night.



Defocus Detection & Hallway View

The Wisenet P series supports defocus detection, which helps to identify when an image is out of focus and significantly improves efficiency. The user can also adjust the optimal focus remotely via the network, reducing the installation/optimisation time of the camera.



True WDR (120dB) & P-Iris

The true WDR function built into the Wisenet P series provides enhanced picture quality, by reducing motion blur and processing clearer images.

P-Iris optimises the iris function when multiple lighting conditions exist in a single scene, which results in images with better contrast, clarity, resolution and depth of field. This optimisation of the resolution at both the centre and corner of the image, as well as the depth of field and shutter speed, provide increased image sharpness especially effective in megapixel cameras.



Multi-directional Cameras

Monitor wide areas with one camera

Wisenet P series multi-sensor cameras are equipped with multiple sensors, which means they can effectively monitor wide areas with a single camera.

- Multi-sensor cameras can simultaneously cover a full 360° area without any blind spots. When combined with a built-in PTZ camera (PNM-9320VQP), detailed images can be obtained through the use of an effective zoom function.
- Panoramic cameras can provide a wide, panoramic view of any area by stitching together and merging images from multiple onboard sensors.

By installing Wisenet multi-sensor cameras, the cost of system installation and maintenance is significantly reduced.

Multi-directional Cameras



Multi-directional Camera with PTZ



Panoramic Cameras



Multiple view modes

Choose from a variety of viewing options to suit your needs by using the broad line-up of Wisenet multi-sensor cameras.

High-resolution Multi-directional Camera

- PNM-7000VD 4MP (2M x 2ea) with dual lens
- PNM-9000VD 10MP (5M x 2ea) with dual lens

The PNM-7000VD and PNM-9000VD are able to simultaneously monitor two areas through multiple angles by installing two camera lenses in one camera, which removes the needs for multiple cameras and reduces TCO (Total Cost of Ownership).



High-resolution compatible fixed lenses

Depending on the desired direction and viewing angle, you can select 2MP (2.4, 2.8, 3.6, 6mm) and 5MP (3.7, 4.6, 7mm) lenses. The high resolution video enables clear and sharp monitoring. By installing two lenses, it's possible to achieve a viewing angle up to 270 degrees, making it ideal for monitoring large open spaces, such as parks, parking lots and shopping malls.



SLA-2M2400D 2.4mm Fixed lens, SLA-2M3600D 3.6mm Fixed lens, SLA-2M6000D 6.0mm Fixed lens

Four cameras in one

- PNM-9081VQ 20MP (5M x 4ea)
- PNM-9080VQ 8MP (2M x 4ea)
- PNM-9084QZ 8MP (2M x 4ea)
- PNM-9084RQZ/9085RQZ 8MP (2M x 4ea) / 20MP (5M x 4ea)
- PNM-9000VQ Max. 20MP (5M/2M x 4ea) with selectable lens modules



Multi-directional cameras have four sensors in one camera. The four sensors in the multi-directional camera can move independently of one another, enabling users to monitor a complete 360° view simultaneously without any blind spots.

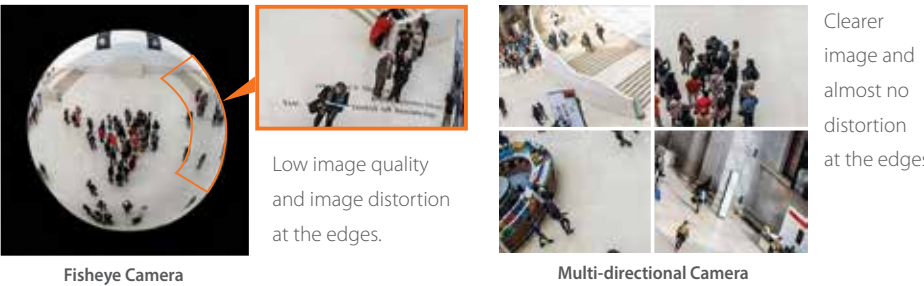
Flexible set-up

In addition, one of the sensors can easily be removed and attached in the centre of the camera, allowing for flexible set-up. These cameras have a separate set-up mode for each sensor. Each sensor can be set up for OSD control, privacy masking and MD control, as well as profile setting per codec as required.



Natural and clearer image

Conventional fisheye cameras can occasionally suffer from low quality or distortion at the edge of the image. However, the multi-directional camera with 4 sensors does not distort the image, delivering a natural, clearer image all round.



Optimised design for indoor and outdoor environments

Wisenet P series panoramic and multi-directional cameras are suitable for monitoring any location or environment. They are ideal for applications such as warehouses, shopping mall entrances, station concourses and airports supporting IP66, IK10.



- Warehouse
- City Surveillance
- Parking lot
- Square
- Crossroads
- Mall entrance
- Airport
- Stadium
- Distribution centre
- Train station

Variable display modes

The fisheye cameras in the Wisenet P series offer more than six display modes including single fisheye, single panorama, double panorama, 1 panorama + 2 PTZ, 1 fisheye + 3 PTZ and quad view mode.



Single Panorama



Double Panorama



Panorama + 2PTZ



Fisheye



Quad view



Fisheye + 3PTZ



Fisheye + 8PTZ

360°/180° panoramic view without blind spots

Equipped with a fisheye lens for 180° panoramic view or 360° surround view without blind spots, the camera is able to provide coverage of wide, open areas, such as retail stores, shopping malls, offices, train stations and more.



Fisheye



Single Panorama

Onboard dewarping streaming

The new fisheye cameras support three dewarping modes including single panorama, double panorama, quad view.



Single Panorama



Double Panorama



Quad view



PNO-9080R
4K IR Bullet Camera



PND-9080R
4K IR Dome Camera



PNV-9080R
4K IR Vandal Dome Camera



PNP-9200RH
4K 20x IR PTZ Camera



PNF-9010R/9010RV/9010RVM
9MP IR Fisheye Camera

Imaging Device	1/1.7" 12.4MP CMOS	1/1.7" 12.4MP CMOS	1/1.7" 12.4MP CMOS	1/2.5" 8MP CMOS	1/1.7" 12.4MP CMOS
Min. Illumination	Colour : 0.3Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.3Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.3Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.1Lux (F1.8) B/W : 0Lux (IR LED on)	Colour : 0.3Lux (F2.2) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p
Focal Length	4.5 ~ 10mm (2.2x) motorized varifocal	4.5 ~ 10mm (2.2x) motorized varifocal	4.5 ~ 10mm (2.2x) motorized varifocal	4.8 ~ 96mm (20x) zoom	2.1mm Fixed
Angular Field of View	[4096 x 2160] H : 100.3° (Wide) ~ 45.6° (Tele) / V : 49.7° (Wide) ~ 24.0° (Tele) [3840 x 2160] H : 92.3° (Wide) ~ 42.6° (Tele) / V : 49.7° (Wide) ~ 24.0° (Tele)	[4096 x 2160] H : 100.3° (Wide) ~ 45.6° (Tele) / V : 49.7° (Wide) ~ 24.0° (Tele) [3840 x 2160] H : 92.3° (Wide) ~ 42.6° (Tele) / V : 49.7° (Wide) ~ 24.0° (Tele)	[4096 x 2160] H : 100.3° (Wide) ~ 45.6° (Tele) / V : 49.7° (Wide) ~ 24.0° (Tele) [3840 x 2160] H : 92.3° (Wide) ~ 42.6° (Tele) / V : 49.7° (Wide) ~ 24.0° (Tele)	H : 65.1° (Wide) ~ 3.8° (Tele) / V : 38.4° (Wide) ~ 2.2° (Tele)	H : 180° / V : 180° / D : 180°
Pan / Tilt / Rotate	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	360° Endless / 190° (-5° ~ 185°) / -	-
IR Viewable Length	40m (131.23ft)	30m (98.43ft)	40m (131.23ft)	200m (656.17ft)	15m (49.21ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	Support	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics, Audio detection	Intelligent analytics, Audio detection
Business Intelligence	-	-	-	-	People counting, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1	4 / 2	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), Built-in mic / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	12MP / 20fps, 8MP / 30fps	12MP / 20fps, 8MP / 30fps	12MP / 20fps, 8MP / 30fps	12MP / 20fps, 8MP / 30fps	12MP / 20fps, 9MP / 25fps
WiseStream	WiseStream	WiseStream	WiseStream	WiseStream	WiseStream
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC	SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (14°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-50°C ~ +55°C (-58°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F) (PNF-9010R) -40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F) (PNF-9010RV/9010RVM)
Certification	IP66, IK10	IK08	IP66, IP67, IK10	IP66, IK10	IK10 (PNF-9010R) IK66, IK10 (PNF-9010RV/9010RVM)
Power Consumption	PoE : Max 11.77W / 12.95W - Heater off/on 12VDC : Max 10.45W / 11.55W - Heater off/on 24VAC : Max 12.43W / 14.08W - Heater off/on	PoE : Max. 10.5W 12V DC : Max. 9.5W	PoE : Max 11.77W / 12.95W - Heater off/on 12VDC : Max 10.45W / 11.55W - Heater off/on 24VAC : Max 12.43W / 14.08W - Heater off/on	24VAC : Max 60.0W / 90.0W - Heater off/on, IR on	Max. 11W (12V DC) Max. 12W (PoE) (PNF-9010R) Max. 12W (12V DC) Max. 12.95W (PoE) (PNF-9010RV/RVM)
Dimensions (WxHxD) / Weight	82.4 x 87.0 x 348.3mm (3.24" x 3.43" x 13.71") (Without sunshield), 1.4Kg (3.09 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34 lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 990g (2.18 lb)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)	Ø146.0 x 63.4mm (Ø5.75" x 2.50") 805g (1.77 lb) (PNF-9010R), 810g (1.79 lb) (PNF-9010RV), 815g (1.8 lb) (PNF-9010RVM)
Additional Features	Hallway View, P-Iris, Defog	Hallway View, P-Iris, Defog	Hallway View, P-Iris, Defog	Defog	M12 Connector (PNF-9010RVM), Built-in mic, On Board Dewarping



PNM-9030V
15MP 180°/220° Panoramic Camera



PNM-9020V
7.3MP 180° Panoramic Camera



PNM-9085RQZ
20MP IR Multi-Directional Camera



PNM-9084RQZ
8MP IR Multi-Directional Camera



PNM-9084QZ
8MP Multi-directional Camera

Imaging Device	1 / 2.8" 5MP CMOS x 4CH	7.3M (2MP x 4CH)	1/1.8" 5MP CMOS x 4CH	1/2.8" 2MP CMOS x 4CH	1/2.8" 2MP CMOS x 4CH
Min. Illumination	Colour : 0.15Lux (F2.0) B/W : 0.01Lux (F2.0)	Colour : 0.3Lux (F2.0) B/W : 0.03Lux (F2.0)	Colour: 0.11lux(F1.6,30 IRE) BW: 0Lux(IR LED on)	Colour: 0.05lux(F1.6,30 IRE) BW: 0Lux(IR LED on)	Colour : 0.08lux(F2.2) BW : 0.008lux(F2.2)
Video Output	Micro USB Type B	-	-	-	-
Focal Length	4mm fixed	3.6mm fixed	4.13 ~ 9.4mm (2.3x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal	3 ~ 6mm (2x) motorized varifocal
Angular Field of View	[180° mode] H : 180° / V : 70° [220° mode] H : 220° / V : 52°	[Total 4sensor] H : 180° / V : 84°	H: 87.58°(Wide)~37.34°(Tele), V: 64.58°(Wide)~28.04°(Tele), D: 112.46°(Wide)~46.85°(Tele)	H: 109.0°(Wide)~33.2°(Tele), V: 57.4°(Wide)~18.7°(Tele), D: 132.0°(Wide)~38.0°(Tele)	H : 107° (Wide) ~ 56.3° (Tele) / V : 57° (Wide) ~ 31.5° (Tele) / D : 126° (Wide) ~ 64.3° (Tele)
Pan / Tilt / Rotate	0° ~ 355° / 0° ~ 60° / -	0° ~ 355° / 0° ~ 60° / -	0~365° / 30~90° / 0~90°	0~365° / 30~90° / 0~90°	0° ~ 360° / 0° ~ 90° / 0° ~ 90°
IR Viewable Length	-	-	30m (98.43ft)	30m (98.43ft)	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	-	120dB	120dB	120dB
Digital Noise Reduction	SSNR III	SSNR III	SSNR V	SSNR V	SSNR V
Digital Image Stabilization	-	-	Support	Support	Support
Analytics	Intelligent analytics, Audio detection Sound classification	Intelligent analytics Audio detection	Intelligent analytics, Audio detection, Motion detection, Sound Classification	Intelligent analytics, Audio detection, Motion detection, Sound Classification	Intelligent analytics Audio detection
Business Intelligence	Heatmap	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	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	15.5MP / 30fps	7.3MP / 30fps	5MP / 30fps	2MP / 60fps	2MP / 60fps
WiseStream	WiseStream II	WiseStream	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 5 or 3 profiles for each CH	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles	Up to 10 profiles
Edge Storage	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI, Wisenet Open Platform	ONVIF profile S/T, SUNAPI, Wisenet Open Platform	ONVIF profile S/T, SUNAPI, Wisenet Open Platform	ONVIF profile S/T, SUNAPI, Wisenet Open Platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -30°C (-22°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) * 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) * Start up above -35°C (-31°F)
Certification	IP66, IK10	IP66, IK10	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X	IP66, IK10, NEMA4X
Power Consumption	PoE+ : Max 25.5W 12VDC : Max 21.0W	PoE+ : Max 25.5W - Heater on 12VDC : Max 21.0W - Heater on	HPoE : Max60W 12VDC: TBD	HPoE : Max 60W 12VDC: TBD	HPoE : Max 35W
Dimensions (WxHxD) / Weight	Ø253 x H165mm (Ø9.96" x 6.5") 3.2Kg (7.1lb)	Ø199.0 x 143.5mm (Ø7.83" x 5.65") 2.03Kg (4.5 lb)	Ø315 x 145.9mm	Ø315 x 145.9mm	Ø251 x 116.5mm (Ø9.88" x 4.59") 3Kg (6.6 lb)
Additional Features	Defog	Defog	Motorized PTRZ, Hallway View, Defog	Motorized PTRZ, Hallway View, Defog	Hallway view, Defog



PNM-9081VQ
20MP Multi-directional Camera



PNM-9080VQ
8MP Multi-directional Camera



PNM-9320VQP
Max. 20MP Multi-directional + 2MP 32x PTZ



SLA-5M7000P
5MP lens for PNM-9320VQP



SLA-5M4600P
5MP lens for PNM-9320VQP

Imaging Device	1/1.8" 6MP CMOS x 4CH	1/2.8" 2.38MP CMOS x 4CH	1/2.8" 2.4MP CMOS (PTZ)	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS
Min. Illumination	Colour : 0.007Lux (F1.2) B/W : 0.007Lux (F1.2)	Colour : 0.015Lux (F1.4) B/W : 0.0015Lux (F1.4)	Colour : 0.05Lux (F1.6) BW : 0.005Lux (F1.6) (PTZ)	Colour : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Colour : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)
Video Output	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p	CVBS 1.0 Vp-p (Multi)	-	-
Focal Length	3 ~ 6mm (2x) motorized varifocal	2.8 ~ 12mm (4.3x) motorized varifocal	4.44 ~ 142.6mm (Optical 32x) F1.6 (Wide) / F4.4 (Tele) (PTZ)	7.0mm fixed	4.6mm fixed
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 : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 61.8° (Wide) ~ 2.19° (Tele) / V : 36.2° (Wide) ~ 1.24° (Tele) (PTZ)	H : 50.7° / V : 37.8° / D : 63.8°	H : 77.9° / V : 57.9° / D : 98.7°
Pan / Tilt / Rotate	[Quad mode] ±30° / 10° ~ 41° / ±90°, [Center mode] ±60° / 10° ~ 41°, 10° ~ 90°(CH2/Center) / ±90°	[Quad mode] ±30° / 10° ~ 41° / ±90°, [Center mode] ±60° / 10° ~ 41°, 10° ~ 90°(CH2/Center) / ±90°	360° Endless / 190° (-5° ~ 185°) (PTZ)	±90° / +12° ~ +93° / ±180°	±90° / +21° ~ +85° / ±180°
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Electrical (Multi), ICR (PTZ)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	120dB	150dB	150dB (2MP), 120dB (5MP)	120dB	120dB
Digital Noise Reduction	SSNRV	SSNRV	SSNRV	-	-
Digital Image Stabilization	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor)	Support (Built-in Gyro sensor - PTZ)	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics * Defocus detection (Multi)	-	-
Business Intelligence	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 2	-	-
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	-	-
Resolution / Max. Frame Rate	5MP / 30fps	2MP / 60fps	5MP / 30fps, 2MP / 60fps	-	-
WiseStream	WiseStream II	WiseStream II	WiseStream II	-	-
Streaming	Up to 40 profiles	Up to 40 profiles	Up to 10 Profiles	-	-
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	SD/SDHC/SDXC	-	-
Application Programming Interface	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF Profile S, SUNAPI	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-35°C ~ +55°C (-31°F ~ +131°F)	-	-
Certification	IP66, IK10	IP66, IK10	IP66, IK10	-	-
Power Consumption	HPoE : Max 33.6W 12VDC : Max 28.8W	PoE+ : Max 25.5W 12VDC : Max 21.6W	HPoE : Max 65W	-	-
Dimensions (WxHxD) / Weight	Ø314 x 152mm (Ø12.36" x 5.98") 4.89kg (10.78 lb)	Ø314 x 152mm (Ø12.36" x 5.98") 4.83kg (10.65 lb)	Ø367.8 x 381.5mm (Ø144.49" x 15.02") 7.05kg (16.1 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)
Additional Features	Hallway view, Defog	Hallway view, Defog	Exchangeable 4ea x 2MP / 5MP lens modules, Hallway view, Defog	-	-

						
	SLA-5M3700P 5MP lens for PNM-9320VQP	SLA-2M6000P 2MP lens for PNM-9320VQP	SLA-2M3600P 2MP lens for PNM-9320VQP	SLA-2M2800P 2MP lens for PNM-9320VQP	SLA-2M2400P 2MP lens for PNM-9320VQP	SLA-2M1200P 2MP lens for PNM-9320VQP
Imaging Device	1/1.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	-	-	-	-	-	-
Focal Length	3.7mm fixed	6.0mm fixed	3.6mm fixed	2.8mm fixed	2.4mm fixed	12mm fixed
Angular Field of View	H : 97.5° / V : 71.9° / D : 126.2°	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° / +36° ~ +73° / ±180°	±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)	Auto (Electrical)
Wide Dynamic Range	120dB	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") 35g (0.08 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)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 30g (0.07 lb)
Additional Features	-	-	-	-	-	-

				
	PNM-9000VQ Max. 20MP Multi-directional Camera	SLA-5M7000Q 5MP lens for PNM-9000VQ	SLA-5M4600Q 5MP lens for PNM-9000VQ	SLA-5M3700Q 5MP lens for PNM-9000VQ
Imaging Device	-	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS	1/1.8" 5MP CMOS
Min. Illumination	-	Colour : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Colour : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)	Colour : 0.16Lux (F1.6) B/W : 0.16Lux (F1.6)
Video Output	CVBS 1.0Vp-p	-	-	-
Focal Length	-	7.0mm fixed	4.6mm fixed	3.7mm fixed
Angular Field of View	-	H : 50.7° / V : 37.8° / D : 63.8°	H : 77.9° / V : 57.9° / D : 98.7°	H : 97.5° / V : 71.9° / D : 126.2°
Pan / Tilt / Rotate	-	±90° / 40° ~ 89° / ±180°	±90° / 50° ~ 80° / ±180°	±90° / 59° ~ 66° / ±180°
IR Viewable Length	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB (2MP), 120dB (5MP)	120dB	120dB	120dB
Digital Noise Reduction	SSNRV	-	-	-
Digital Image Stabilization	Support	-	-	-
Analytics	Intelligent analytics	-	-	-
Business Intelligence	-	-	-	-
Alarm I/O	-	-	-	-
Audio I/O	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-
Resolution / Max. Frame Rate	5MP / 30fps, 2MP / 60fps	-	-	-
WiseStream	WiseStream II	-	-	-
Streaming	Up to 10 Profiles	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-
Application Programming Interface	ONVIF Profile S, SUNAPI	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-	-	-
Certification	IP66, IK10	-	-	-
Power Consumption	PoE+ : 25.5W	-	-	-
Dimensions (WxHxD) / Weight	Ø253 x 130mm (Ø9.96" x 5.12") 3.0 kg (6.7 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)	Ø35.5 x 35.9 mm (Ø1.39" x 1.41") 35g (0.08 lb)
Additional Features	Exchangeable 4ea x 2MP / 5MP lens modules, Hallway view, Defog	-	-	-



SLA-2M6000Q
2MP lens for PNM-9000VQ



SLA-2M3600Q
2MP lens for PNM-9000VQ



SLA-2M2800Q
2MP lens for PNM-9000VQ



SLA-2M2400Q
2MP lens for PNM-9000VQ

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



PNM-9000VD
10MP Multi-directional Camera



SLA-5M7000D
5MP lens for PNM-9000VD



SLA-5M4600D
5MP lens for PNM-9000VQ



SLA-5M3700D
5MP lens for PNM-9000VQ

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

	 PNM-7000VD 4MP Multi-directional Camera	 SLA-2M6000D 2MP lens for PNM-7000VD	 SLA-2M3600D 2MP lens for PNM-7000VD	 SLA-2M2800D 2MP lens for PNM-7000VD	 SLA-2M2400D 2MP lens for PNM-7000VD
Imaging Device	-	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS
Min. Illumination	-	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)	Colour : 0.055Lux (F2.0) B/W : 0.055Lux (F2.0)
Video Output	CVBS 1.0Vp-p	-	-	-	-
Focal Length	-	6.0mm fixed	3.6mm fixed	2.8mm fixed	2.4mm fixed
Angular Field of View	-	H : 50.4° / V : 28.8° / D : 58.1°	H : 94.8° / V : 49.3° / D : 114.3°	H : 107.4° / V : 62.2° / D : 122.0°	H : 135.4° / V : 71.2° / D : 161.6°
Pan / Tilt / Rotate	-	±176° / 0° ~ 65° / ±90°	±176° / 0° ~ 54° / ±90°	±176° / 0° ~ 50° / ±90°	±176° / 0° ~ 30° / ±90°
IR Viewable Length	-	-	-	-	-
Day & Night	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)	Auto (Electrical)
Wide Dynamic Range	150dB	150dB	150dB	150dB	150dB
Digital Noise Reduction	SSNRV	-	-	-	-
Digital Image Stabilization	Support	-	-	-	-
Analytics	Intelligent analytics	-	-	-	-
Business Intelligence	-	-	-	-	-
Alarm I/O	-	-	-	-	-
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	-	-	-	-
Resolution / Max. Frame Rate	2MP / 60fps	-	-	-	-
WiseStream	WiseStream II	-	-	-	-
Streaming	Up to 10 Profiles	-	-	-	-
Edge Storage	SD/SDHC/SDXC	-	-	-	-
Application Programming Interface	ONVIF Profile S, SUNAPI	-	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-	-	-	-
Certification	IP66, IK10	-	-	-	-
Power Consumption	PoE : 12.95W	-	-	-	-
Dimensions (WxHxD) / Weight	Ø161.0 x 73.0mm (Ø6.34" x 2.87") 840g (1.85 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)	Ø35.5 x 27.9mm (Ø1.4" x 1.1") 27g (0.06 lb)
Additional Features	Exchangeable 2ea x 2MP lens modules, Hallway view, Defog	-	-	-	-

WISENET Q series

Compact Cameras with Essential Qualities

This affordable product line delivers professional quality, ideal for securing small to medium sized applications. The Q series has the ability to create a secure environment with its complete lineup, saving both installation costs and time.



High quality cameras offering cost effective solutions

The Q series cameras are affordable products that offer essential features in creating a safe and secure environment. The Q series delivers sharp and clear image quality in 5MP, 4MP and 2MP, ideal in securing small to medium sized applications such as retail, banking and offices.

- Compact design with affordable price
- 5MP, 4MP & 2MP resolution
- Framerate Max. 30fps
- WDR 120dB
- WiseStream II
- Intelligent video analytics
- IR viewable length up to 30m
- Hallway view (Rotate 90°/270°)
- Micro SD/SDHC/SDXC memory slot
- Video output CVBS, PoE

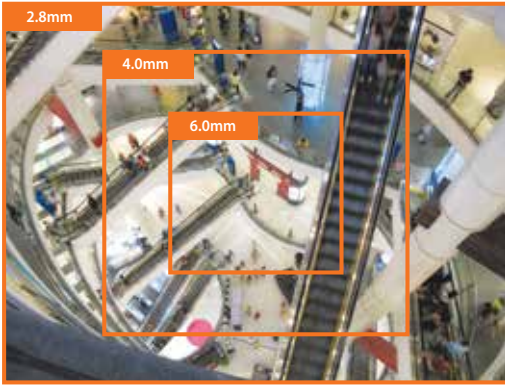


Various lens options

Fixed Lens

The Wisenet Q series fixed-lens models are available with focal lengths of 2.8mm, 4.0mm and 6.0mm.

The 2.8mm lens is available if you prefer a wide-angle view. If an area to monitor is located further away from the camera, the 6.0mm lens can be utilized.



Varifocal Lens

The 3.2 ~ 10mm (3.1x) varifocal lens, created by Hanwha Techwin's own advanced technology, offers greater flexibility in the field of view. The motorized zoom option provides quick and easy megapixel focus using the simple focus feature.



Enhanced video analytics

The Wisenet Q series cameras are equipped with a wide range of Intelligent Video Analytics features, helping users detect different types of incidents and have full situational awareness of their facility.

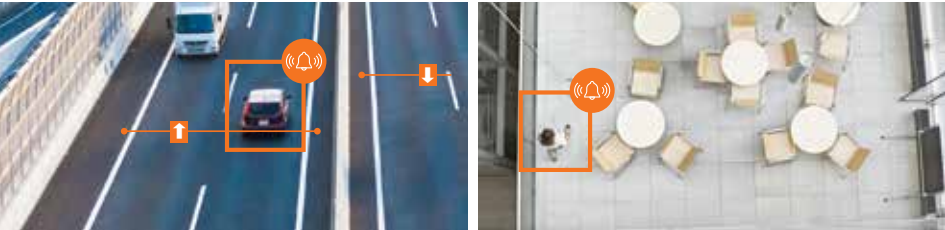


Defocus Detection

Create an alarm if the focus is blurred.

Tampering Detection

Create an alarm if the camera lens is covered or an unauthorized movement changes the field of view.



Directional Detection

Create an alarm if an object is detected in the preset direction.

Motion Detection

Create an alarm if movement is detected in a designated area.



Virtual Line

Create an alarm if an object is detected passing through a virtual line.

Enter / Exit

Create an alarm if an object enters or exits a designated area.



Q mini Super-compact Cameras

Super-compact design fits everywhere

Wisenet Q mini line-up is designed as 99mm super-compact sized. Thanks to this feature, the cameras perfectly blends into any environment while facilitating an effortless installation anywhere.



Business intelligence for smarter retail

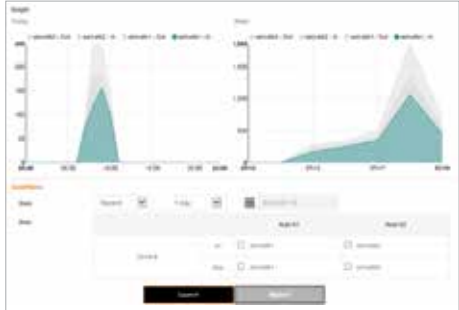
People counting*

Wisenet Q mini cameras have a business intelligence function that offers retailers the opportunity to measure store efficiency. People counting applications display hotspots within a store, which allow marketing personnel to identify the busiest times of the day, helping them manage customer flow and understand buying patterns.

*Available on select Q series cameras

Micro HDMI Output

Available on QND-8011 and QND-8021



Retail Insight

Retail Insight, a business intelligence solution optimized for franchise retail, is a software that helps us use Business Intelligence features such as people counting and heatmap of Wisenet cameras including Q mini cameras in a more convenient and effective way.





QNB-8002
5MP Box Camera



QNO-8080R
5MP IR Bullet Camera



QNO-8010R/8020R/8030R
5MP IR Bullet Camera



QND-8080R
5MP IR Dome Camera



QND-8010R/8020R/8030R
5MP IR Dome Camera

Imaging Device	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS
Min. Illumination	Color : 0.07Lux (F1.2) B/W : 0Lux (IR LED on)	Colour : 0.2Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.15Lux (F2.0) Colour : 0.15Lux (F1.6) (QNO-8020R) B/W : 0Lux (IR LED on)	Colour : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.15Lux (F2.0) Colour : 0.15Lux (F1.6) (QND-8020R) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p	CVBS 0.15Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p
Focal Length	-	3.2 ~ 10mm (3.1x) motorized varifocal	2.8mm fixed (QNO-8010R) 4.0mm fixed (QNO-8020R) 6.0mm fixed (QNO-8030R)	3.2 ~ 10mm (3.1x) motorized varifocal	2.8mm fixed (QND-8010R) 4.0mm fixed (QND-8020R) 6.0mm fixed (QND-8030R)
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 : 104.7° / V : 76.5° / D : 136.0° (QNO-8010R) H : 79.8° / V : 58.1° / D : 105.9° (QNO-8020R) H : 49.4° / V : 37.4° / D : 61.0° (QNO-8030R)	H : 100.3° (Wide) ~ 31.2° (Tele) / V : 72.3° (Wide) ~ 23.5° (Tele) / H : 133.1° (Wide) ~ 38.8° (Tele)	H : 104.7° / V : 76.5° / D : 136.0° (QND-8010R) H : 79.8° / V : 58.1° / D : 105.9° (QND-8020R) H : 49.4° / V : 37.4° / D : 61.0° (QND-8030R)
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	30m (98.43ft)	20m (65.62ft) (QNO-8010R) 25m (82.02ft) (QNO-8020R) 30m (98.42ft) (QNO-8030R)	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	Line in / Line out	-	-	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +50°C (+14°F ~ +122°F)	-10°C ~ +50°C (+14°F ~ +122°F)
Certification	-	IP66, IK10	IP66, IK10	-	-
Power Consumption	PoE : Max 6.4W, typical 4.6W 12VDC : Max 5.8W, typical 4.1W	PoE : Max 9.5W, typical 7.3W	PoE : Max 7.5W, typical 6.1W	PoE : Max 8.9W, typical 6.6W	PoE : Max 6.8W, typical 5.0W PoE : Max 7.5W, typical 5.8W (QND-8010R)
Dimensions (WxHxD) / Weight	73.8 x 66.6 x 136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)	Ø91 x 322.9mm (Ø3.58" x 12.71") 1190g (2.624 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 680g (1.499 lb)	Ø120.3 x 102.0mm (Ø4.74" x 4.02") 430g (0.948 lb)	Ø110.6 x 89.5mm (Ø4.35" x 3.52") 360g (0.794 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View



QND-8011/8021
5MP Dome Camera



QNV-8080R
5MP IR Vandal Dome Camera



QNV-8010R/8020R/8030R
5MP IR Vandal Dome Camera



QNE-8011R/8021R
5MP IR Flateye Camera



QNF-8010
6MP Fisheye Camera

Imaging Device	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/2.8" 5MP CMOS	1/1.8" 6MP CMOS
Min. Illumination	Colour : 0.15Lux (F2.0) (QND-8011) Colour : 0.15Lux (F1.6)	Colour : 0.15Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.15Lux (F2.0) Colour : 0.15Lux (F1.6) (QNV-8020R) B/W : 0Lux (IR LED on)	Colour : 0.15Lux (F1.6) Colour : 0.15Lux (F2.0) (QNE-8011R) B/W : 0Lux (IR LED on)	Colour: 0.2 Lux (F2.5, 1/30sec)
Video Output	Micro HDMI	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS 1.0Vp-p	CVBS : 1.0Vp-p
Focal Length	2.8mm fixed (QND-8011) 4mm fixed (QND-8021)	3.2 ~ 10mm (3.1x) motorized varifocal	2.8mm fixed (QNV-8010R) 4.0mm fixed (QNV-8020R) 6.0mm fixed (QNV-8030R)	2.8mm fixed (QNE-8011R) 4.0mm fixed (QNE-8021R)	1.14mm fixed focal
Angular Field of View	H : 104.4° / V : 76.7° / D : 136.1°(QND-8011) H : 80.1° / V : 58.0° / D : 105.8° (QND-8021)	H : 100.3° (Wide) ~ 31.2° (Tele) / V : 72.3° (Wide) ~ 23.5° (Tele) / H : 133.1° (Wide) ~ 38.8° (Tele)	H : 79.8° / V : 58.1° / D : 105.9°(QNV-8010R) H : 79.8° / V : 58.1° / D : 105.9° (QNV-8020R) H : 49.4° / V : 37.4° / D : 61.0° (QNV-8030R)	H : 104.4° / V : 76.7° / D : 136.1° (QNE-8011R) H : 80.1° / V : 58.0° / D : 105.8° (QNE-8021R)	H: 187° / V: 187° / D: 187°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 69° / 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)	20m (65.62ft) (QNV-8010R) 25m (82.02ft) (QNV-8020R) 30m (98.42ft) (QNV-8030R)	20m (65.62ft)	-
Day & Night	Auto (Electrical)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (Electrical)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNRV
Digital Image Stabilization	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Defocus detection, Motion detection, Tampering
Business Intelligence	People counting	-	-	-	People counting, Heatmap
Alarm I/O	-	1 / 1	1 / 1	-	-
Audio I/O	-	-	-	-	-
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5MP / 30fps	5MP / 30fps	5MP / 30fps	5MP / 30fps	6MP / 30fps
WiseStream	WiseStream II	WiseStream II	WiseStream II	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S/G/T, SUNAPI Wisenet open platform
Operating Temperature	-10°C ~ +40°C (+14°F ~ +104°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F) / Less than 90% RH
Certification	IP42, IK08	IP66, IK10	IP67, IK10	IP67, IK10	IP42
Power Consumption	PoE : Max 5W, typical 4W	PoE : Max 8.9W, typical 6.6W	PoE : Max 7.2W, typical 5.4W, PoE : Max 7.5W, typical 5.8W (QNV-8010R)	PoE : Max 7.4W, typical 5.5W	PoE: Max 6.4W, typical 4.6W
Dimensions (WxHxD) / Weight	Ø99 x 56mm (Ø3.9" x 2.2") 165g (0.364 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 700g (1.543 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.124 lb)	Ø125 x 87.35mm (Ø4.92" x 3.44") 645g (1.422 lb)	Ø99x49mm(Ø3.9x1.93") 320g(0.705 lb)
Additional Features	Super compact design, Hallway View	Hallway View	Hallway View	Hallway View	

	 QNB-7000 4MP IR Bullet Camera	 QNO-7080R 4MP IR Bullet Camera	 QNO-7010R/7020R/7030R 4MP IR Bullet Camera	 QND-7080R 4MP IR Dome Camera	 QND-7010R/7020R/7030R 4MP IR Dome Camera	 QNV-7080R 4MP IR Vandal Dome Camera
Imaging Device	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS
Min. Illumination	Colour : 0.15Lux B/W : 0.01Lux	Colour : 0.15Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.5Lux / 0.4Lux / 0.3Lux (F2.2) B/W : 0Lux (IR LED on)	Colour : 0.15Lux (F1.4) B/W : 0Lux (IR LED on)	Colour : 0.5Lux / 0.4Lux / 0.3Lux (F2.2) B/W : 0Lux (IR LED on)	Colour : 0.15Lux (F1.4) B/W : 0Lux (IR LED on)
Video Output	-	-	-	-	-	-
Focal Length	Manual / DC Auto Iris	2.8 ~ 12mm (4.3x) motorized varifocal	2.8mm fixed (QNO-7010R) 3.6mm fixed (QNO-7020R) 6mm fixed (QNO-7030R)	2.8 ~ 12mm (4.3x) motorized varifocal	2.8mm fixed (QND-7010R) 3.6mm fixed (QND-7020R) 6mm fixed (QND-7030R)	2.8 ~ 12mm (4.3x) motorized varifocal
Angular Field of View	-	H : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1°	H : 110.0° / V : 63.0° / D : 128.0° (QNO-7010R) H : 81.0° / V : 45.0° / D : 95.0° (QNO-7020R) H : 53.0° / V : 31.0° / D : 62.0° (QNO-7030R)	H : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1°	H : 110.0° / V : 63.0° / D : 128.0° (QND-7010R) H : 81.0° / V : 45.0° / D : 95.0° (QND-7020R) H : 53.0° / V : 31.0° / D : 62.0° (QND-7030R)	H : 109.7° ~ 26.0° / V : 60.8° ~ 15.2° / D : 131.3° ~ 30.1°
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	30m (98.43ft)	20m (65.62ft) / 25m (82.02ft) / 30m (98.43ft)	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSDR	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-	-
Alarm I/O	Input 1ea / Output 1ea	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Bi-dierctional (2-Way)	Selectable (mic in/line in) / -	Selectable (mic in/line in) / -	Selectable (Built-in mic) / -	Selectable (Built-in mic) / -	Selectable (mic in/line in) / -
Video Compression	H.265 / H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	4MP / 25fps	4MP / 20fps	4MP / 20fps	4MP / 20fps	4MP / 20fps	4MP / 20fps
WiseStream	WiseStream	WiseStream	WiseStream	WiseStream	WiseStream	WiseStream
Streaming	Up to 3 profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI
Operating Temperature	-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)	-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)
Certification	IPv4, IPv6	IP66, IK10	IP66, IK10	-	IK08	IP66, IK10
Power Consumption	Max. 5.4W (12V DC) Max. 6.2W (PoE),	PoE : Max 8W 12VDC : Max 7W	PoE : Max 7W 12VDC : Max. 6W	PoE : Max 7.2W 12VDC : Max 6.4W	PoE : Max 7W 12VDC : Max 5.8W (QND-7010R) PoE : Max 6.5W 12VDC : Max 5.43W (QND-7020R/7030R)	PoE : Max 7.2W 12VDC : Max 6.4W
Dimensions (WxHxD) / Weight	73.8 x 66.6 x 139.8mm (2.91" x 2.62" x 5.50") 298g (0.66 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 750g (1.65 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 730g (1.61 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 355g (0.78 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 290g (0.64 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 680g (1.5 lb)
Additional Features	Lens distortion correction, Hallway View, WiseStream	Hallway View	Hallway View	Hallway View	Hallway View	Hallway View

	 QNV-7010R/7020R/7030R 4MP IR Vandal Dome Camera	 QNE-7080RV/7080RVW 4MP IR Flateye Camera	 QNB-6002 2MP Box Camera	 QNB-6000 2MP IR Bullet Camera	 QNO-6082R 2MP IR Bullet Camera	 QNO-6070R 2MP Full HD Network IR Bullet Camera
Imaging Device	1/3" 4MP CMOS	1/3" 4MP CMOS	1/2.8" 2MP CMOS	1/2.9" 2.19M CMOS	1/2.8" 2MP CMOS	1/2.9" 2.19M CMOS
Min. Illumination	Colour : 0.5Lux (F2.0) / 0.4Lux / 0.3Lux (F2.2) B/W : 0Lux (IR LED on)	Colour : 0.2Lux (F1.6) B/W : 0Lux (IR LED on)	Color : 0.01Lux (F1.2) B/W : 0Lux (IR LED on)	Colour : 0.15Lux B/W : 0.01Lux	Colour : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.095Lux (30IRE) B/W : 0Lux (IR LED on)
Video Output	-	-	CVBS 1.0 Vp-p	-	CVBS 1.0 Vp-p	-
Focal Length	2.8mm fixed (QNV-7010R) 3.6mm fixed (QNV-7020R) 6mm fixed (QNV-7030R)	3.2 ~ 10mm (3.1x) motorized varifocal	-	Manual / DC Auto Iris	3.2 ~ 10mm (3.1x) motorized varifocal	2.8 ~ 12mm (4.3x) manual
Angular Field of View	H : 110.0° / V : 63.0° / D : 133.0° (QNV-7010R) H : 81.0° / V : 45.0° / D : 95.0° (QNV-7010R) H : 53.0° / V : 31.0° / D : 62.0° (QNV-7010R)	H : 100.0° ~ 30.5° / V : 55.7° ~ 18.3° / D : 119.6° ~ 35.3°	-	-	H : 109.0° (Wide) ~ 33.2° (Tele) / V : 57.4° (Wide) ~ 18.7° (Tele) / D : 132.0° (Wide) ~ 38.0° (Tele) /	H : 103.8° ~ 32.4° / V 53.7° ~ 18.4° / D 121.9° ~ 37.1°
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 70° / 0° ~ 360°	-	-	-	-
IR Viewable Length	20m (65.62ft) / 25m (82.02ft) / 30m (98.43ft)	30m (98.43ft)	-	-	30m (98.43ft)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Wide Dynamic Range	120dB	120dB	120dB	120dB	120dB	120dB
Digital Noise Reduction	SSNR	SSNR	SSNR	SSDR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-	-
Analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics
Business Intelligence	-	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	Input 1ea / Output 1ea	1/1	1/1
Audio I/O	Selectable (mic in/line in) / -	Line-in / -	Line in / Line out	Bi-dierctional (2-Way)	Selectable (mic in/line in) / -	Line in
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265 / H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	4MP / 20fps	4MP / 20fps	2MP / 30fps	2M / 25fps	2MP / 30fps	2MP / 30fps
WiseStream	WiseStream	WiseStream	WiseStream II	WiseStream	WiseStream II	WiseStream II
Streaming	Up to 3 Profiles	Up to 3 Profiles	Up to 3 Profiles	Up to 3 profiles	Up to 3 Profiles	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI	ONVIF profile S/G, SUNAPI	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Prole S/G, SUNAPI (HTTP API)
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 ~ +60°C (-22°F ~ +140°F)/ Less than 90% RH	-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) / Less than 90% RH * * Start up above -20°C (-4°F)
Certification	IP66, IK10	IP66, IK10	-	IPv4, IPv6	IP66, IK10	IP66, IK10
Power Consumption	PoE : Max 7W 12VDC : Max 5.8W (QNV-7010R) PoE : Max 6.8W 12VDC : Max 5.7W (QNV-7020R/7030R)	PoE : Max 8.6W 12VDC : Max 7.7W	PoE : Max 6.4W, typical 4.6W 12VDC : Max 5.8W, typical 4.1W	Max. 4.5W (12V DC) Max. 5.7W (PoE)	PoE : Max 7.4W, typical 5.4W 12VDC : Max 6.5W	PoE : Max. 8W (PoE), Max. 7W (12V DC)
Dimensions (WxHxD) / Weight	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb)	Ø144.9 x 135.5mm (Ø5.70" x 5.33") 1.3Kg (2.87lb)	73.8 x 66.6 x 136.2mm (2.91" x 2.62" x 5.36") 320g (0.71lb)	73.8 x 66.6 x 139.8mm (2.91" x 2.62" x 5.50") 298g (0.66 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") 900g (1.984 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without sunshield) 730g (1.61 lb)
Additional Features	Hallway View	Hallway View	Hallway View	Lens distortion correction, Hallway View, WiseStream	Hallway View	Hallway View



QNO-6012R/6022R/6032R
2MP IR Bullet Camera

Imaging Device	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.1Lux (F2.0) Colour : 0.1Lux (F1.6) (QNO-6022R) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p
Focal Length	2.8mm fixed (QNO-6012R) 4mm fixed (QNO-6022R) 6mm fixed (QNO-6032R)
Angular Field of View	H : 113.74° / V : 61.5° / D : 134.45° (QNO-6012R) H : 87.6° / V : 46.4° / D : 104.5° (QNO-6022R) H : 52.8° / V : 30.3° / D : 60.4° (QNO-6032R)
Pan / Tilt / Rotate	-
IR Viewable Length	20m (65.62ft) (QNO-6012R) 25m (82.02ft) (QNO-6022R) 30m (98.43ft) (QNO-6032R)
Day & Night	Auto (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	-
Analytics	Intelligent analytics
Business Intelligence	-
Alarm I/O	1/1
Audio I/O	Selectable (mic in/line in) / -
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream II
Streaming	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC
Application Programming Interface	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)
Certification	IP66, IK10
Power Consumption	PoE : Max 7W, typical 5.2W 12VDC : Max 6.1W
Dimensions (WxHxD) / Weight	Ø70.0 x 246.0mm (Ø2.76" x 9.69") 700g (1.543 lb)
Additional Features	Hallway View



QND-6082R
2MP IR Dome Camera

Imaging Device	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p
Focal Length	3.2 ~ 10mm (3.1x) 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)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)
Day & Night	Auto (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	-
Analytics	Intelligent analytics
Business Intelligence	-
Alarm I/O	1 / 1
Audio I/O	Built-in mic / -
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream II
Streaming	-
Edge Storage	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-
Power Consumption	PoE : Max 7.7W, typical 6W 12VDC : Max 6.5W
Dimensions (WxHxD) / Weight	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 320g (0.705 lb)
Additional Features	Hallway View



QND-6070R
2MP IR Dome Camera

Imaging Device	1/2.9" 2.19M CMOS
Min. Illumination	Colour : 0.095Lux B/W : 0Lux (IR LED on)
Video Output	-
Focal Length	2.8 ~ 12mm (4.3x) Manual V/F (F1.4)
Angular Field of View	H : 103.8°(Wide) ~ 32.4°(Tele) / V : 53.7°(Wide) ~ 18.4°(Tele) / D : 121.9°(Wide) ~ 37.1°(Tele)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)
Day & Night	True (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	-
Analytics	Intelligent analytics
Business Intelligence	-
Alarm I/O	1 / 1
Audio I/O	Up to 3 Profiles
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream
Streaming	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC, NAS
Application Programming Interface	ONVIF profile S/G, SUNAPI
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-
Power Consumption	Max. 5.5W (12V DC) Max. 6.7W (PoE)
Dimensions (WxHxD) / Weight	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 325g (0.72 lb)
Additional Features	Lens distortion correction, Hallway View



QND-6012R/6022R/6032R
2MP IR Dome Camera

Imaging Device	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.1Lux (F2.0) Colour : 0.1Lux (F1.6) (QND-6022R) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p
Focal Length	2.8mm fixed (QND-6012R) 4mm fixed (QND-6022R) 6mm fixed (QND-6032R)
Angular Field of View	H : 113.74° / V : 61.5° / D : 134.45° (QND-6012R) H : 87.6° / V : 46.4° / D : 104.5° (QND-6022R) H : 52.8° / V : 30.3° / D : 60.4° (QND-6032R)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	20m (65.62ft)
Day & Night	Auto (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	-
Analytics	Intelligent analytics
Business Intelligence	-
Alarm I/O	1 / 1
Audio I/O	Built-in mic / -
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream II
Streaming	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	-
Power Consumption	PoE : Max 7.4W, typical 6W 12VDC : Max 6.4W
Dimensions (WxHxD) / Weight	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 255g (0.562 lb)
Additional Features	Hallway View



QND-6011/6021
2MP Dome Camera

Imaging Device	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.1Lux (F2.0) Colour : 0.1Lux (F1.6) (QND-6011) Colour : 0.1Lux (F1.6) (QND-6021)
Video Output	-
Focal Length	2.8mm fixed (QND-6011) 4mm fixed (QND-6021)
Angular Field of View	H : 113.74° / V : 61.5° / D : 134.45° (QND-6011) H : 87.6° / V : 46.4° / D : 104.5° (QND-6021)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 69° / 0° ~ 355°
IR Viewable Length	-
Day & Night	Auto (Electrical)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	-
Analytics	Intelligent analytics
Business Intelligence	People counting
Alarm I/O	-
Audio I/O	-
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream II
Streaming	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G/T, SUNAPI, Wisenet open platform
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP42, IK08
Power Consumption	PoE : Max 4.8W, typical 2.8W
Dimensions (WxHxD) / Weight	Ø99 x 56mm (Ø3.9" x 2.2") 145g (0.320 lb)
Additional Features	Super compact design, Hallway View



QNV-6082R
2MP IR Vandal Dome Camera

Imaging Device	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.095Lux (F1.6) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p
Focal Length	3.2 ~ 10mm (3.1x) 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)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.42ft)
Day & Night	Auto (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	-
Analytics	Intelligent analytics
Business Intelligence	-
Alarm I/O	1 / 1
Audio I/O	Selectable (mic in/line in) / -
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream II
Streaming	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC
Application Programming Interface	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)
Certification	IP66, IK10
Power Consumption	PoE : Max 7.7W, typical 6W 12VDC : Max 6.5W
Dimensions (WxHxD) / Weight	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 710g (1.565 lb)
Additional Features	Hallway View



QNV-6070R
2MP IR Vandal Dome Camera

Imaging Device	1/2.9" 2.19M CMOS
Min. Illumination	Colour : 0.095Lux B/W : 0Lux (IR LED on)
Video Output	-
Focal Length	2.8 ~ 12mm (4.3x) Manual V/F (F1.4)
Angular Field of View	H : 103.8°(Wide) ~ 32.4°(Tele) / V : 53.7°(Wide) ~ 18.4°(Tele) / D : 121.9°(Wide) ~ 37.1°(Tele)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	30m (98.43ft)
Day & Night	True (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	-
Analytics	Intelligent analytics
Business Intelligence	-
Alarm I/O	1 / 1
Audio I/O	Uni-Directional
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream
Streaming	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC, NAS
Application Programming Interface	ONVIF profile S/G, SUNAPI
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10
Power Consumption	Max. 5.5W (12V DC) Max. 6.7W (PoE)
Dimensions (WxHxD) / Weight	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 660g (1.46 lb)
Additional Features	Lens distortion correction, Hallway View



QNV-6012R/6022R/6032R
2MP IR Vandal Dome Camera

Imaging Device	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.1Lux (F2.0) Colour : 0.1Lux (F1.6) (QNV-6022R) B/W : 0Lux (IR LED on)
Video Output	CVBS 1.0Vp-p
Focal Length	2.8mm fixed (QNV-6012R) 4mm fixed (QNV-6022R) 6mm fixed (QNV-6032R)
Angular Field of View	H : 113.74° / V : 61.5° / D : 134.45° (QNV-6012R) H : 87.6° / V : 46.4° / D : 104.5° (QNV-6022R) H : 52.8° / V : 30.3° / D : 60.4° (QNV-6032R)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	20m (65.62ft) (QNV-6012R) 25m (82.02ft) (QNV-6022R) 30m (98.42ft) (QNV-6032R)
Day & Night	Auto (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	-
Analytics	Intelligent analytics
Business Intelligence	-
Alarm I/O	1 / 1
Audio I/O	Selectable (mic in/line in) / -
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream II
Streaming	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC
Application Programming Interface	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)
Certification	IP66, IK10
Power Consumption	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)
Additional Features	Hallway View



QNE-6080RV
2M Network IR Flateye Camera

Imaging Device	1/2.9" 2.19M CMOS
Min. Illumination	Colour : 0.2Lux B/W : 0Lux (IR LED on)
Video Output	-
Focal Length	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)
Angular Field of View	H : 104.2°(Wide) ~ 31.2°(Tele) / V : 55.1°(Wide) ~ 17.5°(Tele) / D : 124.3°(Wide) ~ 35.8°(Tele)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 70° / 0° ~ 360°
IR Viewable Length	30m (98.43ft)
Day & Night	True (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNR
Digital Image Stabilization	-
Analytics	Intelligent analytics
Business Intelligence	-
Alarm I/O	1 / 1
Audio I/O	Uni-Directional
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream
Streaming	Up to 3 Profiles
Edge Storage	Micro SD/SDHC/SDXC, NAS
Application Programming Interface	ONVIF profile S/G, SUNAPI
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10
Power Consumption	Max. 7.6W (12V DC) Max. 8.3W (PoE)
Dimensions (WxHxD) / Weight	Ø144.9 x 135.5mm (Ø5.70" x 5.33") 1.3Kg (2.87lb)
Additional Features	Lens distortion correction, Hallway View



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

Imaging Device	1/2.8" 2.4MP CMOS
Min. Illumination	Colour : 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)
Video Output	CVBS 1.0Vp-p
Focal Length	4.44 ~ 102.2mm (Optical 23x)
Angular Field of View	H : 61.8° (Wide) ~ 3.08° (Tele) / V : 36.2° (Wide) ~ 1.73° (Tele)
Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°)
IR Viewable Length	-
Day & Night	Auto (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics
Business Intelligence	-
Alarm I/O	4 / 2
Audio I/O	Selectable (mic in/line in) / Line out
Video Compression	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream II
Streaming	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF profile S/G, SUNAPI
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Certification	IP66, IK10 (QNP-6230H) IK10 (With SHP-3701H) (QNP-6320)
Power Consumption	PoE+, 24VAC : Max. 24.0W - Heater Off, 24VAC : Max. 65.0W - Heater On (QNP-6230H) PoE+, 24VAC : Max. 20.0W (QNP-6230)
Dimensions (WxHxD) / Weight	Ø223.4 x 293.6mm (Ø8.8" x 11.56") 1.7Kg (3.75 lb) (QNP-6230H) Ø152.0 x 218.0mm (Ø5.98" x 8.58") 1.7Kg (3.75 lb) (QNP-6230)
Additional Features	Defog



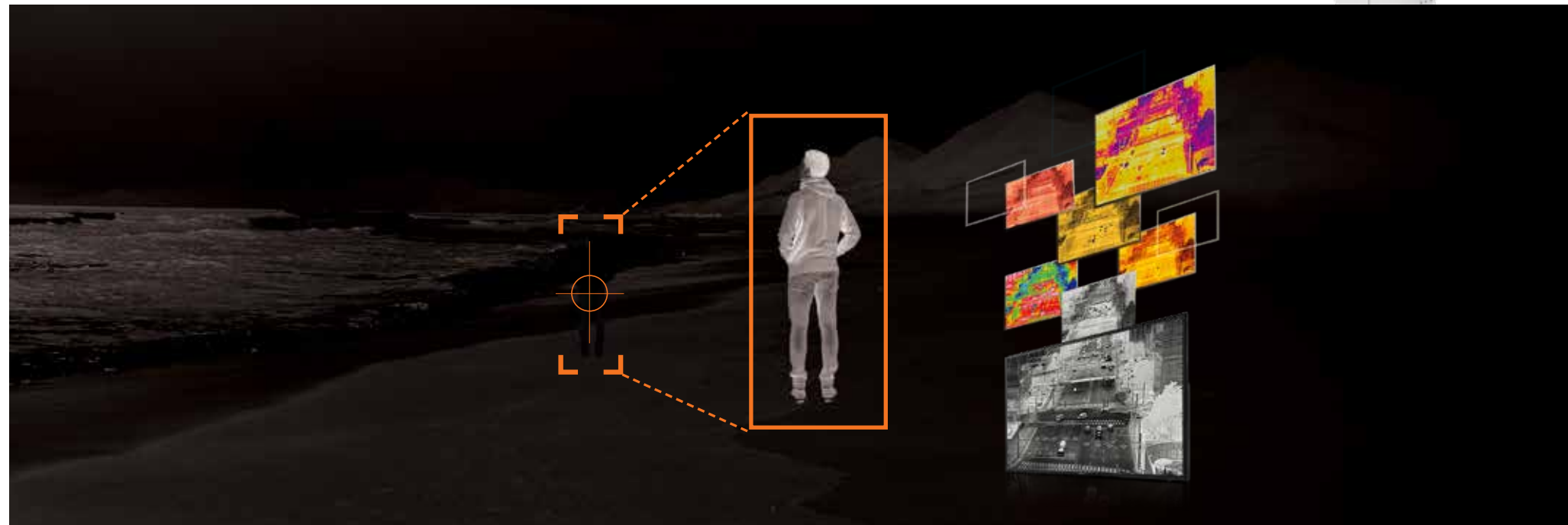
QNP-6230RH
2MP 23x Network IR PTZ Dome Camera

Imaging Device	1/2.8" 2MP CMOS
Min. Illumination	Colour : 0.05Lux (F1.6, 1/30sec) B/W : 0Lux (IR LED On)
Video Output	CVBS: 1.0Vp-p
Focal Length	4.44~102.2mm(23x) zoom
Angular Field of View	H: 61.8°(Wide)~3.08°(Tele) / V: 36.2°(Wide)~1.73°(Tele)
Pan / Tilt / Rotate	360° Endless / 95° (-5° ~ 90°)
IR Viewable Length	100m (328.08ft)
Day & Night	Auto (ICR)
Wide Dynamic Range	120dB
Digital Noise Reduction	SSNRV
Digital Image Stabilization	Support (Built-in Gyro sensor)
Analytics	Directional detection, Motion detection, Enter/Exit, Tampering, Virtual line
Business Intelligence	-
Alarm I/O	Input 4ea / Output 2ea
Audio I/O	Selectable (mic in/line in) / Line out
Video Compression	H.265/H.264,MJPEG
Resolution / Max. Frame Rate	2MP / 30fps
WiseStream	WiseStream II
Streaming	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI (HTTP API), Wisenet open platform
Operating Temperature	24VAC : -50°C~+55°C (-58°F ~ +131°F) / Less than 90% RH HPoE : -40°C~+55°C (-40°F ~ +131°F) / Less than 90% RH * Start up should be done at above -35°C"
Certification	IP66, IK10
Power Consumption	24VAC: Max. 83W (typical : 30W) HPoE : Max. 51W (typical : 30W)
Dimensions (WxHxD) / Weight	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 6.8Kg (14.99 lb)
Additional Features	-

WISeNET T series

Specialized Cameras for Challenging Conditions

T series offers explosion proof and thermal cameras which ensure a reliable video surveillance system even in the most challenging conditions. The explosion proof cameras can be used in heavy industrial facilities where a single spark may cause an explosion, while the thermal cameras are suitable for detecting people and objects in difficult weather conditions.



Explosion-proof Cameras

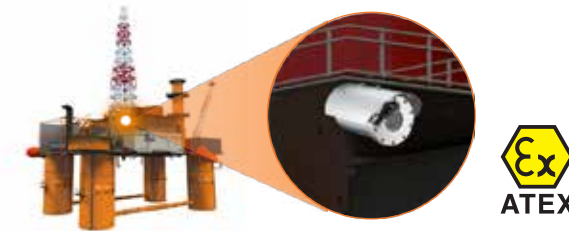
Explosion Proof Cameras for Hazardous Environments

Wisenet T series explosion proof cameras can be used in heavy industrial facilities such as gas pipelines, petrochemical plants or oil refineries which are potentially explosive because of flammable gases and dusts emitted.



Stainless Steel 316L Enclosure to Prevent Explosions

The ATEX certified enclosure made of stainless steel 316L housing has the ability to contain any internal explosions or prevent sparks from escaping the device which may lead to a disaster.



Defog technology to improve image clarity

The defog function is an image processing technology which helps improve image clarity in poor weather conditions such as fog or yellow dust. The visibility of the cameras can be enhanced in any weather condition so that users can monitor images around the clock.



360° endless pan rotation and 255 preset mode

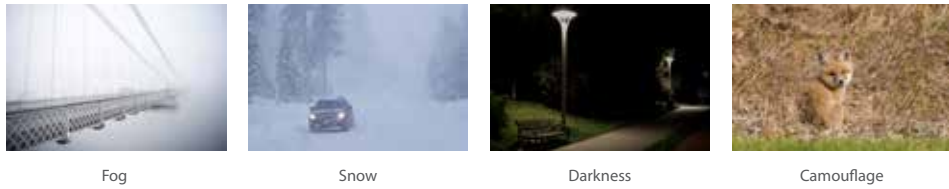
TNU-6320E is capable of monitoring a wide area, with its 360° endless pan and 180° tilt feature moving at 1~50° /sec preset speed. In addition, the camera's flexibility is increased by 255 preset positions, allowing users to save settings for pan/tilt functions and automatically view the location desired.



Thermal Cameras

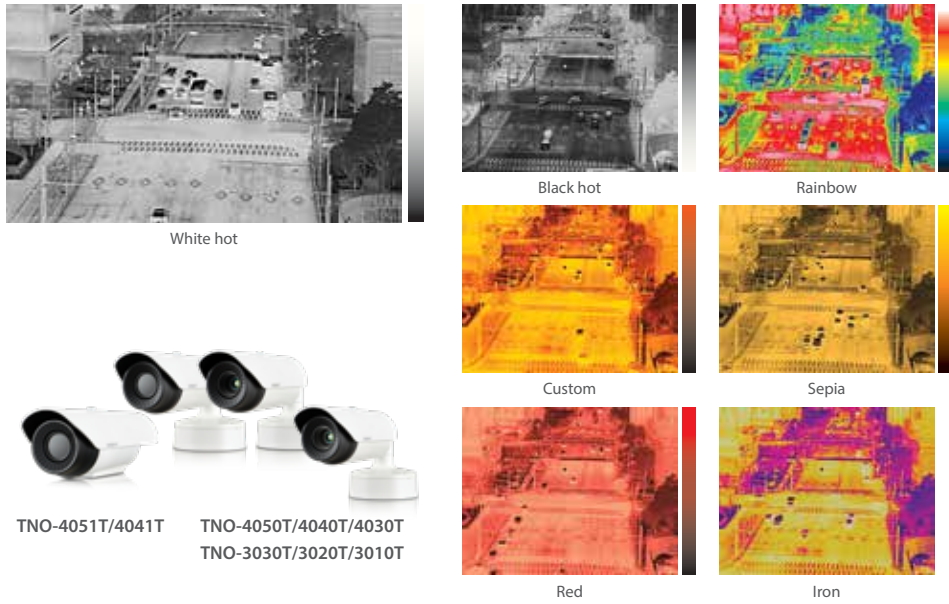
See the unseen with thermal cameras

Wisenet thermal imaging technology provides high contrast images based on temperature differences between the object and background, enabling users to detect incidents more easily in challenging environments.



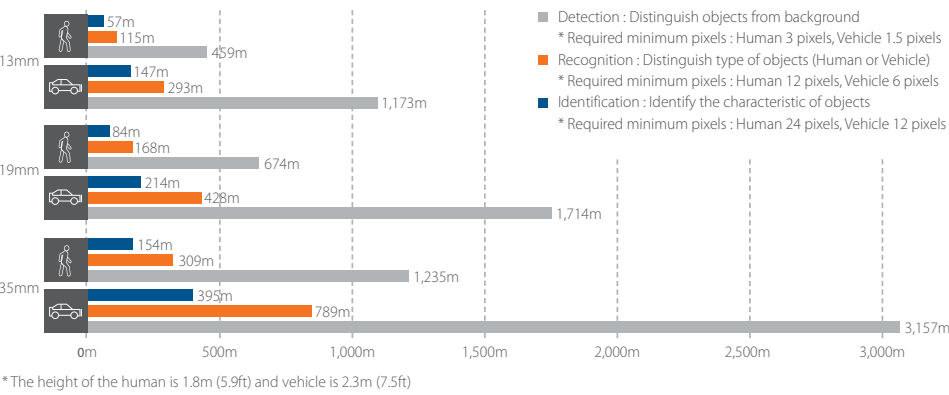
Multiple colour palettes

Wisenet thermal cameras provide seven different types of colour palette for users to select the best image in various situations. Each colour palette has a specific set of colours which change according to the temperature range of the scene.



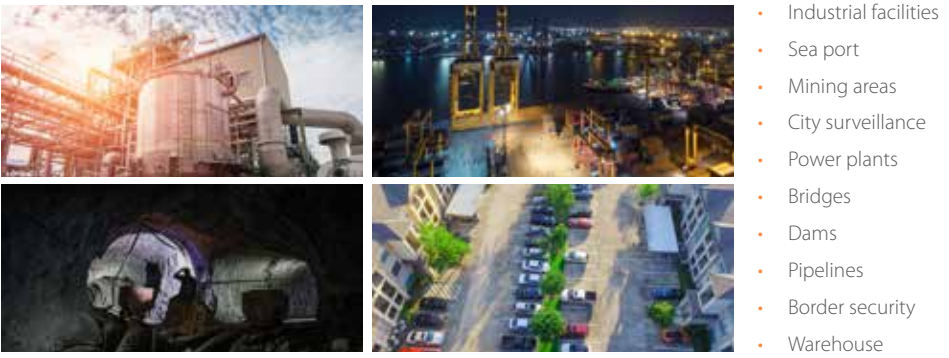
Long detection range up to 3,157m

The main task of the thermal camera is to detect events that occur at long distances. Wisenet thermal cameras are equipped with a 35/19/13mm lens (Horizontal FoV 17°/32°/49°) to detect vehicles up to 3,157m away. The camera provides an image with high colour contrast according to the temperature, so it can easily distinguish objects and background from a long distance. At closer range, it can recognise the type of object or identify the characteristic by capturing details.



Secure a wide variety of applications

Wisenet thermal cameras can be a powerful tool when monitoring applications where there is very little light, due to their ability to create images based on heat. Thermal cameras are especially applicable in manufacturing and industrial facilities, air and seaports, and mining areas.



VGA Thermal Radiometric Camera



Temperature measurement to monitor incidents

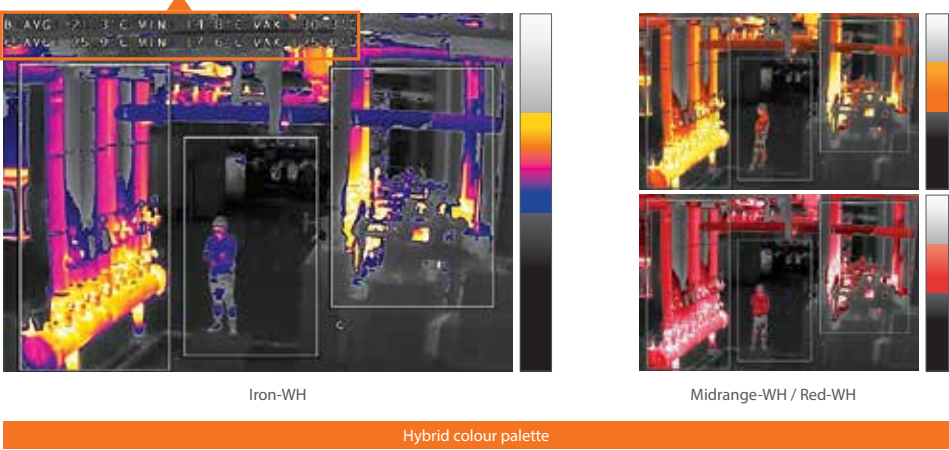
The Wisenet thermal radiometric camera has the added feature of being able to detect the temperature range of -20°C to +130°C. Alarms are generated and sent to users whenever the temperature of three areas in the monitoring screen is above or below a defined value or the temperature increases or decreases beyond the preset range.

In addition, the screen displays average/minimum/maximum temperature of the three areas for more thorough temperature measurement. With accurate temperature measurement, radiometric cameras are perfect for monitoring high-risk areas such as power plants with fire hazards.

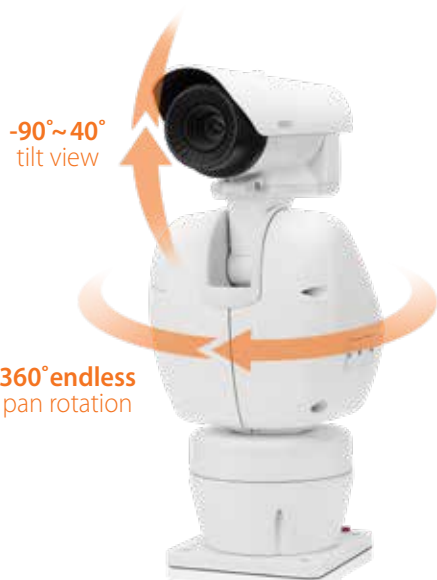
Selected temperature range displayed in vivid colours

Using a hybrid colour palette, the selected range of temperatures can be displayed in vivid colours, helping users observe monitoring areas with greater ease. The temperature of the defined range is expressed in white hot or black and white, ensuring the camera covers the entire monitoring areas with thermal detection.

Temperature of 3 areas displayed on screen



VGA Thermal Positioning Camera



Broad thermal monitoring with positioning

Combines a thermal imaging camera and a positioning unit capable of monitoring a wide area, with its 360° endless pan and -90° to +40° tilt. In addition, the camera's flexibility is increased by 300 preset positions, allowing users to save the settings for pan/tilt functions and automatically view the location desired.



						
	TNB-9000 8K Box Camera	TNV-7010RC 3MP IR Corner Mount Camera	TNO-6320E 2MP Explosion-proof Camera	TNU-6320E 2MP Explosion-proof PTZ Camera	TNU-6320 2MP Positioning Camera	TNU-4041T / 4051T VGA Thermal Positioning Camera
Imaging Device	43.3mm Full-frame CMOS	1/2.8" 3.2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	Uncooled Micro bolometer
Min. Illumination	Color : 0.015Lux(F1.4) BW : 0.0015Lux(F1.4)	Colour : 0.3Lux (F2.0) B/W : 0.015Lux (IR LED on)	Colour : 015Lux (F1.6) B/W : 0.015Lux (F1.6)	Colour : 015Lux (F1.6) B/W : 0.015Lux (F1.6)	Colour : 015Lux (F1.6) B/W : 0.015Lux (F1.6)	-
Video Output	HDMI (1080p)	CVBS 1.0Vp-p	-	-	-	CVBS : 1.0Vp-p
Focal Length	-	2.8mm fixed	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 142.6mm (Optical 32x)	4.44 ~ 142.6mm (Optical 32x)	19mm / 35mm fixed
Angular Field of View	Canon 24mm, H: 57.4° Canon 35mm, H: 42.6° Canon 50mm, H: 30.9° Canon 85mm, H: 19.1° Canon 100mm, H: 16.0° Canon 70-200mm, H: 22.8° ~ 8.0°	H : 102° / V : 75° / D : 129°	H : 62.8° (Wide) ~ 2.23° (Tele) / V : 36.8° (Wide) ~ 1.26° (Tele)	H : 62.8° (Wide) ~ 2.23° (Tele) / V : 36.8° (Wide) ~ 1.26° (Tele)	H : 62.8° (Wide) ~ 2.23° (Tele) / V : 36.8° (Wide) ~ 1.26° (Tele)	H : 32° / V : 24.3° / D : 39.2° H : 17.2° / V : 13° / D : 22°
Pan / Tilt / Rotate	-	0° / ±15° / 0°	-	360° Endless / 180° (-90° ~ 90°) / -	360° Endless / 180° (-90° ~ 90°) / -	360° Endless / -90° ~ 40°
IR Viewable Length	-	10m (32.8ft) with 940nm IR LED	-	-	-	-
Day & Night	Auto(ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	-
Wide Dynamic Range	-	120dB	120dB	120dB	120dB	-
Digital Noise Reduction	SSNRV	SSNRV	SSNRIII	SSNRIII	SSNRIII	-
Digital Image Stabilization		Support	Support	Support	Support	Support (Built-in Gyro sensor)
Analytics	Intelligent analytics, Audio detection, Sound classification	Intelligent analytics, Audio detection, Sound classification, Shock detection	Intelligent analytics	Intelligent analytics	Intelligent analytics	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature change detection
Business Intelligence	-	-	-	-	-	-
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio I/O	Selectable (mic in/line in) / Line out	Selectable (mic in/line in), 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.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	8K/15fps, 24MP/20fps, 15MP/30fps, 4K/60fps	3MP / 30fps	2MP / 60fps	2MP / 60fps	2MP / 60fps	640 x 480 / 30fps
WiseStream	WiseStream II	WiseStream II	-	-	-	WiseStream II
Streaming	Up to 3 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles	Up to 10 Profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	-	-	SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T, SUNAPI	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S, SUNAPI, Wisenet open platform	ONVIF profile S, SUNAPI, Wisenet open platform	ONVIF profile S, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform
Operating Temperature	0°C ~ +45°C (32°F ~ +122°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)	-30°C ~ +60°C (-22°F ~ +140°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +60°C (-40°F ~ +140°F)
Certification	-	IP66, IP6K9K, IK10+	IP67, IK10, CE2460, EX II 2 GD, Ex d IIC T6 Gb IP67, Ex tb IIIC T85°C Db	IP67, IK10, CE2460, EX II 2 GD, Ex d IIC T6 Gb IP67, Ex tb IIIC T80°C Db	IP66	IP66, NEMA 4X, IK10
Power Consumption	HPoE : Max 40W 12VDC : Max 35W	PoE : Max 12W 12VDC : Max 11W	24VAC : Max 28W	24VAC : Max 49W	24VAC : Max 100W - Heater On Max 25W - Heater Off	24VAC : Max 84W - Heater On Max 62W - Heater Off
Dimensions (WxHxD) / Weight	118.5 x 120 x 180mm 2.2kg (4.85lb)	236 x 236 x 126.5mm (9.29" x 9.29" x 4.98") 2.2kg (4.85lb)	Ø162 x 244mm (Ø6.38" x 9.61") 7kg (15.43 lb)	384.0 x 402.0 x 250.0mm (15.12" x 15.83" x 9.84") 35Kg (77.16 lb)	219.0 x 460.0 x 528.0mm (8.62" x 18.11" x 20.79") 14Kg (30.86 lb)	219 x 528 x 335mm (8.62" x 20.79" x 13.19") 11.7 kg (25.79lb)
Additional Features	8K, Canon EF mount	Anti ligature design, Invisible IR LED, Hallway View	Stainless (SUS316L) housing, Built in wiper	Stainless (SUS316L) housing, Built in wiper	Defog, Built in wiper	Various colour palettes

						
	TNO-4041T/4051T VGA Thermal Bullet Camera	TNO-4030T/4040T/4050T VGA Thermal Bullet Camera	TNO-4041TR VGA Radiometric Thermal Bullet Camera	TNO-4030TR/4040TR VGA Radiometric Thermal Bullet Camera	TNO-3010T/3020T/3030T QVGA Thermal Bullet Camera	TNB-6030 Public View Monitoring Camera
Imaging Device	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled Micro bolometer	Uncooled micro bolometer	1/2.8" 2M CMOS
Min. Illumination	-	-	-	-	-	Colour : 0.06 Lux (1/30sec, F2.5)
Video Output	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p, Micro USB Type B	CVBS : 1.0Vp-p	CVBS : 1.0Vp-p, Micro USB Type B	CVBS : 1.0Vp-p, Micro USB Type B	Micro HDMI (Max. 1920 x 1080 60fps)
Focal Length	19mm fixed (TNO-4041T) 35mm fixed (TNO-4051T)	13mm fixed (TNO-4030T) 19mm fixed (TNO-4040T) 35mm fixed (TNO-4050T)	19mm fixed	13mm fixed (TNO-4030TR) 19mm fixed (TNO-4040TR)	2.7mm fixed (TNO-3010T) 4.7mm fixed (TNO-3020T) 13.7mm fixed (TNO-3030T)	4.6mm
Angular Field of View	H : 32° / V : 24.3° / D : 39.2° (TNO-4041T) H : 17.2° / V : 13° / D : 22° (TNO-4051T)	H : 48.6° / V : 36.4° / D : 61.6° (TNO-4030T) H : 32° / V : 24.3° / D : 39.2° (TNO-4040T) H : 17.2° / V : 13° / D : 22° (TNO-4050T)	H : 32° / V : 24.3° / D : 39.2°	H : 48.6° / V : 36.4° / D : 61.6° (TNO-4030TR) H : 32° / V : 24.3° / D : 39.2° (TNO-4040TR)	H : 92° / V : 65.5° / D : 125.7° (TNO-3010T) H : 50° / V : 36.4° / D : 65.3° (TNO-3020T) H : 16° / V : 12° / D : 20° (TNO-3030T)	H : 73.8° / V : 39.6° / D : 86.8°
Pan / Tilt / Rotate	-	-	-	-	-	-
IR Viewable Length	-	-	-	-	-	-
Day & Night	-	-	-	-	-	Auto (Electrical) / Colour / B/W
Wide Dynamic Range	-	-	-	-	-	150dB
Digital Noise Reduction	-	-	-	-	-	SSNRV (2D+3D noise filter) (Off / On)
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)	Off / On
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 detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection	Intelligent analytics, Audio detection, Sound classification, Shock detection, Temperature detection	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis) Appear, Face detection, Motion detection, Digital auto tracking
Business Intelligence	-	-	-	-	-	-
Alarm I/O	1 / 2	1 / 2	1 / 2	1 / 2	1 / 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	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	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	320 x 240 / 30fps	640 x 480 / 30fps
WiseStream	WiseStream II	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	Up to 10 Profiles
Edge Storage	SD/SDHC/SDXC	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, SUNAPI, Wisenet open platform	ONVIF profile S/G, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF profile S/G/T, SUNAPI, Wisenet open platform	ONVIF Profile S/G, SUNAPI (HTTP API), Open Platform
Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	+14°F ~ +122°F (-10°C ~ +50°C) / Less than 90% RH
Certification	IP66, NEMA 4X, IK10 (TNO-4041T)	IP66, NEMA 4X, IK10 (TNO-4030T/4040T)	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IPv4, IPv6
Power Consumption	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 10W 12VDC : Max 9W 24VAC : Max 10.5W	PoE : Max 8.7W 12VDC : Max 7.8W 24VAC : Max 9.2W	Max. 6W (12V DC), Max. 7W (PoE)
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") 2,452g (5.41lb)	Ø101.97 x 401.8mm (Ø4.01" x 15.82") 3,124g (6.89lb)	Ø147.51 x 375.3mm (Ø5.81" x 14.78") 2512g (5.538lb)	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) 0.54 lb (245g)
Additional Features	Various colour palettes, PT type	Various colour palettes	Various colour palettes Spot temperature reading, PT type	Various colour palettes Spot temperature reading	Various colour palettes	Motion detection, Video & audio analytics, Network disconnect

WISeNET NVRs

Range of NVR's to suit everything from the smallest scale retail store to larger projects.

The intuitive and standardised interface of the NVR's allows current users to easily add on extra units.



NVR



XRN-3010/3010A
64CH 12MP NVR



XRN-2011/2011A
32CH 12MP NVR



XRN-2010/2010A
32CH 12MP NVR

Os	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	300Mbps	256Mbps 100Mbps (RAID 5 mode)	256Mbps
Max # of Cameras	64	32	32
Internal Storage	Up to 8 SATA (Max. 64TB)	Up to 8 SATA (Hot swap) Max. 48TB (Non RAID), Max.36TB (RAID 5)	Up to 8 SATA (Max. 48TB) (XRN-2010)
External Storage	1 e-SATA	iSCSI	iSCSI, 1 e-SATA
RAID	-	RAID 5	-
Hot Swap	-	Yes	-
Network Viewer Software	Wisenet WAVE, SSM, WebViewer, SmartViewer, Wisenet Mobile	Wisenet WAVE, SSM, WebViewer, SmartViewer, Wisenet Mobile	Wisenet WAVE, SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Defocus event trigger • Easy configuration (Setup Wizard, P2P (QR Code)) (XRN-3010A)	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Easy configuration (Setup Wizard, P2P (QR Code)) (XRN-2011A)	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Easy configuration (Setup Wizard, P2P (QR Code)) (XRN-2010A)



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



XRN-810S
8CH 8MP NVR



XRN-410S
4CH 8MP NVR

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



PRN-4011
64CH 12MP NVR



QRN-1610S
16CH 8MP NVR



QRN-810S/810
8CH 8MP NVR



QRN-410S/410
4CH 8MP NVR

Os	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	400Mbps	128Mbps	100Mbps (QRN-810), 80Mbps (QRN-810S)	50Mbps (QRN-410), 40Mbps (QRN-410S)
Max # of Cameras	64	16	8	4
Internal Storage	Up to 12 SATA (Max. 96TB)	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
External Storage	iSCSI	-	-	-
RAID	RAID 5/6	-	-	-
Hot Swap	Yes	-	-	-
Network Viewer Software	Wisenet WAVE, SSM, WebViewer, SmartViewer, Wisenet Mobile	Wisenet WAVE, SSM, WebViewer, SmartViewer, Wisenet Mobile	Wisenet WAVE, SSM, WebViewer, SmartViewer, Wisenet Mobile	Wisenet WAVE, SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI (Up to 4K), VGA	HDMI (Up to 4K), VGA (QRN-810) HDMI (Up to 4K) (QRN-810S)	HDMI (Up to 4K), VGA (QRN-410) HDMI (Up to 4K) (QRN-410S)
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	• N+1 failover supported • ARB redundancy supported • WiseStream supported • Defocus event trigger	• Plug & play by 16 PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps • Defocus event trigger	• Plug & play by 8 PoE ports (QRN-810S) • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps (QRN-810), 80Mbps (QRN-801S) • Defocus event trigger	• Plug & play by 4 PoE ports (QRN-410S) • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 64Mbps (QRN-410), 50Mbps (QRN-401S) • Defocus event trigger



QRN-1620S
16CH 8MP NVR



QRN-820S
8CH 8MP NVR



QRN-420S
4CH 8MP NVR

OS	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Max. Recording Bit Rate	128Mbps	80Mbps	40Mbps
Max # of Cameras	16	8	4
Internal Storage	Up to 2 SATA (Max. 12TB)	Up to 1 SATA (Max. 6TB)	Up to 1 SATA (Max. 6TB)
External Storage	-	-	-
RAID	-	-	-
Hot Swap	-	-	-
Network Viewer Software	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI(8MP), VGA	HDMI(8MP), VGA	HDMI(8MP), VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	• Plug & play by 16 PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps • Dual monitor • Dual track recording	• Plug & play by 8PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 80Mbps • Dual track recording	• Plug & play by 4 PoE ports • ARB supported • Easy Configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 50Mbps • Dual track recording

Wisenet Transportation



Key features

TMS S/W preinstalled

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

TAW Clustering

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

Up to 128 Recorder Back-up

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

Area Search

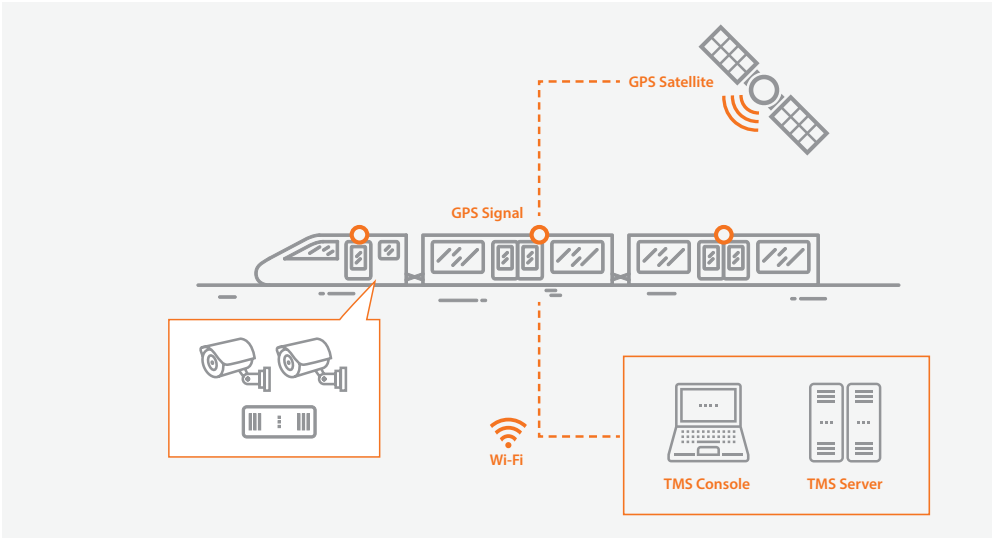
If you are unable to identify the vehicle(ship) in which an accident occurred, search based on the map where the incident occurred. TMS quickly search / playback the GPS and video information in a specific area.

Automatic Archiving

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

Report

TMS system can aggregate various operational statistics records. It provides a variety of information, such as speeding information of the vehicle, working hours of the driver, driving time and statistics of the vehicle.



TAW-4000H16
Transportation Monitoring System



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



TRM-810S
8CH 8MP Mobile NVR



TRM-410S
4CH 8MP Mobile NVR

OS	Windows 10 IoT Enterprise with TMS preloaded	Linux	Linux	Linux
H/W	3U, 19" Rackmount Xeon E3-1275 v5 (8M Cache 3.6GHz) unbuffered ECC DDR3 8GB x2 Gigabit Ethernet RJ-45 (1000 Base-T) x2, IPMI	-	-	-
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
Archiving Bandwidth	Max. 520Mbps @ CIF ~ 12MP	-	-	-
Playback Bandwidth	Max. 150Mbps @ CIF ~ 12MP	-	-	-
Max. Recording Bit Rate	-	128Mbps	80Mbps	50Mbps
Max # of Cameras	-	16 (4PoE, M12 : TRM-1610M / RJ-45 : TRM-1610S)	8 (8 PoE, RJ-45)	4 (4 PoE, RJ-45)
Internal Storage	SSD 125GB up to 16x 3.5" hot-swap RAID HDDs (max 160TB)	Up to 2 SATA (Front-Swap) Max. 4TB (HDD, SSD)	Up to 2 SATA (Front-Swap) Max. 2TB (HDD) / Max. 4TB (SSD)	Up to 2 SATA (Front-Swap) Max. 2TB (HDD) / Max. 4TB (SSD)
RAID	-	RAID 1	RAID 1	-
Hot Swap	-	Yes (RAID 1)	Yes (RAID 1)	-
Network Viewer Software	-	SSM Transportation, WebViewer, Wisenet Mobile	SSM Transportation, WebViewer, Wisenet Mobile	SSM Transportation, WebViewer, Wisenet Mobile
Local Monitor	VGA, DVI, HDMI	HDMI (Up to 4K), VGA	HDMI (Up to 4K), VGA	HDMI (Up to 4K), VGA
Camera Support	-	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Additional Features	• Event Management: up to 128 mobile NVRs • Clustering: up to 28 Servers (Max. 10,000ch) • Area search based on GPS • Automatic backup when Wi-Fi connected • Reporting (Overspeed, Geofence, Emergency bell, Impact detection)	• GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -40°C ~ +70°C (-40°F ~ +158°F)	• GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -25°C to +55°C (-13°F to +131°F)	• GPS supported • Wi-fi supported • Standards approval for transportation (EN50155) • Wide operating temperature range -25°C to +55°C (-13°F to +131°F)

Encoder

			
	SPE-1610A 16CH Encoder	SPE-410A 4CH Encoder	SPE-110A 1CH Encoder
Max. # of Cameras	16	4	1
Compatibility	SPD-151	-	-
Supported Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Max. Resolution	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF	4MP/1080p/720p/WD1/4CIF/CIF
Max. Frame Rate per Channel	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)	4MP : 15fps 1080p/720p/WD1/4CIF/CIF : 30fps(N), 25fps(P)
Bi-Directional Audio	Support	Support	-
RS-485	Support	Support	Support
Alarm I/O	16 / 4	4 / 2	-
SD Card	-	-	-
Application Programming Interface	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI
Power	12VDC : Max 24W	PoE & 12VDC : Max 9.6W	PoE : Max 4.0W 12VDC : Max 3.6W

Network Switch

		
	SPN-10080PM	SPN-10080P
Maximum PoE Budget	64W	
PoE Standard	IEEE802.3af / 802.3at	
PoE Ports	Port 1 ~ 8 : PoE / PoE+	
Switching Capacity	2.8Gbps	
MAC Address Table Size	16K	
Compatible Devices	Wisenet network cameras, TRM-1610M, TRM-1610S	
1000 Base-T Interface	2 (M12, A-code, 8P female) (SPN-10080PM) 2 (RJ-45) (SPN-10080P)	
100 Base-T PoE Interface	8 (M12, D-code, 4P female) (SPN-10080PM) 8 (RJ-45) (SPN-10080P)	
MDI / MDIX Adjustable	Yes	
Power Input	6P (Gender included)	
Dimension (WxDxH)	270.0 x 125.6 x 95.8mm (10.63" x 4.94" x 3.77") (SPN-10080PM) 270.0 x 125.6 x 95.8mm (10.63" x 4.94" x 3.77") (SPN-10080P)	
Weight	2.68 Kg (5.91 lb)(SPN-10080PM) 2.6 Kg (5.73 lb)(SPN-10080P)	
Operation Temperature	-40°C ~ +75°C (-40°F ~ +167°F)	
Operation / Storage Humidity	0% ~ 95% RH	
Maximum Power Consumption	95W	
Power Input	9 ~ 36V DC (Fanless)	

Decoder

			
	SPD-1660R 16 Monitor Decoder	SPD-260B Monitor Decoder Board for SPD-1660R	SPD-151 48CH Decoder
Video Out	HDMI (16ea), VGA (16ea)	HDMI (2ea), VGA (2ea)	HDMI, VGA, BNC
Resolution	HDMI up to 4K, VGA up to 1080p	HDMI up to 4K, VGA up to 1080p	HDMI up to 4K, VGA up to 1080p
Display	1 / 4 / 6 / 8 / 9 / 13 / 16 / 2V / 3V (Up to 20 layouts and sequence)	1 / 4 / 6 / 8 / 9 / 13 / 16 / 2V / 3V (Up to 20 layouts and sequence)	(HDMI) 1 / 4 / 9 / 16 / 25 / 36 (32Ch Only) (VGA) 1 / 4 / 9 / 16 (BNC) 1 Tile merge support
Power	100 ~ 240V AC	-	12V DC, PoE
Compatibility	-	-	SPE-1610A
Additional Features	Monitor merge - 1 x 2, 2 x 1, 2 x 2, 2 x 3, 3 x 2, 2 x 4, 2 x 5, 4 x 2, 3 x 3, 3 x 4, 4 x 3, 4 x 4, 3 x 5, 5 x 3, 5 x 2 SSM, WebViewer supported	Board of SPD-1660R	Up to 49CH, H.265 / H.264 / MJPEG codec, Layout Sequence Support Management using Web-Viewer Web browser based GUI Configuration) and SSM 2.10 support

Open video platform

Intuitive and easy to use

- An intuitive 'drag & drop' tool makes it extremely easy for operators to set up a display of live and recorded images on a single screen or video wall, with customisable layouts and sizes.
- A virtual PTZ which, with just simple clicks of a mouse, enables operators to zoom in to see close up detail of any suspicious activity.
- Motion detection and video analytics support can be configured to generate alerts when user defined incidents occur.
- A wide range of smart, keyword, calendar and time-slice search options facilitate rapid retrieval of recorded video.

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

SUNAPI 2.0 INTEGRATION

Hanwha Techwin has launched Wisenet WAVE with full SUNAPI 2.0 integration for WISENET cameras and recorders.

Full SUNAPI 2.0 driver has been rigorously tested with Wisenet P, X, and Q series cameras resulting in:

- Video/Audio Streaming
- Event – MD, Alarm
- PTZ
- Edge recording



Hanwha Techwin specific features

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

- H.265
- WiseStream
- All triggering Events including sound classification, loitering and queue management
- Simple focus setting
- Multi directional camera support
- Hallway view
- HTTPS
- Time Settings
- Camera profile / Image configuration
- PTZ preset sync

An operating system to suit your needs.

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

			
Cloud	Desktop	Mobile	Server
A cloud-based service that enables simple, centralised remote access and insight into any Wisenet WAVE system.	A rich media player designed to view and manage a single Wisenet WAVE system from a desktop or laptop PC.	A mobile app designed for viewing Wisenet WAVE system video and events while on-the-go.	A media server responsible for discovering, connecting to, and managing system devices and data.
Supported Browsers	Desktop OS Support	Mobile OS Support	Server OS Support
 Google Chrome	 Microsoft Windows	 Google Android	 Microsoft Windows
 Mozilla Firefox	 Ubuntu Linux	 Apple iOS	 Ubuntu Linux
 Opera/Opera Neon	 Apple / Mac OSX		
 Microsoft Edge			
 Apple Safari			

Wisenet SSM 2.1

Convenience for everyone

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



Key features

- Single Core Server with Clustering**
Wisenet SSM has one Core Server merging multiple basic servers such as MG, RS, SM, and HA. The Core Servers can also be clustered together providing a higher degree of reliability.
- Free Trial License**
Users are given a 45 days trial period before they can start activating their license. During the trial, full features are available for use including recording. After the trial, Wisenet SSM will generate a warning message and only limited features will be available.
- New Client User Interface**
With Wisenet SSM's user friendly interface, operators can playback video during live streaming and easily control playback with new timeline control.
- Distributed Computing Architecture**
Wisenet SSM's modular architecture allows the software to effectively manage any system, from low-end solutions to enterprise level installations.
- Extended Scalability**
Wisenet SSM is suitable for both small and larger installations, with numerous features for enterprise systems including Federation, Transaction Server and 3rd party integration.



Live Streaming

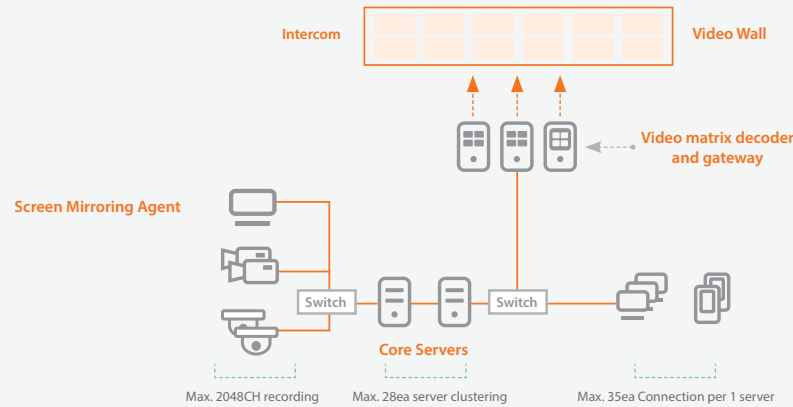


Display Events as Thumbnails



Location of Events for Google Map

System configuration



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

Wisenet Retail Insight

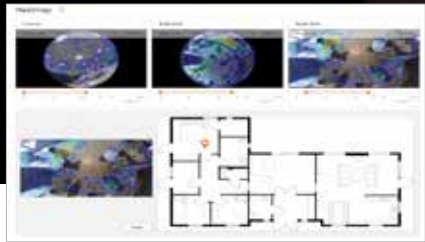
Business Intelligence for your retail shops

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



People counting (age, gender)

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



Heatmap (Time laps)

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



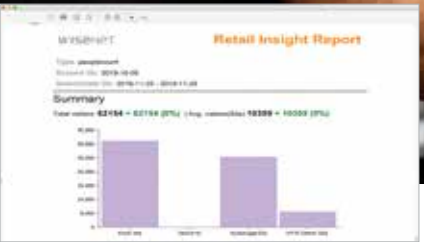
Queue management

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



User friendly UI

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



Regular automatic report

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

ANALOG

Camera

						
	HCB-7000A QHD Box Camera	HCO-7070RA QHD IR Bullet Camera	HCO-7010RA/7020RA/7030RA QHD IR Bullet Camera	HCD-7070RA QHD IR Dome Camera	HCD-7010RA/7020RA/7030RA QHD IR Dome Camera	HCV-7070RA QHD IR Vandal Dome Camera
Imaging Device	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS	1/3" 4MP CMOS
Resolution	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440
Min. Illumination	Colour : 0.16Lux (F1.2) B/W : 0.009Lux (F1.2)	Colour : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.26Lux (F1.8) (HCO-7010R) 0.27Lux (F2.0) (HCO-7020R/7030R) B/W : 0Lux (IR LED on)	Colour : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.26Lux (F1.8) (HCD-7010R) 0.27Lux (F2.0) (HCD-7020R/7030R) B/W : 0Lux (IR LED on)	Colour : 0.16Lux (F1.6) B/W : 0Lux (IR LED on)
Focal Length	-	3.2 ~ 10mm (3.1x) varifocal	2.8mm fixed (HCO-7010R) 4.0mm fixed (HCO-7020R) 6.0mm fixed (HCO-7030R)	3.2 ~ 10mm (3.1x) varifocal	2.8mm fixed (HCD-7010R) 4.0mm fixed (HCD-7020R) 6.0mm fixed (HCD-7030R)	3.2 ~ 10mm (3.1x) varifocal
Angular Field of View	-	H : 93.48° (Wide) ~ 29.44° (Tele) / V : 50.47° (Wide) ~ 16.64° (Tele) / D : 112.53° (Wide) ~ 33.7° (Tele)	H : 107.48° / V : 59.67° / D : 122.01° (HCO-7010R) H : 78.22° / V : 41.21° / D : 87.91° (HCO-7020R) H : 49.01° / V : 27.61° / D : 55.6° (HCO-7030R)	H : 93.48° (Wide) ~ 29.44° (Tele) / V : 50.47° (Wide) ~ 16.64° (Tele) / D : 112.53° (Wide) ~ 33.7° (Tele)	H : 107.48° / V : 59.67° / D : 122.01° (HCD-7010R) H : 78.22° / V : 41.21° / D : 87.91° (HCD-7020R) H : 49.01° / V : 27.61° / D : 55.6° (HCD-7030R)	H : 93.48° (Wide) ~ 29.44° (Tele) / V : 50.47° (Wide) ~ 16.64° (Tele) / D : 112.53° (Wide) ~ 33.7° (Tele)
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 63° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
IR Viewable Length	-	30m (98.43ft)	20m (65.62ft) (HCO-7010R) 25m (82.02ft) (HCO-7020R) 30m (98.43ft) (HCO-7030R)	20m (65.62ft)	20m (65.62ft) (HCD-7010R) 25m (82.02ft) (HCD-7020R) 30m (98.43ft) (HCD-7030R)	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR	BLC/HLC/DWDR
Digital Noise Reduction	2D DNR	2D DNR	2D DNR	2D DNR	2D DNR	2D DNR
Motion detection	Support	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	2 Zones	2 Zones	2 Zones	2 Zones	2 Zones
Alarm I/O	MD Output 1	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)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron)
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-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, IK10	-	-	IP66, IK10
Power Consumption	12VDC & 24VAC : Max 3.6W	12VDC & 24VAC : Max 5.8W	12VDC : Max 5.0W	12VDC & 24VAC : Max 5.8W	12VDC : Max 5.0W	12VDC & 24VAC : Max 5.8W
Dimensions (WxHxD) / Weight	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 186g (0.41 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 914g (2.02 lb)	Ø70.0 x 246.0 mm (Ø2.76" x 9.69") (Without sunshield) 670g (1.48 lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.71 lb)	Ø110.1 x 86.1mm (Ø4.33" x 3.39") 240g (0.53 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.58 lb)
Additional Features	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)	Video Transmission up to 500m (5C2V Coaxial Cable)

HD+ series

HD+ series

					
	HCV-7010RA/7020RA/7030RA QHD IR Vandal Dome Camera	HCB-6001 1080p HD Box Camera	HCB-6000 1080p HD Box Camera	HCZ-6320 1080p HD Box Camera	HCO-6080R 1080p HD IR Bullet Camera
Imaging Device	1/3" 4MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2.38MP CMOS	1/2.8" 2MP CMOS
Resolution	2560 x 1440	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Colour : 0.26Lux (F1.8) (HCV-7010R) 0.27Lux (F2.0) (HCV-7020R/7030R) B/W : 0Lux (IR LED on)	Colour : 0.09Lux (F1.2) B/W : 0.009Lux (F1.2)	Colour : 0.09Lux (F1.2) B/W : 0.009Lux (F1.2)	Colour : 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)	Colour : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)
Focal Length	2.8mm fixed (HCV-7010R) 4.0mm fixed (HCV-7020R) 6.0mm fixed (HCV-7030R)	-	-	4.44 ~ 142.6mm (Optical 32x)	3.2 ~ 10mm (3.1x) motorized varifocal
Angular Field of View	H : 107.48° / V : 59.67° / D : 122.01° (HCV-7010R) H : 78.22° / V : 41.21° / D : 87.91° (HCV-7020R) H : 49.01° / V : 27.61° / D : 55.6° (HCV-7030R)	-	-	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)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-	-	-	-
IR Viewable Length	20m (65.62ft) (HCV-7010R) 25m (82.02ft) (HCV-7020R) 30m (98.43ft) (HCV-7030R)	-	-	-	30m (98.43ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	BLC/HLC/DWDR	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	2D DNR	SSNRIV	SSNRIV	SSNRIII	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	4 Zones	8 Zones	12 Zones	8 Zones
Alarm I/O	-	0 / 1, External D/N 1	0 / 1, External D/N 1	-	MD Output 1
Protocol	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, anasonic, Bosch , Honeywell, Vicon, GE, AD	AHD : ACP (AHD Coax Protocol), RS-485 : Samsung-T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)
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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
Certification	IP66, IK10	-	-	-	IP66, IK10
Power Consumption	12VDC : Max 5.0W	12VDC & 24VAC : Max 6W	12VDC & 24VAC : Max 3.5W	12VDC : Max 6W	12VDC & 24VAC : Max 6.0W
Dimensions (WxHxD) / Weight	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.12 lb)	73.1 x 67.2 x 123.9mm (2.88" x 2.65" x 4.88") 287g (0.63 lb)	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 186g (0.41 lb)	72.0 x 60 x 137mm (2.83" x 2.36" x 5.39") 476g (1.05 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 948g (2.09 lb)
Additional Features	Video Transmission up to 500m (5C2V Coaxial Cable)	Video transmissstion up to 500m (5C2V Coaxial Cable)	Video transmissstion up to 500m (5C2V Coaxial Cable)	Defog	Video transmissstion up to 500m (5C2V Coaxial Cable)

ANALOG

HD⁺ series

	 HCO-6080 1080p Analog HD Bullet Camera	 HCO-6070R 1080p HD IR Bullet Camera	 HCO-6020R 1080p HD IR Bullet Camera	 HCD-6080R 1080p HD IR Dome Camera	 HCD-6070R 1080p HD IR Dome Camera	 HCD-6020R 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	1/2.8" 2MP CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Colour : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.17Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.17Lux (F1.6) B/W : 0Lux (IR LED on)
Focal Length	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) varifocal	4mm fixed (F1.6)	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) varifocal	4mm fixed (F1.6)
Angular Field of View	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)	H : 110.2° (Wide) ~ 32° (Tele) / V : 55.4° (Wide) ~ 18° (Tele) / D : 128.4° (Wide) ~ 36.6° (Tele)	H : 87.6° / V : 46.4° / D : 104.5°
Pan / Tilt / Rotate	-	-		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)	20m (65.62ft)
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	MD Output 1	MD Output 1	-	MD Output 1	MD Output 1	-
Protocol	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	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	-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)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP66, IK10	IP66, IK10	IP66	-	-	-
Power Consumption	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)	12VDC : Max 4.2W
Dimensions (WxHxD) / Weight	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 (0.73 lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.71 lb)	Ø110 x 86mm (Ø4.33" x 3.39") 320g (0.71 lb)
Additional Features	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmsission up to 500m (5C2V Coaxial Cable)	Video transmsission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmsission up to 500m (5C2V Coaxial Cable)	Video transmsission up to 500m (5C2V Coaxial Cable)

HD⁺ series

	 HCD-6010 1080p HD Dome Camera	 HCV-6070R 1080p HD IR Vandal Dome Camera	 HCV-6080R 1080p HD IR Vandal Dome Camera	 HCV-6080 1080p Analog HD IR Vandal-Resistant Dome Camera	 HCP-6320HA/6320A 1080p HD 32x PTZ Camera
Imaging Device	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2MP CMOS	1/2.8" 2.38MP CMOS
Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Colour : 0.27Lux (F2.0) B/W : 0.017 Lux (F2.0)	Colour : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.11Lux (F1.6) B/W : 0Lux (IR LED on)	Colour : 0.2Lux (F1.6) B/W : 0.01Lux (F1.6)
Focal Length	2.8mm fixed (F2.0)	3.2 ~ 10mm (3.1x) varifocal	3.2 ~ 10mm (3.1x) motorized varifocal	3.2 ~ 10mm (3.1x) motorized varifocal	4.44 ~ 142.6mm (Optical 32x)
Angular Field of View	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 : 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 : 62.8° (Wide) ~ 2.23° (Tele) / V : 36.8° (Wide) ~ 1.26° (Tele)
Pan / Tilt / Rotate	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	360° Endless / 210° (-15° ~ 195°) / -
IR Viewable Length	-	30m (98.43ft)	30m (98.43ft)	-	-
Day & Night	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)	Auto (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	Off / User BLC / HLC / WDR	WDR (120dB)
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIII
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	8 Zones	32 Zones
Alarm I/O	-	MD Output 1	MD Output 1	MD Output 1	4 / 2 (Relay)
Protocol	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD : ACP (AHD Coax Protocol), RS-485 : Samsung-T/E, Pelco-P/D, Sungjin, Panasonic, Honeywell, AD, Vicon, Bosch, GE
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-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)	-50°C ~ +55°C (-58°F ~ +131°F) (HCP-6320HA), -10°C ~ +55°C (+14°F ~ +131°F) (HCP-6320A)
Certification	-	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10 (HCP-6320HA), IK10 (With SHP-3701H) (HCP-6320A)
Power Consumption	12VDC : Max 3.5W	12VDC & 24VAC : Max 4.2W	12VDC & 24VAC : Max 4.2W	12VDC & 24VAC : Max 4.2W	24VAC : Max 24.0W / 65.0W - Heater off / on (HCP-6320HA) 24VAC : Max 20.0W (HCP-6320A)
Dimensions (WxHxD) / Weight	Ø110 x 86mm (Ø4.33" x 3.39") 725g (1.60lb) 225g (0.49 lb)	Ø137 × 106.1mm (Ø5.39" × 4.18") 725g (1.60lb) 715g (1.58lb)	Ø137 × 106.1mm (Ø5.39" × 4.18") 725g (1.60lb) 715g (1.58lb)	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)
Additional Features	Video transmsission up to 500m (5C2V Coaxial Cable)	Video transmsission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmsission up to 500m (5C2V Coaxial Cable)	Defog

WISeNET Pentabrid DVR



Making the transfer from Analogue to IP simple

The new Wisenet Pentabrid Hybrid DVRs are designed to enable a quick, seamless and cost-effective migration to an IP network based video surveillance solution from analogue. Any combination of analogue or IP cameras up to 4K ultra high definition can be connected to the new Wisenet Pentabrid Hybrid 4, 8 and 16 channel DVRs, with a simple onboard software switch enabling users to convert any channel from analogue to IP, when required.

HRX-1620 | HRX-820 | HRX-420
HRX-1621 | HRX-821 | HRX-421

- 16ch / 8ch / 4ch Pentabrid DVRs
- 5-in-1 Embedded DVRs
- AHD/HDTV/HDCVI/CVBS + IP input
- Up to 8MP resolution
- H.265, H.264, MJPEG codec support
- HDMI 4K Monitoring, Dual monitor
- P2P service (QR code connect)



ANALOG

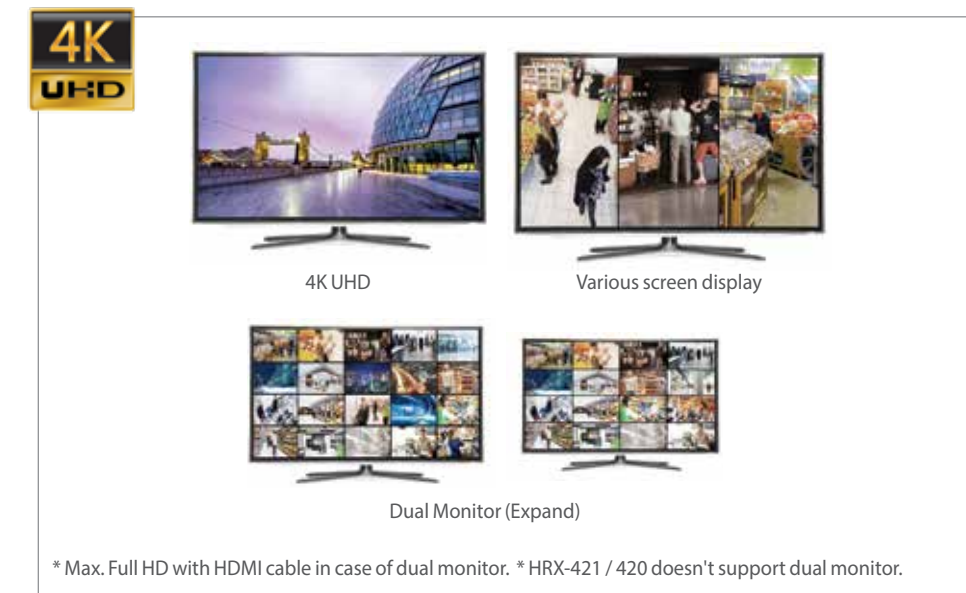
Combining Analogue and IP

Security integrators and installers are having to adapt to project and customer demands as well as having to manage multiple technology solutions. Some customers request to keep their old existing analogue cameras but they want to install new network cameras with high-definition video technologies. That's when pentabrid DVR will be needed. Pentabrid DVR offers the flexibility to meet the demands of certain projects or customers.



Up to 4K resolution monitoring (HDMI) and dual monitor

Wisenet Pentabrid DVRs provide high resolution up to 4K. It also offers various layouts including dual monitor using HDMI and VGA so that users can select and view desired areas.



Dual recording for efficient monitoring

Images are compressed and stored in both low and high resolutions simultaneously to enable multi-channel monitoring depending on the circumstances. This is especially effective in mobile and remote monitoring and it helps speeding up the search time.



ANALOG

HD+ series

DVR

DVR

							
		HRX-1621 16CH 8MP Pentabrid Recorder	HRX-1620 16CH 8MP Pentabrid Recorder	HRX-821 8CH 8MP Pentabrid Recorder	HRX-820 8CH 8MP Pentabrid Recorder	HRX-421 4CH 8MP Pentabrid Recorder	HRX-420 4CH 8MP Pentabrid Recorder
Video Inputs Signal		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	Analog (AHD, TVI, CVI, CVBS) & N/W Camera
Video Inputs Channel		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 16CH, N/W Camera 2CH (up to 18CH)	Analog 4CH, N/W Camera 2CH (up to 6CH)	Analog 4CH, N/W Camera 2CH (up to 6CH)
Live (NTSC / PAL)		480fps / 400fps	480fps / 400fps	240fps / 200fps	240fps / 200fps	120fps / 100fps	120fps / 100fps
Recording 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	H.264, H.265, MJPEG
Max. Recording		8MP 8fps, 5MP 12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8fps, 5MP 12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8fps, 5MP 12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8fps, 5MP 12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8fps, 5MP 12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH	8MP 8fps, 5MP 12fps, 4MP 15/12fps, 2MP 30/25fps NTSC/PAL *per CH
Internal Storage		Up to 8 SATA HDDs	Up to 2 SATA HDDs	Up to 4 SATA HDDs	Up to 2 SATA HDDs	Up to 2 SATA HDDs	Up to 1 SATA HDDs
Audio I/O		16 / 1	4 / 1	8 / 1	4 / 1	4 / 1	1 / 1
Alarm I/O		16 / 4	16 / 4	8 / 4	8 / 4	4 / 2	4 / 1
Monitors	HDMI, VGA	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	1 HDMI, 1 VGA
	Spot Composite	1 BNC	1 BNC	1 BNC	1 BNC	1 BNC	1 BNC
USB		2 ports	2 ports	2 ports	2 ports	2 ports	2 ports
e-SATA		-	-	-	-	-	-
Network	Remote Users	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20	Search 3 / Live Unicast 10 / Live Multicast 20
	Transmission	Dual Stream	Dual Stream	Dual Stream	Dual Stream	Dual Stream	Dual Stream
	Monitoring	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer"	SSM, WebViewer, SmartViewer, Mobile Viewer
Coax Protocol		Support (CVBS and AHD/CVI/TVI)	Support (CVBS and AHD/CVI/TVI)	Support (CVBS and AHD/CVI/TVI)	Support (CVBS and AHD/CVI/TVI)	Support (CVBS and AHD/CVI/TVI)	Support (CVBS and AHD/CVI/TVI)
Serial Interface		RS-485	RS-485	RS-485	RS-485	RS-485	RS-485

PERIPHERAL

LED Monitor

LED Monitor



SMT-4033
40" LED Monitor



SMT-3233
32" LED Monitor



SMT-2233
22" LED Monitor



SMT-1935
19" LED Monitor

Screen Size	40"	32"	22"	19"
Resolution (pixels HxV)	1,920 x 1,080	1,920 x 1,080	1,920 x 1,080	1,280 x 1,024
Video In/Out	1	1	2 / 2	2 / 2
VGA	1	1	1	1
DVI / HDMI	1 / 1	1 / 1	0 / 1	0 / 1
USB	-	-	-	-
Audio In (Stereo)	1	1	2	2
Contrast Ratio	5,000 : 1	1,200 : 1	1,000 : 1	1,000 : 1
Aspect Ratio	16 : 9	16 : 9	16 : 9	4 : 3
Response Time	9.5ms	8ms	5ms	5ms
Brightness	350cd/m ²	350cd/m ²	250cd/m ²	250cd/m ²
Tempered Glass Screen	-	-	Yes	Yes
Picture In Picture	-	-	-	-
Built-in Speakers	Yes	Yes	Yes	Yes
Stand	Optional	Optional	Standard	Standard
Power	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC
Additional Features	Remote Controller	Remote Controller	-	-

Controller

					
		SPC-7000 System Controller	SPC-2000 Network Controller	SPC-2010 PTZ / DVR System Controller	SPC-1010 PTZ Control Keyboard
Features		• 5" TFT Touch LCD • Network Camera / SSM / Analog Camera / DVR Control • User-Friendly Design and Easy-to-Use Keypad • 3 Axis Joystick to Control PTZ Function • Detachable Joystick / Jogshuttle for Universe Use (Right / Left Hand Use) • USB Interface Support (1ea for SSM, 1ea for Image Snapshot / Upgrade) • Fast Camera-Tile Mapping, Config Import / Export		• Superior System Compatibility • 3D Joystick Control • Quick and Easy Installation • SSM Support	
		• Control up to 255 PTZ Cameras / DVRs • Built-in 3 Axis Twist Zoom Joystick • Built-in Jog Shuttle • 16 x 2 Character LCD Display • RS-485 and RS-422 Interface		• Control up to 255 PTZ Cameras • Multi Protocols Supports • OSD Menu, 3D Joystick Control • RS-485 and RS-422 Interface	

PERIPHERAL

Lens

Lens Description	Model	Image	Mount	Image Format	Resolution	Focal Length	Back Focal Length	Zoom Ratio	F. No	Angle of View	Operation			Dimensions W x H x D (mm / inch)	Weight (g / lb)
											Iris	Focus	Zoom		
Varifocal Lens	SLA-M8550D		CS	1 / 2.8"	3Megapixel	8.5 ~ 50mm (0.33" ~ 1.97")	9.4 ~ 10.7mm (0.37" ~ 0.42")	5.9	F1.6	42.3° ~ 7.5°	DC			46 x 60 x 58.2mm (1.81" x 2.36" x 2.29")	80g (0.17 lb)
	SLA-M2890DN					2.8 ~ 9mm (0.11" ~ 0.35")	7.5 ~ 15.9mm (0.30" ~ 0.63")	3.2	1.2	134.2° ~ 42.7°				45.0 x 51.5 x 54.3mm (1.77" x 2.03" x 2.14")	84.0g (0.19 lb)
	SLA-M2890PN					P-Iris				82.1g (0.18 lb)					

ACCESSORY

 SHP-1680F/1680FW	 SHP-3701H	 SHP-3701F	 SHD-3000F1	 SHD-3000F2
In-Ceiling Housing for PTZ & Dome - For indoor applications - Polycarbonate - Can be used with XNP-6120H XNV-6120/6120R/6085 XND-6085/6085V	Outdoor Housing for PTZ Dome - For outdoor applications - Weatherproof rated to IP66 - Aluminium + Polycarbonate - IK10 vandal resistant - Can be used with HCP-6320A/6320/6230 XNP-6320, QNP-6230	In-Ceiling Housing for Dome - For indoor applications - Polycarbonate - Can be used with HCP-6321/6321A/6320/6231 XNP-6320 QNP-6320	In-Ceiling Housing for PTZ Dome - For indoor applications - Polycarbonate - Can be used with PNV-9080R XNV-8080R/6080R/6080/L6080/L6080R	In Ceiling Housing for Dome - For indoor applications - Polycanotate - Can be used with QND-6070R/6071R/6072R/6082R/7080R/7081R HCD-6070R/7070R/6080R/7080R
 SHD-3000F3	 SHD-3000F4	 SHD-3000F5	 SHF-1500F	 SBP-301HM2/301Hmw2
In Ceiling Housing for Dome - For indoor applications - Polycanotate - Can be used with QNV-6070R/6071R/6072R/6082R/7080R/7081R/8080R HCV-7070R/6080R/6070R	In Ceiling Housing for Dome - For indoor applications - Polycanotate - Can be used with PND-9080R XND-6080/6080R/6080RV/6080V/L6080R/L6080RV/L6080V/8080R/8080RV	In Ceiling Housing for Dome - For indoor applications - Polycanotate - Can be used with PNM-9000VQ	In-Ceiling Housing for PTZ & Dome - For indoor applications - Polycarbonate - Can be used with PNF-9010R/9010RV/9010RVM XNF-8010R/8010RV/8010RVM	Hanging Mount - Aluminum - Can be used with QNV-7080R/6070R (SBP-301HM2) LNV-6070R/6072R QNV-6082R/8080R (SBP-301Hmw2)
 SBP-301HM3	 SBP-301HM4	 SBP-300HM5/300Hmw5	 SBP-300HM6	 SBP-300HM7/300Hmw7
Hanging Mount - Aluminum - Can be used with HCP-6320A/6320/6230 XNP-6320 QNP-6230	Hanging Mount - Aluminum - Can be used with QND-6070R/6071R/7080R/7081R	Hanging Mount - Aluminum - Can be used with XNF-8010R/8010RV/8010RVM QNE-6080RV/7080RV (SBP-300HM5) QNE-6080RVW/7080RVW XNF-8010RVW/8010RW (SBP-300Hmw5)	Hanging Mount - Aluminum - Can be used with PNV-9080R XNV-8080R/6120R/6120/6080R/6080/L6080R/L6080 XND-6085V/6085 PNM-7000VD	Hanging Mount - Aluminum - Can be used with XNV-6011 XND-8040R/8030R/8020R/6020R/6010 QND-7030R/7020R/7010R/6030R/6020R/6010R HCD-7010R/7020R/7030R/6020R/6010 SBP-300WM/300WM1/300CM/300LM (SBP-300HM7) XNV-6011W QND-8010R/8020R/8030R/6012R/6022R/6032R SBP-300WM/300WMW1/300CMW/300LMW (SBP-300Hmw7)

ACCESSORY

				
SBP-300HM8	SBP-122HM/122HMW	SBP-168HM	SBP-201HW/201HMW	SBP-317HM/317HMW
Hanging Mount - Aluminum - Can be used with PND-9080R XND-8080RV/8080R/6080V/6080RV/6080R/6080/L6080R/L6080RV/L6080V	Hanging Mount - Aluminum - Can be used with XNV-6010/6020R/8020R/8030R/8040R QNV-6010R/6020R/6030R/6012R/6022R/6032R/7010R/7020R/7030R/8010R/8020R/8030R HCV-7010R/7020R/7030R QND-6070R/6071R/6082R/7080R/7081R/8080R HCD-6070R/7070R/7080R/6080R (SBP-122HM) QND-8080R/6082R QNV-8010R/8020R/8030R/6012R/6022R/6032R (SBP-122HMW)	Hanging Mount - Aluminum - Can be used with XNP-6120H	Hanging Mount - Aluminum - Can be used with PNM-9020V HCM-9020VQ (SBP-201HM) PNM-9000VD (SBP-201HMW)	Hanging Mount - Aluminum - Can be used with PNM-9020V PNM-9080VQ/9081VQ (SBP-317HM) PNM-9084RQZ/9085RQZ (SBP-317HMW)
				
SBP-329HM	SBP-276HM/276HMW	SBP-167HMW/187HMW	SBP-302HF/303HF	SBP-300TM1
Hanging Mount - Aluminum - Can be used with PNM-9020V PNM-9080VQ/9081VQ	Hanging Mount - Aluminum - Can be used with PNM-9020V PNM-9000VQ/9030V (SBP-276HM) PNM-9084QZ (SBP-276HMW)	Hanging Mount - Aluminum, White - Can be used with XND-8081VZ/6081VZ/8081RV/6081RV /6081V (SBP-167HMW) XNV-8081Z/6081Z/6081R/6081 (SBP-187HMW)	Built-in SFP Install Base for PTZ Cameras - Aluminum - LC SFP port type 100Mbps Ethernet speed (Default speed: 1000Mbps) - IEEE 802.3u, IEEE 802.3z Support - Audio input/output, 3.5mm type 24V AC, IP66, IK10, -50°C to +55°C - Can be used with PNP-9200RH/XNP-6370RH (SBP-302HF) QNP-6230H/XNP-6250RH/6320H/6320RH/6371RH (SBP-303HF)	Tilt Mount - Poly Carbonate - Can be used with PNF-9010R/9010RV/9010RVM XNF-8010R/8010RV/8010RVM QNE-6080RV/7080RV
				
SBP-160TM	SBP-300CM/300LM	SBP-300CMW/300LMW	SBP-300WM1/300WMW1	SBP-300WM
Tilt Mount - Aluminum - Can be used with PNV-9080R XNV-8080R/6120R/6120/6080R/6085/6080/L6080/L6080R XND-6085V/6085	Ceiling Mount / Parapet Mount - Aluminum + SECC - Can be used with SBP-300HM6/300HM7/300HM8/122HM/201HM/317HM/329HM/276HM/168HM PH1/PH2/PH3/PH4/PH5/PH6 (SBP-300CM) SBP-300HM6/300HM7/300HM8/122HM/201HM/317HM/329HM/276HM/168HM/300B/300PM/300KM (SBP-300LM) PH1/PH2/PH3/PH4/PH5/PH6 (SBP-300LM)	Wall Mount / Parapet Mount - Aluminum, White - Can be used with SBP-300HMW7/300HMW5/301HMW2/122HMW/167HM/187HM/201HMW	Wall Mount - Aluminum + SECC - Can be used with SBP-300HM6/300HM7/300HM8/122HM/201HM/317HM/329HM/276HM/168HM/300B/300PM/300KM (SBP-300WM1) SBP-300HMW7/300HMW5/301HMW2/122HMW/167HMW/187HMW/201HMW (SBP-300WMW1) PH1/PH2/PH3/PH4/PH5/PH6	Wall Mount - Aluminum + SECC - Can be used with SBP-300HM6/300HM7/300HM8/122HM/201HM/317HM/329HM/276HM/168HM/300B/300PM/300KM (SBP-300WM) PH1/PH2/PH3/PH4/PH5/PH6

				
SBP-137WM/137WM1	SBP-137WMW/137WMW1	SBP-120WM/120WMW	SBP-125WMW	SBP-390WM1/390WM2
Wall Mount - Alluminum and Poly Carbonate - Can be used with QNV-7080R/7081R/7030R/7020R/7010R/6080R/6070R/6071R/6030R/6020R/6010R HCV-7070R/6080R/6070R/7010R/7020R/7030R XNV-8040R/8030R/8020R/6020R/6010	Wall Mount - Aluminum/Plastic, White - Can be used with QNV-6012R/6022R/6032R/6072R/6082R/8010R/8020R/8030R/8080R	Wall Mount - Plastic - Can be used with QND-6070R/6071R/7080R/7081R/7030R/7020R/7010R/6030R/6020R/6010R HCD-6070R/7070R/7080R/6080R/7010R/7020R/7030R/6020R/E6020R/6010 XND-8040R/8030R/8020R/6020R/6010 XNV-6011 (SBP-120WM) QND-6011/6012R/6021/6022R/6032R/6072R/6082R/8010R/8011/8020R/8021/8030R/8080R XND-L6020R (SBP-120WMW)	Wall Mount - Aluminum/Plastic, White - Can be used with QNE-8011R/8021R	Wall Mount - Aluminum - Can be used with SBP-317HM/329HM/276HM/300HM6/201HM (SBP-390WM1) SBP-317HM/329HM/276HM/300HM6/201HM/300PM/300KM (SBP-390WM2)
				
SBU-500WM	SBP-300PM/300PMW	SBP-302PM	SBP-303PM	SBP-300KM/300KMW
Positioning System Mount Can be used with: TNU-6320	Pole Mount / Corner Mount Base - SECC - Can be used with SBP-300B/300WM1/300WM/300LM (SBP-300PM) SBP-300WMW1 (SBP-300PMW)	Pole Mount - SECC - Can be used with HCO-6070R/6080R/7010R/7020R/7030R/7070R PNO-9080R QNO-6010R/6012R/6020R/6022R/6030R/6032R/6070R/6072R/6082R/7010R/7020R/7030R/7080R/8010R/8020R/8030R/8080R XNO-6010R/6020R/6080R/6085R/6120R/8020R/8030R/8040R/8080R/L6080R	Pole Mount - SECC, White - Can be used with TNO-4030T/4030TR/4040T/4040TR/4050T/4050TR (SBP-303PM)	Pole Mount / Corner Mount Base - SECC - Can be used with SBP-300WM1/300WM (SBP-300KM) SBP-300WMW1 (SBP-300KMW)
				
SBP-300B/300NB	SBP-300BW/300NBW	SBV-160WC	SBV-120WC/120WCW	SBV-116B / SBF-100B1
Wall Mount Base / Installation Box - Aluminum + SECC - Can be used with SBP-300WM1/300WM/300WMS1/300WMS SBU-500WM (SBP-300B) - Steel - Can be used with SBP-300WM/300WM1 (SBP-300NB)	Wall Mount Base / Installation Box - Aluminum, White - Can be used with SBP-300WM1 (SBP-300BW) - Aluminum, Steel, Silicon, White - Can be used with SBP-300WMW1 (SBP-300NBW)	Weather Cap - Alluminum and Poly Carbonate - Can be used with XNV-8080R/6120R/6120/6085/6080R/6080/L6080/L6080R XND-6085V/6085, PNV-9080R	Weather Cap - Alluminum and Poly Carbonate - Can be used with XNV-6011/6020R/8020R/8030R/8040R QNV-6010R/6020R/6030R/7010R/7020R/7030R HCV-7010R/7020R/7030R	Back Box - Aluminum - Can be used with XNV-6011 (SBV-116B) XNF-8010R/8010RV/8010RVM QNE-6080RV/7080RV (SBF-100B1)

ACCESSORY

				
SBV-136B/136BW	SBV-120GW/125BW/158G	SBO-126B/100B1	SBP-300HMS6	SBP-300WMS1/300WMS
Back Box - Aluminum - Can be used with XNP-6040H, HCV-7070R/6080R/6070R QNV-6070R/6071R/6080R/7080R/7081R	Back Box - Aluminum, White - Can be used with QNV-6012R/6022R/6032R/8010R/8020R/8030R (SBV-120GW) QNE-8011R/8021R (SBV-125BW) PNV-9080R XNV-8080R/6120R/6120/6080R/6080/L8080R/L6080/L6080R/6085 XND-6085V/6085, PNM-7000VD (SBV-158G)	Back Box - Aluminum - Can be used with XNO-L6080R QNO-8080R (SBO-126B) QNO-6012R/6022R/6032R/6070R/6072R/6082R/8010R/8020R/8030R HCO-7070R/7010R/7020R/7030R/6080R/6070R (SBO-100B1)	Wall Mount - Stainless steel (SUS316L) - Can be used with XNV-8080RS/6120RS/6080RS	Wall Mount - Stainless steel (SUS316L) - Can be used with XNP-6320HS SBP-300HMS6
				
SBP-300PMS/300KMS	SHB-4300H/4300H1/4300H2/4300HP	SHB-4200/4200H	STH-200	STB-400/4150V
Corner Mount Base / Pole Mount - Stainless steel (SUS316L) - Can be used with SBP-300WMS1/300WMS (SBP-300PMS) SBP-300WMS1/300WMS (SBP-300KMS)	Fixed Housing - Aluminum diecasting construction - Fully cable managed bracket - Built-in fan & heater - Support three cable glands, IP66	Fixed Housing - Support two cable glands - Built-in fan & heater : SHB-4200H	Fixed Housing - For fixed camera application - Wall/ceiling installations - Easy to install side open type	Fixed Mount - Bracket for STH-500/200 - Aluminum and Steel material (STB-400) - Bracket for box cameras - Aluminum and Steel material (STB-4150V)
				
SPI-50	SBC-160B/180B			
IR Illuminator - Compatible IR Illuminator for TNU-6320 - Wavelength 850nm - Angle 25°	Skin Cover - Plastic, Black - Can be used with XND-6081RV/6081V/6081VZ/8081RV/8081VZ (SBC-160B) XNV-6081/6081R/6081Z/8081Z (SBC-180B)			

 SPB-IND6 Smoked Dome Cover - Poly Carbonate + Poly Carbonate - Can be used with HCD-6070R/7070R/7080R/6080R						 SPB-IND11/IND81/IND81V Smoked Dome Cover - Poly Carbonate + Poly Carbonate - Can be used with XND-6010/6020/8020R/8030R/8040R (SPB-IND11) XND-6080/6080R/L6080R/8080R PND-9080R (SPB-IND81) XND-6080V/6080RV/L6080RV/L6080V/8080RV (SPB-IND81V)						 SPB-IND12/IND72 Smoked Dome Cover - Poly Carbonate + Poly Carbonate - Can be used with HCD-6020R/7010R/7020R/7030R QND-6010R/6012R/6020R/6022R/6030R/6032R/7010R/7020R/7030R/8010R/8020R/8030R (SPB-IND12) QND-6070R/6071R/6072R/6082R/7080R/7081R/8080R (SPB-IND72)						 SPB-IND83/IND83V Smoked Dome Cover - Poly Carbonate + Poly Carbonate - Can be used with XND-6085 (SPB-IND83) XND-6085V (SPB-IND83V)						 SPG-IND12B Black Dome cover - Poly Carbonate - Can be used with: QND-6010R/6020R/6030R/7010R/7020R/7030R											
 SPG-IND72B Black Dome cover - Poly Carbonate - Can be used with: QND-6070R, QND-7080R						 SPB-VAN3/VAN4 Smoked Dome Cover - Aluminium + Poly Carbonate - Can be used with PNV-9080R XNV-6080/6080R/8080R/L6080/L6080R (SPB-VAN3) HCV-6070R/6080R/7070R QNV-6070R/6071R/6072R/6082R/7080R/7081R/8080R (SPB-IND83V)						 SPB-VAN11/VAN71/VAN81 Smoked Dome Cover - Aluminium + Poly Carbonate - Can be used with XNV-6010/6020R/8020R/8030R/8040R (SPB-VAN11) XNV-6120/6120R (SPB-VAN71) XNV-6085 (SPB-VAN81)						 SPB-VAN12/VAN72 Smoked Dome Cover - Aluminium + Poly Carbonate - Can be used with HCV-7010R/7020R/7030R QNV-6010R/6012R/6020R/6022R/6030R/6032R/7010R/7020R/7030R/8010R/8020R/8030R (SPB-VAN12) HCV-6070R/6080R/7070R QNV-6070R/6071R/6072R/6082R/7080R/7081R/8080R (SPB-VAN72)						 SPB-PTZ71 Smoked Dome Cover - Poly Carbonate + Poly Carbonate - Can be used with XNP-6040H						 SPB-PTZ73 Smoked Dome Cover - Poly Carbonate + Poly Carbonate - Can be used with XNP-6120H					

CAMERA TYPE SUMMARY

PTZ Cameras

Type	Outdoor PTZ				Indoor PTZ
Shape	 PH4	 PH6	 PH7	 PH8	 P4
Colour	Ivory				
Model	HCP-6230H/6320H/ 6320HA XNP-6320H QNP-6230H	PNP-9200RH XNP-6370RH/ 6371RH/ 6250RH/ 6320RH/ QNP-6230RH	XNP-6120H	XNP-6040H	HCP-6230/6320/ 6320A XNP-6320 QNP-6230

White Cameras

Type	Vandal-Resistant				Indoor Dome			Fisheye	Flateye		Multi-sensor		
Shape	 VW5	 VW6	 VW7	 VW8	 DW4	 DW5	 DW6	 FW1	 FEW1	 FEW2	 MW1	 MW2	 MW3
Colour	White												
Model	QNV-6072R/ 6082R/ 8080R	QNV-6012R/ 6022R/ 6032R/ 8010R/ 8020R/ 8030R	XND-8081VZ/ 6081VZ/ 8081RV/ 6081R/ 6081V PND-A9081RV A9081RF A7081RV A7081RF A6080RV A6080RF	XNV-8081Z/ 6081Z/ 8081R/ 6081 PNV-A9081R A7081R A6080R	QND-6072R 6082R 8080R	QND-6012R/ 6022R/ 6032R/ 8010R/ 8020R/ 8030R	QND-6011/ 6021/ 8011/ 8021	QNF-8010	QNE-7080RVW/ 6080RVW	QNE-8011R/ 8021R	PNM-9000VD	PNM-9084QZ	PNM-9084RQZ 9085RQZ

Dome Cameras

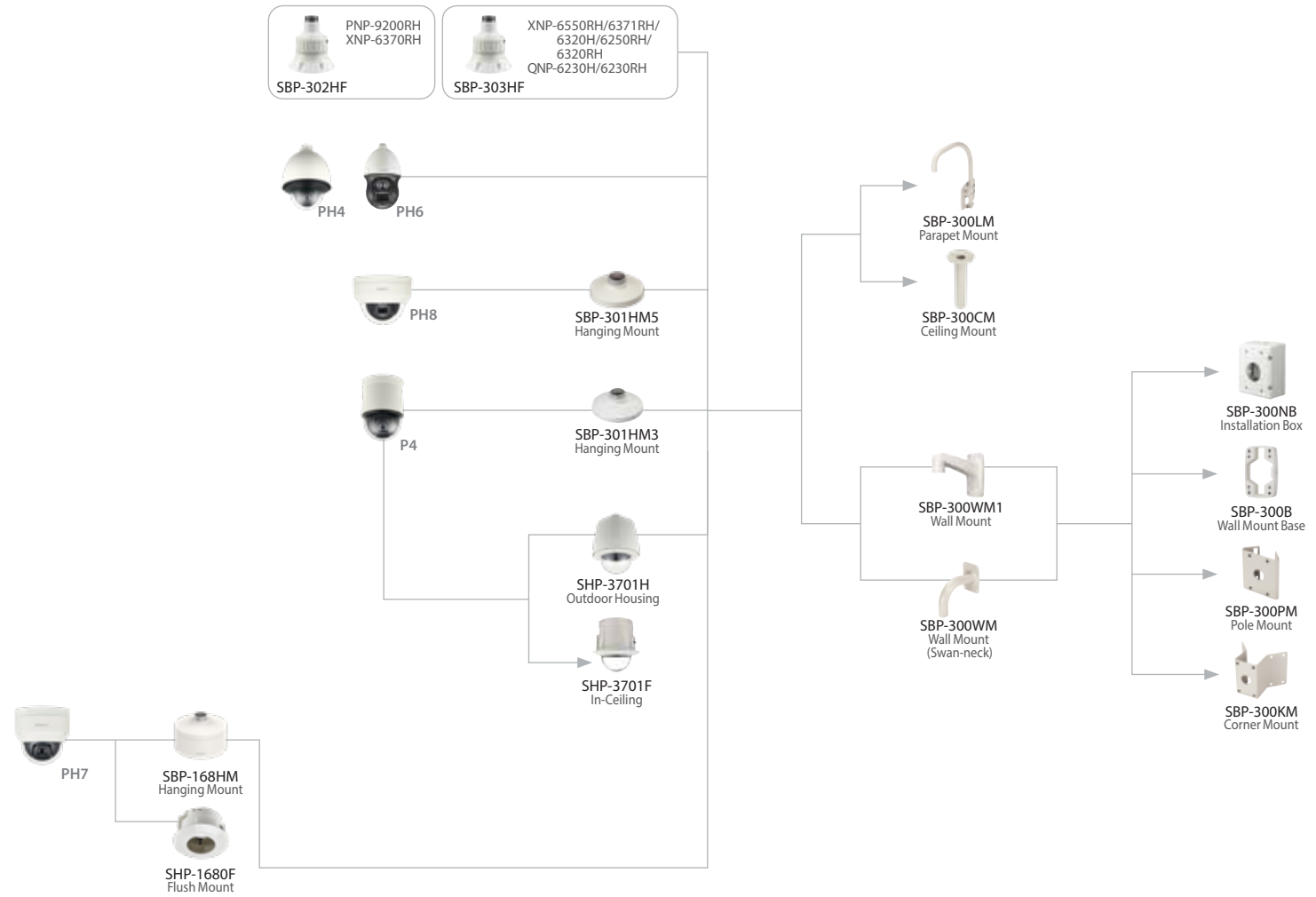
Type	Vandal-Resistant				Indoor Dome			
Shape	 V3	 V4	 V5	 V6	 D4	 D5	 D6	 D7
Colour	Ivory							
Model	PNV-9080R XNV-8080R/6120R/6120/ 6085/6085R/6080R/ 6080/L6080/L6080R	SNV-6013 XNV-6011	QNV-6070R/6071R/6080R/ 7080R/7081R HCV-7070R/6080R/6070R	XNV-8040R/8030R/8020R/ 6020R/6010 QNV-7030R/7020R/7010R/ 6030R/6020R/6010R HCV-7010R/7020R/7030R	QND-6070R/6071R/6080R/ 7080R/7081R HCD-6070R/7070R/7080R/ 6080R	XND-8040R/8030R/8020R/ 6020R/6010/L6020R QND-7030R/7020R/7010R/ 6030R/6020R/6010R HCD-7010R/7020R/7030R/ 6020R/6020R/6010	PND-9080R XND-8080RV/8080R/ 6080V/6080RV/ 6080R/6080/ L6080R/L6080RV/ L6080V/	XND-6085V/6085

Fisheye / Multi-Sensor Cameras

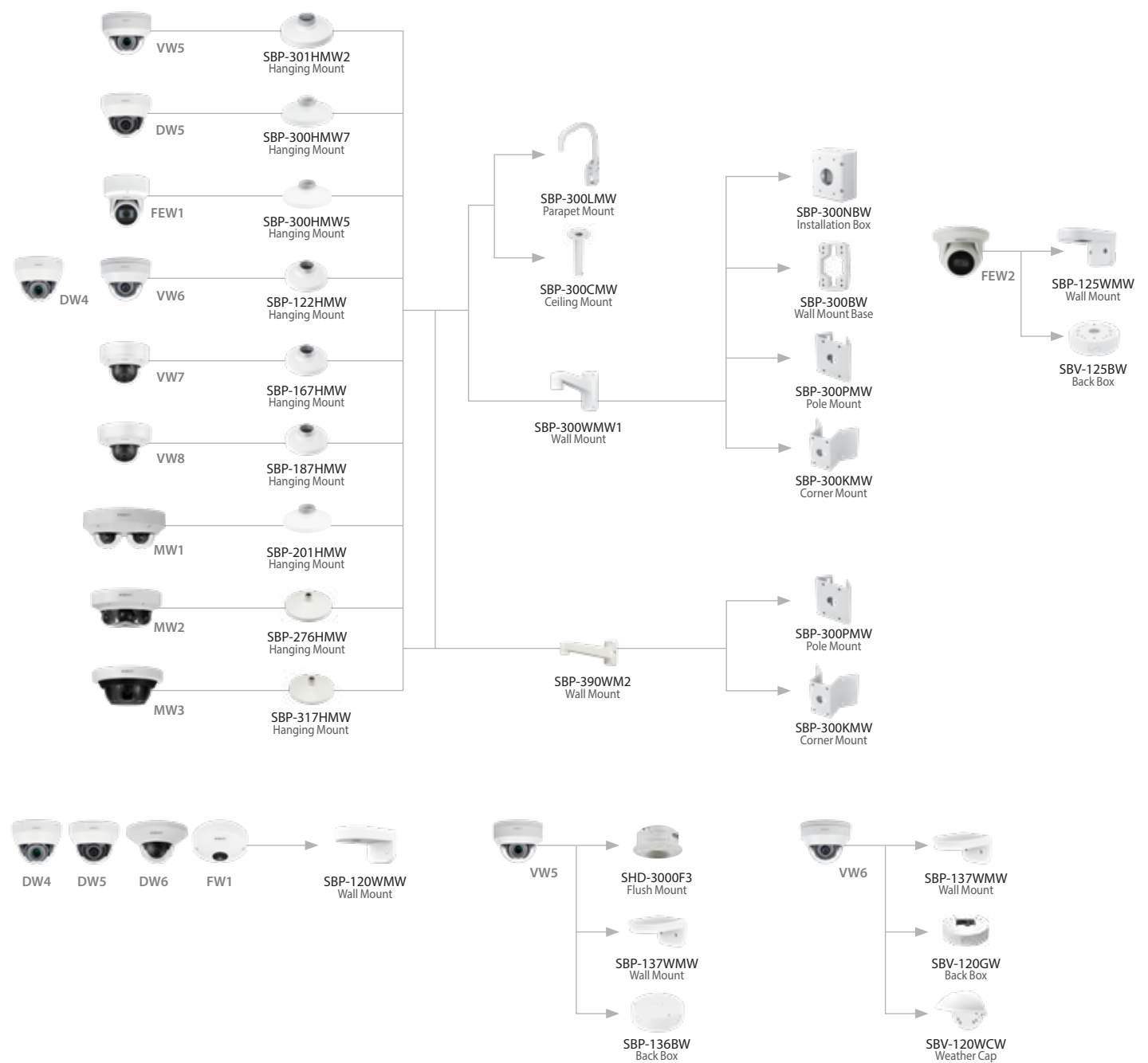
Type	Fisheye		Flateye	Multi-sensor					
Shape	 F3	 FV3	 FE1	 M1	 M2	 M3	 M4	 M5	 M6
Colour	Ivory								
Model	XNF-8010R PNF-9010R	PNF-9010RV/9010RVM XNF-8010RV/8010RVM	QNE-7080RV/6080RV	PNM-9020V HCM-9020VQ	PNM-9081VQ/9080VQ PNM-9084QZ PNM-9084RQZ PNM-9085RQZ	PNM-7000VD	PNM-9000VQ	PNM-9030V	PNM-9320VP

ACCESSORY CONFIGURATION

PTZ ACC

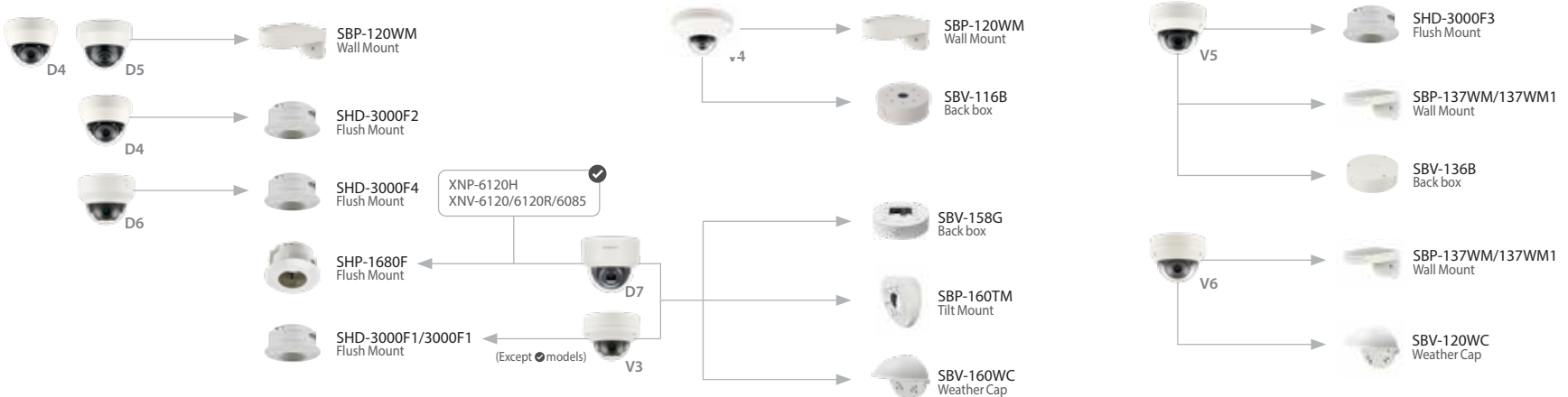
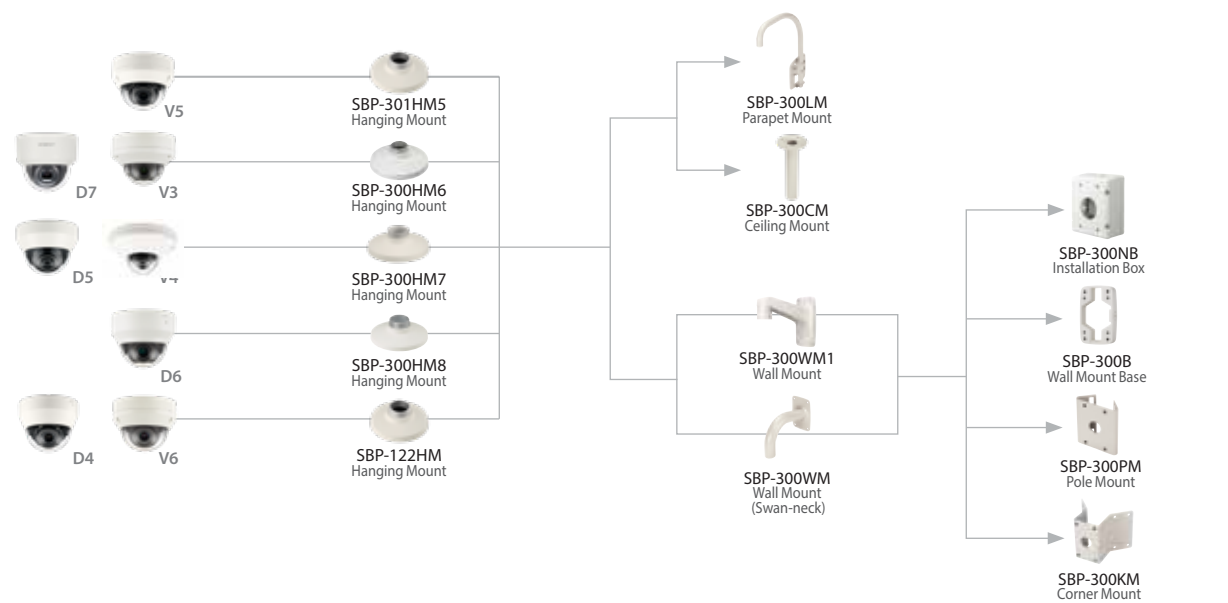


WHITE ACC

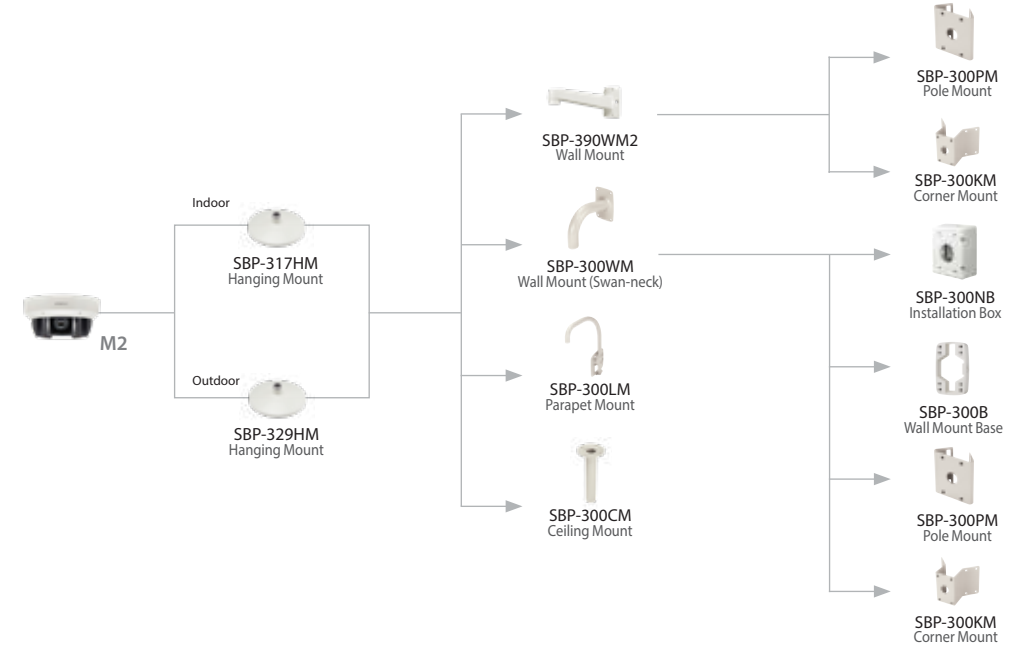
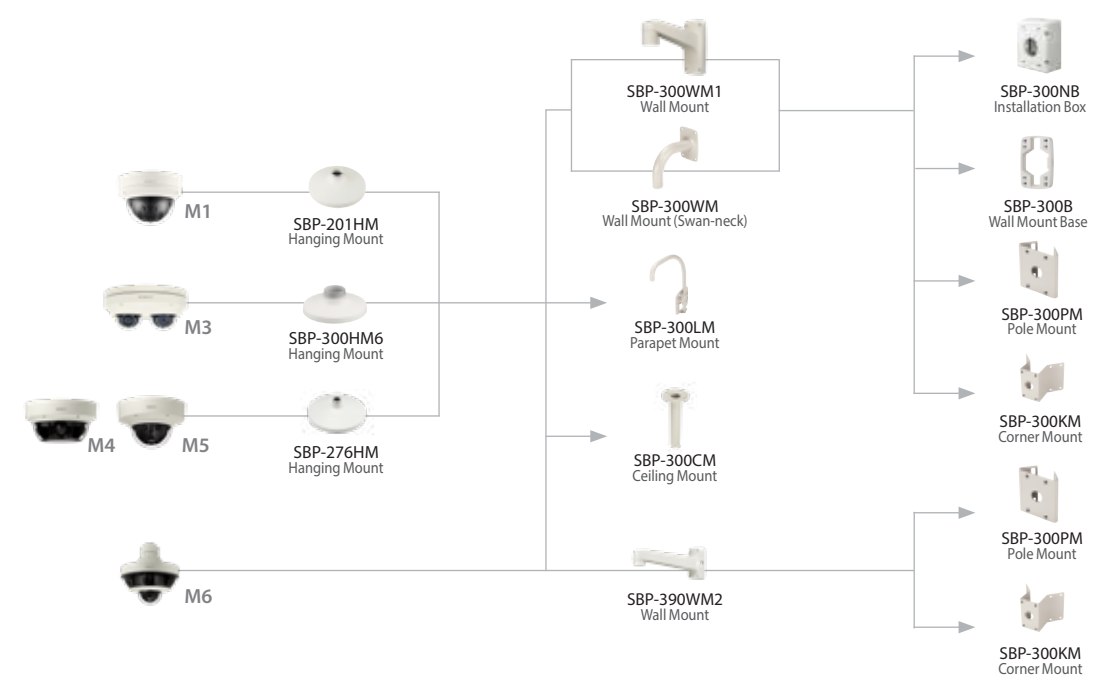


ACCESSORY CONFIGURATION

DOME ACC

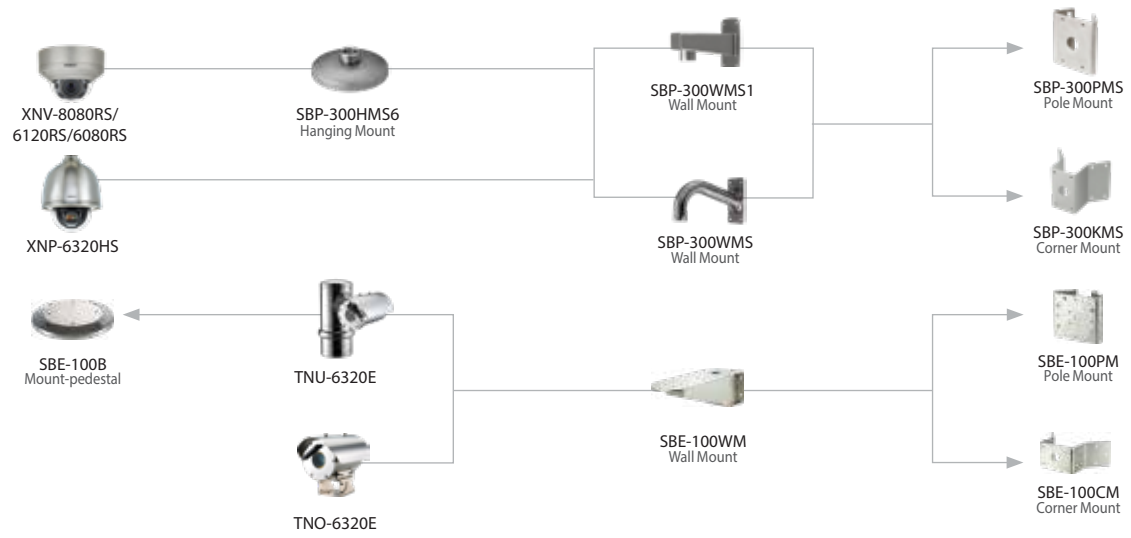


MULTI SENSOR ACC

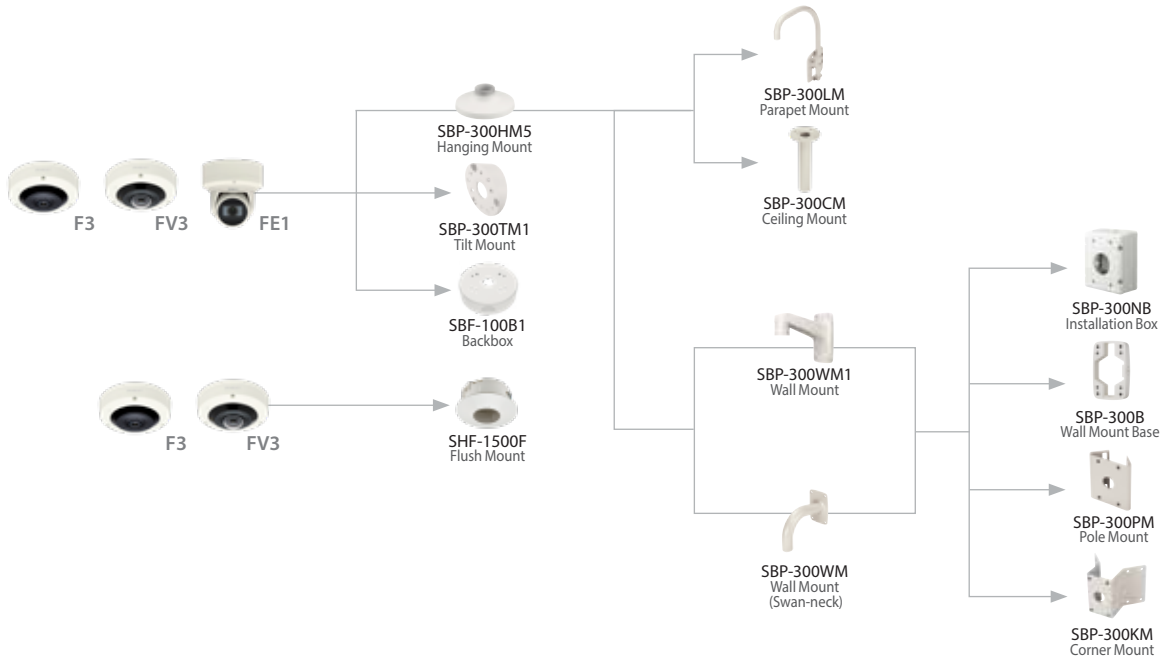


ACCESSORY CONFIGURATION

STAINLESS ACC



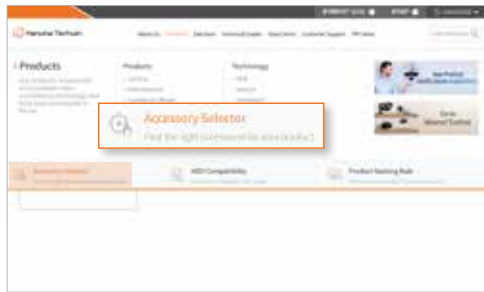
FISHEYE ACC



BULLET ACC



How to use Accessory Selector



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



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



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

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