

WISeNET
SAMSUNG



Product line-up

4th Quarter 2017

WISENET

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

Security Solutions

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



Core
value



Complete

Seamless Security
Dependable Quality
Comprehensive
Solutions



Assured

Partner-assured
Buyer-assured
User-assured



Value-added

Added Usability
Added Flexibility
Added Possibility



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WISENET X series

Defining the new standard of excellence

The Most Powerful Chipset Wisenet 5

Wisenet X series is supercharged by the most powerful chipset ever incorporated into a full camera range.

The Wisenet 5 chip uses an all-new architecture that enables faster processing. That means you get the best video performance just as you need it.



-
- The world's best WDR (150dB)
 - Improve bandwidth by up to 99% using WiseStreamII
 - Digital image stabilization with Built-in Gyro sensor
 - Clearer and colored image even in low light environments
 - Enhanced video / audio analytics





WISENET X
XNB-8000



WISENET X
XNO-8080R



WISENET X
XNO-8020R/8030R/8040R



WISENET X
XND-8080RV



WISENET X
XND-8020R/8030R/8040R



WISENET X
XND-8020F

	Wisenet X XNB-8000	Wisenet X XNO-8080R	Wisenet X XNO-8020R/8030R/8040R	Wisenet X XND-8080RV	Wisenet X XND-8020R/8030R/8040R	Wisenet X XND-8020F
Resolution	5MP	5MP	5MP	5MP	5MP	5MP
Imaging Device	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS
Video Compression Format	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	5M / 30fps	5M / 30fps	5M / 30fps	5M / 30fps	5M / 30fps	5M / 30fps
Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color: 0.07 Lux B/W: 0.007 Lux	Color: 0.07 Lux B/W: 0 Lux (IR LED on)	Color: 0.16 Lux B/W: 0 Lux (IR LED on)	Color: 0.07 Lux B/W: 0 Lux (IR LED on)	Color: 0.16 Lux B/W: 0 Lux (IR LED on)	Color: 0.16 Lux B/W: 0.16 Lux
Video Output	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	Micro USB type B
Lens	-	3.7 ~ 9.4mm (2.5x) motorized V/F (F1.2)	3.7mm fixed (F1.6) (XNO-8020R) 4.6mm fixed (F1.6) (XNO-8030R) 7.0mm fixed (F1.6) (XNO-8040R)	3.9 ~ 9.4mm (2.4x) motorized V/F (F1.3)	3.7mm fixed (F1.6) (XND-8020R) 4.6mm fixed (F1.6) (XND-8030R) 7.0mm fixed (F1.6) (XND-8040R)	3.7mm fixed (F1.6)
Angular Field of View	-	H: 100.2°(Wide) ~ 38.7°(Tele) / V: 72.7°(Wide) ~ 29.0°(Tele) / D: 132.0°(Wide) ~ 48.6°(Tele)	H: 97.5° / V: 71.9° / D: 126.2° (XNO-8020R) H: 77.9° / V: 57.9° / D: 98.7° (XNO-8030R) H: 50.7° / V: 37.8° / D: 63.8° (XNO-8040R)	H: 92.1°(Wide) ~ 38.7°(Tele) / V: 67.2°(Wide) ~ 29.0°(Tele) / D: 119.9°(Wide) ~ 48.6°(Tele)	H: 97.5° / V: 71.9° / D: 126.2° (XND-8020R) H: 77.9° / V: 57.9° / D: 98.7° (XND-8030R) H: 50.7° / V: 37.8° / D: 63.8° (XND-8040R)	H: 97.5° / V: 71.9° / D: 126.2°
Focus Control	Simple focus / Manual	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual	-	Manual
IR Viewable Length	-	50m (164.04ft)	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)	-
Pan / Tilt / Rotate	-	-	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	Auto (Electrical)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support (Built in Gyro sensor)	Support	Support	Support	Support	Support
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management
Protocol	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
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	-
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Uni-Directional
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	-	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IK08	IK08	-
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 (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Power	Max. 8.5W (24V AC) Max. 7.5W (12V DC) Max. 8.5W (PoE)	Max. 14.5W (24V AC) Max. 12.5W (12V DC) Max. 12.95W (PoE)	Max. 9.3W (12V DC) Max. 10.3W (PoE)	Max. 9W (12V DC) Max. 10W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	Max. 4.7W (PoE)
Dimensions (WxHxD) / Weight	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	Ø91.0 x 368.6mm (Ø3.58" x 14.51") (Without Sunshield) 2.18Kg (4.81 lb)	Ø70.0 x 296.0mm (Ø2.76" x 11.65") (Without Sunshield) 1.22Kg (2.69 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 628g (1.39 lb) (XND-8080R) 732g (1.61 lb) (XND-8080RV)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84 lb)	Ø98.9 x 129.1mm (Ø3.89" x 5.08") 275g (0.61 lb)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc)



WISENET X
XNV-8080R



WISENET X
XNV-8020R/8030R/8040R



WISENET X
XNF-8010R/8010RV/8010RVM



WISENET X
XNB-6005



WISENET X
XNO-6120R



WISENET X
XNO-6080R

	XNV-8080R	XNV-8020R/8030R/8040R	XNF-8010R/8010RV/8010RVM	XNB-6005	XNO-6120R	XNO-6080R
Resolution	5MP	5MP	6MP	2MP	2MP	2MP
Imaging Device	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
Video Compression Format	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	5M / 30fps	5M / 30fps	2048 x 2048 / 30fps	2M / 60fps	2M / 60fps	2M / 60fps
Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color: 0.07 Lux B/W: 0 Lux (IR LED on)	Color: 0.16 Lux B/W: 0 Lux (IR LED on)	Color: 0.1 Lux B/W: 0 Lux (IR LED on)	Color: 0.01 Lux B/W: 0.001 Lux	Color: 0.03 Lux B/W: 0 Lux (IR LED on)	Color: 0.015 Lux B/W: 0 Lux (IR LED on)
Video Output	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, DIP connector type	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Lens	3.9 ~ 9.4mm (2.4x) motorized V/F (F1.3)	3.7mm fixed (F1.6) (XNV-8020R) 4.6mm fixed (F1.6) (XNV-8030R) 7.0mm fixed (F1.6) (XNV-8040R)	1.6mm fixed (F1.6)	-	5.2 ~ 62.4mm (Optical 12x)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)
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: 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°	-	H: 54.58° (Wide) ~ 5.30° (Tele) / V: 32.19° (Wide) ~ 3.00° (Tele) / D: 61.40° (Wide) ~ 6.06° (Tele)	H: 119.5° (Wide) ~ 27.9° (Tele) / V: 62.8° (Wide) ~ 15.7° (Tele) / D: 142.1° (Wide) ~ 32.0° (Tele)
Focus Control	Simple focus (motorized V/F) / Manual	-	Simple focus / Manual	Simple focus / Manual	Auto / Manual / One shot AF	Simple focus (motorized V/F) / Manual
IR Viewable Length	50m (164.04ft)	30m (98.43ft)	15m (49.21ft)	-	70m (229.66ft)	50m (164.04ft)
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	-	-	-	-
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support	Support	-	Support (Built in Gyro sensor)	Support	Support
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Virtual line, Enter/ Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification
Protocol	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
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP67, IP66, NEMA 4X, IK10	IP67, IP66, IK10	IP66, IK10 (XNF-8010RV/8010RVM)	-	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F) (XNF-8010R) -40°C ~ +55°C (-40°F ~ +131°F) (XNF-8010RV/8010RVM)	-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)
Power	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	Max. 11W (12V DC), Max. 12W (PoE) (XNF-8010R) Max. 12W (12V DC), Max. 12.95W (PoE) (XNF-8010RV, XNF-8010RVM)	Max. 8W (24V AC) Max. 6.5W (12V DC) Max. 7.5W (PoE)	Max. 14.5W (24V AC) Max. 12.5W (12V DC) Max. 12.95W (PoE)	Max. 15W (24V AC) Max. 12W (12V DC) Max. 12.95W (PoE)
Dimensions (WxHxD) / Weight	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 1.01Kg (2.23 lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36 lb)	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)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	Ø91.0 x 368.6mm (Ø3.58" x 14.51") 2.18Kg (4.81 lb)	Ø91.0 x 368.6mm (Ø3.58" x 14.51") (Without Sunshield) 2.18Kg (4.81 lb)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	M12 Connector (XNF-8010RVM), Built-in MIC, On board dewarping, Handover, WiseStream II, Heatmap, People counting	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View



WISENET X
NNO-6010R/6020R



WISENET X
XND-6080V



WISENET X
XND-6080RV



WISENET X
XND-6020R



WISENET X
XND-6011F



WISENET X
XND-6010

	2MP	2MP	2MP	2MP	2MP	2MP
Resolution	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
Video Compression Format	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	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps
Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color: 0.055 Lux (XNO-6010R), 0.015 Lux (XNO-6020R) B/W: 0 Lux (IR LED on)	Color: 0.015 Lux B/W: 0.0015 Lux	Color: 0.015 Lux B/W: 0 Lux (IR LED on)	Color: 0.015 Lux B/W: 0 Lux (IR LED on)	Color: 0.055 Lux B/W: 0.055 Lux	Color: 0.055 Lux B/W: 0.0055 Lux
Video Output	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Lens	2.4mm fixed (F2.0) (XNO-6010R) 4mm fixed (F1.4) (XNO-6020R)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	4mm fixed (F1.4)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)
Angular Field of View	H: 139.0° / V: 73.0° / D: 167.0° (XNO-6010R) H: 88.6° / V: 47.5° / D: 104.8° (XNO-6020R)	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: 88.6° / V: 47.5° / D: 104.8°	H: 112° / V: 62° / D: 130°	H: 139.0° / V: 73.0° / D: 167.0°
Focus Control	-	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	-	Manual	-
IR Viewable Length	20m (65.61ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)	-	30m (98.43ft)	30m (98.43ft)	-	-
Pan / Tilt / Rotate	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	Auto (Electrical)	True (ICR)
Backlight Compensation	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support	Support	Support	Support	Support	Support
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management
Protocol	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
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-	1 / 1
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Uni-Directional	Bi-Directional
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP67, IP66, NEMA 4X, IK10	IK08	IK08	IK08	-	IK08
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Power	Max. 8.8W (12V DC) Max. 9.7W (PoE)	Max. 6W (12V DC) Max. 6.5W (PoE)	Max. 9W (12V DC) Max. 10W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	Max. 4.7W	Max. 5.5W (12V DC) Max. 6W (PoE)
Dimensions (WxHxD) / Weight	Ø70 x 301.5mm (Ø2.76" x 11.87") (XNO-6010R) Ø70 x 296mm (Ø2.76" x 11.65") (XNO-6020R) (Without sunshield) 1.22Kg (2.69 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 714g (1.57 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 724g (1.60 lb)	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)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 365g (0.80 lb)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View



WISENET X
XNV-6120/6120R



WISENET X
XNV-6080



WISENET X
XNV-6080R



WISENET X
XNV-6020R



WISENET X
XNV-6011



WISENET X
XNV-6010

	WISENET X XNV-6120/6120R	WISENET X XNV-6080	WISENET X XNV-6080R	WISENET X XNV-6020R	WISENET X XNV-6011	WISENET X XNV-6010
Resolution	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
Video Compression Format	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	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps
Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	Color : 0.03 Lux B/W : 0.003 Lux (XNV-6120) Color : 0.03 Lux B/W : 0 Lux (IR LED on) (XNV-6120R)	Color : 0.015 Lux B/W : 0.0015 Lux	Color : 0.015 Lux B/W : 0 Lux (IR LED on)	Color : 0.015 Lux B/W : 0 Lux (IR LED on)	Color : 0.055 Lux B/W : 0.055 Lux	Color : 0.055 Lux B/W : 0.055 Lux
Video Output	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Lens	5.2 ~ 62.4mm (Optical 1.2x) F1.6(Wide) / F3.0(Tele)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	4mm fixed (F1.4)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)
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 : 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 : 88.6° / V : 47.5° / D : 104.8°	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°
Focus Control	Auto / Manual / One shot AF	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Manual	Manual	Manual
IR Viewable Length	70m (229.66ft) (XNV-6120R)	-	50m (164.04ft)	30m (98.43ft)	-	-
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 75° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 353° / 0° ~ 59° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	Auto (Electrical)	True (ICR)
Backlight Compensation	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)	WDR (150dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support (Built in Gyro sensor)	Support	Support	Support	Support	Support
Video & Audio Analytics	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Face detection, Motion detection, Digital auto tracking, People counting, Heatmap, Queue management	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Face detection, Digital auto tracking, Sound classification, Heatmap, People counting, Queue management
Protocol	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
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-	1 / 1
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	-	Bi-Directional
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, IK10	IP67, IP66, IK10, NEMA4X	IP67, IP66, NEMA 4X, IK10
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-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)
Power	Max. 8.2W (24V AC), Max. 7W (12V DC), Max. 7.8W (PoE) (XNV-6120) Max. 14W (24V AC), Max. 11.5W (12V DC), Max. 12.95W (PoE) (XNV-6120R)	Max. 8.2W (24V AC) Max. 7W (12V DC) Max. 7.8W (PoE)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 8W (12V DC) Max. 9W (PoE)	Max. 6.5W (PoE)	Max. 5.5W (12V DC) Max. 6W (PoE)
Dimensions (WxHxD) / Weight	Ø160.0 x 128.5mm (Ø6.30" x 5.06") 985g (2.17lb) (XNV-6120) 995g (2.19lb) (XNV-6120R)	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)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 615g (1.36 lb)	Ø112.8 x 63.7mm (Ø4.44" x 2.51") 420g (0.93 lb)	Ø120.0 x 97.5mm (Ø4.72" x 3.84") 625g (1.38 lb)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	Handover, WiseStream II, Advanced video analytics, Hallway View	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View



WISENET X
XNP-6370RH



WISENET X
XNP-6120H



WISENET X
XNP-6040H

	2MP	2MP	2MP	
VIDEO	Resolution	2MP	2MP	2MP
	Imaging Device	1/1.9" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
	Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps
	Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
	Max. User Access	15 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	Color : 0.05 Lux B/W : 0 Lux (IR LED on)	Color : 0.03 Lux B/W : 0.003 Lux	Color : 0.015 Lux B/W : 0.0015 Lux
	Video Output	CVBS 1.0Vpp	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
	Lens	6 ~ 222mm (IR Corrected Optical 37x) F1.5(Wide) / F4.6(Tele)	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	2.8 ~ 12mm (Optical 4.3x) (F1.4)
	Angular Field of View	H : 59.3°(Wide) ~ 1.9°(Tele) / V : 35.8°(Wide) ~ 1.1°(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)
Focus Control	AF / One-shot AF / Manual	Auto / Manual / One shot AF	Auto / Manual / One shot AF	
OPERATIONAL	IR Viewable Length	350m (1,148.29ft)	-	-
	Pan / Tilt / Rotate	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 190° (-5° ~ 185°)	0° ~ 355° / 0° ~ 90°
	Day & Night	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (150dB)	WDR (150dB)
	Digital Noise Reduction	SSNR (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
	Digital Image Stabilization	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)
	Video & Audio Analytics	Tampering, Crossing, Enter/Exit, (Dis)Appear, Audio detection	Tampering, Loitering, Directional detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Digital Auto Tracking, Sound classification
FEATURES	Protocol	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI
	Alarm I/O	4 / 2 (Relay)	1 / 1	1 / 1
	Audio	Bi-Directional	Bi-Directional	Bi-Directional
	Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
	Environment Protection	IP66, IK10	IP66, IK10	IP66, IK10
	Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)
	Power	Max. 60.0W / 90.0W - Heater off / on, IR on (24V AC)	Max. 12W (12V DC, PoE)	Max. 8.6W (12V DC) Max. 9.6W (PoE)
	Dimensions (WxHxD) / Weight	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1kg (15.65 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, WiseStream, Auto tracking	WiseStream II, Advanced video analytics, Auto tracking, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc)	WiseStream II, Advanced video analytics, Auto tracking, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc)



WISENET P
PNO-9080R



WISENET P
PND-9080R



WISENET P
PNV-9080R



WISENET P
PNM-9081VQ



WISENET P
PNM-9080VQ



WISENET P
PNM-9020V



WISENET P
PNF-9010R/9010RV/9010RVM



WISENET P
PNP-9200RH

	Resolution	12MP	12MP	12MP	20MP	8MP	7.3MP	12MP	8MP
VIDEO	Imaging Device	1/1.7" 12.4M CMOS	1/1.7" 12.4M CMOS	1/1.7" 12.4M CMOS	1/1.8" 6M CMOS x 4	1/2.8" 2.38M CMOS x 4	7.3M (2M x 4)	1/1.7" 12.4M CMOS	1/2.5" 8M CMOS
	Video Compression Format	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	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	12M / 20fps, 8M / 30fps	12M / 20fps, 8M / 30fps	12M / 20fps, 8M / 30fps	4ea x 5M / 30fps	4ea x 2M / 60fps	7.3M / 30fps (H.265, H.264)	12M / 20fps, 9M / 25fps	8M / 30fps
	Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 40 Profiles)	Multiple (Up to 40 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
	Max. User Access	15 (Unicast)	15 (Unicast)	15 (Unicast)	20 (Unicast)	20 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)
	Min. Illumination	Color: 0.3 Lux B/W: 0 Lux (IR LED on)	Color: 0.3 Lux B/W: 0 Lux (IR LED on)	Color: 0.3 Lux B/W: 0 Lux (IR LED on)	Color: 0.07 Lux B/W: 0.007 Lux	Color: 0.015 Lux B/W: 0.0015 Lux	Color: 0.3 Lux	Color: 0.3 Lux B/W: 0 Lux (IR LED on)	Color: 0.1 Lux B/W: 0 Lux (IR LED on)
	Video Output	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp (selectable CVBS per channel)	CVBS 1.0Vpp (selectable CVBS per channel)	-	CVBS 1.0Vpp, DIP Connector Type	CVBS 1.0Vpp
	Lens	4.5 ~ 10mm (2.2x) motorized V/F (F1.6)	4.5 ~ 10mm (2.2x) motorized V/F (F1.6)	4.5 ~ 10mm (2.2x) motorized V/F (F1.6)	3.6 ~ 9.4mm (2.6x) motorized V/F (F1.2)	2.8 ~ 12mm (4.3x) motorized V/F F1.4(Wide) / F3.6(Tele)	3.6mm fixed	2.1mm fixed (F2.2)	4.8 ~ 96mm (Optical 20x) F1.8(Wide) / F3.6(Tele)
	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: 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)	[Total 4 Sensor] H: 180° / V: 84°	H: 180.0° / V: 180.0° / D: 180.0°	H: 65.1°(Wide) ~ 3.8°(Tele) / V: 38.4°(Wide) ~ 2.2°(Tele)
	Focus Control	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	-	Simple focus	AF / One-shot AF
OPERATIONAL	IR Viewable Length	40m (131.23ft)	30m (98.43ft)	40m (131.23ft)	-	-	-	15m (49.21ft)	200m (656.17ft)
	Pan / Tilt / Rotate	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	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°	0° ~ 355° / 0° ~ 60° / -	-	360° Endless / 190° (-5° ~ 185°) / -
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (150dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNR	SSNR	SSNR	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNRH (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)	SSNR
	Digital Image Stabilization	-	-	-	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	-	-	Support
	Intelligent Video Analytics	Tampering (Scene change), Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital Auto tracking with Metadata	Tampering (Scene change), Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital Auto tracking with Metadata	Tampering (Scene change), Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital Auto tracking with Metadata	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection, Digital Auto tracking, Heatmap	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Defocus detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection with Metadata
	Protocol	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF profile S, SUNAPI	ONVIF profile S, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	4 / 2 (Relay)
	Audio	Bi-Directional	Bi-Directional	Bi-Directional	-	-	Bi-Directional	Bi-Directional	Bi-Directional
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	
FEATURES	Environment Protection	IP66, IK10	IK08	IP66, IP67, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IK10 (PNF-9010R), IP66, IK10 (PNF-9010RV/9010RVM)	IP66, IK10
	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)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-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)	-50°C ~ +55°C (-58°F ~ +131°F)
	Power	Max. 12.43W / 14.08W - Heater on (24V AC) Max. 10.45W / 11.55W - Heater on (12V DC) Max. 11.77W / 12.95W - Heater on (PoE)	Max. 9.5W (12V DC) Max. 10.5W (PoE)	Max. 12.43W / 14.08W - Heater on (24V AC) Max. 10.45W / 11.55W - Heater on (12V DC) Max. 11.77W / 12.95W - Heater on (PoE)	Max. 28.8W (12V DC) Max. 33.6W (HPoE)	Max. 21.6W (12V DC) Max. 25.5W (PoE+)	Max. 21.0W - Heater on (12V DC) Max. 25.5W - Heater on (PoE+)	Max. 11W (12V DC) Max. 12W (PoE) (PNF-9010R) Max. 12W (12V DC) Max. 12.95W (PoE) (PNF-9010RV/RVM)	Max. 60.0W / 90.0W - Heater off / on, IR on (24V AC)
	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)	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)	Ø199.0 x 143.5mm (Ø7.83" x 5.65") 2.03Kg (4.48 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)	Ø236.9 x 407.7mm (Ø9.33" x 16.05") 7.1Kg (15.65 lb)
	Additional Features	Handover, Hallway View, P-Iris, Defog, WiseStream	Handover, Hallway View, P-Iris, Defog, WiseStream	Handover, Hallway View, P-Iris, Defog, WiseStream	Multidirectional camera, Hallway View, P-Iris, Defog, WiseStream II	Multidirectional camera, Hallway View, P-Iris, Defog, WiseStream II	Handover, Multi sensor, Defog, WiseStream	M12 Connector (PNF-9010RVM), Built-in mic, On Board Dewarping, Handover, WiseStream, Heatmap, People counting	Handover, Auto tracking, Defog, WiseStream



WISENET Q
QNO-7080R



WISENET Q
QNO-7010R/7020R/7030R



WISENET Q
QND-7080R



WISENET Q
QND-7010R/7020R/7030R



WISENET Q
QNV-7080R



WISENET Q
QNV-7010R/7020R/7030R

	4MP	4MP	4MP	4MP	4MP	4MP
Resolution	4MP	4MP	4MP	4MP	4MP	4MP
Imaging Device	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS
Video Compression Format	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	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps	4M / 20fps, 2M / 30fps
Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
Max. User Access	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
Min. Illumination	Color: 0.15 Lux B/W: 0 Lux (IR LED on)	Color: 0.5 Lux (QNO-7010R), 0.4 Lux (QNO-7020R), 0.3 Lux (QNO-7030R) B/W: 0 Lux (IR LED on)	Color: 0.15 Lux B/W: 0 Lux (IR LED on)	Color: 0.5 Lux (QND-7010R), 0.4 Lux (QND-7020R), 0.3 Lux (QND-7030R) B/W: 0 Lux (IR LED on)	Color: 0.15 Lux B/W: 0 Lux (IR LED on)	Color: 0.5 Lux (QNV-7010R), 0.4 Lux (QNV-7020R), 0.3 Lux (QNV-7030R) B/W: 0 Lux (IR LED on)
Lens	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8mm fixed (F2.2) (QNO-7010R) 3.6mm fixed (F2.2) (QNO-7020R) 6.0mm fixed (F2.2) (QNO-7030R)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8mm fixed (F2.2) (QND-7010R) 3.6mm fixed (F2.2) (QND-7020R) 6.0mm fixed (F2.2) (QND-7030R)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8mm fixed (F2.0) (QNV-7010R) 3.6mm fixed (F2.2) (QNV-7020R) 6.0mm fixed (F2.2) (QNV-7030R)
Angular Field of View	H: 109.7° (Wide) ~ 26.0° (Tele) / V: 60.8° (Wide) ~ 15.2° (Tele) / D: 131.3° (Wide) ~ 30.1° (Tele)	H: 111.0° / 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° (Wide) ~ 26.0° (Tele) / V: 60.8° (Wide) ~ 15.2° (Tele) / D: 131.3° (Wide) ~ 30.1° (Tele)	H: 111.0° / 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° (Wide) ~ 26.0° (Tele) / V: 60.8° (Wide) ~ 15.2° (Tele) / D: 131.3° (Wide) ~ 30.1° (Tele)	H: 110.0° / V: 63.0° / D: 133.0° (QNV-7010R) H: 81.0° / V: 45.0° / D: 95.0° (QNV-7020R) H: 53.0° / V: 31.0° / D: 62.0° (QNV-7030R)
Focus Control	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual	-	Simple focus (motorized V/F) / Manual	-
IR Viewable Length	30m (98.43ft)	20m (65.62ft) (QNO-7010R), 25m (82.02ft) (QNO-7020R), 30m (98.43ft) (QNO-7030R)	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)	20m (65.62ft) (QNV-7010R), 25m (82.02ft) (QNV-7020R), 30m (98.43ft) (QNV-7030R)
Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-	-
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection
Protocol	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
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional
Edge Storage	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS
Environment Protection	IP66, IK10	IP66, IK10	-	IK08	IP66, IK10	IP66, IK10
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Power	Max. 7.0W (12V DC) Max. 8.0W (PoE)	Max. 6.0W (12V DC) Max. 7.0W (PoE)	Max. 6.4W (12V DC) Max. 7.2W (PoE)	Max. 5.8W (12V DC) Max. 7.0W (PoE) (QND-7010R) Max. 5.43W (12V DC) Max. 6.5W (PoE) (QND-7020R/7030R)	Max. 6.4W (12V DC) Max. 7.2W (PoE)	Max. 5.8W (12V DC) Max. 7.0W (PoE) (QNV-7010R) Max. 5.7W (12V DC) Max. 6.8W (PoE) (QNV-7020R/7030R)
Dimensions (WxHxD) / Weight	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)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb)
Additional Features	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream



WISENET Q
QNO-6070R



WISENET Q
QNO-6010R/6020R/6030R



WISENET Q
QND-6070R



WISENET Q
QND-6010R/6020R/6030R



WISENET Q
QNV-6070R



WISENET Q
QNV-6010R/6020R/6030R

	QNO-6070R	QNO-6010R/6020R/6030R	QND-6070R	QND-6010R/6020R/6030R	QNV-6070R	QNV-6010R/6020R/6030R
Resolution	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS
Video Compression Format	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	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps	2M / 30fps
Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
Max. User Access	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
Min. Illumination	Color 0.095 Lux B/W: 0 Lux (IR LED on)	Color: 0.15 Lux B/W: 0 Lux (IR LED on)	Color 0.095 Lux B/W: 0 Lux (IR LED on)	Color: 0.15 Lux B/W: 0 Lux (IR LED on)	Color 0.095 Lux B/W: 0 Lux (IR LED on)	Color: 0.15 Lux B/W: 0 Lux (IR LED on)
Lens	2.8 ~ 12mm (4.3x) Manual V/F (F1.4)	2.8mm fixed (F2.0) (QNO-6010R) 3.6mm fixed (F1.8) (QNO-6020R) 6.0mm fixed (F1.8) (QNO-6030R)	2.8 ~ 12mm (4.3x) Manual V/F (F1.4)	2.8mm fixed (F1.8) (QND-6010R) 3.6mm fixed (F1.8) (QND-6020R) 6.0mm fixed (F1.8) (QND-6030R)	2.8 ~ 12mm (4.3x) Manual V/F (F1.4)	2.8mm fixed (F1.8) (QNV-6010R) 3.6mm fixed (F1.8) (QNV-6020R) 6.0mm fixed (F1.8) (QNV-6030R)
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)	H: 116.0° / V: 62.0° / D: 137.0° (QNO-6010R) H: 86.48° / V: 46.22° / D: 102.44° (QNO-6020R) H: 52.54° / V: 28.86° / D: 61.14° (QNO-6030R)	H: 103.8°(Wide) ~ 32.4°(Tele) / V: 53.7°(Wide) ~ 18.4°(Tele) / D: 121.9°(Wide) ~ 37.1°(Tele)	H: 111.0° / V: 61.0° / D: 125.0° (QND-6010R) H: 86.48° / V: 46.22° / D: 102.44° (QND-6020R) H: 52.54° / V: 28.86° / D: 61.14° (QND-6030R)	H: 103.8°(Wide) ~ 32.4°(Tele) / V: 53.7°(Wide) ~ 18.4°(Tele) / D: 121.9°(Wide) ~ 37.1°(Tele)	H: 110.0° / V: 61.0° / D: 125.0° (QNV-6010R) H: 86.48° / V: 46.22° / D: 102.44° (QNV-6020R) H: 52.54° / V: 28.86° / D: 61.14° (QNV-6030R)
Focus Control	Manual	-	Manual	-	Manual	-
IR Viewable Length	30m (98.43ft)	20m (65.62ft) : QNO-6010R, 25m (82.02ft) : QNO-6020R, 30m (98.43ft) : QNO-6030R	20m (65.62ft)	20m (65.62ft)	30m (98.43ft)	20m (65.62ft) (QNV-6010R), 25m (82.02ft) (QNV-6020R), 30m (98.43ft) (QNV-6030R)
Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR	SSNR	SSNR
Digital Image Stabilization	-	-	-	-	-	-
Intelligent Video Analytics	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection	Motion detection with metadata, Tampering, Defocus detection
Protocol	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
Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional	Uni-Directional
Edge Storage	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS
Environment Protection	IP66, IK10	IP66, IK10	-	IK08	IP66, IK10	IP66, IK10
Operating Temperature	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Power	Max. 7.0W (12V DC) Max. 8.0W (PoE)	Max. 6.0W (12V DC) Max. 7.0W (PoE)	Max. 5.5W (12V DC) Max. 6.7W (PoE)	Max. 5.8W (12V DC) Max. 7.0W (PoE) (QND-6010R) Max. 5.43W (12V DC) Max. 6.5W (PoE) (QND-6020R/6030R)	Max. 5.5W (12V DC) Max. 6.7W (PoE)	Max. 5.8W (12V DC) Max. 7.0W (PoE) (QNV-6010R) Max. 5.7W (12V DC) Max. 6.8W (PoE) (QNV-6020R/6030R)
Dimensions (WxHxD) / Weight	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 730g (1.61 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") 325g (0.72 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") 660g (1.46 lb)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 490g (1.08 lb)
Additional Features	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream	Lens distortion correction, Hallway View, WiseStream



WISENET T TNO-6320E

	Resolution	2MP
VIDEO	Imaging Device	1/2.8" 2.38M CMOS
	Video Compression Format	H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 60fps
	Streaming Capacity	Multiple (Up to 10 Profiles)
	Max. User Access	10 (Unicast)
	Min. Illumination	Color : 0.15 Lux B/W : 0.015 Lux
	Video Output	-
	Lens	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)
	Angular Field of View	H : 62.8°(Wide) ~ 2.23°(Tele) / V : 36.8°(Wide) ~ 1.26°(Tele)
Focus Control	Auto / Manual / One push	
OPERATIONAL	IR Viewable Length	-
	Pan / Tilt / Rotate	-
	Day & Night	Auto (ICR)
	Backlight Compensation	WDR (120dB)
	Digital Noise Reduction	SSNR III (2D+3D Noise filter)
	Digital Image Stabilization	Support
	Intelligent Video Analytics	Motion detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection
FEATURES	Protocol	ONVIF Profile S, SUNAPI
	Alarm I/O	1 / 1 (Relay)
	Audio	-
	Edge Storage	NAS
	Environment Protection	IP67, IK10
	Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)
	Power	Max. 28.0W - Heater on (24V AC)
	Dimensions (WxHxD) / Weight	Ø162.0 x 244.0mm (Ø6.38" x 9.61") 7Kg (15.43 lb)
	Additional Features	Explosion certification : CE2460 EX II 2 GD Ex d IIC T6 Gb IP67 Ex tb IIIC T85°C Db



WISENET X
XRN-3010



WISENET X
XRN-2011



WISENET X
XRN-2010

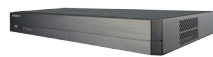


WISENET X
XRN-1610S/1610



WISENET X
XRN-810S

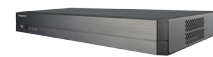
	Linux	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	300Mbps	256Mbps 100Mbps (RAID 5 mode)	256Mbps	180Mbps	100Mbps
Max # of Cameras	64	32	32	16	8
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)	Up to 4 SATA (Max. 24TB) (XRN-1610S) Up to 8 SATA (Max. 48TB) (XRN-1610)	Up to 2 SATA (Max. 12TB)
External Storage	1 e-SATA	iSCSI	iSCSI, 1 e-SATA	iSCSI, 1 e-SATA	-
RAID	-	RAID 5	-	-	-
Hot Swap	-	Yes	-	-	-
Network Viewer Software	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI (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	HDMI (Up to 4K), VGA Support dual monitor : HDMI / VGA	HDMI (Up to 4K), VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	<ul style="list-style-type: none"> • N+1 failover supported • ARB redundancy supported • WiseStream support • Defocus event trigger 	<ul style="list-style-type: none"> • N+1 failover supported • ARB redundancy supported • WiseStream support 	<ul style="list-style-type: none"> • N+1 failover supported • ARB redundancy supported • WiseStream support 	<ul style="list-style-type: none"> • Plug & play by 16 PoE / PoE+ Ports (XRN-1610S) • WiseStream support • Defocus event trigger 	<ul style="list-style-type: none"> • 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



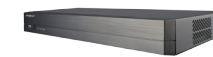
WISENET X
XRN-410S



WISENET P
PRN-4011



WISENET Q
QRN-810



WISENET Q
QRN-410

	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	50Mbps	400Mbps	100Mbps	50Mbps
Max # of Cameras	4	64	8	4
Internal Storage	Up to 1 SATA (Max. 6TB)	Up to 12 SATA (Max. 96TB)	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	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile	SSM, WebViewer, SmartViewer, Wisenet Mobile
Local Monitor	HDMI (Up to 4K), VGA	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	SUNAPI, ONVIF
Features	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • N+1 failover supported • ARB redundancy supported • WiseStream support • Defocus event trigger 	<ul style="list-style-type: none"> • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps • Defocus event trigger 	<ul style="list-style-type: none"> • ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 64Mbps • Defocus event trigger



WISENET III
SNB-6011B



WISENET III
SNB-6010B



WISENET III
SNZ-6320



WISENET Lite
SNO-L6083R



WISENET Lite
SNO-L6013R



SNF-8010/8010VM



WISENET Lite
SND-L6013

	Resolution	2MP	2MP	2MP	2MP	2MP	5MP	2MP
VIDEO	Imaging Device	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/1.9" 2.4M CMOS	1/1.8" 6M CMOS	1/2.9" 2.19M CMOS
	Video Compression Format	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 30fps	2M / 30fps	2M / 60fps	2M / 30fps	2M / 60fps	5M / 20fps	2M / 30fps
	Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 5 Profiles)	Multiple (Up to 3 Profiles)
	Max. User Access	15 (Unicast)	15 (Unicast)	10 (Unicast)	15 (Unicast)	15 (Unicast)	10 (Unicast)	6 (Unicast)
	Min. Illumination	* Color: 0.3 Lux	* Color: 0.3 Lux	Color: 0.15 Lux B/W: 0.015 Lux	* Color: 0.3 Lux	Color: 0.015 Lux B/W: 0.0015 Lux	Color: 0.2 Lux B/W: 0.02 Lux	Color: 0.15 Lux B/W: 0.15 Lux
	Video Output	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp	-
	Lens	2.4mm Pinhole (F 2.0)	4.6mm Pinhole (F 2.5)	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	4.6mm Pinhole (F 2.5)	-	1.14mm fixed (F2.5)	3.6mm fixed (F1.8)
	Angular Field of View	H: 134.3° / V: 70.9°	H: 71° / V: 38°	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 71° / V: 38°	-	H: 187.0° / V: 187.0° / D: 187.0°	H: 86.5° / V: 47.8° / D: 101.2°
	Focus Control	-	-	Auto / Manual / One push	-	Simple focus / Manual	Manual	-
OPERATIONAL	IR Viewable Length	-	-	-	-	-	-	-
	Pan / Tilt / Rotate	-	-	-	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
	Day & Night	Electrical	Electrical	True (ICR)	Electrical	True (ICR)	True (ICR)	Electrical
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (60dB)	BLC, DWDR
	Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNR
	Digital Image Stabilization	Support	Support	Support	Support	Support	-	-
	Intelligent Video Analytics	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection with Metadata	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection with Metadata	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection with Metadata	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection with Metadata	Motion detection, Audio detection, Tampering	Motion detection with Metadata, Tampering
	Protocol	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI	ONVIF Profile S & G, SUNAPI
	Alarm I/O	1 / 1	1 / 1	1 / 1 (Relay)	1 / 1	1 / 1	1 / 1	-
	Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Uni-Directional
Edge Storage	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC, NAS	
FEATURES	Environment Protection	-	-	-	-	-	IP66, IK10 / EN-61373/50155 (SNF-8010VM)	-
	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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F) (SNF-8010) -30°C ~ +55°C (-22°F ~ +131°F) * Start up above -25°C (-13°F) (SNF-8010VM)	-10°C ~ +55°C (+14°F ~ +131°F)
	Power	Max. 6.5W (12V DC) Max. 7.5W (PoE)	Max. 6.5W (12V DC) Max. 7.5W (PoE)	Max. 9.0W (12V DC) Max. 10.0W (PoE)	Max. 6.5W (12V DC) Max. 7.5W (PoE)	Max. 11.44W (24V AC) Max. 10.1W (12V DC) Max. 11.1W (PoE)	Max. 8.7W (12V DC) Max. 10.3W (PoE) mode A only (SNF-8010VM)	Max. 2.4W (PoE)
	Dimensions (WxHxD) / Weight	Header: Ø24.0 x 50.0mm (Ø0.94" x 1.97"), 80g (0.18 lb) (Include 1.5m cable) Main unit: 131.1 x 28.0 x 86.0mm (5.16" x 1.1" x 3.39") 255g (0.56 lb)	Header: Ø24.0 x 42.4mm (Ø0.94" x 1.67"), 80g (0.18 lb) (Include 1.5m cable) Main unit: 131.1 x 28.0 x 86.0mm (5.16" x 1.10" x 3.39") 255g (0.56 lb)	72.0 x 59.9 x 135.4mm (2.83" x 2.36" x 5.33") 540g (1.19 lb)	Header: Ø24.0 x 42.4mm (Ø0.94" x 1.67"), 80g (0.18 lb) (Include 1.5m cable) Main unit: 131.1 x 28.0 x 86.0mm (5.16" x 1.10" x 3.39") 255g (0.56 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 430g (0.95 lb)	Ø145.9 x 49.6mm (Ø5.74" x 1.95") 780g (1.72 lb) (SNF-8010) Ø145.9 x 62.4mm (Ø5.74" x 2.46") 800g (1.76 lb) (SNF-8010VM)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 250g (0.55 lb)
	Additional Features	Separated head and body, Defog	Separated head and body, Defog	RS-485, Defog	Separated head and body, Defog	P-Iris, RS-485, Defog	Various Viewing Compositions, M12 Connector (SNF-8010VM)	Lens distortion correction, Hallway View

NETWORK



Wisenet Lite
SND-L6012



Wisenet Lite
SND-L6083R



Wisenet Lite
SND-L6013R



Wisenet III
SNV-6012M



Wisenet Lite
SNV-L6083R



Wisenet Lite
SNV-L6013R

	2MP	2MP	2MP	2MP	2MP	2MP
VIDEO						
Resolution	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.8" 2.38M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS
Video Compression Format	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Max. Frame Rate	2M / 30fps	2M / 30fps	2M / 30fps	2M / 60fps	2M / 30fps	2M / 30fps
Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
Max. User Access	6 (Unicast)	6 (Unicast)	6 (Unicast)	15 (Unicast)	6 (Unicast)	6 (Unicast)
Min. Illumination	Color : 0.15 Lux B/W : 0.15 Lux	Color : 0.095 Lux B/W : 0 Lux (IR LED on)	Color : 0.15 Lux B/W : 0 Lux (IR LED on)	Color : 0.15 Lux B/W : 0.15 Lux	Color : 0.095 Lux B/W : 0 Lux (IR LED on)	Color : 0.15 Lux B/W : 0 Lux (IR LED on)
Video Output	-	-	-	CVBS 1.0Vpp DIP Connector Type	-	-
Lens	2.8mm fixed (F1.8)	2.8 ~ 12mm (4.3x) V/F (F1.4)	3.6mm fixed (F1.8)	3mm fixed (F2.0)	2.8 ~ 12mm (4.3x) V/F (F1.4)	3.6mm fixed (F1.8)
Angular Field of View	H : 110.0° / V : 61.0° / D : 125.0°	H : 103.8°(Wide) ~ 32.4°(Tele) / V : 53.7°(Wide) ~ 18.4°(Tele) / D : 121.9°(Wide) ~ 37.1°(Tele)	H : 86.5° / V : 47.8° / D : 101.2°	H : 103.1° / V : 53.9° / D : 124.5°	H : 103.8°(Wide) ~ 32.4°(Tele) / V : 53.7°(Wide) ~ 18.4°(Tele) / D : 121.9°(Wide) ~ 37.1°(Tele)	H : 86.5° / V : 47.8° / D : 101.2°
Focus Control	-	Manual	-	-	Manual	-
OPERATIONAL						
IR Viewable Length	-	15m (49.21ft)	15m (49.21ft)	-	20m (65.62ft)	15m (49.21ft)
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-10° ~ 10° / 0° ~ 90° / -	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-5° ~ 5° / 0° ~ 67° / 90°
Day & Night	Electrical	True (ICR)	True (ICR)	Electrical	True (ICR)	True (ICR)
Backlight Compensation	BLC, DWDR	BLC, DWDR	BLC, DWDR	WDR (120dB)	BLC, DWDR	BLC, DWDR
Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR III (2D+3D Noise filter)	SSNR	SSNR
Digital Image Stabilization	-	-	-	Support	-	-
Intelligent Video Analytics	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Face detection	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering
FEATURES						
Protocol	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S & G, SUNAPI	ONVIF Profile S, SUNAPI
Alarm I/O	-	-	-	-	-	-
Audio	Uni-Directional	Uni-Directional	Uni-Directional	-	Uni-Directional	Uni-Directional
Edge Storage	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS
Environment Protection	-	-	-	IP66, IK10 / EN50155, EN50121	IP66, IK10	IP66, IK10
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F)	-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)
Power	Max. 2.4W (PoE)	Max. 5.4W (PoE)	Max. 5.9W (PoE)	Max. 7.5W (PoE)	Max. 5.8W (PoE)	PoE
Dimensions (WxHxD) / Weight	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 240g (0.53 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 290g (0.64 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 245g (0.54 lb)	135.2 x 54.3 x 124.5mm (5.32" x 2.14" x 4.90") 530g (1.17 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 670g (1.48 lb)	99.0 x 52.0 x 100.0mm (3.90" x 2.05" x 3.94") 300g (0.66 lb)
Additional Features	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	Defog, M12 connector	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View

NETWORK



WISENET III
SNP-6321H



WISENET III
SNP-6321



WISENET III plus
SNP-6320H



WISENET III plus
SNP-6320



WISENET Lite
SNP-L6233H/L6233



WISENET III plus
SNP-6320RH



WISENET Lite
SNP-L6233RH

	2MP	2MP	2MP	2MP	2MP	2MP	2MP
Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS
Video Compression Format	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 30fps	2M / 60fps	2M / 30fps
Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
Max. User Access	10 (Unicast)	10 (Unicast)	15 (Unicast)	15 (Unicast)	10 (Unicast)	15 (Unicast)	15 (Unicast)
Min. Illumination	Color: 0.15 Lux B/W: 0.015 Lux	Color: 0.15 Lux B/W: 0.015 Lux	Color: 0.2 Lux B/W: 0.01 Lux	Color: 0.2 Lux B/W: 0.01 Lux	Color: 0.15 Lux B/W: 0.015 Lux	Color: 0.1 Lux B/W: 0 Lux (IR LED on)	Color: 0.1 Lux B/W: 0 Lux (IR LED on)
Video Output	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp	CVBS 1.0Vpp
Lens	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	4.44 ~ 102.1mm (Optical 23x)	4.4 ~ 140.8mm (IR Corrected Optical 32x) F1.6(Wide) / F4.9(Tele)	4.4 ~ 101.2mm (IR Corrected Optical 23x) F1.6(Wide) / F4.5(Tele)
Angular Field of View	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: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 62.8°(Wide) ~ 3.14°(Tele) / V: 36.8°(Wide) ~ 1.76°(Tele)	H: 63.68°(Wide) ~ 2.24°(Tele) / V: 37.52°(Wide) ~ 1.28°(Tele)	H: 63.68°(Wide) ~ 3.1°(Tele) / V: 37.52°(Wide) ~ 1.76°(Tele)
Focus Control	Auto / Manual / One push	Auto / Manual / One push	Auto / Manual / One push	Auto / Manual / One push	Auto / Manual / One push	AF / One-shot AF / Manual	AF / One-shot AF / Manual
IR Viewable Length	-	-	-	-	-	150m (492.13ft)	100m (328.08ft)
Pan / Tilt / Rotate	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 210° (-15° ~ 195°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 190° (-5° ~ 185°) / -
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (100dB)	WDR (120dB)	WDR (100dB)
Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNR
Digital Image Stabilization	Support	Support	Support	Support	Support	Support	Support
Intelligent Video Analytics	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection
Protocol	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI
Alarm I/O	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	4 / 3 (Relay)	4 / 3 (Relay)	4 / 3 (Relay)
Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional
Edge Storage	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP66, IK10	IK10 (With SHP-3701H)	IP66, IK10	IK10 (With SHP-3701H)	IP66, IK10 (SNP-L6233H) IK10 (With SHP-3701H) (SNP-L6233)	IP66, IK10	IP66, IK10
Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -30°C ~ +55°C (-22°F ~ +131°F) (PoE+)	-10°C ~ +55°C (+14°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -30°C ~ +55°C (-22°F ~ +131°F) (PoE+)	-10°C ~ +55°C (+14°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -30°C ~ +55°C (-22°F ~ +131°F) (PoE+) (SNP-L6233H) -10°C ~ +55°C (+14°F ~ +131°F) (SNP-L6233)	-50°C ~ +55°C (-58°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F)
Power	Max. 65.0W - AC & PoE Heater on (24V AC) Max. 25.0W - 24V AC Heater off / PoE Heater on (PoE+)	Max. 20.0W (24V AC, PoE+)	Max. 24.0W (24V AC, PoE+) Max. 65.0W - Heater on (24V AC)	Max. 20.0W (24V AC, PoE+)	Max. 65.0W - AC & PoE Heater on (24V AC) Max. 25.0W - PoE Heater on (PoE+) (SNP-L6233H) Max. 20.0W (24V AC, PoE+) (SNP-L6233)	Max. 30.0W - Heater off Max. 35.0W / 90.0W - Heater off / on, IR on (24V AC)	Max. 30.0W - Heater off Max. 35.0W / 90.0W - Heater off / on, IR on (24V AC)
Dimensions (WxHxD) / Weight	Ø223.4 x 293.6mm (Ø8.8" x 11.56") 3.2Kg (7.05 lb)	Ø152.0 x 218.0mm (Ø5.98" x 8.58") 1.8Kg (3.97 lb)	Ø223.4 x 293.6mm (Ø8.8" x 11.56") 3.3Kg (7.28 lb)	Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb)	Ø223.4 x 293.6mm (Ø8.8" x 11.56") 3.2Kg (7.05 lb) (SNP-L6233H) Ø152.0 x 218.0mm (Ø5.98" x 8.58") 1.8Kg (3.97 lb) (SNP-L6233)	Ø248.0 x 399.5mm (Ø9.76" x 15.73") 7.1Kg (15.65 lb)	Ø248.0 x 399.5mm (Ø9.76" x 15.73") 7.1Kg (15.65 lb)
Additional Features	RS-485, Defog	RS-485, Defog	Auto tracking, RS-485, Defog	Auto tracking, RS-485, Defog	RS-485, Defog	Auto tracking, RS-485/422, Defog	RS-485/422, Defog

NETWORK

iSCSI External Storage



SRB-160S

OS	Linux
Max. recording bandwidth	800Mbps
Internal HDD	Max.16 Hot swappable HDDs (Max. 128TB) * RAID 0 mode
RAID	0 / 10 / 5 / 6, RAID5 + Hotstandby
iSCSI volume	Max. 8 NVRs can be connected
Setup	One-touch setup of RAID volume
	Setup via webpage & remote storage management S/W
Redundancy	Network failover, Load balancing
Mechanical	4 Gigabit ethernet ports
	3U chassis with front key-lock
Features	Dual SMPS for high reliability

Encoder / Decoder



SPE-400



SPE-101



SPE-100

Max. # of Cameras	4	1	1
Supported Compression	H.264, MJPEG, MPEG-4	H.264, MJPEG, MPEG-4	H.264, MJPEG, MPEG-4
Max. Resolution	704 x 480 / 704 x 576 (NTSC / PAL)	704 x 480 / 704 x 576 (NTSC / PAL)	704 x 480 / 704 x 576 (NTSC / PAL)
Max. Frame Rate per Channel	30/25fps (NTSC / PAL)	30/25fps (NTSC / PAL)	30/25fps (NTSC / PAL)
Bi-Directional Audio	Yes	-	Yes
RS-485	4	1	1
Alarm I/O	4 / 4	-	1 / 1
SD Card	SD/SDHC	-	SD/SDHC
ONVIF	Yes	Yes	Yes
Power	12V DC	12V DC / PoE	12V DC / PoE



SPD-150

Video Out	HDMI, VGA, CVBS
Resolution	HDMI up to 4K, VGA up to 1080p
Display	(HDMI) 1 / 4 / 6 / 8 / 9 / 13 / 16 / 25 / 36(32) / 2V / 3V (VGA) 1 / 4 / 6 / 8 / 9 / 13 / 16 / 2V / 3V Split mode, Halfway View mode (Up to 20 layouts and sequence)
Power	12V DC, PoE
Additional Features	Up to 49CH, H.265 / H.264 / MJPEG codec, Layout sequence support

Wisenet SSM

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. Server software includes core server for system management, plugins for intelligent business reports, transaction server to link your system to other surveillance areas such as access control, video decoder for wall display, and more. On the other hand, client software provides PC console for operators in security room and mobile viewer for guards on the move.

What's New in Wisenet SSM



Free Trial License

Users are given 45 days of trial period before activating license. During this period full features including recording are available. After trial periods, features will be limited and SSM will generate a warning message.



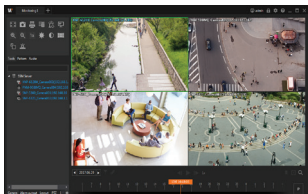
Single Core Server with Clustering

Basic servers such as MG, RS, SM, HA have been put in a single "Core Server" for new launched Wisenet SSM. In addition, these "Core Servers" can be clustered together providing higher level of reliability. From Wisenet SSM, a group of clustered core servers will be named 'Domain' and in the same domain, core servers will synchronize data.

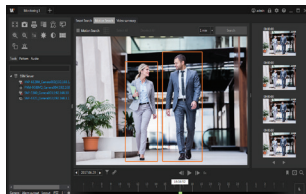


New Client User Interface

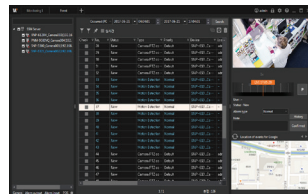
You can play back recorded video during live streaming and easily control playback up to 32x as well as reverse playback. Also Wisenet SSM displays the events in the same area as thumbnails making it easier to carry out a detailed search.



Live Streaming

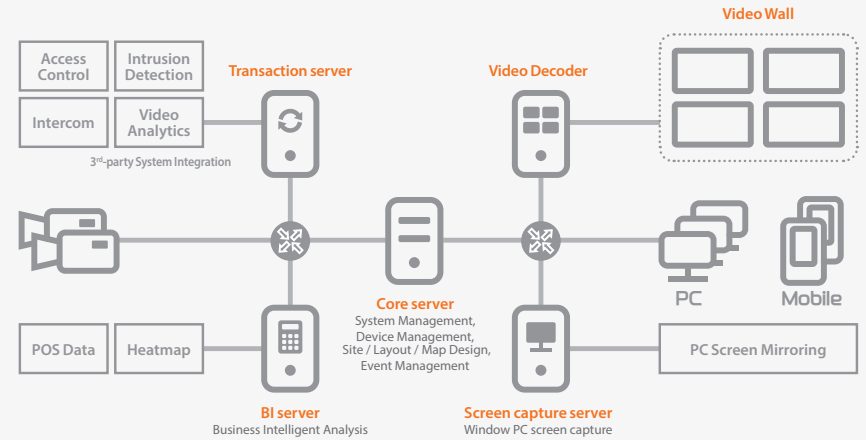


Display Events as Thumbnails



Location of Events for Google Map

System configuration

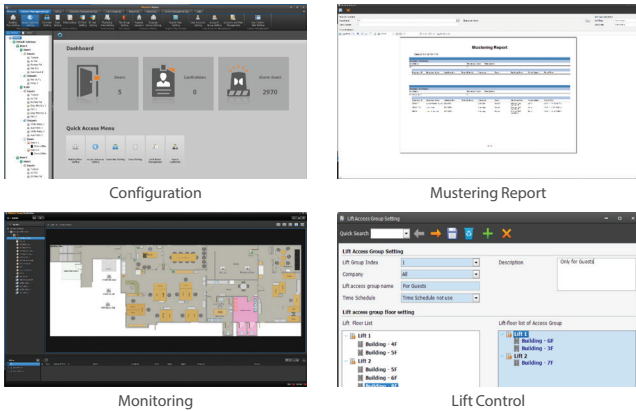


General	Wisenet SSM (v2.0)
System	
Maximum Number of Monitoring Channel	Up to 10,000channel / domain
Maximum Number of Recording Channel	Up to 10,000channel / domain
Architecture	Server / Client
Clients	Console Client, Mobile Viewer
Supported Devices	Network camera / encoder / decoder, DVR / NVR, Controller
Basic Component	
Core Server	<ul style="list-style-type: none"> Centralized License Management: 45 days free trial Server Clustering: Data sharing, Failure management System Dashboard: Real-time system status monitoring User Management: Device access authority, Feature level authority Federation: Multi-tier domain federation, Max 100 domains Centralized Device Configuration: Auto / Manual Device and add-on server registration Device Connection: Up to 3,000 channel Event Configuration: 4 levels event priority, Configurable event color Event Action: Rule based event and triggering action setup Layout & Pattern: User defined layout and tile pattern
Console Client	<ul style="list-style-type: none"> Tab Based Window: Live, Advanced search, Event, Configuration, Retail Number of Channels: Max 100 channels, Max 64 channels per tab Decoding: Hardware accelerator supported (NVIDIA CUDA) Playback: Multi channel playback, Bookmark Real-time Event: Event filtering by status, type, and priority Event Search: Event acknowledgement history Smart Search: Search by virtual area and virtual line Video Summary: Image preview, Video summary history management POS Text Search: Receipt list area, Keyword search Heatmap: Search by object type (Person, Vehicle) and time Counting Analysis: Statistic view, Map view, Report by date

Wisenet ACS Control Software

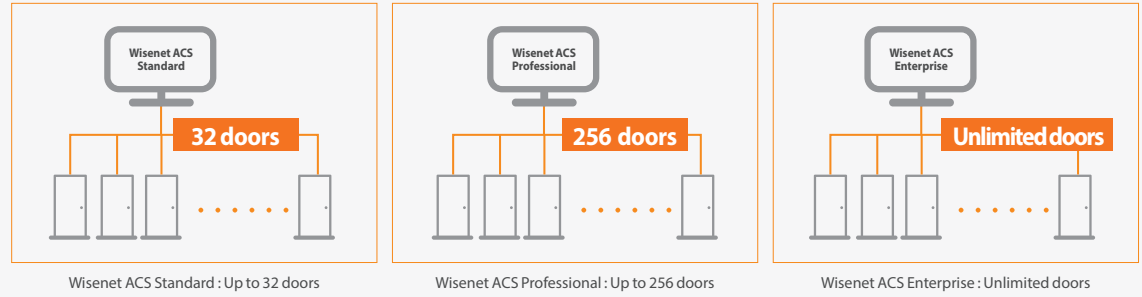
Wisenet ACS Control Software is access control management software and can be integrated with Wisenet SSM for integrated Monitoring solution. It is highly scalable up to unlimited doors system and has robust software architecture.

Key Features

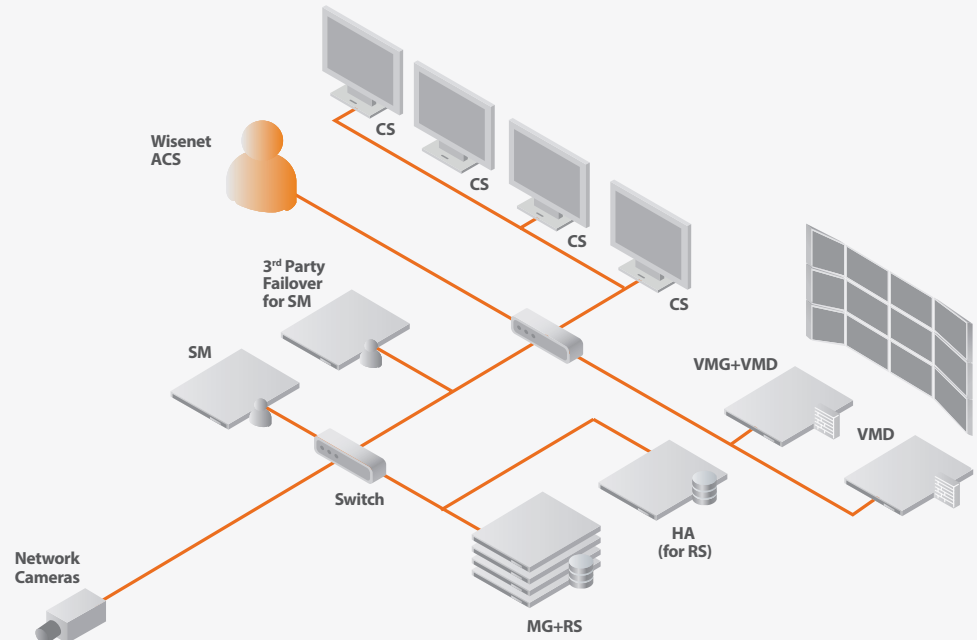


Access Control	<ul style="list-style-type: none"> Device auto discovery Cardholder management Batch uploads Card (s) pre-registration Device maintenance Unlimited access groups, Time schedules Area / Zone management Biometric readers (FP) Lift Control (with V300)
Monitoring	<ul style="list-style-type: none"> Real time access events & alarm monitoring Graphic maps Remote door management (Close / Open) I/O monitoring Mustering Event filtering for monitoring Control door monitoring / Management permissions per user group
Card Design and Printing	<ul style="list-style-type: none"> Create multiple design templates Auto-fill card holder data from system database Print cards
Fire Groups	<ul style="list-style-type: none"> Create firegroups for each fire sensor input Extensive reporting options
Advanced Reporting	<ul style="list-style-type: none"> Export to multiple formats (excel, pdf, word etc.) Full Integration with Hanwha Techwin's VMS, SSM Review video of the access events & alarms
Video Integration with SSM	<ul style="list-style-type: none"> Real-time event & alarm notification to SSM User group & user privileges Manual & scheduled database backup
Maintenance	<ul style="list-style-type: none"> Database restore Data export & import Custom fields Auditing & user activity logs
System	<ul style="list-style-type: none"> Up to 32doors (standard), 256doors (professional), Unlimited doors (enterprise) Very simple and intuitive user interface Highly scalable

Wisenet ACS



Integration with Wisenet SSM





WISENET HD+
HCB-7000



WISENET HD+
HCO-7070R



WISENET HD+
HCO-7010R/20R/30R



WISENET HD+
HCD-7070R



WISENET HD+
HCD-7010R/20R/30R



WISENET HD+
HCV-7070R



WISENET HD+
HCV-7010R/20R/30R

	4MP	4MP	4MP	4MP	4MP	4MP	4MP
TV Lines / Resolutions	4MP	4MP	4MP	4MP	4MP	4MP	4MP
Imaging Device	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS	1/3" 4M CMOS
Horizontal Resolution	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440	2560 x 1440
Min. Illumination	Color: 0.16 Lux B/W: 0.009 Lux	Color: 0.16 Lux B/W: 0 Lux (IR LED on)	Color: 0.26 Lux (HCO-7010R) 0.27 Lux (HCO-7020R/7030R) B/W: 0 Lux (IR LED on)	Color: 0.16 Lux B/W: 0 Lux (IR LED on)	Color: 0.26 Lux (HCD-7010R) 0.27 Lux (HCD-7020R/7030R) B/W: 0 Lux (IR LED on)	Color: 0.16 Lux B/W: 0 Lux (IR LED on)	Color: 0.26 Lux (HCV-7010R) 0.27 Lux (HCV-7020R/7030R) B/W: 0 Lux (IR LED on)
Lens	-	3.2 ~ 10mm (3.1x) V/F (F1.6)	2.8mm Fixed (F1.8) (HCO-7010R) 4.0mm Fixed (F2.0) (HCO-7020R) 6.0mm Fixed (F2.0) (HCO-7030R)	3.2 ~ 10mm (3.1x) V/F (F1.6)	2.8mm Fixed (F1.8) (HCD-7010R) 4.0mm Fixed (F2.0) (HCD-7020R) 6.0mm Fixed (F2.0) (HCD-7030R)	3.2 ~ 10mm (3.1x) V/F (F1.6)	2.8mm Fixed (F1.8) (HCV-7010R) 4.0mm Fixed (F2.0) (HCV-7020R) 6.0mm Fixed (F2.0) (HCV-7030R)
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)	20m (65.62ft) (HCV-7010R) 25m (82.02ft) (HCV-7020R) 30m (98.43ft) (HCV-7030R)
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)	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)
Focus Control	Manual	Manual	Fixed	Manual	Fixed	Manual	Fixed
Pan / Tilt / Rotate	-	-	-	0° ~ 350° / 0° ~ 63° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	BLC / HLC / DWDR	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	2D DNR
Motion detection	Support	Support	Support	Support	Support	Support	Support
Privacy Masking	2 Zones	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	-
Communication	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)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)
Environment Protection	-	IP66, IK10	IP66, IK10	-	-	IP66, IK10	IP66, IK10
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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
Power	Max. 3.6W (24V AC & 12V DC)	Max. 5.8W (24V AC & 12V DC)	Max. 5.0W (12V DC)	Max. 5.8W (24V AC & 12V DC)	Max. 5.0W (12V DC)	Max. 5.8W (24V AC & 12V DC)	Max. 5.0W (12V DC)
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 246.0mm (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)	Ø120.3 x 91.7mm (Ø4.74" x 3.61") 510g (1.12 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)	Video Transmission up to 500m (5C2V Coaxial Cable)



WISENET HD+
HCB-6001



WISENET HD+
HCB-6000



WISENET HD+
HCO-6080R



WISENET HD+
HCO-6070R



WISENET HD+
HCD-6080R

	2MP	2MP	2MP	2MP	2MP
TV Lines / Resolutions	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS
Horizontal Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color : 0.09 Lux B/W : 0.009 Lux	Color : 0.09 Lux B/W : 0.009 Lux	Color : 0.11 Lux B/W : 0 Lux (IR LED on)	Color : 0.11 Lux B/W : 0 Lux (IR LED on)	Color : 0.11 Lux B/W : 0 Lux (IR LED on)
Lens	-	-	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	3.2 ~ 10mm (3.1x) V/F (F1.6)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)
IR Viewable Length	-	-	30m (98.43ft)	30m (98.43ft)	20m (65.62ft)
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 : 110.2°(Wide) ~ 32°(Tele) / V : 55.4°(Wide) ~ 18°(Tele) / D : 128.4°(Wide) ~ 36.6°(Tele)
Focus Control	Simple Focus	Manual	Simple focus (motorized V/F) / Manual	Manual	Simple focus (motorized V/F) / Manual
Pan / Tilt / Rotate	-	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	4 Zones	8 Zones	8 Zones	8 Zones	8 Zones
Alarm I/O	0 / 1, External D/N 1	0 / 1, External D/N 1	MD Output 1	MD Output 1	MD Output 1
Communication	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), RS-485 : Samsung T/E, Pelco D/P, Panasonic Bosch, Honeywell, Vicon, GE, AD	AHD : ACP (AHD Coax Protocol), CVBS : Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol), RS-485 : Samsung T, Pelco D/P, Panasonic Bosch, Honeywell, Vicon, GE, AD	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)
Environment Protection	-	-	IP66, IK10	IP66, IK10	-
Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) *Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Power	Max. 6W (24V AC & 12V DC)	Max. 3.5W (24V AC & 12V DC)	Max. 6.0W (24V AC & 12V DC)	Max. 6.0W (24V AC & 12V DC)	Max. 6.0W (24V AC & 12V DC)
Dimensions (WxHxD) / Weight	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)	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)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 330g (0.73 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)



WISENET HD+
HCD-6070R



WISENET HD+
HCV-6080R



WISENET HD+
HCV-6070R



WISENET HD+
HCM-9020VQ



WISENET HD+
HCP-6320HA/6320A

	2MP	2MP	2MP	2MP	2MP
TV Lines / Resolutions	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/3" 2M CMOS Sensor x 4	1/2.8" 2.38M CMOS
Horizontal Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color: 0.11 Lux B/W: 0 Lux (IR LED on)	Color: 0.11 Lux B/W: 0 Lux (IR LED on)	Color: 0.11 Lux B/W: 0 Lux (IR LED on)	Color: 0.1 Lux (4mm) / 0.01 Lux (6mm) B/W: 0.01 Lux (4mm, 0.6mm)	Color: 0.2 Lux B/W: 0.01 Lux
Lens	3.2 ~ 10mm (3.1x) V/F (F1.6)	3.2 ~ 10mm (3.1x) motorized V/F (F1.6)	3.2 ~ 10mm (3.1x) V/F (F1.6)	4mm x 2 (F2.6), 6mm x 2 (F2.0)	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)
IR Viewable Length	20m (65.62ft)	30m (98.43ft)	30m (98.43ft)	-	-
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: 110.2°(Wide) ~ 32°(Tele) / V: 55.4°(Wide) ~ 18°(Tele) / D: 128.4°(Wide) ~ 36.6°(Tele)	[4mm] H: 80.20° / V: 43.50° / D: 95.24° [6mm] H: 51.66° / V: 30.46° / D: 60.78°	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)
Focus Control	Manual	Simple focus (motorized V/F) / Manual	Manual	Fixed	Auto / Manual / One push
Pan / Tilt / Rotate	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	20° ~ 60° / 0° / 355°	360° Endless / 210° (-15° ~ 195°) / -
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (100dB)	WDR (120dB)
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	Off / Low / Middle / High	SSNRIII
Motion detection	Support	Support	Support	Support	Support
Privacy Masking	8 Zones	8 Zones	8 Zones	16 Zones	32 Zones
Alarm I/O	MD Output 1	MD Output 1	MD Output 1	0 / 4	4 / 2 (Relay)
Communication	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)	Pelco-C (Coaxitron), RS-485: Pelco-D	AHD: ACP (AHD Coax Protocol), RS-485: Samsung-T/E, Pelco-P/D, Sungjin, Panasonic, Honeywell, AD, Vicon, Bosch, GE
Environment Protection	-	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10 (HCP-6320HA), IK10 (With SHP-3701H) (HCP-6320A)
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 ~ +50°C (-22°F ~ +122°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)
Power	Max. 4.2W (24V AC & 12V DC)	Max. 4.2W (24V AC & 12V DC)	Max. 4.2W (24V AC & 12V DC)	Max. 7.3W, TDN On (24V AC) Max. 6.7W, TDN On (12V DC)	Max. 24.0W / 65.0W - Heater off / on (24V AC) (HCP-6320HA) Max. 20.0W (24V AC) (HCP-6320A)
Dimensions (WxHxD) / Weight	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.71 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 725g (1.60 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.58 lb)	Ø199 x 89.5mm (7.83" x 3.52") 2Kg (4.41 lb)	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb) (SNP-6320HA), Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb) (SNP-6320A)
Additional Features	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Multi-directional camera	Defog



WISENET HD+
SCO-6083R



WISENET HD+
SCO-6023R



WISENET HD+
SCD-6083R



WISENET HD+
SCD-6023R



WISENET HD+
SCD-6013



WISENET HD+
SCV-6083R



WISENET HD+
SCV-6023R

	2MP	2MP	2MP	2MP	2MP	2MP	2MP
TV Lines / Resolutions	2MP	2MP	2MP	2MP	2MP	2MP	2MP
Imaging Device	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS	1/3" 2M CMOS
Horizontal Resolution	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080	1920 x 1080
Min. Illumination	Color: 0.11 Lux B/W: 0 Lux (IR LED on)	Color: 0.25 Lux B/W: 0 Lux (IR LED on)	Color: 0.11 Lux B/W: 0 Lux (IR LED on)	Color: 0.25 Lux B/W: 0 Lux (IR LED on)	Color: 0.1 Lux B/W: 0.01 Lux	Color: 0.11 Lux B/W: 0 Lux (IR LED on)	Color: 0.25 Lux B/W: 0 Lux (IR LED on)
Lens	2.8 ~ 12mm (4.3x) V/F (F1.4)	4mm Fixed (F 2.1)	2.8 ~ 12mm (4.3x) V/F (F1.4)	4mm Fixed (F 2.1)	2.8mm Fixed (F1.8)	2.8 ~ 12mm (4.3x) V/F (F1.4)	4mm Fixed (F 2.1)
IR Viewable Length	30m (98.43ft)	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)	-	30m (98.43ft)	20m (65.62ft)
Angular Field of View	H: 102°(Wide) ~ 32.2°(Tele) / V: 54°(Wide) ~ 18.2°(Tele) / D: 121°(Wide) ~ 38°(Tele)	H: 80.7° / V: 43.5° / D: 95.8°	H: 102°(Wide) ~ 32.2°(Tele) / V: 54°(Wide) ~ 18.2°(Tele) / D: 121°(Wide) ~ 38°(Tele)	H: 80.7° / V: 43.5° / D: 95.8°	H: 108.7° / V: 60.6° / D: 125.4°	H: 102°(Wide) ~ 32.2°(Tele) / V: 54°(Wide) ~ 18.2°(Tele) / D: 121°(Wide) ~ 38°(Tele)	H: 80.7° / V: 43.5° / D: 95.8°
Focus Control	Manual	Fixed	Manual	Fixed	Fixed	Manual	Fixed
Pan / Tilt / Rotate	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR	BLC / HLC / DWDR
Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV	SSNRIV
Motion detection	Support	Support	Support	Support	Support	Support	Support
Privacy Masking	4 Zones	4 Zones	4 Zones	4 Zones	4 Zones	4 Zones	4 Zones
Alarm I/O	0 / 1	-	0 / 1	-	-	0 / 1	-
Communication	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)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron)
Environment Protection	IP66, IK10	IP66	-	-	-	IP66, IK10	IP66, IK10
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)	-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)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
Power	Max. 6.0W (24V AC & 12V DC)	Max. 4.2W (12V DC)	Max. 4.2W (24V AC & 12V DC)	Max. 4.2W (12V DC)	Max. 2.5w (12V DC)	Max. 4.2W (24V AC & 12V DC)	Max. 4.2W (12V DC)
Dimensions (WxHxD) / Weight	Ø78.0 x 260.0mm (Ø3.07" x 10.24") (Without sunshield) 922g (2.03 lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.50") (Without Sunshield) 208g (0.46 lb)	Ø119.8 x 98.8mm (Ø4.72" x 3.89") 304g (0.67 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 242g (0.53 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 231g (0.51 lb)	Ø137.0 x 106.1mm (Ø5.39" x 4.18") 716g (1.58 lb)	Ø137.0 x 94.0mm (Ø5.39" x 3.70") 560g (1.23 lb)
Additional Features	Defog	Defog	Defog	Defog	Defog	Defog	Defog

DVR



WISENET HD+
HRD-1642



WISENET HD+
HRD-1641



WISENET HD+
HRD-842



WISENET HD+
HRD-841



WISENET HD+
HRD-442



WISENET HD+
HRD-440



BEYOND
SRD-1676D

		Wisenet HD+ HRD-1642	Wisenet HD+ HRD-1641	Wisenet HD+ HRD-842	Wisenet HD+ HRD-841	Wisenet HD+ HRD-442	Wisenet HD+ HRD-440	BEYOND SRD-1676D
Channel		16CH	16CH	8CH	8CH	4CH	4CH	16CH
OS	Embedded	Linux	Linux	Linux	Linux	Linux	Linux	Linux
Live	Frame Rate (NTSC / PAL)	480fps / 400fps	480fps / 400fps	240fps / 200fps	240fps / 200fps	120fps / 100fps	120fps / 100fps	480fps / 400fps
Recording	Max. Record Rate / NTSC	240fps@2560 x 1440 480fps@1920 x 1080	240fps@2560 x 1440 480fps@1920 x 1080	120fps@2560 x 1440 240fps@1920 x 1080	120fps@2560 x 1440 240fps@1920 x 1080	60fps@2560 x 1440 120fps@1920 x 1080	60fps@2560 x 1440 120fps@1920 x 1080	480fps@1280 x 480
	Max. Record Rate / PAL	200fps@2560 x 1440 400fps@1920 x 1080	200fps@2560 x 1440 400fps@1920 x 1080	100fps@2560 x 1440 200fps@1920 x 1080	100fps@2560 x 1440 200fps@1920 x 1080	50fps@2560 x 1440 100fps@1920 x 1080	50fps@2560 x 1440 100fps@1920 x 1080	400fps@1280 x 576
	Compression	H.264	H.264	H.264	H.264	H.264	H.264	H.264
Video	Inputs	16CH: AHD, NTSC, PAL TVI, CVI	16CH: AHD, NTSC, PAL TVI, CVI	8CH: AHD, NTSC, PAL TVI, CVI	8CH: AHD, NTSC, PAL TVI, CVI	4CH: AHD, NTSC, PAL HDTVI, HDCVI	4CH: AHD, NTSC, PAL TVI, CVI	16CH
Audio	Inputs	16CH (Built-in 4CH)	4CH	8CH (Built-in 4CH)	4CH	4CH	1CH	16CH (Built-in 4CH)
Storage	Internal HDD	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 HDD	Up to 4 SATA HDDs
	External HDD	Up to 2 Expansion Bays	Up to 1 Expansion Bays	Up to 2 Expansion Bays	Up to 1 Expansion Bays	-	-	Up to 2 Expansion Bays
Monitors	VGA	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	HDMI	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Spot Composite	1CH (BNC)	1CH (BNC)	1CH (BNC)	1CH (BNC)	1CH (BNC)	1CH (BNC)	2CH (Digital)
Connections	USB	2 ports	2 ports	2 ports	2 ports	2 ports	2 ports	2 ports
	e-SATA	2 External SATA ports	1 External SATA port	2 External SATA Ports	1 External SATA port	-	-	2 External SATA Ports
	Mouse	Yes	Yes	Yes	Yes	Yes	Yes	Yes
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	Search 3 / Live Unicast 10 / Live Multicast 20
	Transmission	4MP, 1080p, 720p, WD1, 4CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, 2CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, CIF	4MP, 1080P, 720P, WD1, 4CIF, CIF	4MP, 1080P, 720P, WD1, 4CIF, CIF	4CIF, 2CIF, CIF
	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	SSM, WebViewer, SmartViewer
PTZ Control	Coax Protocol	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	NTSC/PAL : Pelco-C (Coaxitron) AHD : ACP (AHD Coax Protocol)	Samsung CCVC, Pelco-C
	RS-485 Protocol	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE

MONITOR / CONTROLLER

LED Monitor



SMT-4933



SMT-2731



SMT-2233



SMT-1935

	SMT-4933	SMT-2731	SMT-2233	SMT-1935
Screen Size	49" (UHD)	27"	22"	19"
Resolution (pixels HxV)	3,840 x 2,160	1,920 x 1,080	1,920 x 1,080	1,280 x 1,024
Video In/Out	-	2 / 2	2 / 2	2 / 2
VGA	1	1	1	1
DVI / HDMI	2 / 4	0 / 1	0 / 1	0 / 1
USB	Yes (S/W Update Only)	-	-	-
Audio In (Stereo)	1	2	2	2
Contrast Ratio	4,700 : 1	1,000 : 1	1,000 : 1	1,000 : 1
Aspect Ratio	16 : 9	16 : 9	16 : 9	4 : 3
Response Time	8ms	5ms	5ms	5ms
Brightness	500cd/m ²	300cd/m ²	250cd/m ²	250cd/m ²
Tempered Glass Screen	-	Yes	Yes	Yes
Picture In Picture	-	-	-	-
Built-in Speakers	Yes	Yes	Yes	Yes
Stand	General (Optional)	Standard	Standard	Standard
Power	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC
Additional Features	Temperature Sensor, 24/7 (50,000 hour), Full HD 4 Picture by Picture Support	-	-	-

Controller / PoE Extender



SPC-7000







SPC-2000





















SPC-1010

	SPC-7000	SPC-2000	SPC-1010
Features	<p>Network/Analog Cameras / NVR / DVR / SSM Controller</p> <ul style="list-style-type: none"> • 5" TFT Touch LCD • Network Camera / SSM / Analog Camera / DVR Control • User-Friendly Design and Easy-to-Use Keypad • 3 Axis Joystick to Control PTZ Function • Detachable Joystick / Jogshuttle for Universe Use (Right / Left Hand Use) • USB Interface Support (1ea for SSM, 1ea for Image Snapshot / Upgrade) • Fast Camera-Tile Mapping, Config Import / Export 	<p>Network Controller</p> <ul style="list-style-type: none"> • Superior System Compatibility • 3D Joystick Control • Quick and Easy Installation • SSM Support 	<p>PTZ Control Keyboard</p> <ul style="list-style-type: none"> • Control up to 255 PTZ Cameras • Multi Protocols Supports • OSD Menu, 3D Joystick Control • RS-485 and RS-422 Interface



















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		
	SLA-M2890DN		CS	1/2.8"	3Megapixel	2.8 ~ 9mm (0.11" ~ 0.35")	7.5 ~ 15.9mm (0.30" ~ 0.63")	3.2	1.2	134.2° ~ 42.7°	DC	Manual	Manual	45.0 x 51.5 x 54.3mm (1.77" x 2.03" x 2.14")	84.0g (0.19 lb)
P-Iris	82.1g (0.18 lb)														
	SLA-M2890PN			1/3"	520K pixel	2.8 ~ 12mm (0.11" ~ 0.47")	20.2 ~ 8.1mm (0.80" ~ 0.32")	4.2	1.3	133.0° ~ 29.7°	DC				71g (0.16 lb)
	SLA-2812DN														
	SLA-550DV														

PERIPHERALS

 <p>SHP-1680F</p>	 <p>SHP-3701H</p>	 <p>SHP-3701F</p>	 <p>SHD-3000F1</p>	 <p>SHD-3000F2</p>	 <p>SHD-3000F3</p>
<p>In-Ceiling Housing for PTZ & Dome</p> <ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with XNP-6120H XNV-6120/6120R/6085 XND-6085/6085V 	<p>Outdoor Housing for PTZ Dome</p> <ul style="list-style-type: none"> For outdoor applications Weatherproof rated to IP66 Aluminium + Polycarbonate IK10 vandal resistant Can be used with HCP-6320A/6320/6230 XNP-6320, QNP-6230 SNP-3300A/3301/3302/3350/3370/3371/3750/5200/5300/5320/5321/5430/6200/6201/6320/6321/L5233/L6233 SCP-2250/2251/2270/2271/2273/2330/2370/2371/2373/2430/3250/3370/3371/3430 	<p>In-Ceiling Housing for Dome</p> <ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with HCP-6320A/6320/6230 XNP-6320, QNP-6230 SNP-3300A/3301/3302/3350/3370/3371/3750/5200/5300/5320/5321/5430/6200/6201/6320/6321/L5233/L6233 SCP-2250/2251/2270/2271/2273/2330/2370/2371/2373/2430/3250/3370/3371/3430 	<p>In-Ceiling Housing for PTZ Dome</p> <ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with PNV-9080R XNV-6080/6080R/8080R SND-5083/5084/5084R/6083/6084/6084R/7084/7084R SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R SCD-6081R SCV-6081R 	<p>In Ceiling Housing for Dome</p> <ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with QND-6070R/7080R SND-6011R/L5083R/L6083R SCD-5080/5082/5083/5083R/6021/6083R SUD-5082 HCD-7070R/6080R/6070R 	<p>In Ceiling Housing for Dome</p> <ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with XNV-8040R/8030R/8020R/6020R/6010 XNP-6040H QNV-6070R/7080R/7030R/7020R/7010R/6030R/6020R/6010R SNV-L5083R/L6083R SCV-5082/5082R/5083/5083R/5085/6023R/6083R HCV-7070R/7010R/7020R/7030R/6080R/6070R
 <p>SHD-3000F4</p>	 <p>SBP-300HM1</p>	 <p>SBP-301HM2</p>	 <p>SBP-301HM3</p>	 <p>SBP-301HM4/300HM5</p>	 <p>SBP-300HM6</p>
<p>In Ceiling Housing for Dome</p> <ul style="list-style-type: none"> For indoor applications Polycarbonate Can be used with PND-9080R XND-6080/6080R/6080RV/6080V/8080R/8080RV 	<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with SNP-3300A/3301/3302/3350/3370/3371/3750/5200/6200/3120 SCP-2250/2251/2430/3250/3430/2120/3120/2270/2330/2370/3370 SBP-300CM/300LM/300WM/300WM1 	<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with XNP-6040H QNV-6070R/7080R SNV-1080/1080R/L5083R/L6083R SND-5083/5084/5084R/6083/6084/6084R/7084/7084R SCV-2081/2081R/2082R/3081/3082/3083/5082/5082R/5083/5083R/5085/6023R/6083R SCD-6081R HCV-7070R/6080R/6070R SBP-300CM/300LM/300WM/300WM1 	<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with SNV-3080/3082/3120/5080/5080R/7080/7080R/7082 SNP-5300/5320/5321/5430/6201/6320/6321/L5233/L6233 SCV-2060/2080/3080/3120 SCP-2271/2273/2371/2373/3371 SBP-300CM/300LM/300WM/300WM1 HCP-6320A/6230 	<p>Hanging Mount for 3M / 5M Fisheye Cameras</p> <ul style="list-style-type: none"> Aluminum Can be used with PNF-9010R/9010RV/9010RVM SNF-7010/7010V/7010VM SBP-300CM/300LM/300WM/300WM1 (SBP-301HM4) Can be used with XNF-8010R/8010RV/8010RVM SNF-8010/8010VM SBP-300CM/300LM/300WM/300WM1 (SBP-301HM5) 	<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with PNV-9080R XND-6085/6085V XNV-6080/6080R/6120/6120R/8080R SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R SCV-6081R SBP-300CM/300LM/300WM/300WM1
 <p>SBP-300HM7</p>	 <p>SBP-300HM8</p>	 <p>SBP-122HM</p>	 <p>SBP-168HM</p>	 <p>SBP-329HM</p>	 <p>SBP-201HM/317HM</p>
<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with XND-6010/6020/8020R/8030R/8040R XNV-6011 QND-6010R/6020R/6030R/7010R/7020R/7030R SND-L5013/L6012/L6013/L6013R/L6014R SNV-6013 SCD-6023R HCD-7010R/7020R/7030R SBP-300CM/300LM/300WM/300WM1 	<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with PND-9080R XND-6080/6080R/6080RV/6080V/6085/6085V/8080R/8080RV SND-6084R/6084/6083/5084R/5084/5083 SCD-6081R SBP-300CM/300LM/300WM/300WM1 	<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with XNV-6010/6020/8020R/8030R/8040R QNV-6010R/6020R/6030R/7010R/7020R/7030R QND-6070R/7080R SCD-5080/5082/5083/5083R/6021/6083R SND-6011R/L5083R/L6083R SUD-5082 HCD-7070R/6080R/6070R HCV-7010R/7020R/7030R SBP-300CM/300LM/300WM/300WM1 	<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with XNP-6120H 	<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with PNM-9080VQ/9081VQ 	<p>Hanging Mount</p> <ul style="list-style-type: none"> Aluminum Can be used with PNM-9020V (SBP-201HM) Can be used with PNM-9080VQ/9081VQ (SBP-317HM)

PERIPHERALS

 <p>SBP-300HF/301HF/302HF</p>	 <p>SBP-300TM/300TM1</p>	 <p>SBP-160TM</p>	 <p>SBP-300WM1/300WM</p>	 <p>SBP-300CM/300LM</p>	 <p>SBP-120WM</p>
<p>Built-in SFP Install Base for PTZ Cameras</p> <ul style="list-style-type: none"> • 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 use with SNP-6320H/5430H (SBP-300HF) • Can use with SNP-6321H/5321H/L6233H/L5233H (SBP-301HF) • Can use with PNP-9200RH/XNP-6370RH (SBP-302HF) 	<p>Tilt Mount for 3M/5M Fisheye Cameras</p> <ul style="list-style-type: none"> • Poly Carbonate • Can be used with SNF-7010VM/7010V/7010 (SBP-300TM) • Can be used with PNF-9010R/9010RV/9010RVM XNF-8010R/8010RV/8010RVM SNF-8010/8010VM (SBP-300TM1) 	<p>Tilt Mount</p> <ul style="list-style-type: none"> • Aluminum • Can be used with PNV-9080R XND-6085/6085V XNV-6012/6012R/6080/6080R/6085R/8080R SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R SCV-6081R 	<p>Wall Mount</p> <ul style="list-style-type: none"> • Aluminum + SECC • Can be used with SBP-300NB/300B/300PM/300KM 	<p>Ceiling Mount / Parapet Mount</p> <ul style="list-style-type: none"> • Aluminum + SECC • Can be used with hanging mount and outdoor PTZ 	<p>Wall Mount</p> <ul style="list-style-type: none"> • Poly Carbonate • Can be used with SCD-2060E/2080/2080R/2081/2082/3080/3081/3082/3083/2020/2022/2022R/5020/5030 SND-5061/7061/5011 SUD-5020 (SBP-300WM0) • Plastic • Can be used with QND-7080R/7030R/7020R/7010R/6070R/6030R/6020R/6010R, XND-6010/6020 SND-L6083R/L6014R/L6013R/L6012/L5083R/L5013 SCD-6083R/6023R/6021/5083R/5083/5082/5080 (SBP-120WM)
 <p>SBP-300PM/302PM</p>	 <p>SBP-300KM</p>	 <p>SBP-300B</p>	 <p>SBP-300NB</p>	 <p>SBV-160WC</p>	 <p>SBF-100B1/SBO-100B1</p>
<p>Pole Mount</p> <ul style="list-style-type: none"> • SECC • Can be used with SBP-300B/300WM1/300WM/300LM (SBP-300PM) • Can be used with PNO-9080R/SNO-8081R/SBO-100B1 QNO-7080R/6070R/7010R/7020R/7030R/6010R/6020R/6030R (SBP-302PM) 	<p>Corner Mount Base</p> <ul style="list-style-type: none"> • SECC • Can be used with SBP-300B/300WM1/300WM/300LM 	<p>Wall Mount Base</p> <ul style="list-style-type: none"> • Aluminum + SECC • Can be used with SBP-300PM/300KM 	<p>Installation Box</p> <ul style="list-style-type: none"> • Steel • Can be used with SBP-300WM/300WM1/300KM/300PM 	<p>Weather Cap</p> <ul style="list-style-type: none"> • Alluminum and Poly Carbonate • Can be used with PNV-9080R XNV-6080/6080R/8080R SCV-6081R/5084/5084R SNV-6084/6084R/6085R/7084/7084R/8080/8081R 	<p>Back Box</p> <ul style="list-style-type: none"> • Aluminum • Can be used with PNF-9010R/9010RV/9010RVM SNF-8010/8010VM (SBF-100B1) • Can be used with QNO-7080R/6070R/7010R/7020R/7030R/6010R/6020R/6030R SNO-L6083R/L5083R SCO-6083R (SBO-100B1) HCO-7070R/7010R/7020R/7030R/6080R/6070R
 <p>SHB-4300H1/4300HP</p>	 <p>SHB-4200/4200H</p>	 <p>STB-400</p>	 <p>STB-4150V</p>	 <p>SPB-IND5</p>	 <p>SPB-IND6</p>
<p>fixed Housing</p> <ul style="list-style-type: none"> • Aluminum diecasting construction • Fully cable managed bracket • Built-in fan & heater • Support three cable glands, IP66 	<p>fixed Housing</p> <ul style="list-style-type: none"> • Support two cable glands • Built-in fan & heater : SHB-4200H 	<p>fixed Mount</p> <ul style="list-style-type: none"> • Bracket for STH-500/200 • Alluminum and Steel material 	<p>fixed Mount</p> <ul style="list-style-type: none"> • Bracket for box cameras • Alluminum and Steel material 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Poly Carbonate + Poly Carbonate • Can be used with SCD-6081R SND-5083/5084/6083/6084/6084R/7084 	<p>Smoked Dome Cover</p> <ul style="list-style-type: none"> • Poly Carbonate + Poly Carbonate • Can be used with SCD-5080/5082/5083/5083R/6021/6083R SND-6011R SUD-5082 QND-6070R/7080R

PERIPHERALS



SPB-IND11

Smoked Dome Cover

- Poly Carbonate + Poly Carbonate
- Can be used with XND-6010/6020/8020R/8030R/8040R



SPB-IND12

Smoked Dome Cover

- Poly Carbonate + Poly Carbonate
- Can be used with QND-6010R/6020R/6030R/7010R/7020R/7030R



SPB-IND72

Smoked Dome Cover

- Poly Carbonate + Poly Carbonate
- Can be used with QND-6070R/7080R



SPB-IND81V

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with XND-6080V/6080RV/8080RV



SPB-VAN3

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with PNV-9080R SCV-6081R SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R XNV-8080R/6080/6080R



SPB-VAN4

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with SCV-5082/5082R/5083/5083R/5085/6023R/6083R SNV-L5083R/L6083R



SPB-VAN11

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with XNV-6010/6020/8020R/8030R/8040R



SPB-VAN12

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with QNV-6010R/6020R/6030R/7010R/7020R/7030R














SPB-VAN72

Smoked Dome Cover

- Aluminium + Poly Carbonate
- Can be used with QNV-6070R/7080R

PERIPHERALS







PTZ Cameras

Type	Outdoor PTZ							Indoor PTZ			
Shape											
Color	Ivory										
Model	SCP-2270H/2330H/ 2370H/2370TH/ 3370H/3370TH/ SNP-3301H/3302H/ 3370TH/3371H/ 3371TH/ 5200H/5200TH/ 6200H/6200TH	SCP-2250H/2251H/ 2430H/3250H/ 3430H	SCP-3120VH SNP-3120VH	SCP-2271H/2273H/ 2371H/2373H/ 3371H SNP-5300H/5320H/ 5321H/5430H/ 6201H/6320H/ 6321H/L5233H/ L6233H HCP-6320	SCP-2370RH SNP-6200RH/6230RH/ L6233RH/6320RH	XNP-6370RH PNP-9200RH	XNP-6120H	SCP-2270/2330/ 2370/3370 SNP-3300A/3301/ 3302/3350/ 3370/3371/ 3750/5200/ 6200	SCP-2250/2251/2430/ 3250/3430	SCP-3120/2120 SNP-3120	SCP-2271/2273/ 2371/2373/ 3371 SNP-5300/5320/ 5321/5430/ 6201/6320/ 6321/L5233/ L6233 HCP-6230/6320A

Dome Cameras

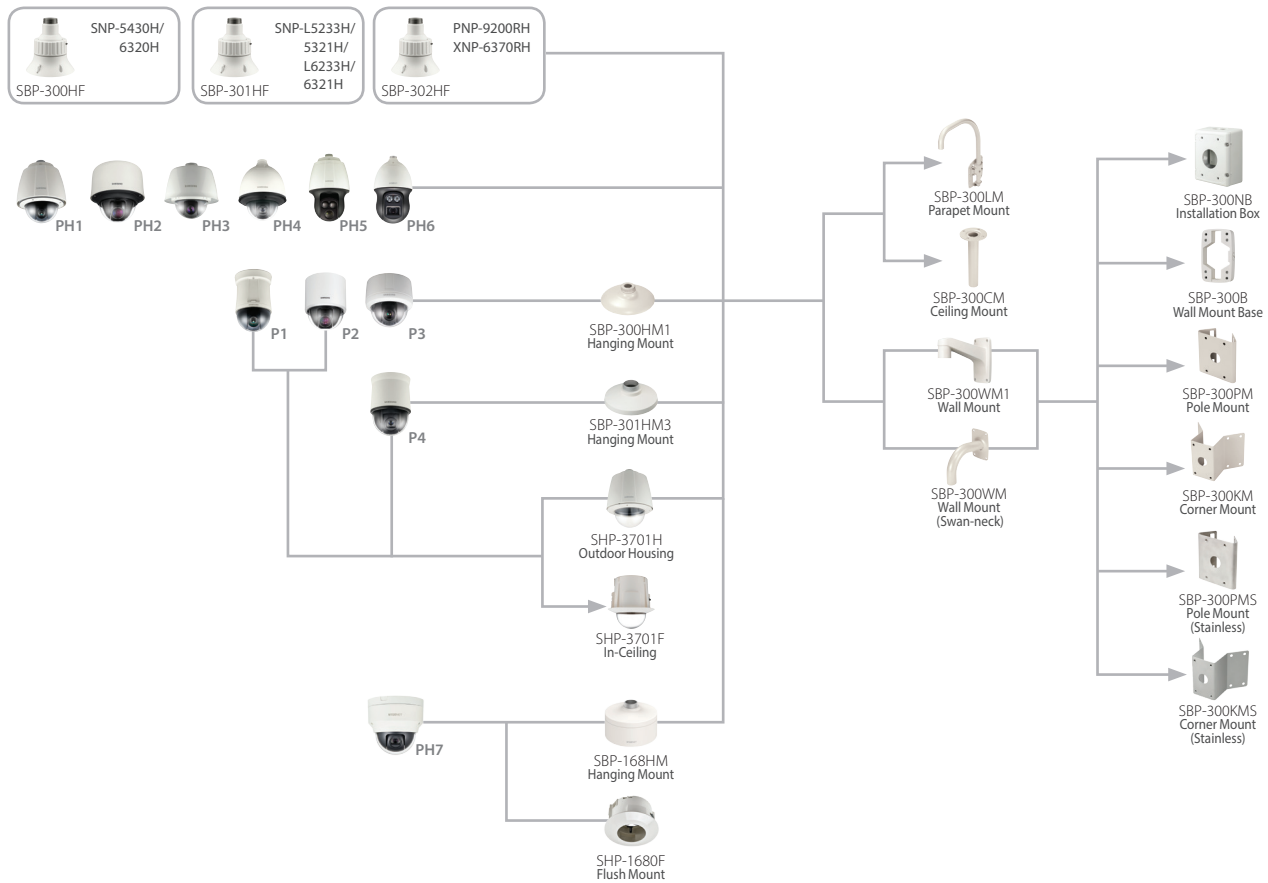
Type	Vandal-Resistant						Indoor Dome					
Shape												
Color	Ivory											
Model	SCV-2060/2080/ 3080/3120 SNV-3080/3082/ 3120/5080/ 5080R/7080/ 7080R/7082	SCV-2081/2081R/ 2082R/3081/ 3082/3083 SNV-1080/1080R	PNV-9080R XNV-6080/6080R/ 8080R/6085R/ 6120/6120R SCV-6081R SNV-5084/5084R/ 6084/6084R/ 6085R/7084/ 7084R/8080/ 8081R	SNV-6013 XNV-6011	QNV-6070R/7080R XNP-6040H SCV-5082/5082R/ 5083/5083R/ 5085/6023R/ 6083R SNV-L5083R/L6083R HCV-6080R/6070R/ 7070R/7030R/ 7020/7010	QNV-6010R/6020R/ 6030R/7010R/ 7020R/7030R XNV-6010/6020/ 8020R/8030R/ 8040R HCV-7010R/7020R/ 7030R	SCD-2060E/2080/ 2080R/2081/ 2082/3080/ 3081/3082/ 3083 SND-1080/5061/ 7061	SCD-2020/2020R/ 2021/2022/ 2022R/2040/ 2042R/5010/ 5020/5030 SND-1011/5011/ 7011 SUD-2020/2022/ 5020	SCD-6081R SND-5083/5084/ 5084R/6083/ 6084/6084R/ 7084/7084R	QND-6070R/7080R SND-L5083R/6011R/ L6083R SCD-5080/5081R/ 5082/6021/ 6083R SUD-5082 HCD-6070R/6080R/ 7070R	QND-6010R/6020R/6030R/ 7010R/7020R/7030R/ SCD-6023R SND-L5013/L6012/ L6013/L6013R/ L6014R/ XND-6010/6020R/ 8020R/8030R/8040R HCD-7010R/7020R/7030R	PND-9080R XND-6080/6080R/ 6080RV/6080V/ 8080R/8080RV

Fisheye / Panoramic Cameras

Type	Fisheye				Multi Imager	
Shape						
Color	Ivory					
Model	SNF-7010	SNF-8010	SNF-7010V/ 7010VM	PNF-9010R/ 9010RV/ 9010RVM SNF-8010VM	PNM-9020V HCM-9020VQ	PNM-9081VQ/ 9080VQ

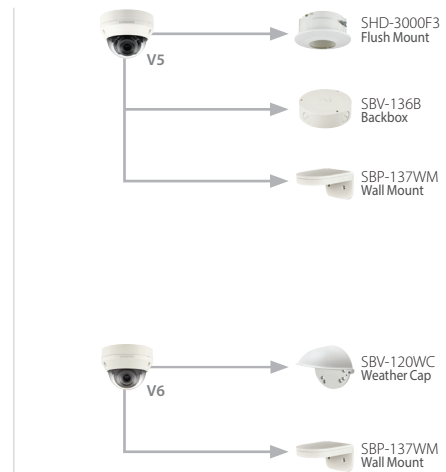
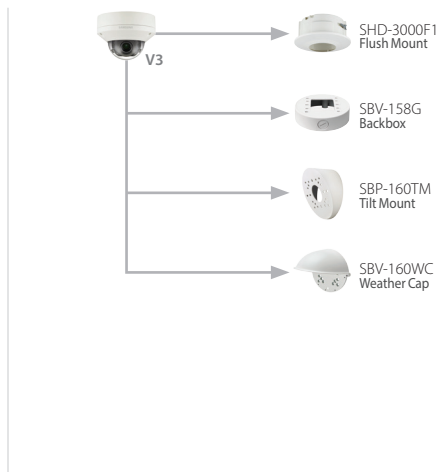
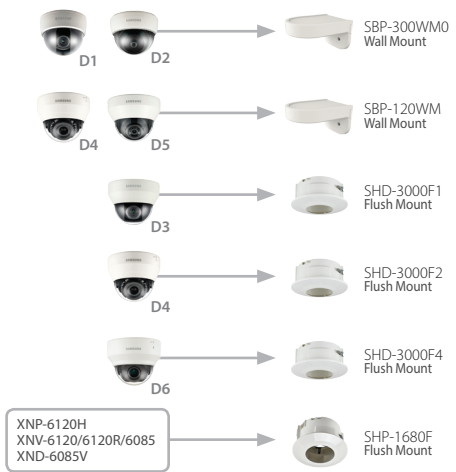
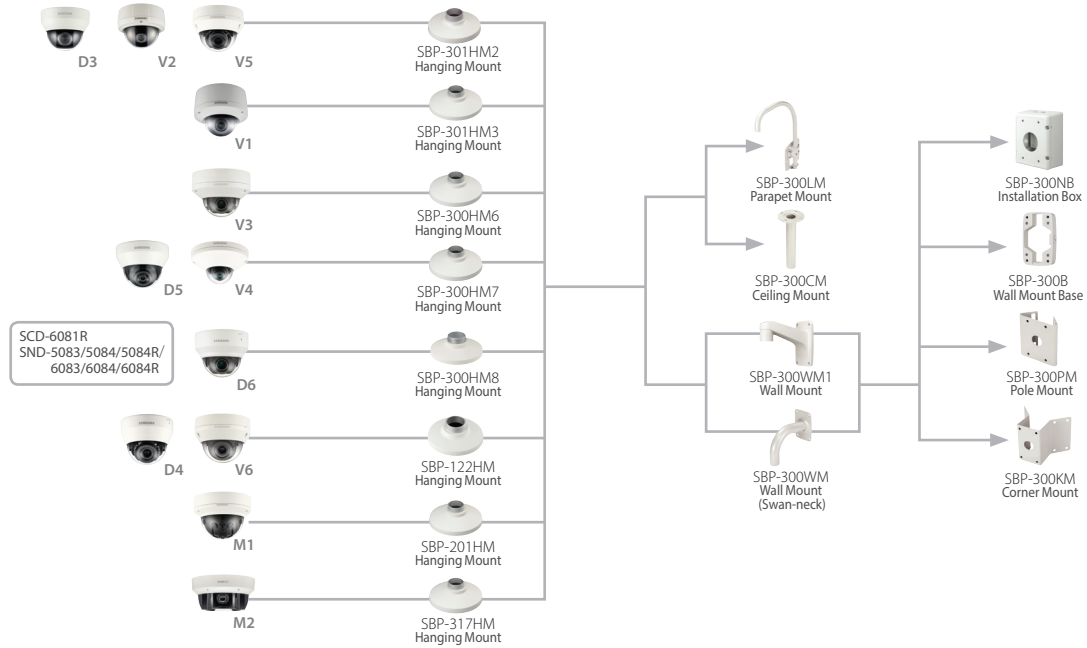
ACCESSORIES CONFIGURATION

PTZ ACC



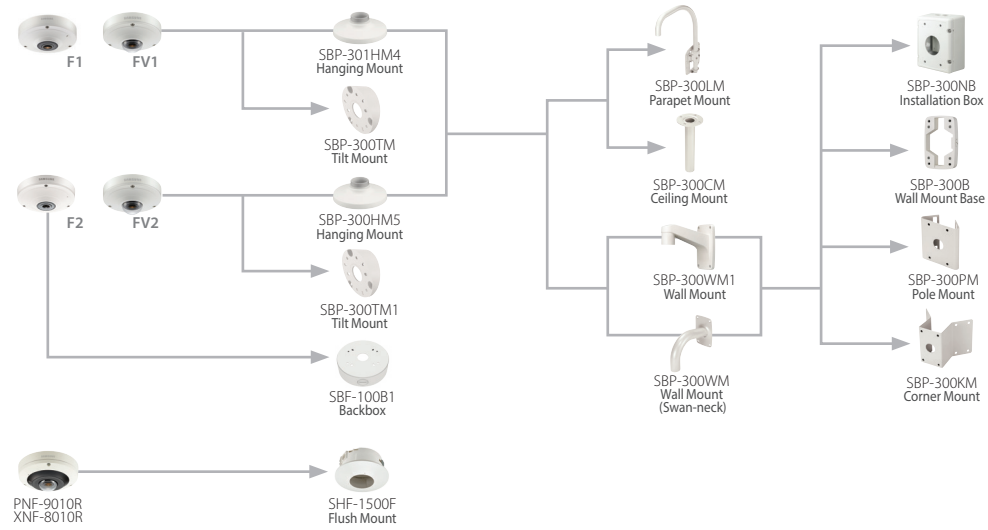
ACCESSORIES CONFIGURATION

DOMES ACC

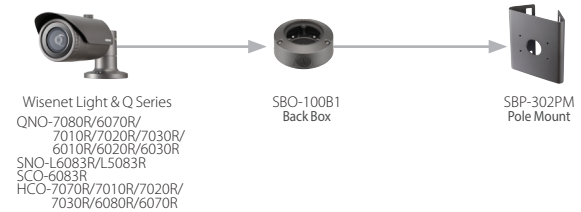


ACCESSORIES CONFIGURATION

FISHEYE ACC

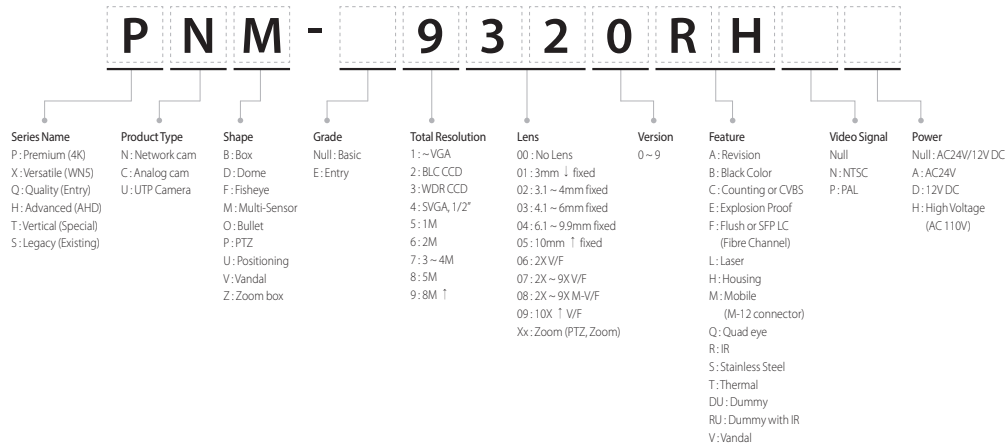


BULLET ACC

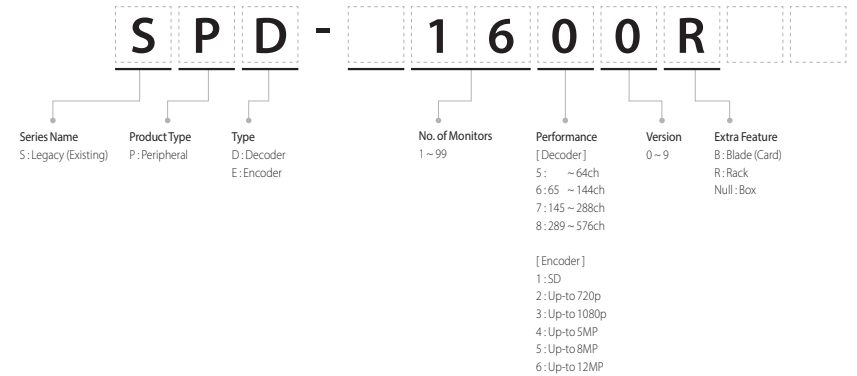


PRODUCT NAMING RULE

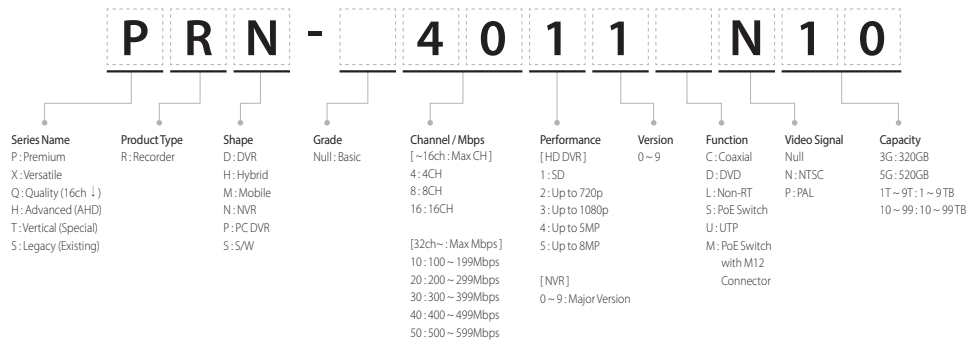
Camera



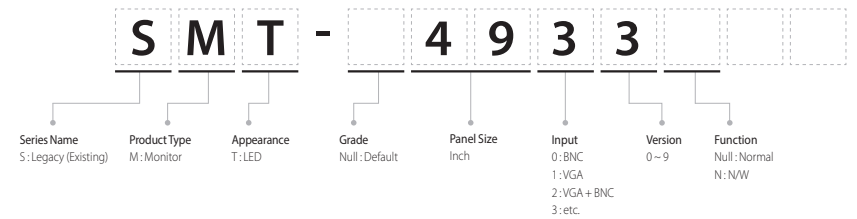
Decoder/Encoder



Recorder



Monitor





MEMO

A large rectangular area with rounded corners, containing 20 horizontal lines for writing a memo.

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I.H-1709