

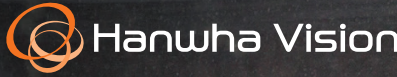
HEAD OFFICE

6, Pangyo-ro 319beon-gil, Bundang-gu, Seongnam-si,
Gyeonggi-do, 13488 South KOREA Tel.: 1588-5772
For more information, please visit our website hanwhavision.com

Global Networks

Hanwha Vision America
Hanwha Vision Europe
Hanwha Vision MEAFZE
Hanwha Vision Oceania
Hanwha Vision Singapore Branch
Hanwha Vision Hanoi / Ho Chi Minh Office

Scan this
QR code to find
our official partners.



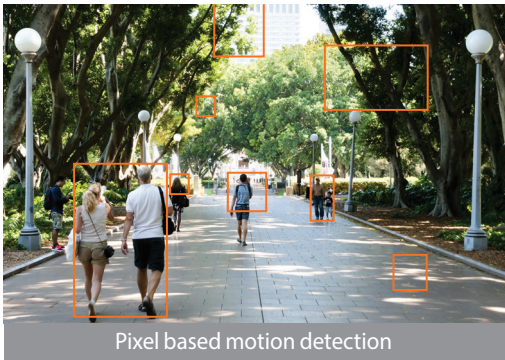
P series
AI Cameras

© 2024 Hanwha Vision Co., Ltd. All rights reserved.
DESIGN AND SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE
Under no circumstances, this document shall be reproduced, distributed or changed,
partially or wholly, without formal authorization of Hanwha Vision Co.,Ltd.
Hanwha Vision is formerly known as Hanwha Techwin.

REVISED 06-2024(M.H)

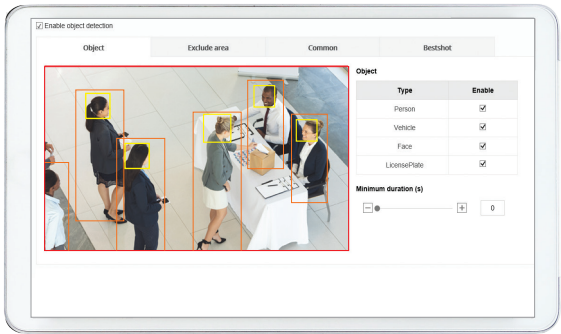
Increase event monitoring accuracy and operational efficiency by reducing false alarms

The never-ending rush of urban living translates into constant waves of people and vehicles surging through city streets at all hours. As the number of surveillance cameras grows along with the cities, an operator may be presented with too much information to handle, as conventional cameras equipped with motion-based detection generate too many event alarms. With operators under great strain to verify each one, there could be delays in response times. Now, AI algorithms built into P series 4K AI cameras are able to dramatically help improve operator efficiency.



Classify Target Objects with Attributes

P series AI cameras differentiates what it sees into broad categories such as 'Person', 'Face', 'Vehicle' and 'license plate'. Delving deeper, Wisenet AI algorithms are quickly and accurately able to identify the different attributes of the objects within the camera's field of view. For example, the camera sees a person and immediately detects the color of clothing. It is also intelligent enough to distinguish whether the person is wearing glasses or holding a bag. These attributes are then saved as metadata alongside the captured footage.



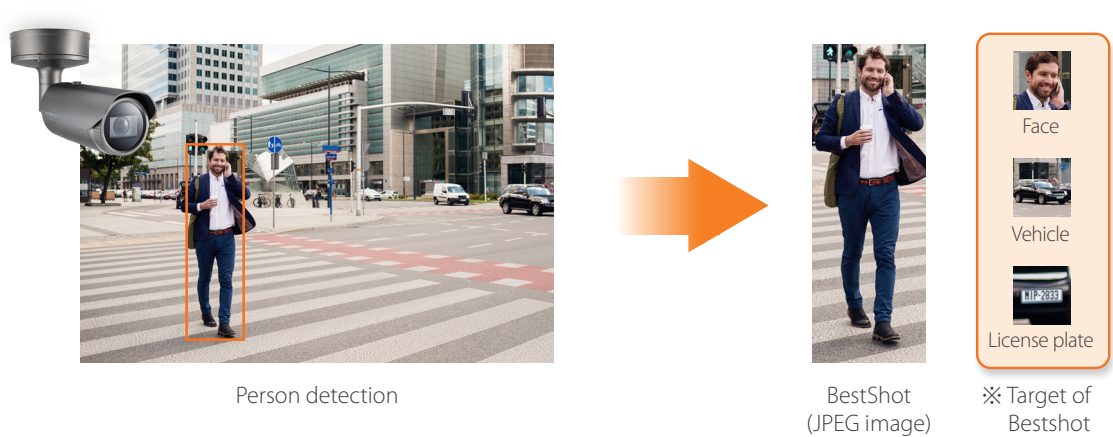
Wisenet Webviewer



Faster forensic data search with bandwidth control

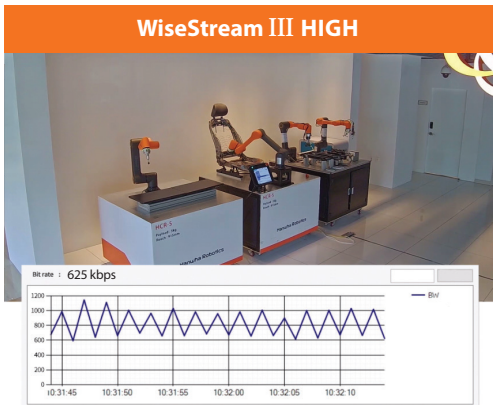
BestShots for objects, Metadata for attributes, minimizing storage and bandwidth requirements

P series AI cameras are equipped with the BestShot feature which ensures that only the most suitable images of classified objects are sent to the backend server. Full video image can be up to 4K resolution to see details of objects, along with tagged attributes metadata. Users have the option to set the image resolution less than 4K for full video streaming or use BestShot to minimize bandwidth and storage requirements.

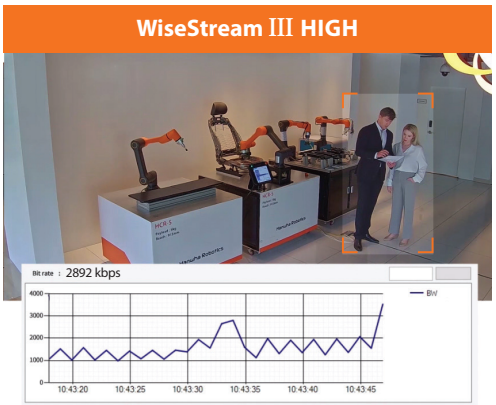


Define importance of objects in the scene, Apply different compression rates accordingly

Powered by AI, WiseStream III identifies major objects and selectively applies compression rates depending on the significance of objects in the video, and WiseStream III analyzes motion in video and applies different compression rates on static and dynamic areas in the video for bandwidth reduction. Hanwha Vision's enhanced compression technology significantly reduces the data size and bandwidth while maintaining the original image quality of significant objects; humans and vehicles.



WiseStream III OFF : 3561 kbps
WiseStream III HIGH : 625 kbps



WiseStream III OFF : 3984 kbps
WiseStream III HIGH : 2892 kbps

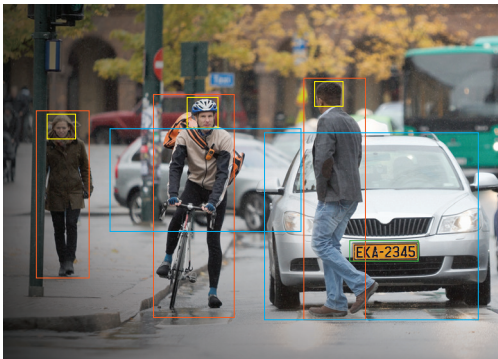
Helping with intelligent management, as well as security

Wisenet SSM, the best partner for AI smart search

P series AI cameras are fully supported by Wisenet SSM Video Management Software (VMS), enabling operators to quickly forensically search for specific events or for objects with defined attributes, by filtering the recorded metadata.

AI camera

Detect and classify objects real-time



* Person, face, vehicle, license plate

Wisenet SSM AI Search

Quickly search based on attributes



Plug-in support for VMS

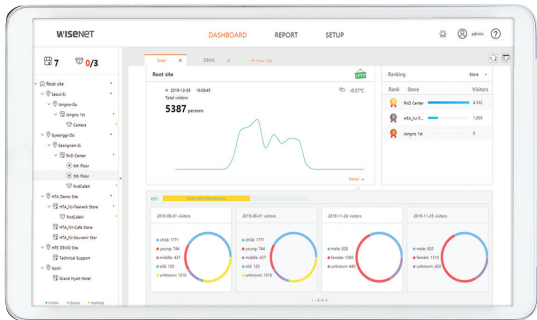
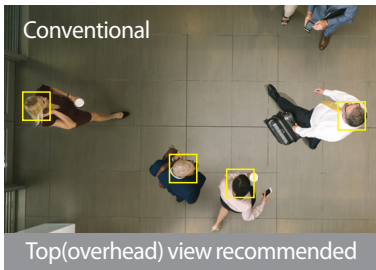
P series AI cameras offers integration of video management system from Milestone, Genetec using **Hanwha's** plugin and Wisenet WAVE. This plugin supports seamless integration so that users can easily search the AI events on Milestone, Genetec, and WAVE including Wisenet SSM.

(Compatible models : Milestone, Genetec, Wisenet WAVE)



Retail Insight v2.0, analyzing customer demographics

Store operators are able to combine P series AI cameras with the Retail Insight v2.0 business intelligence application, to granularly look at what is happening within their stores, with the cameras using attribution identification to help track customer demographics, age and gender.



Wisenet Retail Insight v2.0

Clear and Sharp Image Quality

Enhanced WDR

The enhanced WDR technology(line by line type) built into the P series AI cameras helps produce clear images from scenes containing a challenging mix of bright and dark areas and reduces the ghost effect which can occur with conventional multi-frame WDR.



Digital PTZ

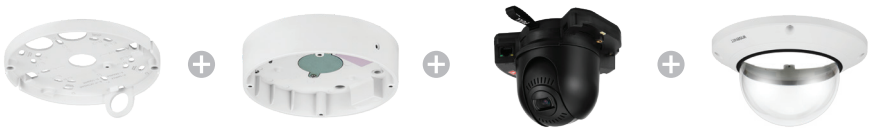
P series AI cameras support 2 channel streaming. Channel 1 can be used for full screen video display with channel 2 simultaneously streaming the digital PTZ auto tracking of an object.



Digital auto tracking of a person

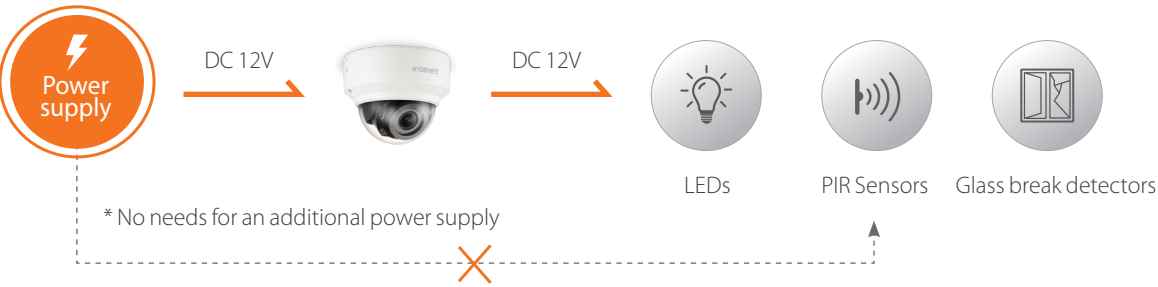
Easy installation with modular structure

The cameras designed to significantly reduce the time normally needed for installation, set-up and maintenance adjustments. With a four-part magnetic modular design which simplifies the installation process, P series AI cameras are equipped with a number of other practical features which help minimize the time installers have to spend on site.



DC output for connected devices

P series AI cameras come with a 12V DC power supply with maximum 50mA to enable connection of sensor devices, eliminating the need for additional power supply. They also have alarm in/out ports so that connected devices such as LEDs can be activated when a camera detects (classifies) a person.






* Example of operation scenario



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

Advances in image stabilisation technology allow for the reduction of motion blur caused by wind or vibration. A gyroscopic sensor plus DIS technology is specifically designed and engineered into select P series AI cameras, resulting in sharp, stable images.



	<div>PNO-A9081R 4K AI IR Bullet Camera</div>	<div>PNV-A9081R 4K AI IR Vandal Dome Camera</div>	<div>PND-A9081RV 4K AI IR Dome Camera</div>
Imaging Device	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS
Min. Illumination	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)
Video Output	CVBS : 1.0 Vp-p	CVB S: 1.0 Vp-p	CVBS : 1.0 Vp-p
Focal Length	4.5~10mm(2.2x) motorized varifocal	4.5~10mm(2.2x) motorized varifocal	4.5~10mm(2.2x) motorized varifocal
Angular Field of View	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)
Pan / Tilt / Rotate	-	0°~360° / -45°~85° / 0°~355°	0°~360° / -45°~85° / 0°~355°
IR Viewable Length	30m(98.42ft)	30m(98.42ft)	30m(98.42ft)
Day & Night	Auto(ICR)	Auto(ICR)	Auto(ICR)
Wide Dynamic Range	120dB	120dB	120dB
Digital Noise Reduction	SSNRV/WiseNRII (Using AI engine)	SSNRV/WiseNRII (Using AI engine)	SSNRV/WiseNRII (Using AI engine)
Digital Image Stabilization	Support(built-in gyro sensor)	Support(built-in gyro sensor)	Support(built-in gyro sensor)
Analytics	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1	1 / 1
Audio I/O	Line in / Line out	Line in / Line out	Line in / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	8MP/30fps	8MP/30fps	8MP/30fps
WiseStream	WiseStream II /WiseStreamIII (Using AI engine)	WiseStream II /WiseStreamIII (Using AI engine)	WiseStream II /WiseStreamIII (Using AI engine)
Streaming	Up to 3 profiles	Up to 3 profiles	Up to 3 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-40°C ~ +55°C (-40°F ~ +131°F) -40°F ~ +60°C (-13°F ~ +140°F) * Start up above -30°C	-40°C ~ +55°C (-40°F ~ +131°F) -40°C ~ +60°C (-13°F ~ +140°F) * Start up above -30°C	-25°C ~ +50°C (-13°F ~ +122°F) / IR LED on -25°C ~ +55°C (-13°F ~ +131°F) / IR LED off
Certification	IP66/IP67, IK10, NEMA4X	IP66/IP67/IP6K9K, IK10+, NEMA4X	IP52, IK10
Power Consumption	PoE+: Max 20.0W, typical 17.00W 12VDC: Max 18.00W, typical 16.00W	PoE+: Max 20.00W, typical 17.00W 12VDC: Max 18.70W, typical 15.00W	PoE+: Max 20.00W, typical 16.00W 12VDC: Max 17.70W, typical 14.00W
Dimensions (WxHxD) / Weight	Ø91.0 x 368.6mm (3.58" x 14.51") (Without sunshield), Weight : 2.48Kg (5.47lb)	Ø180 x 125mm(7.09" x 4.92"), Weight : 1.90Kg (4.19lb)	Ø160 x 125mm(6.30" x 4.92"), Weight : 1.60Kg (3.53lb)
Additional Features	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)



PND-A9081RF
4K AI IR Dome Camera

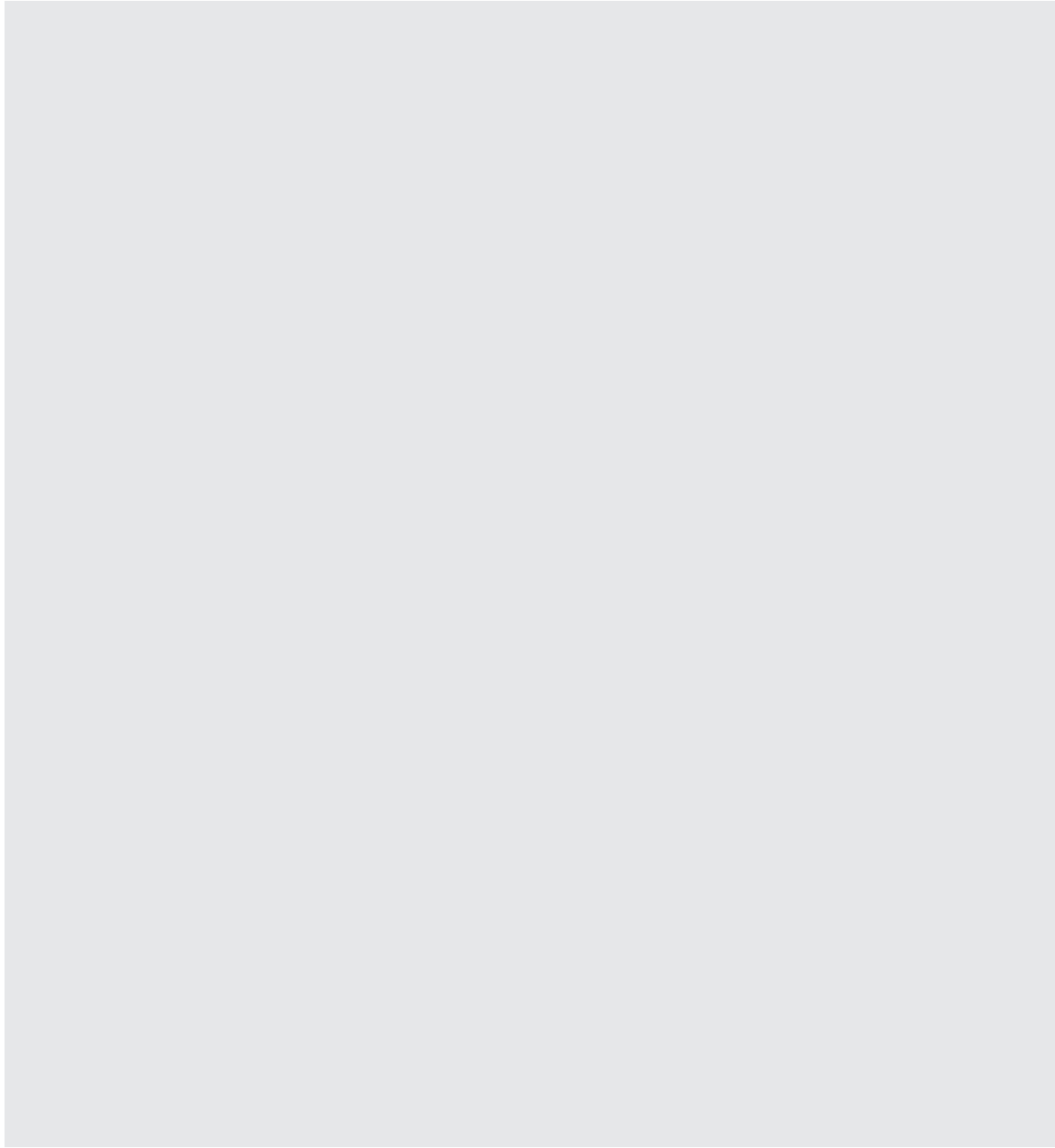


PNB-A9001
4K AI Box Camera

Imaging Device	1/1.8" 8MP CMOS	1/1.8" 8MP CMOS
Min. Illumination	Color : 0.05Lux(F1.6) BW : 0Lux(IR LED on)	Color : 0.03Lux(F1.2, 1/30sec)
Video Output	CVBS : 1.0 Vp-p	CVBS : 1.0 Vp-p
Focal Length	4.5~10mm(2.2x) motorized varifocal	-
Angular Field of View	H: 101.4°(Wide)~45.5°(Tele) / V: 53.6°(Wide)~25.5°(Tele) / D: 120.7°(Wide)~52.3°(Tele)	-
Pan / Tilt / Rotate	0°~360° / -45°~85° / 0°~355°	-
IRViewable Length	30m(98.42ft)	-
Day & Night	Auto(ICR)	Auto(ICR)
Wide Dynamic Range	120dB	120dB
Digital Noise Reduction	SSNRV/WiseNRII (Using AI engine)	SSNRV/WiseNRII (Using AI engine)
Digital Image Stabilization	Support(built-in gyro sensor)	Support(built-in gyro sensor)
Analytics	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification	Object detection (Person/Vehicle/Face/License plate), Audio detection, Sound classification
Business Intelligence	People counting, Queue management, Heatmap	People counting, Queue management, Heatmap
Alarm I/O	1 / 1	1 / 1
Audio I/O	Line in / Line out	Line in / Line out
Video Compression	H.265, H.264, MJPEG	H.265, H.264, MJPEG
Resolution / Max. Frame Rate	8MP/30fps	8MP/30fps
WiseStream	WiseStream II /WiseStreamIII (Using AI engine)	WiseStream II /WiseStreamIII (Using AI engine)
Streaming	Up to 3 profiles	Up to 3 profiles
Edge Storage	Micro SD/SDHC/SDXC	Micro SD/SDHC/SDXC
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform	ONVIF Profile S/G/T SUNAPI(HTTP API) Wisenet open platform
Operating Temperature	-25°C ~ +50°C (-13°F ~ +122°F) / IR LED on -25°C ~ +55°C (-13°F ~ +131°F) / IR LED off	-10°C ~ +55°C (+14°F ~ +131°F)
Certification	IP52, Plenum rate(UL2820)	-
Power Consumption	PoE+: Max 20.00W, typical 16.00W 12VDC: Max 17.70W, typical 14.00W	PoE+: Max 16.50W, typical 12.50W 12VDC: Max 13.50W, typical 10.80W
Dimensions (WxHxD) / Weight	Ø205 x 163mm(8.07" x 4.92"), Weight : 1.95Kg (4.30lb)	73.1 x 66.6 x 147.8mm, Weight : 0.70Kg (1.54lb)
Additional Features	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)	AI : BestShot, Attributes (Person, Vehicle, Face, License plate)

Memo

Memo



Memo

