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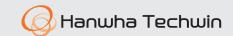
* Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.





WISENET

Undertaking Tougher Missions in Challenging Environment



Robust Security Monitoring in Safe and Hazardous Zones and Reliable Analytics for Any Threats

The importance of video surveillance cameras is more prominent in special circumstances than anywhere else.

Blind zones and special facilities such as chemical plants are often impossible to monitor, yet they require unmanned security 24/7 in case of accidents or intrusion. Hanwha Techwin provides the most advanced security solutions to secure people, property and data with a product lineup such as cameras with stainless steel parts, explosion-proof cameras, and thermal cameras for monitoring coastal areas, national borders and industrial plants all of which are hard to keep watch with human eyes.



02 03



WISENET X series

Why Stainless Steel Cameras?

Compared to conventional materials for surveillance cameras housings, stainless steel is more resistant to







Wisenet adopted 316L austenitic stainless steel that provides high toughness, from elevated temperatures up to 55°C (131°F) to far blow freezing down to -40°C (-40°F). Wisenet stainless steel cameras provide not only long term value by preventing rapid deterioration and premature replacement, also hygiene conditions and aesthetic appearance.

Applications for stainless steel cameras include:

Marine, Mining, Oil & gas, Food processing, Medical/Hospitals, Clean rooms and so on





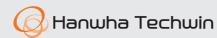


Clean rooms





Protection against corrosive elements



True WDR performance

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





X 150dB WDR only available in 2MP X series

Improve bandwidth by up to 99% using WiseStream ${\rm I\hspace{-.1em}I}$

When Hanwha Techwin's original video compression technology WiseStreamII is combined with H.265 compression, the bitrate data data is reduced by up to 99% compared to current H.264 technology. The costs of configuring and maintaining the system are also greatly reduced, while still maintaining the same pixels and high quality.



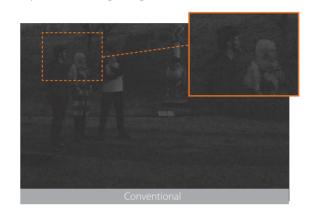
WiseStream II OFF: 7160kbps WiseStream II ON: 74kbps



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

Clearer, sharper images in low light environments

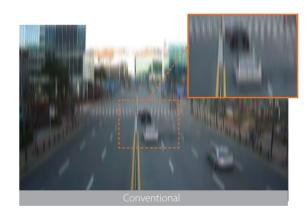
Wisenet X series achieves optimal performance in low-light conditions by capturing and producing crystal-clear images regardless of the environment or time of day.





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

Advances in Wisenet image stabilization technology allow for the reduction of motion blur caused by wind or vibration. A gyroscopic sensor plus DIS technology is specifically added to the Wisenet X series cameras resulting in sharp, stable images.





Fog Detection

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





06 07



Enhanced Video / Audio Analytics

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

Loitering detection

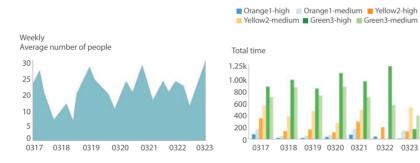
This feature detects when an object remain in a designated area longer than the time threshold set by user.



Queue management

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





Sound classification

Wisenet X series camera help user respond immediately in case of situation in danger, so that can classify sound such as gunshot, glass breakage, scream and explosion.









More convenient installation with USB

Wisenet X series can connect cameras and mobile devices through USB and Wi-Fi. View angles can be checked immediately after installation using a smartphone. No additional devices are required, saving you time and money.

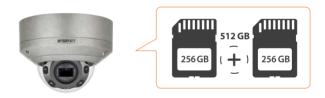






Dual SD slots

Dual SD slots allow up to 512 GB to be saved automatically to the camera, keeping data safe in the event of an unstable network. Obviously this allows to record more video footage than single SD slot.



Handover to PTZ

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

X XNP-6370RH/6320H/6320, PNP-9200RH



08 09



Product Specifications







XNV-6080RS

	XNV-8080K3	XIVV-0080R3
Resolution	5MP	2MP
Imaging Device	1/1.8" 6M CMOS	1/2.8" 2M CMOS
Video Compression	H.265, H.264, MJPEG	
Resolution / Frame Rate	5M / 30fps	2M / 60fps
Streaming Capacity	Multiple (Up to 10 Profiles)	
Max. User Access	20 (Unicast)	
Min. Illumination	Color: 0.07Lux, B/W: 0Lux (IR LED on)	Color: 0.015Lux, B/W: 0Lux (IR LED on)
Video Output	CVBS 1.0Vpp, Micro USB type B	
Lens	3.9 ~ 9.4mm (2.4x) motorized V/F (F1.3)	2.8 ~ 12mm (4.3x) motorized V/F (F1.4)
Angular Field of View	H:92.1°(Wide) ~ 38.7°(Tele) / V:67.2°(Wide) ~ 29.0°(Tele) / D:119.9°(Wide) ~ 48.6°(Tele)	H: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	
R Viewable Length	50m (164.04ft)	
Pan / Tilt / Rotate	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	
Day & Night	True (ICR)	
Backlight Compensation	WDR (120dB)	WDR (150dB)
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	
Digital Image Stabilization	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	
Protocol	ONVIF profile S/G, SUNAPI	
Alarm I/O	1/1	
Audio	Bi-Directional	
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	
Environment Protection	IP66, NEMA 4X, IK10+	
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	
Power	Max. 11.5W(12V DC), Max. 12.95W(PoE), Max. 14W(24V AC)	Max. 14W (24V AC) Max. 11.5W (12V DC) Max. 12.95W (PoE)
Dimensions (WxHxD) / Weight	Ø 162 X 120.5mm (Ø6.38" x 4.74") 2.68kg(5.91lb)	Ø162 x 120.5mm (Ø6.38" x 4.74") 2.68kg (5.91 lb)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification Hallway View, SUS316L	

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	XNV-6120RS	XNP-6320HS
Resolution	2MP	
Imaging Device	1/2.8" 2M CMOS	
Video Compression	H.265, H.264, MJPEG	
Resolution / Frame Rate	2M / 60fps	
Streaming Capacity	Multiple (Up to 10 Profiles)	
Max. User Access	20 (Unicast)	
Min. Illumination	Color: 0.03Lux, B/W: 0Lux (IR LED on)	Color: 0.05Lux, B/W: 0.005Lux
Video Output	CVBS 1.0Vpp, Micro USB type B	
Lens	5.2 ~ 62.4mm (Optical 12x) F1.6(Wide) / F3.0(Tele)	4.44 ~ 142.6mm(Optical 32x) F1.6 (Wide) / F4.4 (Tele)
Angular Field of View	H:54.58°(Wide) ~ 5.30°(Tele) / V:32.19°(Wide) ~ 3.00°(Tele) / D:61.40°(Wide) ~ 6.06°(Tele)	H:61.8°(Wide) ~ 2.19°(Tele) / V:36.2°(Wide) ~ 1.24°(Tele)
Focus Control	Auto / Manual / One shot AF	Auto / Manual / One shot AF
IR Viewable Length	70m (229.66ft)	-
Pan/Tilt/Rotate	0°~354°/0°~75°/0°~355°	360° Endless / 210° (-15° ~ 195°)
Day & Night	True (ICR)	
Backlight Compensation	WDR (150dB)	
Digital Noise Reduction	SSNRV (2D+3D Noise filter)	
Digital Image Stabilization	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, Digital auto tracking, Sound classification	
Protocol	ONVIF profile S/G, SUNAPI	
Alarm I/O	1/1	4 / 2 (Relay)
Audio	Bi-Directional	
Edge Storage	SD/SDHC/SDXC, NAS, Local PC	
Environment Protection	IP66, NEMA 4X, IK10+	IP67, IP66, NEMA4X, IK10
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F)	-50°C ~ +55°C (-58°F ~ +131°F) (24V AC) * Start up above -40°C (-40°F) -35°C ~ +55°C (-31°F ~ +131°F) (PoE+) * Start up above -25°C (-13°F)
Power	Max. 14W (24V AC), Max. 11.5W (12V DC), Max. 12.95W (PoE)	Max. 24.0W - Heater off (24V AC, PoE+), Max. 65.0W - Heater on (24V AC)
Dimensions (WxHxD) / Weight	Ø162 x 134.5mm (Ø6.38" x 5.3") 2.92Kg (6.44 lb)	Ø227 x 295.5mm (Ø8.94" x 11.63") 5.3Kg (11.68 lb)
Additional Features	Handover, WiseStream II, Advanced video analytics, Sound classification, Hallway View, SUS316L	WiseStream II, Advanced video analytics, Auto Tracking, SUS316L, Sound classification

 $[\]hbox{\rm *The lastest product information / sepecification can be found at handwa-security.com}$