



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



Contents . . .

Network	4~26	Analog	27~30
Cameras	4~22	Cameras	27~30
Wisenet X series	4~11	Wisenet HD+ series	27~30
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Wisenet T series	15	Wisenet HD+ series	31~32
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PoE switch series	23	Monitor / Controller	33
Encoder / Decoder	23		
Software	24	Lens	34
Access control	25~26	Peripherals	35~41

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-8080R/8080RV



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



WISENET X
XND-8020F

	Resolution	5MP	5MP	5MP	5MP	5MP	5MP
VIDEO	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)
OPERATIONAL	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
FEATURES	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)
ADDITIONAL FEATURES	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) 2.22Kg (4.89 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 NNV-8080R	WISENET X NNV-8080RS	WISENET X NNV-8020R/8030R/8040R	WISENET X XNF-8010R/8010RV/8010RVM	WISENET X XNB-6005	WISENET X XNB-6000	WISENET X XNB-6001
Resolution	5MP	5MP	5MP	6MP	2MP	2MP	2MP
Imaging Device	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/1.8" 6M CMOS	1/2" 2.17M 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	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	5M / 30fps	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)	Multiple (Up to 10 Profiles)
Max. User Access	20 (Unicast)	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: 0.07 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: 0.006 Lux B/W: 0.0006 Lux	Color: 0.01 Lux B/W: 0.001 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, 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)	3.9 ~ 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)	-	-	-
Angular Field of View	H: 92.1° (Wide) ~ 38.7° (Tele) / V: 67.2° (Wide) ~ 29.0° (Tele) / D: 119.9° (Wide) ~ 48.6° (Tele)	H: 92.1° (Wide) ~ 38.7° (Tele) / V: 67.2° (Wide) ~ 29.0° (Tele) / D: 119.9° (Wide) ~ 48.6° (Tele)	H: 97.5° / V: 71.9° / D: 126.2° (XNV-8020R) H: 77.9° / V: 57.9° / D: 98.7° (XNV-8030R) H: 50.7° / V: 37.8° / D: 63.8° (XNV-8040R)	H: 192° / V: 192° / D: 192°	-	-	-
Focus Control	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	-	Simple focus / Manual	Simple focus / Manual	Simple focus / Manual	-
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	30m (98.43ft)	15m (49.21ft)	-	-	-
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	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 (120dB)	WDR (150dB)	WDR (150dB)	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)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support	Support	Support	-	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	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, 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, Digital auto tracking, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Motion detection, Face detection, Digital auto tracking, 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	ONVIF Profile S & G, SUNAPI
Alarm I/O	1 / 1	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	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	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP67, IP66, IK10	IP66, IK10 (XNF-8010RV/8010RVM)	-	-	-
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * 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)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
Power	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	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. 9W (24V AC) Max. 8W (12V DC) Max. 8.5W (PoE)	Max. 8W (24V AC) Max. 6.5W (12V DC) Max. 7.5W (PoE)	Max. 6.5W (12V DC) Max. 6W (PoE)
Dimensions (WxHxD) / Weight	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 1.01Kg (2.23 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") TBD	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)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 420g (0.93 lb)	131.1 x 28 x 86mm (5.16" x 1.10" x 3.39") 245g (0.54 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, SÜS316L	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	extraLUX, 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



New

WISENET X
SLA-T4680



New

WISENET X
SLA-T4680V



New

WISENET X
SLA-T2480



New

WISENET X
SLA-T2480V



New

WISENET X
SLA-T1080F



WISENET X
XNO-6120R



WISENET X
XNO-6085R

	Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	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	1/2" 2.17M CMOS
	Video Compression Format	-	-	-	-	-	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	-	-	-	-	-	2M / 60fps	2M / 60fps
	Streaming Capacity	-	-	-	-	-	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
	Max. User Access	-	-	-	-	-	20 (Unicast)	20 (Unicast)
	Min. Illumination	0.06 Lux	0.06 Lux	0.45 Lux	0.45 Lux	0.03 Lux	Color : 0.03 Lux B/W : 0 Lux (IR LED on)	Color : 0.004 Lux B/W : 0 Lux (IR LED on)
	Video Output	-	-	-	-	-	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
	Lens	4.6mm Pinhole (F2.5)	4.6mm Pinhole (F2.5)	2.4mm Fixed (F2.0)	2.4mm Fixed (F2.0)	1.6mm Fixed (F1.6)	5.2 ~ 62.4mm (Optical 12x)	4.1 ~ 16.4mm (Optical 4x) motorized V/F F0.94(Wide) / F2.4(Tele)
	Angular Field of View	H: 73° / V: 39° / D: 85°	H: 73° / V: 39° / D: 85°	H: 138° / V: 73° / D: 168°	H: 138° / V: 73° / D: 168°	H: 187° / V: 113.9°	H: 54.58° (Wide) ~ 5.30° (Tele) / V: 32.19° (Wide) ~ 3.00° (Tele) / D: 61.40° (Wide) ~ 6.06° (Tele)	H: 100° (Wide) ~ 26.2° (Tele) / V: 54° (Wide) ~ 14.8° (Tele) / D: 116° (Wide) ~ 30.0° (Tele)
	Focus Control	Fixed	Fixed	Fixed	Fixed	Fixed	Auto / Manual / One shot AF	Simple focus (motorized V/F) / Manual
OPERATIONAL	IR Viewable Length	-	-	-	-	-	70m (229.66ft)	70m (229.66ft)
	Pan / Tilt / Rotate	-	-	-	-	-	-	-
	Day & Night	Electrical	Electrical	Electrical	Electrical	Electrical	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (150dB)	WDR (150dB)
	Digital Noise Reduction	-	-	-	-	-	SSNRV (2D+3D Noise filter)	SSNRV (2D+3D Noise filter)
	Digital Image Stabilization	-	-	-	-	-	Support	Support (Built in Gyro sensor)
	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
FEATURES	Protocol	-	-	-	-	-	ONVIF Profile S & G, SUNAPI	ONVIF Profile S&G, SUNAPI
	Alarm I/O	-	-	-	-	-	1 / 1	1 / 1
	Audio	-	-	-	-	-	Bi-Directional	Bi-Directional
	Edge Storage	-	-	-	-	-	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC
	Environment Protection	-	-	-	-	-	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, 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)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)
	Power	-	-	-	-	-	Max 14.5W (24V AC) Max 12.5W (12V DC) Max 12.95W (PoE)	Max. 14.5W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)
	Dimensions (WxHxD) / Weight	Ø24 x 42mm (Ø0.94" x 1.65") (Lens) 8m (314.96") (Cable) 310g (0.68 lb)	30 x 20.2 x 45mm (1.18" x 0.80" x 1.77") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)	Ø24 x 49.8mm (Ø0.94" x 1.96") (Lens) 8m (314.96") (Cable) 318g (0.70 lb)	30 x 27.9 x 45mm (1.18" x 0.10" x 1.77") (Lens) 8m (314.96") (Cable) 328g (0.72 lb)	Ø68.9 x 35mm (Ø2.71" x 1.38") (Lens) 8m (314.96") (Cable) 321g (0.71 lb)	Ø91.0 x 368.6mm (Ø3.58" x 14.51") 2.18Kg (4.81 lb)	Ø91.0 x 388.6mm (Ø3.58" x 15.30") 2.35Kg (5.18 lb)
	Additional Features	Lens module for XNB-6001	Lens module for XNB-6001	Lens module for XNB-6001	Lens module for XNB-6001	Lens module for XNB-6001	Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View	extraLUX, Handover, WiseStream II, Advanced video analytics, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), Hallway View



WISENET X
XNO-6080R



WISENET X
XNO-6010R/6020R



WISENET X
XND-6085/6085V



WISENET X
XND-6080



WISENET X
XND-6080R



WISENET X
XND-6080V



WISENET X
XND-6080RV

	Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2" 2.17M 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	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 60fps	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)	Multiple (Up to 10 Profiles)
	Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	Color : 0.015 Lux B/W : 0 Lux (IR LED on)	Color : 0.055 Lux (XNO-6010R), 0.015 Lux (XNO-6020R) B/W : 0 Lux (IR LED on)	Color : 0.004 Lux B/W : 0.0004 Lux	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 : 0.0015 Lux	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, 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	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.4mm fixed (F2.0) (XNO-6010R) 4mm fixed (F1.4) (XNO-6020R)	4.1 ~ 16.4mm (Optical 4x) F0.94(Wide) / F2.4(Tele)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)
	Angular Field of View	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 139.0° / V : 73.0° / D : 167.0° (XNO-6010R) H : 88.6° / V : 47.5° / D : 104.8° (XNO-6020R)	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)
	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 (motorized V/F) / Manual
OPERATIONAL	IR Viewable Length	50m (164.04ft)	20m (65.61ft) (XNO-6010R) 30m (98.43ft) (XNO-6020R)	-	-	30m (98.43ft)	-	30m (98.43ft)
	Pan / Tilt / Rotate	-	-	±175° / ±73° / ±175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (150dB)	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)	SSNRV (2D+3D Noise filter)
	Digital Image Stabilization	Support	Support	Support (Built in Gyro sensor)	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, 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	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
	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	ONVIF Profile S & G, SUNAPI
	Alarm I/O	1 / 1	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	Bi-Directional
FEATURES	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	SD/SDHC/SDXC, NAS, Local PC
	Environment Protection	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP51, IK08	IK08	IK08	IK08	IK08
	Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
	Power	Max. 15W (24V AC) Max. 12W (12V DC) Max. 12.95W (PoE)	Max. 8.8W (12V DC) Max. 9.7W (PoE)	Max. 8.6W (12V DC) Max. 10.2W (PoE)	Max. 6W (12V DC) Max. 6.5W (PoE)	Max. 9W (12V DC) Max. 10W (PoE)	Max. 6W (12V DC) Max. 6.5W (PoE)	Max. 9W (12V DC) Max. 10W (PoE)
	Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (Ø3.58" x 14.51") (Without Sunshield) 2.18Kg (4.81 lb)	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)	Ø160.0 x 140.0mm (Ø6.30" x 5.51") 1.10 kg (2.43 lb) (XND-6085) 1.25 kg (2.76 lb) (XND-6085V)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 624g (1.38 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)
	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	extraLUX, 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 XND-6020R	WISENET X XND-6011F	WISENET X XND-6010	WISENET X XNV-6120/6120R	WISENET X XNV-6120RS	WISENET X XNV-6085	WISENET X XNV-6080
Resolution	2MP	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" 2.17M 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	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2M / 60fps	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)	Multiple (Up to 10 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	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	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 : 0.03 Lux B/W : 0 Lux (IR LED on)	Color : 0.004 Lux B/W : 0.0004 Lux	Color : 0.015 Lux B/W : 0.0015 Lux
Video Output	CVBS 1.0Vpp, Micro USB type B	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	4mm fixed (F1.4)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	4.1 ~ 16.4mm (Optical 4x) F0.94(Wide) / F2.4(Tele)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)
Angular Field of View	H : 88.6° / V : 47.5° / D : 104.8°	H : 112° / V : 62° / D : 130°	H : 139.0° / V : 73.0° / D : 167.0°	H : 54.58° (Wide) ~ 5.30° (Tele) / V : 32.19° (Wide) ~ 3.00° (Tele) / D : 61.40° (Wide) ~ 6.06° (Tele)	H : 54.58° (Wide) ~ 5.30° (Tele) / V : 32.19° (Wide) ~ 3.00° (Tele) / D : 61.40° (Wide) ~ 6.06° (Tele)	H : 100° (Wide) ~ 26.2° (Tele) / V : 54° (Wide) ~ 14.8° (Tele) / D : 116° (Wide) ~ 30.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)
Focus Control	-	Manual	-	Auto / Manual / One shot AF	Auto / Manual / One shot AF	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual
IR Viewable Length	30m (98.43ft)	-	-	70m (229.66ft) (XNV-6120R)	50m (164.04ft)	-	-
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 355° / 0° ~ 47° / 0° ~ 353°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 75° / 0° ~ 355°	0° ~ 354° / 0° ~ 75° / 0° ~ 355°	±175° / ±173° / ±175°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
Day & Night	True (ICR)	Auto (Electrical)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
Backlight Compensation	WDR (150dB)	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)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support	Support	Support	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	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, 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, Motion detection, Face detection, Sound classification	Tampering, Loitering, Directional detection, Defocus detection, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Motion 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, 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, 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	ONVIF Profile S & G, SUNAPI
Alarm I/O	1 / 1	-	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1
Audio	Bi-Directional	Uni-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	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IK08	-	IK08	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10+	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, 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)	-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) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F)
Power	Max. 8W (12V DC) Max. 9W (PoE)	Max. 4.7W	Max. 5.5W (12V DC) Max. 6W (PoE)	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. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 13.5W (24V AC), Max. 11.1W (12V DC), Max. 12.1W (PoE)	Max. 8.2W (24V AC) Max. 7W (12V DC) Max. 7.8W (PoE)
Dimensions (WxHxD) / Weight	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 380g (0.84 lb)	Ø98.9 x 129mm (Ø3.89" x 5.08") 275g (0.61 lb)	Ø110.0 x 90.0mm (Ø4.33" x 3.54") 365g (0.80 lb)	Ø160.0 x 128.5mm (Ø6.30" x 5.06") 985g (2.17lb) (XNV-6120) 995g (2.19lb) (XNV-6120R)	Ø160.0 x 128.5mm (Ø6.30" x 5.06") TBD	TBD	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 985g (2.17 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, SUS316L	extraLUX, 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

		 Preliminary New	 Preliminary New	 Preliminary New			
	WISENET X XNV-6080R	WISENET X XNV-6080RS	WISENET X XNV-6021R	WISENET X XNV-6021RM	WISENET X XNV-6020R	WISENET X XNV-6011	WISENET X XNV-6010
Resolution	2MP	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	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	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	2M / 60fps	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)	Multiple (Up to 10 Profiles)
Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
Min. Illumination	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 Lux (IR LED on)	Color : 0.055 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	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B	CVBS 1.0Vpp, Micro USB type B
Lens	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)	3.6mm Fixed (F2.0)	3.6mm Fixed (F2.0)	4mm fixed (F1.4)	2.8mm fixed (F2.0)	2.4mm fixed (F2.0)
Angular Field of View	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	H : 119.5° (Wide) ~ 27.9° (Tele) / V : 62.8° (Wide) ~ 15.7° (Tele) / D : 142.1° (Wide) ~ 32.0° (Tele)	TBD	TBD	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	Manual	Manual	Manual	Manual
IR Viewable Length	50m (164.04ft)	50m (164.04ft)	15m (49.21ft)	15m (49.21ft)	30m (98.43ft)	-	-
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	±10° / 0° ~ 67° / ±90°	±10° / 0° ~ 67° / ±90°	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)	True (ICR)	Auto (Electrical)	True (ICR)
Backlight Compensation	WDR (150dB)	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)	SSNRV (2D+3D Noise filter)
Digital Image Stabilization	Support	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	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, People counting	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, People counting	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, 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	ONVIF Profile S & G, SUNAPI
Alarm I/O	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	SD/SDHC/SDXC, NAS, Local PC
Environment Protection	IP67, IP66, NEMA 4X, IK10	IP67, IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP66, NEMA 4X, IK10	IP67, IP66, IK10	IP66, IK10, NEMA4X	IP67, IP66, NEMA 4X, IK10
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
Power	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	TBD	TBD	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 118.5mm (Ø6.30" x 4.67") 995g (2.19 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") TBD	Ø110 x 52mm (Ø4.33" x 2.05") TBD	Ø110 x 52mm (Ø4.33" x 2.05") TBD	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, SUS316L	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	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 NXP-6370RH	 WISENET X NXP-6320	 WISENET X NXP-6320H	 WISENET X NXP-6320HS	 WISENET X NXP-6120H	 WISENET X NXP-6040H
	Preliminary	Preliminary	Preliminary	Preliminary		
	New	New	New	New		
VIDEO	Resolution	2MP	2MP	2MP	2MP	2MP
	Imaging Device	1/1.9" 2M CMOS	1/2.8" 2.4M CMOS	1/2.8" 2.4M CMOS	1/2.8" 2.4M 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
	Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps
	Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
	Max. User Access	15 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination	Color: 0.05 Lux B/W: 0 Lux (IR LED on)	Color: 0.15 Lux B/W: 0.01 Lux	Color: 0.15 Lux B/W: 0.01 Lux	Color: 0.15 Lux B/W: 0.01 Lux	Color: 0.03 Lux B/W: 0.003 Lux
	Video Output	CVBS 1.0Vpp	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	6 ~ 222mm (IR Corrected Optical 37x) F1.5(Wide) / F4.6(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)	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)
OPERATIONAL	Angular Field of View	H: 59.3°(Wide) ~ 1.9°(Tele) / V: 35.8°(Wide) ~ 1.1°(Tele)	H: 61.8°(Wide) ~ 2.19°(Tele) / V: 36.2°(Wide) ~ 1.24°(Tele)	H: 61.8°(Wide) ~ 2.19°(Tele) / V: 36.2°(Wide) ~ 1.24°(Tele)	H: 61.8°(Wide) ~ 2.19°(Tele) / V: 36.2°(Wide) ~ 1.24°(Tele)	H: 54.58°(Wide) ~ 5.30°(Tele) / V: 32.19°(Wide) ~ 3.00°(Tele)
	Focus Control	AF / One-shot AF / Manual	Auto / Manual / One shot AF	Auto / Manual / One shot AF	Auto / Manual / One shot AF	Auto / Manual / One shot AF
	IR Viewable Length	350m (1,148.29ft)	-	-	-	-
	Pan / Tilt / Rotate	360° Endless / 190° (-5° ~ 185°) / -	360° Endless / 210° (-15° ~ 195°)	360° Endless / 210° (-15° ~ 195°)	360° Endless / 210° (-15° ~ 195°)	360° Endless / 190° (-5° ~ 185°)
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	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)
	Digital Image Stabilization	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)
	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, Fog detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection, Motion detection, Sound classification	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	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI
	Alarm I/O	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	4 / 2 (Relay)	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
	Environment Protection	IP66, IK10	IK10 (with SHP-3701H)	IP66, IK10	IP67, IP66, NEMA4X, IK10	IP66, IK10
	Operating Temperature	-50°C ~ +55°C (-58°F ~ +131°F)	-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+)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -30°C ~ +55°C (-22°F ~ +131°F) (PoE+)	-30°C ~ +55°C (-22°F ~ +131°F)
	Power	Max. 60.0W / 90.0W - Heater off / on, IR on (24V AC)	Max. 20.0W (24V AC, PoE+)	Max 24.0W - Heater off (24V AC, PoE+) Max 65.0W - Heater on (24V AC)	Max 24.0W - Heater off (24V AC, PoE+) Max 65.0W - Heater 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)	Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb)	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb)	TBD	Ø168.0 x 161.5mm (Ø6.61" x 6.36") 1.9kg (4.19 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)	WiseStream II, Advanced video analytics, Auto Tracking, Sound classification (Explosion, Gunshot, Glass breakage, Scream etc), SUS316L	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: 0.015 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)	SSNRIII (2D+3D Noise filter)	SSNR	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
FEATURES	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
	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/9010RVM)	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

	Resolution	2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	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	-
OPERATIONAL	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	-	-	-	-	-	-
FEATURES	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



WISENET T
TNO-4051T



WISENET T
TNO-4050T



WISENET T
TNO-4041T



WISENET T
TNO-4040T



WISENET T
TNO-4030T



WISENET T
TNU-6320E

	Resolution	2MP	VGA	VGA	VGA	VGA	VGA	2MP
VIDEO	Imaging Device	1/2.8" 2.38M CMOS	Uncooled Micro volometer	Uncooled Micro volometer	Uncooled Micro volometer	Uncooled Micro volometer	Uncooled Micro volometer	1/2.8" 2.38M CMOS
	Video Compression Format	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.264, MJPEG
	Resolution / Max. Frame Rate	2M / 60fps	640 x 480 (Scaled up to 800 x 600) / 30fps	640 x 480 (Scaled up to 800 x 600) / 30fps	640 x 480 (Scaled up to 800 x 600) / 30fps	640 x 480 (Scaled up to 800 x 600) / 30fps	640 x 480 (Scaled up to 800 x 600) / 30fps	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)	Multiple (Up to 10 Profiles)
	Max. User Access	10 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)	10 (Unicast)
	Min. Illumination	Color : 015 Lux B/W : 0.015 Lux	-	-	-	-	-	Color : 015 Lux B/W : 0.015 Lux
	Video Output	-	CVBS : 1.0 Vpp, Micro USB type B	CVBS : 1.0 Vpp, Micro USB type B	CVBS : 1.0 Vpp, Micro USB type B	CVBS : 1.0 Vpp, Micro USB type B	CVBS : 1.0 Vpp, Micro USB type B	-
	Lens	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	35mm fixed (F1.0)	35mm fixed (F1.0)	19mm fixed (F1.0)	19mm fixed (F1.0)	13mm fixed (F1.0)	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)	H : 17°	H : 17°	H : 32°	H : 32°	H : 49°	H : 62.8°(Wide) ~ 2.23°(Tele) / V : 36.8°(Wide) ~ 1.26°(Tele)
OPERATIONAL	Focus Control	Auto / Manual / One push	Fixed	Fixed	Fixed	Fixed	Fixed	Auto / Manual / One push
	IR Viewable Length	-	-	-	-	-	-	-
	Pan / Tilt / Rotate	-	-	-	-	-	-	360° Endless / 180° (-90° ~ 90°) / -
	Day & Night	Auto (ICR)	-	-	-	-	-	Auto (ICR)
	Backlight Compensation	WDR (120dB)	-	-	-	-	-	WDR (120dB)
	Digital Noise Reduction	SSNR III (2D+3D Noise filter)	-	-	-	-	-	SSNR III (2D+3D Noise filter)
	Digital Image Stabilization	Support	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support (Built in Gyro sensor)	Support
	Intelligent Video Analytics	Motion detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Loitering, Directional detection, Virtual line, Fence detection, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Drastic temperature swings	Tampering, Loitering, Directional detection, Virtual line, Fence detection, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Drastic temperature swings	Tampering, Loitering, Directional detection, Virtual line, Fence detection, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Drastic temperature swings	Tampering, Loitering, Directional detection, Virtual line, Fence detection, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Drastic temperature swings	Tampering, Loitering, Directional detection, Virtual line, Fence detection, Enter/Exit, (Dis)Appear, Audio detection, Motion detection, Sound classification, Shock detection, Drastic temperature swings	Motion detection, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection
	Protocol	ONVIF Profile S, 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	ONVIF Profile S, SUNAPI
FEATURES	Alarm I/O	1 / 1 (Relay)	2 / 2	2 / 2	2 / 2	2 / 2	2 / 2	1 / 1 (Relay)
	Audio	-	Bi-directional	Bi-directional	Bi-directional	Bi-directional	Bi-directional	-
	Edge Storage	NAS	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	NAS
	Environment Protection	IP67, IK10	IP66, NEMA4X, IK10	IP66, NEMA4X, IK10	IP66, NEMA4X, IK10	IP66, NEMA4X, IK10	IP66, NEMA4X, IK10	IP67, IK10
	Operating Temperature	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F)	-40°C ~ +60°C (-40°F ~ +140°F) * Start up above -30°C (-22°F)
	Power	Max. 28.0W - Heater on (24V AC)	TBD	TBD	TBD	TBD	TBD	Max. 49.0W - Heater on (24V AC)
	Dimensions (WxHxD) / Weight	Ø162.0 x 244.0mm (Ø6.38" x 9.61") 7Kg (15.43 lb)	TBD	TBD	TBD	TBD	TBD	384.0 x 402.0 x 250.0mm (15.12" x 15.83" x 9.84") 35Kg (77.16 lb)
	Additional Features	Explosion certification : CE2460 EX II 2 GD Ex d IIC T6 Gb IP67 Ex tb IIIC T85°C Db	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway view, 11 Color palettes	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway view, 11 Color palettes	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway view, 11 Color palettes	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway view, 11 Color palettes	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway view, 11 Color palettes	Explosion certification : CE2460 EX II 2 GD Ex d IIC T6 Gb IP67 Ex tb IIIC T80°C Db



Wisenet X
XRN-3010



Wisenet X
XRN-2011



Wisenet X
XRN-2010



Wisenet X
XRN-1610S/1610



Wisenet X
XRN-810S

	Wisenet X XRN-3010	Wisenet X XRN-2011	Wisenet X XRN-2010	Wisenet X XRN-1610S/1610	Wisenet X XRN-810S
OS	Linux	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, 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	• N+1 failover supported • ARB redundancy supported • WiseStream support • Defocus event trigger	• N+1 failover supported • ARB redundancy supported • WiseStream support	• N+1 failover supported • ARB redundancy supported • WiseStream support	• Plug & play by 16 PoE / PoE+ Ports (XRN-1610S) • WiseStream support • Defocus event trigger	• 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



Wisenet T
TRM-1610S

	Wisenet X XRN-410S	Wisenet P PRN-4011	Wisenet Q QRN-810	Wisenet Q QRN-410	Wisenet T TRM-1610S
OS	Linux	Linux	Linux	Linux	Linux
Supported Compression	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream	H.265, H.264, MJPEG, WiseStream
Max. Recording Bit Rate	50Mbps	400Mbps	100Mbps	50Mbps	128Mbps
Max # of Cameras	4	64	8	4	16
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)	Up to 2 SATA (Front-Swap) Max. 4TB (HDD, SSD)
External Storage	-	iSCSI	-	-	-
RAID	-	RAID 5/6	-	-	RAID 1
Hot Swap	-	Yes	-	-	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 Transportation, WebViewer, 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	HDMI (Up to 4K), VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	• 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	• N+1 failover supported • ARB redundancy supported • WiseStream support • Defocus event trigger	• ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 128Mbps • Defocus event trigger	• ARB supported • Easy configuration (Setup Wizard, P2P (QR Code)) • Event push to smart phone • Transmission bandwidth 64Mbps • Defocus event trigger	• GPS supported • Wi-fi supported • Standards approval for transportation (EN50155, EN61373) • Wide operating temperature range -40°C ~ +70°C (-40°F ~ +158°F)



SNB-8000

**WISENET III
SNB-7004**

**WISENET III
SNB-6011B**

**WISENET III
SNB-6010B**

**WISENET III
SNB-6005**

**WISENET III
SNB-6004**

**WISENET III
SNB-6004F**

**WISENET III
SNB-6003**

	Resolution	5MP	3MP	2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/1.8" 6M CMOS	1/2.8" 3.2M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/1.9" 2.4M 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	H.264, MJPEG
	Resolution / Max. Frame Rate	5M / 20fps	3M / 30fps	2M / 30fps	2M / 30fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps
	Streaming Capacity	Multiple (Up to 6 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)	Multiple (Up to 10 Profiles)
	Max. User Access	10 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)
	Min. Illumination	Color : 0.1 Lux B/W : 0.01 Lux	Color : 0.06 Lux B/W : 0.006 Lux	* Color : 0.3 Lux	* Color : 0.3 Lux	Color : 0.015 Lux B/W : 0.0015 Lux	Color : 0.03 Lux B/W : 0.002 Lux	Color : 0.03 Lux B/W : 0.002 Lux	Color : 0.03 Lux B/W : 0.03 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 DIP Connector Type	CVBS 1.0Vpp DIP Connector Type	CVBS 1.0Vpp DIP Connector Type
	Lens	-	-	2.4mm Pinhole (F 2.0)	4.6mm Pinhole (F 2.5)	-	-	-	-
	Angular Field of View	-	-	H : 134.3° / V : 70.9°	H : 71° / V : 38°	-	-	-	-
OPERATIONAL	Focus Control	Simple focus / Manual	Simple focus / Manual	-	-	Simple focus / Manual	Simple focus / Manual	Simple focus / Manual	Manual
	IR Viewable Length	-	-	-	-	-	-	-	-
	Pan / Tilt / Rotate	-	-	-	-	-	-	-	-
	Day & Night	True (ICR)	True (ICR)	Electrical	Electrical	True (ICR)	True (ICR)	True (ICR)	Electrical
	Backlight Compensation	BLC	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNR (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)
	Digital Image Stabilization	-	Support	Support	Support	Support	Support	Support	Support
	Intelligent Video Analytics	Tampering, Audio detection	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	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 with Metadata	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection
FEATURES	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, Open Platform	ONVIF Profile S, SUNAPI, Open Platform
	Alarm I/O	1 / 1	1 / 1	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	Bi-Directional	Bi-Directional
	Edge Storage	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS
	Environment Protection	-	-	-	-	-	-	-	-
	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)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
	Power	Max. 12.65W (24V AC) Max. 10.68W (12V DC) Max. 12.14W (PoE)	Max. 13.1W (24V AC) Max. 11.1W (12V DC) Max. 12.6W (PoE)	Max. 6.5W (12V DC) Max. 7.5W (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. 11.44W (24V AC) Max. 10.1W (12V DC) Max. 11.1W (PoE)	Max. 12.5W (24V AC) Max. 10.5W (12V DC)	Max. 9.5W (24V AC) Max. 8.38W (12V DC) Max. 9.18W (PoE)
	Dimensions (WxHxD) / Weight	73.1 x 66.6 x 147.0mm (2.88" x 2.62" x 5.79") 566g (1.25 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 430g (0.95 lb)	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 1.1" 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)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 395g (0.87 lb)	73.1 x 66.6 x 147.8mm (2.88" x 2.62" x 5.82") 385g (0.85 lb)	73.1 x 66.6 x 136.2mm (2.88" x 2.62" x 5.36") 330g (0.73 lb)
	Additional Features	P-Iris, RS-485	P-Iris, RS-485, Defog	Separated head and body, Defog	Separated head and body, Defog	P-Iris, RS-485, Defog	P-Iris, RS-485, Defog	P-Iris, RS-485, Defog, SFP LC type	P-Iris, RS-485, Defog



WISENET III
SNZ-6320



SNO-8081R



WISENET III
SNO-7084R



WISENET III
SNO-6084R



WISENET III
SNO-6011R



WISENET Lite
SNO-L6083R



WISENET Lite
SNO-L6013R

	Resolution	2MP	5MP	3MP	2MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/2.8" 2.38M CMOS	1/1.8" 6M CMOS	1/2.8" 3.2M CMOS	1/2.8" 2.38M 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.265, H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 60fps	5M / 30fps	3M / 30fps	2M / 60fps	2M / 30fps	2M / 30fps	2M / 30fps
	Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
	Max. User Access	10 (Unicast)	10 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	6 (Unicast)	6 (Unicast)
	Min. Illumination	Color: 0.15 Lux B/W: 0.015 Lux	Color: 0.12 Lux B/W: 0 Lux (IR LED on)	Color: 0.06 Lux B/W: 0 Lux (IR LED on)	Color: 0.03 Lux B/W: 0 Lux (IR LED on)	Color: 0.08 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)
	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	-	-
	Lens	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	3 ~ 8.5mm (2.8x) motorized V/F (F1.3)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	3.8mm fixed (F2.0)	2.8 ~ 12mm (4.3x) V/F (F1.4)	3.6mm fixed (F1.8)
	Angular Field of View	H: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.8°(Wide) ~ 1.26°(Tele)	H: 93.4°(Wide) ~ 39.2°(Tele) / V: 68.1°(Wide) ~ 29.3°(Tele)	H: 100.12°(Wide) ~ 35.38°(Tele) / V: 73.76°(Wide) ~ 26.58°(Tele)	H: 105.5°(Wide) ~ 37.1°(Tele) / V: 57.5°(Wide) ~ 21.0°(Tele)	H: 84.5° / V: 45.8° / D: 98.8°	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	Auto / Manual / One push	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Manual	Manual	-
OPERATIONAL	IR Viewable Length	-	30m (98.43ft)	30m (98.43ft)	30m (98.43ft)	15m (49.21ft)	20m (65.62ft)	20m (65.62ft)
	Pan / Tilt / Rotate	-	-	-	-	-	-	-
	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 (120dB, 15fps)	BLC, DWDR	BLC, DWDR
	Digital Noise Reduction	SSNR III (2D+3D Noise filter)	SSNR (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR III (2D+3D Noise filter)	SSNR	SSNR
	Digital Image Stabilization	Support	-	Support	Support	Support	-	-
	Intelligent Video Analytics	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Motion detection, Tampering, Audio 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	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Face detection with Metadata	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering
FEATURES	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 & G, SUNAPI	ONVIF Profile S & G, SUNAPI
	Alarm I/O	1 / 1 (Relay)	1 / 1	1 / 1	1 / 1	1 / 0	-	-
	Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	-	Uni-Directional	Uni-Directional
	Edge Storage	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS, Local PC	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS
	Environment Protection	-	IP66, IK10	IP66, IK10	IP66, IK10	IP66	IP66, IK10	IP66
	Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -20°C ~ +55°C (-4°F ~ +131°F) (12V DC, PoE) * Start up above -10°C (+14°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) -20°C ~ +55°C (-4°F ~ +131°F) (12V DC, PoE) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -20°C (-4°F)
	Power	Max. 9.0W (12V DC) Max. 10.0W (PoE)	Max. 12.0W / 13.5W - Heater on (24V AC) Max. 10.0W / 11.5W - Heater on (12V DC) Max. 11.5W / 12.95W - Heater on (PoE)	Max. 13.0W / 19.0W - Heater on (24V AC) Max. 11.5W (12V DC) Max. 12.5W (PoE)	Max. 11.0W - Heater off Max. 17.0W - Heater on (24V AC)	Max. 8.5W (PoE)	Max. 5.9W (PoE)	Max. 5.7W (PoE)
	Dimensions (WxHxD) / Weight	72.0 x 59.9 x 135.4mm (2.83" x 2.36" x 5.33") 540g (1.19 lb)	82.4 x 87.0 x 348.3mm (3.24" x 3.43" x 13.71") (Without Sunshield) 1.42Kg (3.13 lb)	82.4 x 82.4 x 312.6mm (3.24" x 3.24" x 12.31") (Without Sunshield) 1.19Kg (2.62 lb)	82.4 x 82.4 x 312.6mm (3.24" x 3.24" x 12.31") (Without Sunshield) 1.19Kg (2.62 lb)	77.1 x 83.0 x 302.4mm (3.04" x 3.27" x 11.91") 560g (1.23 lb)	Ø70.0 x 246.0mm (Ø2.76" x 9.69") (Without Sunshield) 700g (1.54 lb)	Ø58.6 x 165.2mm (Ø2.31" x 6.5") (Without Sunshield) 250g (0.55 lb)
	Additional Features	RS-485, Defog	Lens distortion correction, Hallway View, P-Iris	P-Iris, Defog	P-Iris, Defog	Defog	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View



SNF-8010/8010VM



**WISeNET III
SND-7084**



**WISeNET III
SND-6084**



**WISeNET III
SND-6083**



**WISeNET Lite
SND-L6013**



**WISeNET Lite
SND-L6012**



**WISeNET III
SND-7084R**



**WISeNET III
SND-6084R**

	Resolution	5MP	3MP	2MP	2MP	2MP	2MP	3MP	2MP
VIDEO	Imaging Device	1/1.8" 6M CMOS	1/2.8" 3.2M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/2.8" 3.2M 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	H.264, MJPEG
	Resolution / Max. Frame Rate	5M / 20fps	3M / 30fps	2M / 60fps	2M / 60fps	2M / 30fps	2M / 30fps	3M / 30fps	2M / 60fps
	Streaming Capacity	Multiple (Up to 5 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
	Max. User Access	10 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	6 (Unicast)	6 (Unicast)	15 (Unicast)	15 (Unicast)
	Min. Illumination	Color : 0.2 Lux B/W : 0.02 Lux	Color : 0.06 Lux B/W : 0.006 Lux	Color : 0.03 Lux B/W : 0.002 Lux	Color : 0.03 Lux B/W : 0.002 Lux	Color : 0.15 Lux B/W : 0.15 Lux	Color : 0.15 Lux B/W : 0.15 Lux	Color : 0.06 Lux B/W : 0 Lux (IR LED on)	Color : 0.03 Lux B/W : 0 Lux (IR LED on)
	Video Output	CVBS 1.0Vpp	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
	Lens	1.14mm fixed (F2.5)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	3 ~ 8.5mm (2.8x) V/F (F1.2)	3.6mm fixed (F1.8)	2.8mm fixed (F1.8)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)
	Angular Field of View	H : 187.0° / V : 187.0° / D : 187.0°	H : 100.12°(Wide) ~ 35.38°(Tele) / V : 73.76°(Wide) ~ 26.58°(Tele)	H : 105.5°(Wide) ~ 37.1°(Tele) / V : 57.5°(Wide) ~ 21.0°(Tele)	H : 106.18°(Wide) ~ 37.1°(Tele) / V : 58.42°(Wide) ~ 20.94°(Tele)	H : 86.5° / V : 47.8° / D : 101.2°	H : 110.0° / V : 61.0° / D : 125.0°	H : 100.12°(Wide) ~ 35.38°(Tele) / V : 73.76°(Wide) ~ 26.58°(Tele)	H : 105.5°(Wide) ~ 37.1°(Tele) / V : 57.5°(Wide) ~ 21.0°(Tele)
	Focus Control	Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	Manual	-	-	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual
OPERATIONAL	IR Viewable Length	-	-	-	-	-	-	25m (82.02ft)	15m (49.21ft)
	Pan / Tilt / Rotate	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°
	Day & Night	True (ICR)	True (ICR)	True (ICR)	Electrical	Electrical	Electrical	True (ICR)	True (ICR)
	Backlight Compensation	WDR (60dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	BLC, DWDR	BLC, DWDR	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNR	SSNR	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)
	Digital Image Stabilization	-	Support	Support	Support	-	-	Support	Support
	Intelligent Video Analytics	Motion detection, Audio detection, Tampering	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	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection
FEATURES	Protocol	ONVIF Profile S, SUNAPI	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S, SUNAPI, Open Platform
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-	-	1 / 1	1 / 1
	Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Uni-Directional	Uni-Directional	Bi-Directional	Bi-Directional
	Edge Storage	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS
	Environment Protection	IP66, IK10 / EN-61373/50155 (SNF-8010VM)	-	-	-	-	-	-	-
	Operating Temperature	-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)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)
	Power	Max. 8.7W (12V DC) Max. 10.3W (PoE) mode A only (SNF-8010VM)	Max. 9.6W (12V DC) Max. 11.6W (PoE)	Max. 8.79W (12V DC) Max. 9.57W (PoE)	Max. 8.09W (12V DC) Max. 8.94W (PoE)	Max. 2.4W (PoE)	Max. 2.4W (PoE)	Max. 10.0W (12V DC) Max. 11.0W (PoE)	Max. 9.0W (12V DC, PoE)
	Dimensions (WxHxD) / Weight	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)	Ø132.1 x 107.6mm (Ø5.20" x 4.24") 605g (1.33 lb)	Ø132.1 x 107.6mm (Ø5.20" x 4.24") 505g (1.11 lb)	Ø132.1 x 107.6mm (Ø5.20" x 4.24") 485g (1.07 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 250g (0.55 lb)	Ø110.0 x 86.0mm (Ø4.33" x 3.39") 240g (0.53 lb)	Ø132.1 x 107.6mm (Ø5.20" x 4.24") 575g (1.27 lb)	Ø132.1 x 107.6mm (Ø5.20" x 4.24") 525g (1.16 lb)
	Additional Features	Various Viewing Compositions, M12 Connector (SNF-8010VM)	P-Iris, Defog	P-Iris, Defog	Defog	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	P-Iris, Defog	P-Iris, Defog



WISENET III
SND-6011R



WISENET Lite
SND-L6083R



WISENET Lite
SND-L6013R



SNV-8080



WISENET III
SNV-7084



WISENET III
SNV-6084



WISENET III
SNV-6013



WISENET III
SNV-6012M

	Resolution	2MP	2MP	2MP	5MP	3MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/2.8" 2.38M CMOS	1/2.9" 2.19M CMOS	1/2.9" 2.19M CMOS	1/1.8" 6M CMOS	1/2.8" 3.2M 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	H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 30fps	2M / 30fps	2M / 30fps	5M / 20fps	3M / 30fps	2M / 60fps	2M / 60fps	2M / 60fps
	Streaming Capacity	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 6 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)
	Max. User Access	15 (Unicast)	6 (Unicast)	6 (Unicast)	10 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)
	Min. Illumination	Color: 0.08 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: 0.1 Lux B/W: 0.01 Lux	Color: 0.06 Lux B/W: 0.006 Lux	Color: 0.03 Lux B/W: 0.002 Lux	Color: 0.15 Lux B/W: 0.15 Lux	Color: 0.15 Lux B/W: 0.15 Lux
	Video Output	CVBS 1.0Vpp	-	-	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
	Lens	3.8mm fixed (F2.0)	2.8 ~ 12mm (4.3x) V/F (F1.4)	3.6mm fixed (F1.8)	3.6 ~ 9.4mm (2.6x) motorized V/F (F1.2)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	2.8mm fixed (F1.8)	3mm fixed (F2.0)
OPERATIONAL	Angular Field of View	H: 84.5° / V: 45.8° / D: 98.8°	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: 104.0°(Wide) ~ 39.2°(Tele) / V: 75.2°(Wide) ~ 29.3°(Tele)	H: 100.12°(Wide) ~ 35.38°(Tele) / V: 73.76°(Wide) ~ 26.58°(Tele)	H: 105.5°(Wide) ~ 37.1°(Tele) / V: 57.5°(Wide) ~ 21.0°(Tele)	H: 112.0° / V: 62.0°	H: 103.1° / V: 53.9° / D: 124.5°
	Focus Control	-	Manual	-	Simple focus / Manual	Simple focus (motorized V/F) / Manual	Simple focus (motorized V/F) / Manual	-	-
	IR Viewable Length	10m (32.81ft)	15m (49.21ft)	15m (49.21ft)	-	-	-	-	-
	Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	-	-10° ~ 10° / 0° ~ 90° / -
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	Electrical	Electrical
	Backlight Compensation	WDR (120dB)	BLC, DWDR	BLC, DWDR	BLC	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNRIII (2D+3D Noise filter)	SSNR	SSNR	SSNR (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)	SSNRIII (2D+3D Noise filter)
	Digital Image Stabilization	Support	-	-	-	Support	Support	Support	Support
FEATURES	Intelligent Video Analytics	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering	Motion detection, Tampering, Audio 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, Face detection, People counting, Zone analyzing	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Face detection
	Protocol	ONVIF Profile S, SUNAPI, Open Platform	ONVIF Profile S & G, SUNAPI	ONVIF Profile S & G, SUNAPI	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
	Alarm I/O	1 / 0	-	-	1 / 1	1 / 1	1 / 1	-	-
	Audio	-	Uni-Directional	Uni-Directional	Bi-Directional	Bi-Directional	Bi-Directional	-	-
	Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS	SD/SDHC/SDXC, NAS
	Environment Protection	-	-	-	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10 / EN50155, EN50121
	Operating Temperature	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-10°C ~ +55°C (+14°F ~ +131°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) * Start up above -35°C (-31°F)	-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)	-30°C ~ +55°C (-22°F ~ +131°F)
	Power	Max. 8.0W (PoE)	Max. 5.4W (PoE)	Max. 5.9W (PoE)	Max. 14.2W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)	Max. 11.0W / 13.0W - Heater on (24V AC) Max. 9.0W / 11.5W - Heater on (12V DC) Max. 10.0W / 12.5W - Heater on (PoE)	Max. 14.0W - Heater on (24V AC, 12V DC) Max. 12.95W - Heater on (PoE)	Max. 7.5W (PoE)	Max. 7.5W (PoE)
Additional Features	Dimensions (WxHxD) / Weight	Ø120.0 x 101.8mm (Ø4.72" x 4.01") 380g (0.84 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)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 980g (2.16 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 960g (2.12 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 985g (2.17 lb)	Ø112.8 x 63.7mm (Ø4.44" x 2.51") 550g (1.21 lb)	135.2 x 54.3 x 124.5mm (5.32" x 2.14" x 4.90") 530g (1.17 lb)
	Additional Features	Defog	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	-	P-Iris, Defog	P-Iris, Defog	Defog	Defog, M12 connector



SNV-8081R



**WISENET III
SNV-7084R**



**WISENET III
SNV-6085R**



**WISENET III
SNV-6084R**



**WISENET Lite
SNV-L6083R**



**WISENET Lite
SNV-L6013R**



**WISENET Lite
SNV-L6014RM/L6014RBM**

	Resolution	5MP	3MP	2MP	2MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/1.8" 6M CMOS	1/2.8" 3.2M CMOS	1/2.8" 2.38M CMOS	1/2.8" 2.38M 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.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
	Resolution / Max. Frame Rate	5M / 30fps	3M / 30fps	2M / 60fps	2M / 60fps	2M / 30fps	2M / 30fps	2M / 30fps
	Streaming Capacity	Multiple (Up to 3 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 10 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)	Multiple (Up to 3 Profiles)
	Max. User Access	10 (Unicast)	15 (Unicast)	15 (Unicast)	15 (Unicast)	6 (Unicast)	6 (Unicast)	6 (Unicast)
	Min. Illumination	Color: 0.15 Lux B/W: 0 Lux (IR LED on)	Color: 0.06 Lux B/W: 0 Lux (IR LED on)	Color: 0.09 Lux B/W: 0 Lux (IR LED on)	Color: 0.03 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: 0.15 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 DIP Connector Type	-	-	-
	Lens	3.93 ~ 9.4mm (2.4x) motorized V/F (F1.3)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	10 ~ 23mm (2.3x) motorized V/F (F1.6)	3 ~ 8.5mm (2.8x) motorized V/F (F1.2)	2.8 ~ 12mm (4.3x) V/F (F1.4)	3.6mm fixed (F1.8)	3.6mm fixed (F1.8)
	Angular Field of View	H: 93.4°(Wide) ~ 39.2°(Tele) / V: 68.1°(Wide) ~ 29.3°(Tele)	H: 100.12°(Wide) ~ 35.38°(Tele) / V: 73.76°(Wide) ~ 26.58°(Tele)	H: 31.3°(Wide) ~ 13.9°(Tele) / V: 17.1°(Wide) ~ 7.8°(Tele)	H: 105.5°(Wide) ~ 37.1°(Tele) / V: 57.5°(Wide) ~ 21.0°(Tele)	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: 86.5° / V: 47.8° / D: 101.2°
	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	Manual	-	-
OPERATIONAL	IR Viewable Length	30m (98.43ft)	25m (82.02ft)	20m (65.62ft)	15m (49.21ft)	20m (65.62ft)	15m (49.21ft)	15m (49.21ft)
	Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 350° / 0° ~ 67° / 0° ~ 355°	-5° ~ 5° / 0° ~ 67° / 90°	-5° ~ 5° / 0° ~ 67° / 90°
	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)	BLC, DWDR	BLC, DWDR	BLC, DWDR
	Digital Noise Reduction	SSNR (2D+3D Noise filter)	SSNR (2D+3D Noise filter)	SSNR (2D+3D Noise filter)	SSNR (2D+3D Noise filter)	SSNR	SSNR	SSNR
	Digital Image Stabilization	Support	Support	Support	Support	-	-	-
	Intelligent Video Analytics	Motion detection, Tampering, Audio 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	Tampering, Virtual line, Enter/Exit, (Dis)Appear, Audio detection, Face detection	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering	Motion detection with Metadata, Tampering
FEATURES	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 & G, SUNAPI	ONVIF Profile S, SUNAPI	ONVIF Profile S, SUNAPI
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1	-	-	-
	Audio	Bi-Directional	Bi-Directional	Bi-Directional	Bi-Directional	Uni-Directional	Uni-Directional	Uni-Directional
	Edge Storage	SD/SDHC/SDXC, NAS, Local PC	Micro SD/SDHC/SDXC, NAS	Micro SD/SDHC, NAS, Local PC	SD/SDHC/SDXC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS	Micro SD/SDHC, NAS
	Environment Protection	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, IK10	IP66, 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) (24V AC) -20°C ~ +55°C (-4°F ~ +131°F) (12V DC, PoE) * Start up above -10°C (+14°F)	-40°C ~ +55°C (-40°F ~ +131°F) (24V AC) -20°C ~ +55°C (-4°F ~ +131°F) * Start up above -35°C (-31°F)	-40°C ~ +55°C (-40°F ~ +131°F) (24V AC) -20°C ~ +55°C (-4°F ~ +131°F) (12V DC, PoE) * Start up above -10°C (+14°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. 12.0W / 13.5W - Heater on (24V AC) Max. 10.0W / 11.5W - Heater on (12V DC) Max. 11.5W / 12.95W - Heater on (PoE)	Max. 12.0W / 15.0W - Heater on (24V AC) Max. 10.5W (12V DC) Max. 11.5W (PoE)	Max. 11.0W - Heater off Max. 12.95W - Heater on (24V AC, 12V DC, PoE)	Max. 9.5W / Max. 13.5W - Heater on (24V AC)	Max. 5.8W (PoE)	PoE	PoE
	Dimensions (WxHxD) / Weight	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 955g (2.11 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 975g (2.15 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 970g (2.14 lb)	Ø160.0 x 118.5mm (Ø6.30" x 4.67") 960g (2.12 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)	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, P-Iris	P-Iris, Defog	P-Iris, Defog	P-Iris, Defog	Lens distortion correction, Hallway View	Lens distortion correction, Hallway View	M12 connector, Lens distortion correction, Hallway View, Built-in mic



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 III plus
SNP-6320RH



WISENET Lite
SNP-L6233RH

	Resolution	2MP	2MP	2MP	2MP	2MP	2MP	2MP	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	1/2.8" 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	H.264, MJPEG
	Resolution / Max. Frame Rate	2M / 60fps	2M / 60fps	2M / 60fps	2M / 60fps	2M / 30fps	2M / 60fps	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)	Multiple (Up to 10 Profiles)
	Max. User Access	10 (Unicast)	10 (Unicast)	15 (Unicast)	15 (Unicast)	10 (Unicast)	15 (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: 0.015 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)	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	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)	4.4 ~ 101.2mm (IR Corrected Optical 23x) F1.6(Wide) / F4.5(Tele)
OPERATIONAL	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)	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	AF / One-shot AF / Manual
	IR Viewable Length	-	-	-	-	-	150m (492.13ft)	100m (328.08ft)	100m (328.08ft)
FEATURES	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 / 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)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (100dB)	WDR (120dB)	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)	SSNRIII (2D+3D Noise filter)	SSNR
	Digital Image Stabilization	Support	Support	Support	Support	Support	Support	Support	Support
FEATURES	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	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, Open Platform	ONVIF Profile S, SUNAPI
	Alarm I/O	4 / 2 (Relay)	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	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	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	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)	-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)	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 (Ø8.80" 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 (Ø8.80" 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)	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	Auto tracking, RS-485/422, Defog	RS-485/422, Defog

NETWORK

NVR



SRN-1673S



SRN-873S



SRN-473S

OS	Linux	Linux	Linux
Supported Compression	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Max. Recording Bit Rate	80Mbps	64Mbps	32Mbps
Max # of Cameras	16	8	4
Internal Storage	Up to 4 SATA	Up to 2 SATA	Up to 1 SATA
External Storage	1 e-SATA	1 e-SATA	-
RAID	-	-	-
Hot Swap	-	-	-
Network Viewer Software	SSM, SmartViewer, Wisenet Mobile	SSM, SmartViewer, Wisenet Mobile	SSM, SmartViewer, Wisenet Mobile
Local Monitor	HDMI / VGA	HDMI / VGA	HDMI / VGA
Camera Support	SUNAPI, ONVIF	SUNAPI, ONVIF	SUNAPI, ONVIF
Features	• Plug & play by 16 PoE / PoE+ Ports • WebViewer supported • HDD removable (Easy install)	• Plug & play by 8 PoE / PoE+ Ports • WebViewer supported	• Plug & play by 4 PoE / PoE+ Ports • WebViewer supported

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

Preliminary



SPD-1660R

New



SPD-400



SPD-150

Video Out	HDMI, VGA	HDMI, VGA, CVBS	HDMI, VGA, CVBS
Resolution	HDMI up to 4K, VGA up to 1080p	H.264 : up to 2M / Quad View-up to 720p	HDMI up to 4K, VGA up to 1080p
Display	1 / 4 / 6 / 8 / 9 / 13 / 16 / 2V / 3V Hallway View mode (Up to 20 layouts and sequence)	Single View, Quad View	(HDMI) 1 / 4 / 6 / 8 / 9 / 13 / 16 / 25 / 36(32) / 2V / 3V (VGA) 1 / 4 / 6 / 8 / 9 / 13 / 16 / 2V / 3V Split mode, Hallway View mode (Up to 20 layouts and sequence)
Power	220V AC	12V DC	12V DC, PoE
Additional Features	Monitor merge - 1 x 2, 2 x 1, 2 x 2, 2 x 3, 3 x 2, 2 x 4, 2 x 5, 4 x 2, 3 x 3, 3 x 4, 4 x 3, 4 x 4, 3 x 5, 5 x 3, 5 x 2 SSM, WebViewer supported	-	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

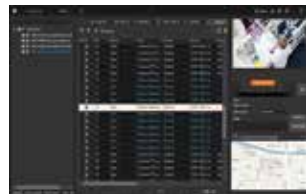
You can play back recorded video during live streaming and easily control playback up to 32x as well as reverse playback. Also Wisenet SSM displays the events in the same area as thumbnails making it easier to carry out a detailed search.



Live Streaming

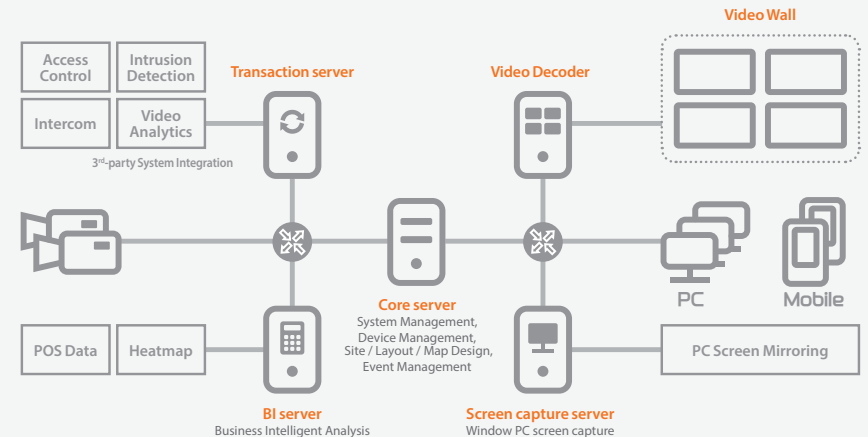


Display Events as Thumbnails



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	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	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

Reader



Wisenet ACS
R10/R10 Elite/R10 Elite Mobile



Wisenet ACS
R40/R40 Elite/R40 Elite Mobile



Wisenet ACS
RK40/RK40 Elite/RK40 Elite Mobile



Wisenet ACS
BioEntry W2



Wisenet ACS
5427CK



Wisenet ACS
BioMini

	R10/R10 Elite/R10 Elite Mobile	R40/R40 Elite/R40 Elite Mobile	RK40/RK40 Elite/RK40 Elite Mobile	BioEntry W2	5427CK	BioMini
Frequency	13.56Mhz	13.56Mhz	13.56Mhz	13.56Mhz	13.56Mhz	-
Communication	Wiegand	Wiegand	Wiegand / Clock & Data	Wiegand	USB 2.0	USB 2.0
Compatible Access Cards	R10 : iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN R10 Elite : iCLASS SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN R10 Elite Mobile : Mobile ID, MIFARE (Classic) / DESFire EV1 CSN	R40 : iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN R40 Elite : iCLASS SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN R40 Elite Mobile : Mobile ID, MIFARE (Classic) / DESFire EV1 CSN	RK40 : iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN RK40 Elite : iCLASS SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN RK40 Elite Mobile : Mobile ID, MIFARE (Classic) / DESFire EV1 CSN	iCLASS SE, MIFARE (Classic) / DESFire EV1 CSN	iCLASS SE / SEOS Elite, MIFARE (Classic) / DESFire EV1 CSN	-
Keypad	-	-	Yes (4 x 3)	-	-	-
Operating Voltage Range	5-16V DC	5-16V DC	5-16V DC	12V DC	USB 2.0	USB 2.0
Operating Temperature	-35°C ~ +65°C (-31°F ~ +150°F)	-35°C ~ +65°C (-31°F ~ +150°F)	-35°C ~ +65°C (-31°F ~ +150°F)	-20°C ~ +50°C (-4°F ~ +122°F)	0°C ~ +70°C (+32°F ~ +158°F)	-10°C ~ +50°C (+14°F ~ +122°F)
Ingress Protection	IP55	IP55	IP55	IP67	IP54	-
Impact Protection	-	-	-	IK08	-	-
Panel Connection	Pigtail	Pigtail	Pigtail	Pigtail	-	-
Color	Black	Black	Black	Dark Gray	Black	Dark Gray
Max. User	-	-	-	500,000 (1 : 1), 100,000 (1 : N)	-	-
Max. Fingerprint Template	-	-	-	1,000,000 (1 : 1), 200,000 (1 : N)	-	-
Ethernet	-	-	-	10/100Mbps	-	-

Controller



Wisenet ACS
V2000



Wisenet ACS
EH400K



Wisenet ACS
V1000



Wisenet ACS
V100



Wisenet ACS
V200



Wisenet ACS
V300

	V2000	EH400K	V1000	V100	V200	V300
Communication Port	Ethernet (10/100)	Ethernet (10/100)	Ethernet (10/100) / RS-485	RS-485	RS-485	RS-485
Reader interface	2ea	1ea	-	2ea	-	-
Max. expansion board	-	-	32ea	-	-	-
Max. card holders	250,000	125,000	250,000	-	-	-
Max. Event buffers	99,999	99,999	99,999	-	-	-
Input port	2ea	4ea	2ea	4ea	16ea	2ea
Output port	4ea	2ea	2ea	4ea	2ea	12ea
Operating Current	210mA / 12V DC	-	-	-	-	-
Operating Temperature	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)	0°C ~ +50°C (+32°F ~ +122°F)
PoE	-	802.af	-	-	-	-
Color	Gray	Black	Gray	Gray	Gray	Gray

Card



iCLASS SE



iCLASS SEOS Elite



Mobile ID

13.56Mhz - Compatible with R10 / R40 / RK40	13.56Mhz - Compatible with R10 Elite / R40 Elite / RK40 Elite - Encoded by Hanwha Techwin unique format	- Bluetooth / NFC via mobile device (Android, iOS) - Compatible with R10 Elite mobile / R40 Elite mobile / RK40 Elite mobile
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Peripheral



Wisenet ACS
SSA-X300

Controller/ Interface On Board	Max. 2ea Boards in enclosure
Input Power	100 ~ 240V AC (50Hz/60Hz) / 2.0A
Power Consumption	13.5V ±5%, 4.7A (Strobe, Horn 12.5V DC ±5%)
Charging Current	700mA
Back up Battery	12V, 18Ah, rechargeable
SMPS Status Transmission	AC loss, Battery fail (Non battery)
AC Input Protection	by Fuse in input port
Operation Temperature	0°C ~ +45°C (+32°F ~ +113°F)
Case Lock	Lock on front door with keys
Dimension (mm)	410 x 410 x 97mm (16.14" x 16.14" x 3.82")

Appliance



Wisenet ACS
SSA-A100

Supported Platform	Windows 10 IoT 2016 Enterprise entry
Installed S/W	SSA-M1000 (up to 32doors)
Processor	Intel celeron J3455 quad core 1.5 GHz to 2.3 GHz burst
RAM	SODIMM 8GB
Storage	120GB SSD
USB Storage	2x Front USB 3.0, 2 x Rear USB 3.0
Graphics	Intel HD graphics 500
Power Supply	19V, 65W
Ethernet	10/100/1000 Mbps ethernet
Connectivity	Wireless-AC 3168, IEEE 802.11ac 1 x 1 + Bluetooth v4.2
Dimension (WxHxD)	115 x 51 x 111mm (4.53" x 2.01" x 4.37")

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



Configuration



Mustering Report



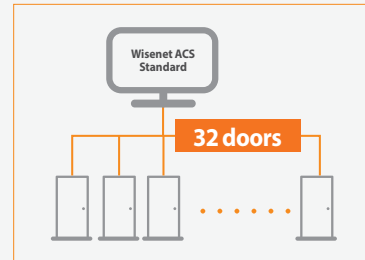
Monitoring



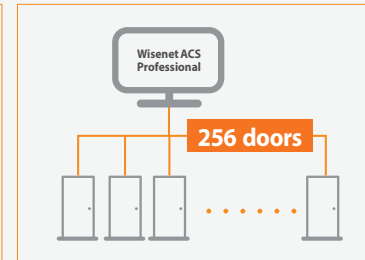
Lift Control

Access Control	Device auto discovery
	Cardholder management
	Batch uploads
	Card (s) pre-registration
	Device maintenance
	Unlimited access groups, Time schedules
	Area / Zone management
Monitoring	Biometric readers (FP)
	Lift Control (with V300)
	Real time access events & alarm monitoring
	Graphic maps
	Remote door management (Close / Open)
	I/O monitoring
	Mustering
Card Design and Printing	Event filtering for monitoring
	Control door monitoring / Management permissions per user group
Fire Groups	Create multiple design templates
	Auto-fill card holder data from system database
Advanced Reporting	Print cards
	Create firegroups for each fire sensor input
Video Integration with SSM	Extensive reporting options
	Export to multiple formats (excel, pdf, word etc.)
Maintenance	Full Integration with Hanwha Techwin's VMS, SSM
	Review video of the access events & alarms
System	Real-time event & alarm notification to SSM
	User group & user privileges
System	Manual & scheduled database backup
	Database restore
System	Data export & import
	Custom fields
System	Auditing & user activity logs
	Up to 32doors (standard), 256doors (professional), Unlimited doors (enterprise)
System	Very simple and intuitive user interface
	Highly scalable

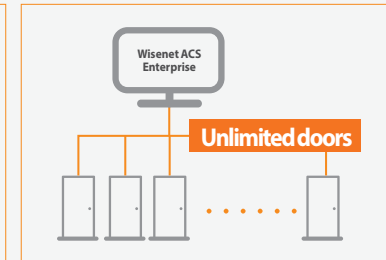
Wisenet ACS



Wisenet ACS Standard : Up to 32 doors

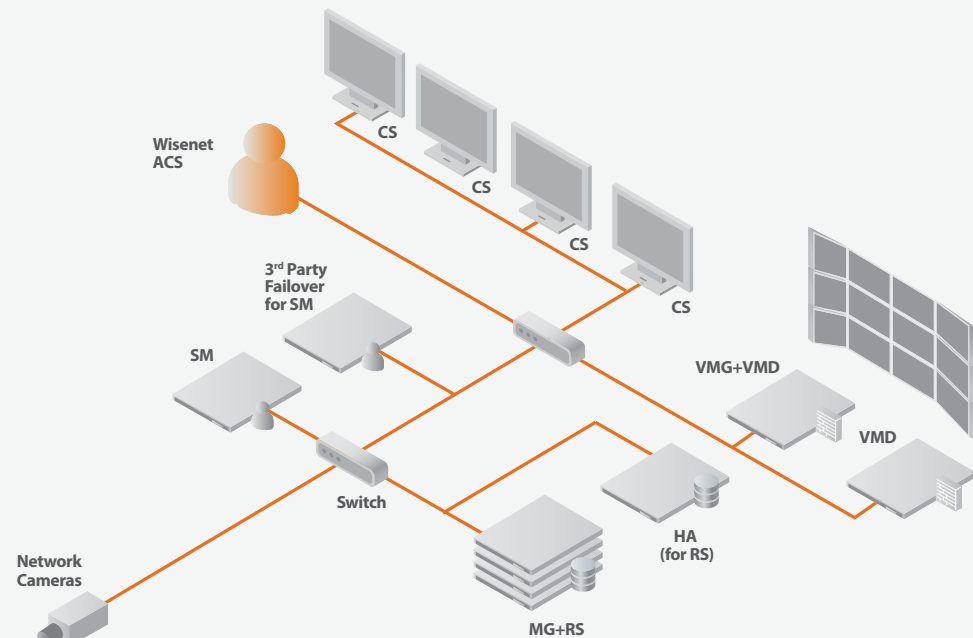


Wisenet ACS Professional : Up to 256 doors



Wisenet ACS Enterprise : Unlimited doors

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

TV Lines / Resolutions		4MP	4MP	4MP	4MP	4MP	4MP	4MP
VIDEO	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°
OPERATIONAL	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
FEATURES	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 246.0 mm (Ø2.76" x 9.69") (Without sunshield) 670g (1.48 lb)	Ø119.8 x 98.5mm (Ø4.72" x 3.88") 320g (0.71 lb)	Ø110.1 x 86.1mm (Ø4.33" x 3.39") 240g (0.53 lb)	Ø137 x 106.1mm (Ø5.39" x 4.18") 715g (1.58 lb)	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)



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HCB-6001



WISENET HD+
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HCB-6000

TV Lines / Resolutions		2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	Imaging Device	1/2.8" 2M CMOS	1/2.8" 2M CMOS	1/2.8" 2.38M 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	1920 x 1080
	Min. Illumination	Color: 0.09 Lux B/W: 0.009 Lux	Color: 0.09 Lux B/W: 0.009 Lux	Color: 0.2 Lux B/W: 0.01 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	-	-	4.44 ~ 142.6mm (Optical 32x) F1.6(Wide) / F4.4(Tele)	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: 62.8°(Wide) ~ 2.23°(Tele) / V: 36.80°(Wide) ~ 1.26°(Tele)	H: 110.2°(Wide) ~ 32°(Tele) / V: 55.4°(Wide) ~ 18°(Tele) / D: 128.4°(Wide) ~ 36.6°(Tele)	H: 110.2°(Wide) ~ 32°(Tele) / V: 55.4°(Wide) ~ 18°(Tele) / D: 128.4°(Wide) ~ 36.6°(Tele)	H: 110.2°(Wide) ~ 32°(Tele) / V: 55.4°(Wide) ~ 18°(Tele) / D: 128.4°(Wide) ~ 36.6°(Tele)
	Focus Control	Simple Focus	Manual	Auto / Manual / One push	Simple focus (motorized V/F) / Manual	Manual	Simple focus (motorized V/F) / Manual
Pan / Tilt / Rotate		-	-	-	-	-	0° ~ 350° / 0° ~ 67° / 0° ~ 355°
OPERATIONAL	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	SSNRIV	SSNRIV	SSNRIII	SSNRIV	SSNRIV	SSNRIV
	Motion detection	Support	Support	Support	Support	Support	Support
	Privacy Masking	4 Zones	8 Zones	12 Zones	8 Zones	8 Zones	8 Zones
FEATURES	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), RS-485: Samsung T/E, Pelco-D/P, Panasonic, Bosch, Honeywell, Vicon, AD	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), CCP (CVI Coax Protocol), TCP (TVI Coax Protocol)
	Environment Protection	-	-	-	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) * 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. 6W (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	73.1x 67.2 x 123.9mm (2.88" x 2.65" x 4.88") 287g (0.63 lb)	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 186g (0.41 lb)	72.0 x 60 x 137mm (2.83" x 2.36" x 5.39") 476g (1.05 lb)	Ø78.0 x 259.8mm (Ø3.07" x 10.23") (Without sunshield) 948g (2.09 lb)	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)	Defog	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)	Video transmission up to 500m (5C2V Coaxial Cable)



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HCD-6070R



WISENET HD+
HCV-6080R



WISENET HD+
HCV-6070R



WISENET HD+
HCM-9020VQ



WISENET HD+
HCP-6320HA/6320A



WISENET HD+
HCP-6230H/6230

TV Lines / Resolutions		2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	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	1/2.8" 2.38M CMOS
	Horizontal Resolution	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: 0.11 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, 6mm)	Color: 0.2 Lux B/W: 0.01 Lux	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)	4.44 ~ 101.2mm (Optical 23x) F1.6 (Wide) / F3.63 (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)	H: 62.8°(Wide) ~ 3.14°(Tele) / V: 36.8°(Wide) ~ 1.76°(Tele)
	Focus Control	Manual	Simple focus (motorized V/F) / Manual	Manual	Fixed	Auto / Manual / One push	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°) / -	360° Endless / 210° (-15° ~ 195°) / -
OPERATIONAL	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (100dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNRIV	SSNRIV	SSNRIV	Off / Low / Middle / High	SSNRIII	SSNRIII
	Motion detection	Support	Support	Support	Support	Support	Support
	Privacy Masking	8 Zones	8 Zones	8 Zones	16 Zones	32 Zones	32 Zones
FEATURES	Alarm I/O	MD Output 1	MD Output 1	MD Output 1	0 / 4	4 / 2 (Relay)	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	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)	IP66, IK10 (HCP-6230H), IK10 (With SHP-3701H) (HCP-6230)
	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)	-50°C ~ +55°C (-58°F ~ +131°F) (HCP-6230H), -10°C ~ +55°C (+14°F ~ +131°F) (HCP-6230)
	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)	Max. 24.0W / 65.0W - Heater off / on (24V AC) (HCP-6230H) Max. 20.0W (24V AC) (HCP-6230)
	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 (Ø7.83" 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)	Ø220.0 x 293.6mm (Ø8.66" x 11.56") 3.3Kg (7.28 lb) (SNP-6230H), Ø152.0 x 218.0mm (Ø5.98" x 8.58") 2.2Kg (4.85 lb) (SNP-6230)
	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	Defog



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SCB-6003



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

TV Lines / Resolutions		2MP	2MP	2MP	2MP	2MP	2MP	2MP
VIDEO	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: 0.04 Lux B/W: 0.004 Lux	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)
	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)
	IR Viewable Length	-	30m (98.43ft)	20m (65.62ft)	20m (65.62ft)	20m (65.62ft)	-	30m (98.43ft)
	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)
	Focus Control	-	Manual	Fixed	Manual	Fixed	Fixed	Manual
	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°
OPERATIONAL	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
FEATURES	Alarm I/O	0 / 1, External D/N 1	0 / 1	-	0 / 1	-	-	0 / 1
	Communication	AHD: ACP (AHD Coax Protocol), CVBS: Pelco-C (Coaxitron), RS-485	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
	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)	-10°C ~ +55°C (+14°F ~ +131°F)	-30°C ~ +55°C (-22°F ~ +131°F) * Start up above -10°C (+14°F)
	Power	Max. 4.2W (24V AC & 12V DC)	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)
	Dimensions (WxHxD) / Weight	68.4 x 59.6 x 92.7mm (2.69" x 2.35" x 3.65") 175.5g (0.39 lb)	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)
	Additional Features	Defog	Defog	Defog	Defog	Defog	Defog	Defog


WISENET HD+
HRD-1642
WISENET HD+
HRD-1641
WISENET HD+
SRD-1694
WISENET HD+
SRD-1685
WISENET HD+
SRD-1684/893/493
WISENET HD+
HRD-842
WISENET HD+
HRD-841
WISENET HD+
HRD-840

	Channel	16CH	16CH	16CH	16CH	16CH/8CH/4CH	8CH	8CH	8CH
OS	Embedded	Linux	Linux	Linux	Linux	Linux	Linux	Linux	Linux
Live	Frame Rate (NTSC / PAL)	480fps / 400fps	480fps / 400fps	480fps / 400fps	480fps / 400fps	480fps / 400fps (SRD-1684) 240fps / 200fps (SRD-893) 120fps / 100fps (SRD-493)	240fps / 200fps	240fps / 200fps	240fps / 200fps
Recording	Max. Record Rate / NTSC	240fps@2560 x 1440 480fps@1920 x 1080	240fps@2560 x 1440 480fps@1920 x 1080	480fps@1920 x 1080	480fps@1280 x 720 192fps@1920 x 1080	240fps@1920 x 1080 (SRD-1684/893) 120fps@1920 x 1080 (SRD-493)	120fps@2560 x 1440 240fps@1920 x 1080	120fps@2560 x 1440 240fps@1920 x 1080	120fps@2560 x 1440 240fps@1920 x 1080
	Max. Record Rate / PAL	200fps@2560 x 1440 400fps@1920 x 1080	200fps@2560 x 1440 400fps@1920 x 1080	400fps@1920 x 1080	400fps@1280 x 720 192fps@1920 x 1080	200fps@1920 x 1080 (SRD-1684/893) 100fps@1920 x 1080 (SRD-493)	100fps@2560 x 1440 200fps@1920 x 1080	100fps@2560 x 1440 200fps@1920 x 1080	100fps@2560 x 1440 200fps@1920 x 1080
	Compression	H.264	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	16CH : AHD, NTSC, PAL	16CH : AHD, NTSC, PAL	16CH : AHD, NTSC, PAL (SRD-1684) 8CH : AHD, NTSC, PAL (SRD-893) 4CH : AHD, NTSC, PAL (SRD-493)	8CH : AHD, NTSC, PAL TVI, CVI	8CH : AHD, NTSC, PAL TVI, CVI	8CH : AHD, NTSC, PAL TVI, CVI
Audio	Inputs	16CH (Built-in 4CH)	4CH	16CH (Built-in 4CH)	16CH (Built-in 4CH)	1CH	8CH (Built-in 4CH)	4CH	1CH
Storage	Internal HDD	Up to 8 SATA HDDs	Up to 2 SATA HDDs	Up to 8 SATA HDDs	Up to 4 SATA HDDs	Up to 1 SATA HDD	Up to 4 SATA HDDs	Up to 2 SATA HDDs	Up to 1 SATA HDD
	External HDD	Up to 2 Expansion Bays	Up to 1 Expansion Bays	Up to 2 Expansion Bays	Up to 2 Expansion Bays	-	Up to 2 Expansion Bays	Up to 1 Expansion Bays	-
Monitors	VGA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	HDMI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Spot Composite	1CH (BNC)	1CH (BNC)	1CH (Digital)	1CH (Digital)	-	1CH (BNC)	1CH (BNC)	1CH (BNC)
Connections	USB	2 ports	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	2 External SATA Ports	-	2 External SATA Ports	1 External SATA port	-
	Mouse	Yes	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	Search 3 / Live Unicast 10 / Live Multicast 20
	Transmission	4MP, 1080p, 720p, WD1, 4CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, CIF	1080p, 720p, 4CIF, 2CIF, CIF	1080p, 720p, 4CIF, 2CIF, CIF	4CIF, 2CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, 2CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, CIF	4MP, 1080p, 720p, WD1, 4CIF, CIF
	Monitoring	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer	SSM, WebViewer, SmartViewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer
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 : PTZ control via coaxial cable 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)
	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, VICON, 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

DVR


WISENET HD+
SRD-894

WISENET HD+
SRD-494

WISENET HD+
HRD-442

WISENET HD+
HRD-440

BEYOND
SRD-1676D

BEYOND
SRD-1656D

BEYOND
SRD-876D

BEYOND
SRD-476D

		8CH	4CH	4CH	4CH	16CH	16CH	8CH	4CH
Channel		8CH	4CH	4CH	4CH	16CH	16CH	8CH	4CH
OS	Embedded	Linux	Linux	Linux	Linux	Linux	Linux	Linux	Linux
Live	Frame Rate (NTSC / PAL)	240fps / 200fps	120fps / 100fps	120fps / 100fps	120fps / 100fps	480fps / 400fps	480fps / 400fps	240fps / 200fps	120fps / 100fps
Recording	Max. Record Rate / NTSC	240fps@1920 x 1080	120fps@1920 x 1080	60fps@2560 x 1440 120fps@1920 x 1080	60fps@2560 x 1440 120fps@1920 x 1080	480fps@1280 x 480	120fps@1280 x 480	240fps@1280 x 480	120fps@1280 x 480 * P/B : 60fps@1280 x 480, 120fps@960 x 480
	Max. Record Rate / PAL	200fps@1920 x 1080	100fps@1920 x 1080	50fps@2560 x 1440 100fps@1920 x 1080	50fps@2560 x 1440 100fps@1920 x 1080	400fps@1280 x 576	100fps@1280 x 576	200fps@1280 x 576	100fps@1280 x 576 * P/B : 50fps@1280 x 576, 120fps@960 x 576
	Compression	H.264	H.264	H.264	H.264	H.264	H.264	H.264	H.264
Video	Inputs	8CH : AHD, NTSC, PAL	4CH : AHD, NTSC, PAL	4CH : AHD, NTSC, PAL HDTV, HDCVI	4CH : AHD, NTSC, PAL TVI, CVI	16CH	16CH	8CH	4CH
Audio	Inputs	8CH (Built-in 4CH)	4CH	4CH	1CH	16CH (Built-in 4CH)	16CH (Built-in 4CH)	8CH (Built-in 4CH)	4CH
Storage	Internal HDD	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	Up to 4 SATA HDDs	Up to 4 SATA HDDs	Up to 1 SATA HDD
	External HDD	Up to 2 Expansion Bays	-	-	-	Up to 2 Expansion Bays	Up to 2 Expansion Bays	Up to 2 Expansion Bays	-
Monitors	VGA	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	HDMI	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Spot Composite	2CH (Digital)	2CH (Digital)	1CH (BNC)	1CH (BNC)	2CH (Digital)	2CH (Digital)	2CH (Digital)	2CH (Digital 1CH / Analog 1CH)
Connections	USB	2 ports	2 ports	2 ports	2 ports	2 ports	2 ports	2 ports	2 ports
	e-SATA	2 External SATA Ports	-	-	-	2 External SATA Ports	2 External SATA Ports	2 External SATA Ports	-
	Mouse	Yes	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	Search 3 / Live Unicast 10 / Live Multicast 20
	Transmission	1080p, 720p, 4CIF, 2CIF, CIF	1080P, 720P, 4CIF, 2CIF, CIF	4MP, 1080P, 720P, WD1, 4CIF, CIF	4MP, 1080P, 720P, WD1, 4CIF, CIF	4CIF, 2CIF, CIF	4CIF, 2CIF, CIF	4CIF, 2CIF, CIF	4CIF, 2CIF, CIF
	Monitoring	SSM, WebViewer, SmartViewer	SSM, WebViewer, SmartViewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer, Mobile Viewer	SSM, WebViewer, SmartViewer	SSM, WebViewer, SmartViewer	SSM, WebViewer, SmartViewer	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)	Samsung CCVC, Pelco-C	Samsung CCVC, Pelco-C	Samsung CCVC, Pelco-C	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	Samsung-T/E, Pelco-D/P, Panasonic, Phillips, AD, DIAMOND, ERNA, KALATEL, VCL TP, VICON, ELMO, GE

* Coaxial communication not supported

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* The latest product information / sepecification can be found at hanwha-security.com

MONITOR / CONTROLLER

LED Monitor



SMT-4933



SMT-4033

New



SMT-3233

New



SMT-2731



SMT-2233



SMT-1935



SMT-1931



SMT-1914

Screen Size	49" (UHD)	40"	32"	27"	22"	19"	19"	19"
Resolution (pixels HxV)	3,840 x 2,160	1,920 x 1,080	1,920 x 1,080	1,920 x 1,080	1,920 x 1,080	1,280 x 1,024	1,366 x 768	1,280 x 1,024
Video In/Out	-	1	1	2 / 2	2 / 2	2 / 2	2 / 2	-
VGA	1	1	1	1	1	1	1	1
DVI / HDMI	2 / 4	1 / 1	1 / 1	0 / 1	0 / 1	0 / 1	0 / 1	-
USB	Yes (S/W Update Only)	-	-	-	-	-	-	-
Audio In (Stereo)	1	1	1	2	2	2	2	-
Contrast Ratio	4,700 : 1	5,000 : 1	5,000 : 1	1,000 : 1	1,000 : 1	1,000 : 1	1,000 : 1	1,000 : 1
Aspect Ratio	16 : 9	16 : 9	16 : 9	16 : 9	16 : 9	4 : 3	16 : 9	4 : 3
Response Time	8ms	8ms	8ms	5ms	5ms	5ms	5ms	5ms
Brightness	500cd/m ²	350cd/m ²	350cd/m ²	300cd/m ²	250cd/m ²	250cd/m ²	250cd/m ²	250cd/m ²
Tempered Glass Screen	-	-	-	Yes	Yes	Yes	Yes	Yes
Picture In Picture	-	-	-	-	-	-	-	Yes
Built-in Speakers	Yes	Yes	Yes	Yes	Yes	Yes	Yes	-
Stand	General (Optional)	General (Optional)	General (Optional)	Standard	Standard	Standard	Standard	Standard
Power	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC	100V ~ 240V AC
Additional Features	Temperature Sensor, 24/7 (50,000 hour), Full HD 4 Picture by Picture Support	Remote Controller	Remote Controller	-	-	-	-	-

Controller / PoE Extender



SPC-7000



SPC-2000



SPC-2010



SPC-1010



SPO-100

Features	Network/Analog Cameras / NVR / DVR / SSM Controller • 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	Network Controller • Superior System Compatibility • 3D Joystick Control • Quick and Easy Installation • SSM Support	PTZ / DVR System Controller • Control up to 255 PTZ Cameras / DVRs • Built-in 3 Axis Twist Zoom Joystick • Built-in Jog Shuttle • 16 x 2 Character LCD Display • RS-485 and RS-422 Interface	PTZ Control Keyboard • Control up to 255 PTZ Cameras • Multi Protocols Supports • OSD Menu, 3D Joystick Control • RS-485 and RS-422 Interface	PoE Extender • Simultaneous Transmission of Power and IP Data with the Cat 5 Cable • Supporting TCP Speed of 100Mbps Full Duplex • The Maximum Transmission Distance for Ethernet Data Can be Extended More than 100m Depending on the Camera and Power Source • A Camera with up to 11.7W Power Consumption Can be Connected as Power is Supplied Through the PoE Hub • Built-in Surge Protection Circuit for Safety
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Lens Description	Model	Image	Mount	Image Format	Resolution	Focal Length	Back Focal Length	Zoom Ratio	F.No	Angle of View	Operation			Dimensions W x H x D (mm / inch)	Weight (g / lb)
											Iris	Focus	Zoom		
Varifocal Lens	SLA-M8550D		CS	1/2.8"	3Megapixel	8.5 ~ 50mm (0.33" ~ 1.97")	9.4 ~ 10.7mm (0.37" ~ 0.42")	5.9	F1.6	42.3° ~ 7.5°	DC			46 x 60 x 58.2mm (1.81" x 2.36" x 2.29")	80g (0.17 lb)
	SLA-M2890DN					2.8 ~ 9mm (0.11" ~ 0.35")	7.5 ~ 15.9mm (0.30" ~ 0.63")	3.2	1.2	134.2° ~ 42.7°				45.0 x 51.5 x 54.3mm (1.77" x 2.03" x 2.14")	84.0g (0.19 lb)
	SLA-M2890PN					P-Iris	Manual	Manual	82.1g (0.18 lb)						
	SLA-2812DN			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			37.5 x 48.0 x 56.0mm (1.48" x 1.89" x 2.20")	71g (0.16 lb)
	SLA-550DV					5 ~ 50mm (0.20" ~ 1.97")	10.5 ~ 10.6mm (0.41" ~ 0.42")	10	1.3	64.0° ~ 6.9°				45.0 x 56.2 x 57.8mm (1.77" x 2.21" x 2.28")	100g (0.22 lb)

PERIPHERALS

					
SHP-1680F	SHP-3701H	SHP-3701F	SHD-3000F1	SHD-3000F2	SHD-3000F3
In-Ceiling Housing for PTZ & Dome	Outdoor Housing for PTZ Dome	In-Ceiling Housing for Dome	In-Ceiling Housing for PTZ Dome	In Ceiling Housing for Dome	In Ceiling Housing for Dome
• For indoor applications • Polycarbonate • Can be used with XNP-6120H XNV-6120/6120R/6085 XND-6085/6085V	• 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	• 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	• 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	• For indoor applications • Polycarbonate • Can be used with QND-6070R/7080R SCD-5080/5082/5083/5083R/6021/6083R SUD-5082 HCD-7070R/6080R/6070R	• 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-5083R/L6083R SCV-5082/5082R/5083/5083R/5085/6023R/6083R HCV-7070R/7010R/7020R/7030R/6080R/6070R
					
SHD-3000F4	SHF-1500F	SBP-300HM1	SBP-301HM2	SBP-301HM3	SBP-301HM4/300HM5
In Ceiling Housing for Dome	In-Ceiling Housing for Dome	Hanging Mount	Hanging Mount	Hanging Mount	Hanging Mount for 3M / 5M Fisheye Cameras
• For indoor applications • Polycarbonate • Can be used with PND-9080R XND-6080/6080R/6080RV/6080V/8080R/8080RV	• For indoor applications • Polycarbonate • Can be used with PNF-9010R XNF-8010R	• 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	• 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	• 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	• Aluminum • Can be used with PNF-9010R/9010RV/9010RVM SNF-7010/7010V/7010VVM SBP-300CM/300LM/300WM/300WM1 (SBP-301HM4) • Can be used with XNF-8010R/8010RV/8010RVM SNF-8010/8010VVM SBP-300CM/300LM/300WM/300WM1 (SBP-301HM5)
					
SBP-300HM6	SBP-300HM7	SBP-300HM8	SBP-122HM	SBP-168HM	SBP-329HM
Hanging Mount	Hanging Mount	Hanging Mount	Hanging Mount	Hanging Mount	Hanging Mount
• 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	• 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	• 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	• 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	• Aluminum • Can be used with XNP-6120H	• Aluminum • Can be used with PNM-9080VQ/9081VQ

PERIPHERALS

 SBP-201HM/317HM	 SBP-300HF/301HF/302HF	 SBP-300TM/300TM1	 SBP-160TM	 SBP-300WM1/300WM	 SBP-300CM/300LM
Hanging Mount - Aluminum - Can be used with PNM-9020V (SBP-201HM) - Can be used with PNM-9080VQ/9081VQ (SBP-317HM)	Built-in SFP Install Base for PTZ Cameras - Aluminum - LC SFP port type 100Mbps Ethernet speed (Default speed : 1000Mbps) - IEEE 802.3u, IEEE 802.3z Support - Audio input/output, 3.5mm type 24V AC, IP66, IK10, -50°C to +55°C - Can use with SNP-6320H/5430H (SBP-300HF) - Can use with SNP-6321H/5321H/L6223H/L5223H (SBP-301HF) - Can use with PNP-9200RH/XNP-6370RH (SBP-302HF)	Tilt Mount for 3M/5M Fisheye Cameras - 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)	Tilt Mount - Aluminum - Can be used with PNV-9080R XND-6085/6085V XNV-6012/6012R/6080R/6085R/8080R SNV-5084/5084R/6084R/6085R/7084R/7084R/8080R/8081R SCV-6081R	Wall Mount - Aluminum + SECC - Can be used with SBP-300NB/300B/300PM/300KM	Ceiling Mount / Parapet Mount - Aluminum + SECC - Can be used with hanging mount and outdoor PTZ
 SBP-137WM	 SBP-300WM0/120WM	 SBP-300PM/302PM	 SBP-300KM	 SBP-300PMs	 SBP-300KMS
Smoked Dome Cover Wall Mount - Alluminum and Poly Carbonate - Can be used with QNV-6010R/6020R/6030R/6070R/7010R/7020R/7030R/7080R XNV-6010/602/8020R/8030R/8040R HCV-6070R/6080R/7010R/7020R/7030R/7070R/SCV-5082/5082R/5083/5083R/5085/6023R/6083R SNV-L5083R/L6083R	Wall Mount - 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/L6013/L6012/L5083R/L5013 SCD-6083R/6023R/6021/5083R/5083/5082/5080 (SBP-120WM)	Pole Mount - 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)	Corner Mount Base - SECC - Can be used with SBP-300B/300WM1/300WM/300LM	Pole Mount - Stainless Steel 316 - Can be used with SBP-300B/300WM1/300WM/300LM	Corner Mount Base - Stainless Steel 316 - Can be used with SBP-300B/300WM1/300WM/300LM
 SBP-300B	 SBP-300NB	 SBV-160WC	 SBV-120WC	 SBV-136B/158G	 SBF-100B1/SBO-100B1
Wall Mount Base - Aluminum + SECC - Can be used with SBP-300PM/300KM	Installation Box - Steel - Can be used with SBP-300WM/300WM1/300KM/300PM	Weather Cap - 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	Weather Cap - Alluminum and Poly Carbonate - Can be used with XNV-6010/6020/8020R/8030R/8040R QNV-6010R/6020R/6030R/7010R/7020R/7030R	Back Box - Aluminum - Can be used with XNP-6040H SCV-5082/5082R/5083/5083R/5085/6023R/6083R SNV-L5083R/L6083R QNV-6070R/7080R (SBV-136B) HCV-6070R/6080R/7010/7020/7030R/7070R - Can be used with PNV-9080R XNV-6080/6080R/8080R SNV-5084/5084R/6084/6084R/6085R/7084/7084R/8080/8081R SCV-6081R (SBV-158G)	Back Box - 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

PERIPHERALS



SHB-4300H/4300H1/4300H2/4300HP

fixed Housing

- Aluminum diecasting construction
- Fully cable managed bracket
- Built-in fan & heater
- Support three cable glands, IP66



SHB-4200/4200H

fixed Housing

- Support two cable glands
- Built-in fan & heater : SHB-4200H



STH-200

fixed Housing

- For fixed camera application
- Wall/ceiling installations
- Easy to install side open type



STB-400

fixed Mount

- Bracket for STH-500/200
- Alluminum and Steel material



STB-4150V

fixed Mount

- Bracket for box cameras
- Alluminum and Steel material



SPB-IND5

Smoked Dome Cover

- Poly Carbonate + Poly Carbonate
- Can be used with
SCD-6081R
SND-5083/5084/6083/6084/6084R/
7084



SPB-IND6

Smoked Dome Cover

- Poly Carbonate + Poly Carbonate
- Can be used with
SCD-5080/5082/5083/5083R/6021/6083R
SND-6011R
SUD-5082
QND-6070R/7080R



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-IND81

Smoked Dome Cover

- Poly Carbonate + Poly Carbonate
- Can be used with
XND-6080/6080R/8080R



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

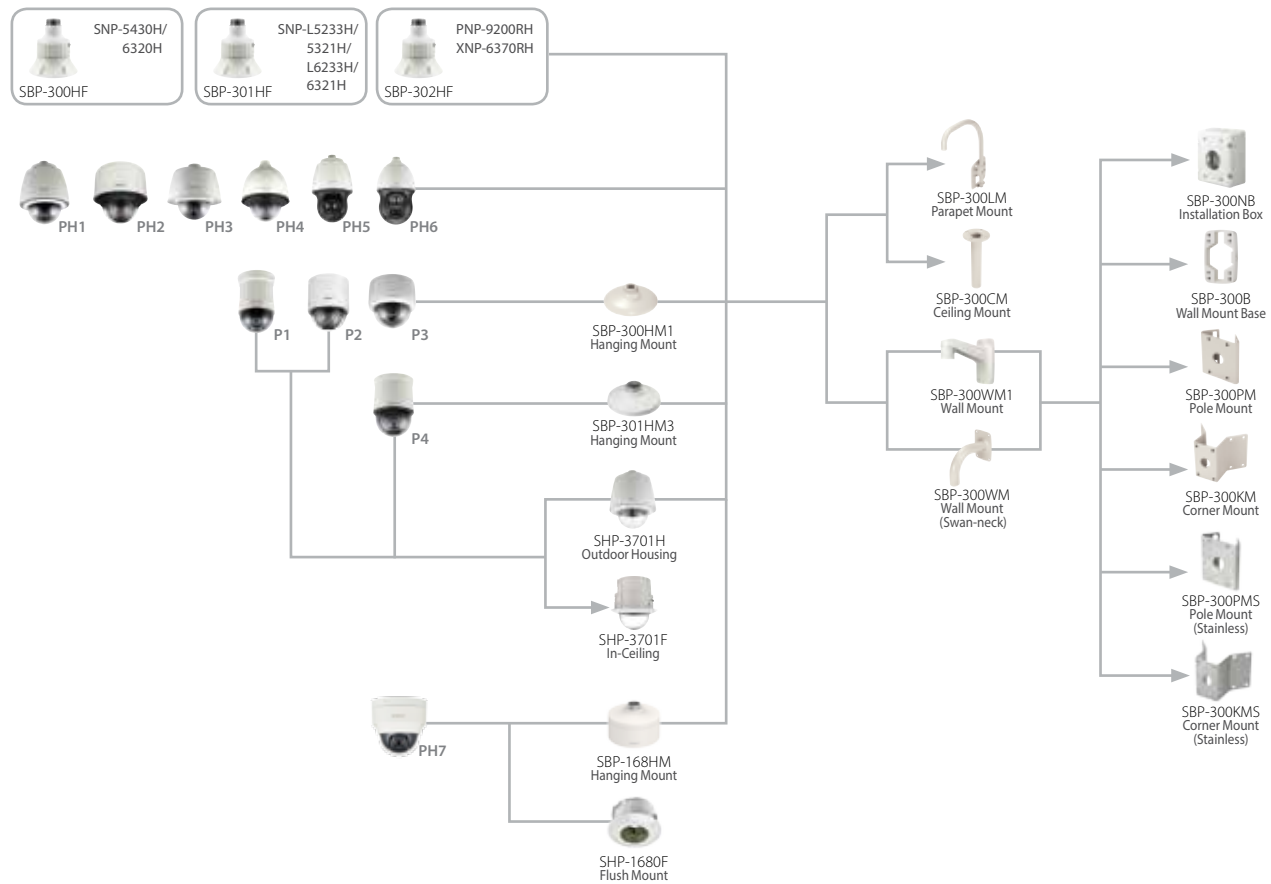
Type	Vandal-Resistant						Indoor Dome					
Shape												
Color	Ivory											
Model	SCV-2060/2080/ 3080/3120 SNV-3080/3082/ 3120/5080/ 5080R/7080/ 7080R/7082	SCV-2081/2081R/ 2082R/3081/ 3082/3083 SNV-1080/1080R	PNV-9080R XNV-6080/6080R/ 8080R/6085R/ 6120/6120R SCV-6081R SNV-5084/5084R/ 6084/6084R/ 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

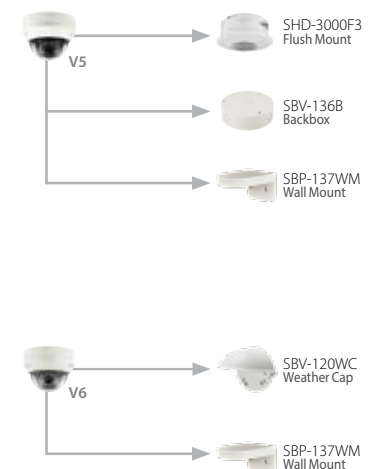
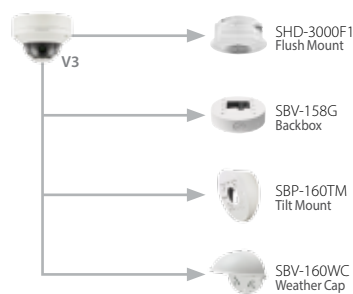
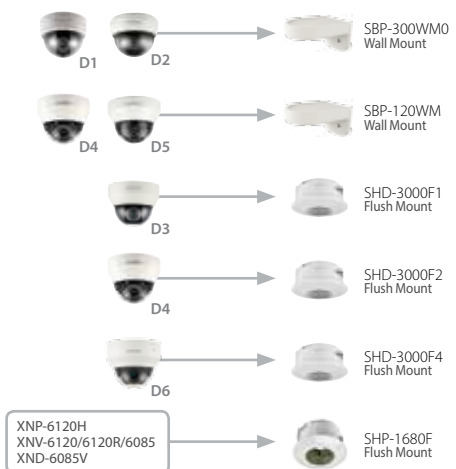
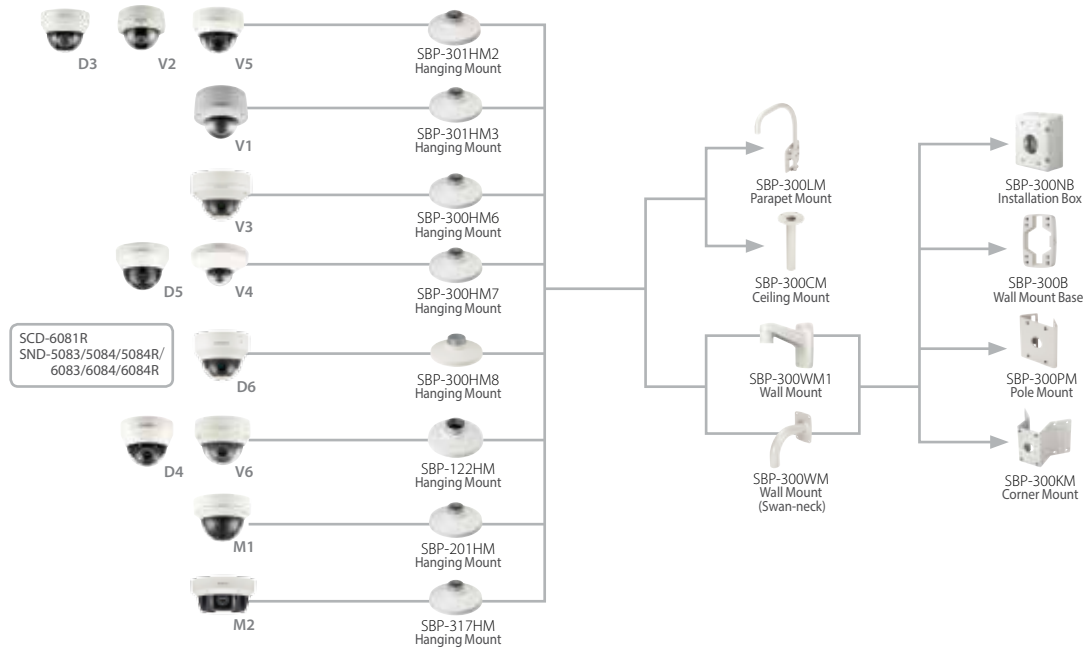
ACCESSORIES CONFIGURATION

PTZ ACC



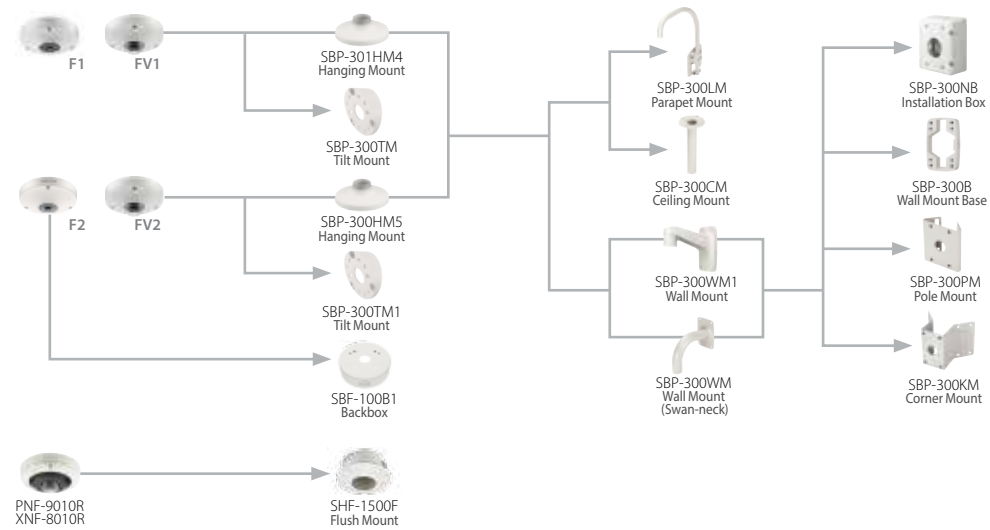
ACCESSORIES CONFIGURATION

DOMESTIC ACC

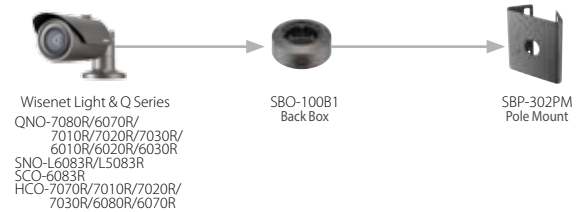


ACCESSORIES CONFIGURATION

FISHEYE ACC

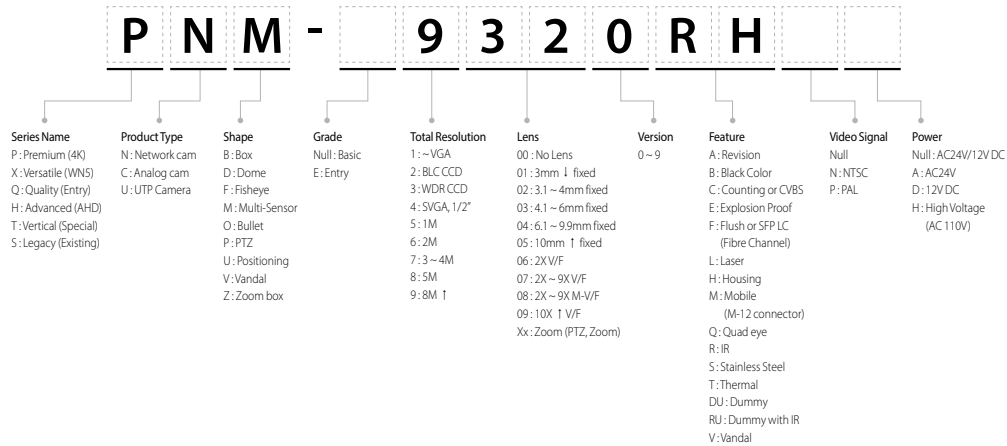


BULLET ACC

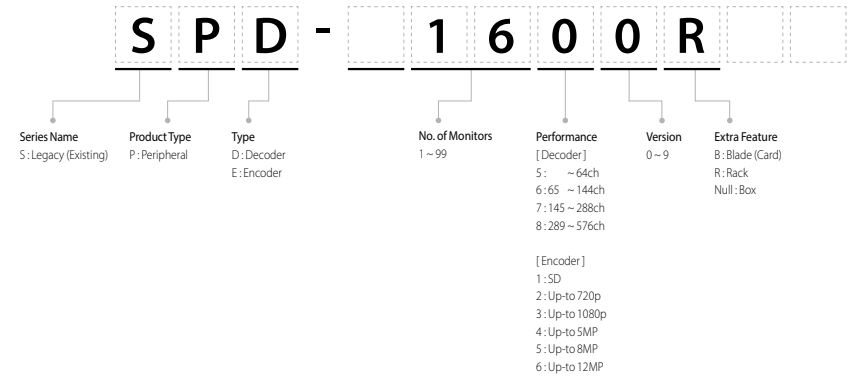


PRODUCT NAMING RULE

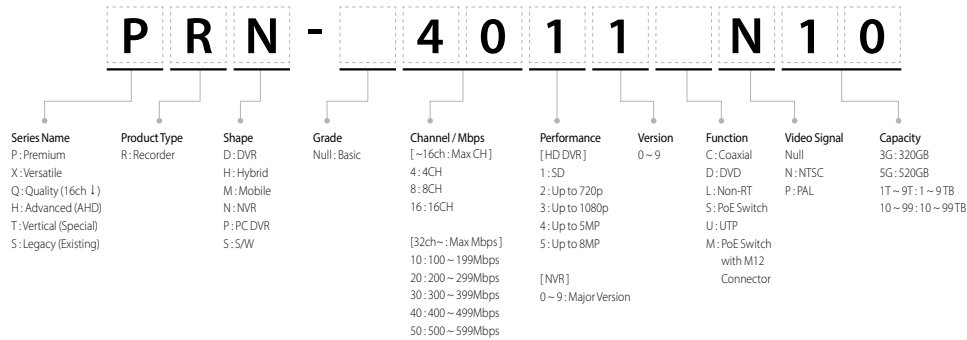
Camera



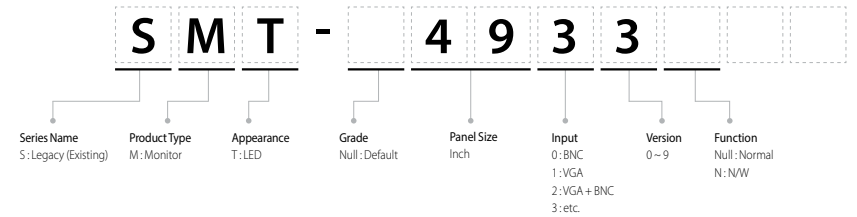
Decoder/Encoder



Recorder



Monitor



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