

**SAMSUNG**  
WISeNET

**4K**  
**UHD**



**WISeNET P** series  
Premium 4K Ultra HD

 **Hanwha**  
Techwin America



# Wisenet P series

Hanwha Techwin enhances its legacy in video surveillance with Wisenet P Series. Featuring 12MP resolution, H.265 codec, WiseStream technology, PTZ hand-over and advanced video analytics, see why Wisenet P Series is the ideal solution for retail, transportation, banking, corporate facilities and education.

## Features

- Max. 12MP resolution
- Triple Codec H.265/H.264/MJPEG
- Max. 20fps@12MP, Max. 30fps @ 4K (Bullet, Dome)
- Max 20fps @12MP, Max 25fps @ 9MP (4k Fisheye)
- WiseStream technology
- True WDR (120dB)
- Hallway view (Rotate 90°/270°)
- Defog, motion detection, defocus detection, tampering
- Video analytics (enter/exit, appear/disappear, virtual line)
- PTZ hand-over feature

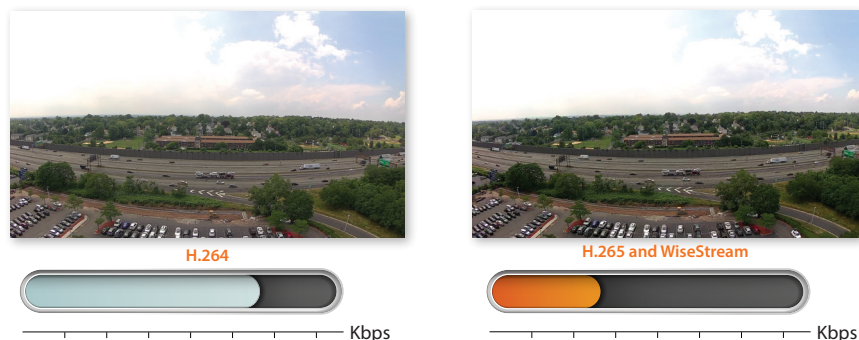
## Complete line-up of indoor and outdoor cameras

Wisenet P is available in bullet, dome, and fisheye form factors.

	BULLET	INDOOR DOME	OUTDOOR VANDAL DOME	FISHEYE
12MP	 PNO-9080R	 PND-9080R	 PNV-9080R	 PNF-9010R/RV/RVM

## Improved bandwidth with WiseStream technology

The streaming performance of our new Wisenet series cameras is greatly enhanced through WiseStream, Hanwha Techwin's advanced compression technology. WiseStream significantly reduces bandwidth consumption when used with Dynamic GoV control technology. When WiseStream and H.265 are used together, further reductions can be achieved compared with H.264 video compression.



## 120dB True Wide Dynamic Range & P-Iris

True Wide Dynamic Range improves images in high-contrast environments while P-Iris control sets the optimal iris position to reduce optical errors and to maximize image quality.



## PTZ Hand-Over

Hanwha's unique PTZ hand-over feature allows an IP PTZ camera to receive an alarm trigger from a fixed camera on the same IP video surveillance system. Once the notification is received, the PTZ camera will zoom into the assigned camera pre-set location. This feature improves the efficiency of the surveillance system by decreasing the reliance on the system operator to track events, and by increasing the likelihood that critical events in a surveillance area will be captured and recorded.



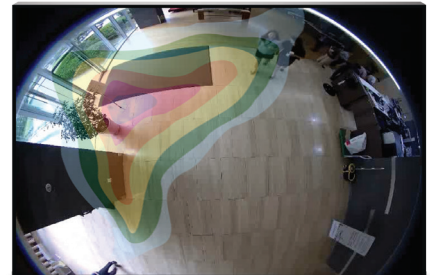
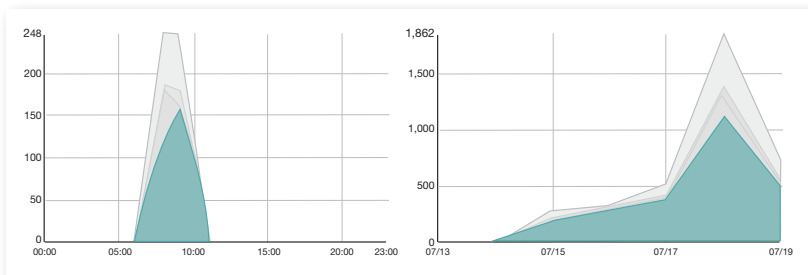
## Defocus Detection

The entire Wisenet P series cameras feature defocus detection. If a camera goes out of focus, an alarm notification will be sent to users, allowing them to adjust camera focus.



## People Counting & Heatmap Function (4K Fisheye)

Our P Series fisheye cameras supports license-free People Counting business analytics. This feature supports data search, report and graph function.



## Simple Focus (4K Fisheye)

Premium fisheye series supports Simple Focus which is useful during installation. Manual focus is not necessary, just a simple click of the icon is needed to focus the camera.



## On-board Advanced Video Analytics



### Wisenet P series



PNO-9080R



PND-9080R



PNV-9080R



PNF-9010R/9010RV/9010RVM

	Resolution	12MP	12MP	12MP	12MP
VIDEO	Imaging Device	1/1.7" 12.4M CMOS	1/1.7" 12.4M CMOS	1/1.7" 12.4M CMOS	1/1.7" 12.4M CMOS
	Video Compression Format	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
	Resolution / Max. Frame Rate	12M / 20fps, 8M / 30fps	12M / 20fps, 8M / 30fps	12M / 20fps, 8M / 30fps	12M / 20fps, 9M / 25fps
	Streaming Capacity	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)	Multiple (Up to 3 profiles)
	Max. User Access	20 (Unicast)	20 (Unicast)	20 (Unicast)	20 (Unicast)
	Min. Illumination (30 IRE)	Color : 0.3Lux B/W : 0Lux (IR LED on)	Color : 0.3Lux B/W : 0Lux (IR LED on)	Color : 0.3Lux B/W : 0Lux (IR LED on)	Color : 0.3Lux B/W : 0Lux (IR LED on)
	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)	2.1mm fixed (F2.2)
	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 : 180° / V : 180° / D : 180°
	Focus Control	Simple focus (Motorized V/F) / Manual	Simple focus (Motorized V/F) / Manual	Simple focus (Motorized V/F) / Manual	Simple focus / Manual
OPERATIONAL	IR Viewable Length	40m (131.23ft)	30m (98.43ft)	40m (131.23ft)	15m (49.21ft)
	Pan / Tilt / Rotate	-	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	0° ~ 354° / 0° ~ 67° / 0° ~ 355°	-
	Day & Night	True (ICR)	True (ICR)	True (ICR)	True (ICR)
	Backlight Compensation	WDR (120dB)	WDR (120dB)	WDR (120dB)	WDR (120dB)
	Digital Noise Reduction	SSNR	SSNR	SSNR	SSNR
	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, Virtual line, Enter / Exit, (Dis)Appear, Audio detection, Defocus detection
FEATURES	Protocol	ONVIF profile S & G, SUNAPI, SVP, Wisenet Open Platform	ONVIF profile S & G, SUNAPI, SVP, Wisenet Open Platform	ONVIF profile S & G, SUNAPI, SVP, Wisenet Open Platform	ONVIF profile S&G, SUNAPI, Wisenet Open Platform
	Alarm I/O	1 / 1	1 / 1	1 / 1	1 / 1
	Audio	Bi-directional	Bi-directional	Bi-directional	Bi-directional
	Edge Storage	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	SD/SDHC/SDXC, NAS, Local PC	micro SD/SDHC/SDXC, NAS, Local PC
	Environment Protection	IP66, IK10	IK08	IP66, IP67, IK10	IK10 (PNF-9010R), IP66, IK10 (PNF-9010RV/9010RVM)
	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)	-10°C ~ +55°C (+14°F ~ +131°F) (PNF-9010R) -40°C ~ +55°C (-40°F ~ +131°F) (PNF-9010RV/9010RVM)
	Power	AC 24V (Max. 12.43W / 14.08W - Heater on) DC 12V (Max. 11.77W / 12.95W - Heater on) PoE (Max. 10.43W) / 11.55W - Heater on	DC 12V (Max. 9.5W) PoE (Max. 10.5W)	AC 24V (Max. 12.43W / 14.08W - Heater on) DC 12V (Max. 11.77W / 12.95W - Heater on) PoE (Max. 10.43W) / 11.55W - Heater on	DC 12V (Max. 11W), PoE (Max. 12W) (PNF-9010R) DC 12V (Max. 12W), PoE (Max. 12.95W) (PNF-9010RV/RVM)
	Dimensions (WxHxD) / Weight	82.4 x 87.0 x 348.3mm (3.24" x 3.43" x 13.71") (Without sunshield) 1.4Kg (3.09 lb)	Ø140.8 x 113.0mm (Ø5.54" x 4.45") 610g (1.34 lb)	Ø160.0 x 118.5mm (Ø6.3" x 4.67") 990g (2.18 lb)	Ø146.0mm x 63.4mm (Ø5.75" x 2.5") 845g (1.86 lb) (PNF-9010R/9010RV), 835g (1.84 lb) (PNF-9010RVM)
	Additional Features	Hallway view, P-Iris, Defog, WiseStream	Hallway view, P-Iris, Defog, WiseStream	Hallway view, P-Iris, Defog, WiseStream	M12 connector (PNF-9010RVM), Built-in mic, On board dewarping, WiseStream, Heatmap, People counting