

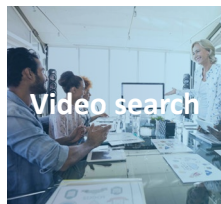


AI CREATES VALUE

Dahua AI Product & Solution Introduction

2.0

What are the current problems?



Massive data, limited value.
Manual query is time consuming and laborious, and there are still possible omissions.
The target video information cannot be found quickly and accurately.



There are loopholes in access control management of important areas.
Access control card was stolen by a third party.
Distracted point access control management is not concentrated, need to swipe multiple times to open the door.
Visitor record traceability.



Too many false alarms, low accuracy.
Bad user experience.
High cost of operation maintenance.
High security risk.



Unable to accurately count these monitoring information.

Dahua AI series products can solve all of these problems and provide you with solutions to suit your needs.

- Face recognition, Feature search and image search can narrow down a query, help you to find the target quickly. And it can generate the trajectory map of the target based on the location information of the query.
- For key areas of access control management can take the face and the access card binding authentication method. By this way you can prevent trailing people from entering.
- The platform centrally manages the access control rights, can lock or recover all doors remotely.
- Face recognition can help you to find the path of each visitor.
- Perimeter Protection can automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. and enables system to act secondary recognition for the targets. Improving alarm accuracy.
- According to the characteristics of structured attributes, statistical analysis and output the report.

AI Applications

In the surveillance industry, primary target objects of deep learning algorithms are people and vehicles. Taking this into account, Dahua provides the following technology suitable for various applications.



Metadata



Face Recognition



ANPR



Metadata Search

Deep Learning



Face Search



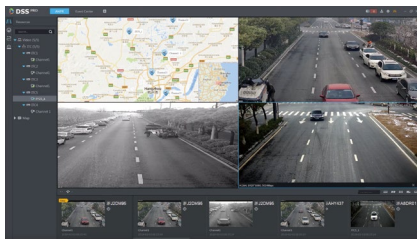
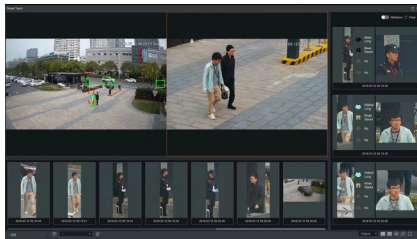
Flow Path



Perimeter Protection



People Counting



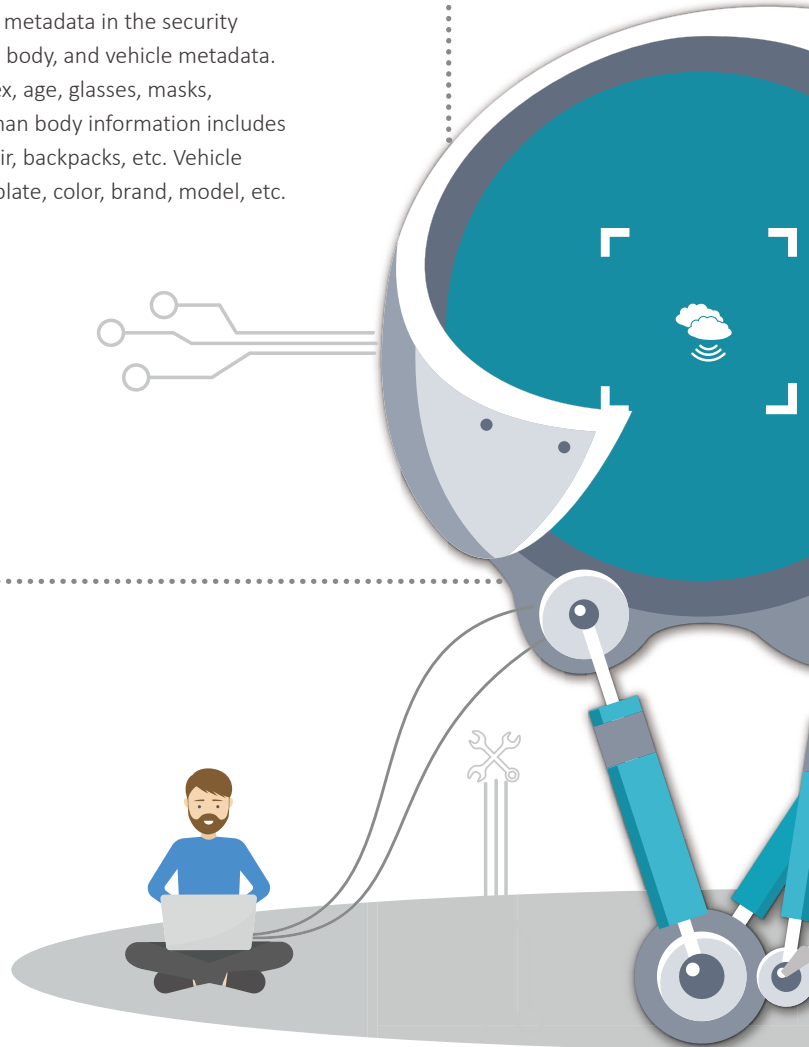
Metadata

Metadata is feature attribute information extracted from a target object which can be used for data retrieval. Currently, there are three main kinds of metadata in the security industry: human face, human body, and vehicle metadata. Facial information includes sex, age, glasses, masks, expressions, beards, etc. Human body information includes tops, pants, clothing color, hair, backpacks, etc. Vehicle information includes license plate, color, brand, model, etc.



ANPR

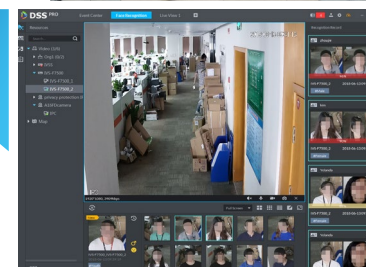
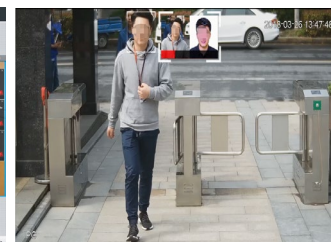
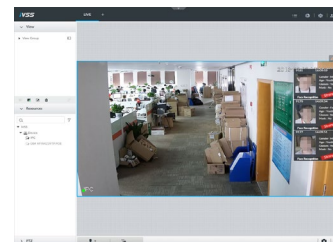
ANPR (Automatic Number Plate Recognition) is a technology that uses optical character recognition on images to read license plates with high recognition accuracy. ANPR applications include toll collection, traffic monitoring and security, speed and journey time measurement, parking and access control, etc.





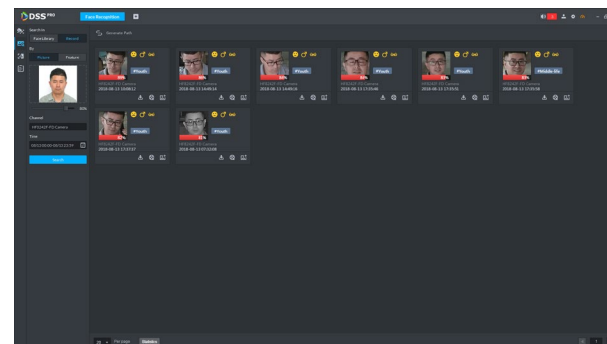
Face Recognition

The face recognition function can be used to determine whether faces are present in the input face image or video. If faces are present, the position and size of each face and the position of the main features of each face are further given, and according to the information, the identity characteristics of each face are extracted and the human face will be modeled. Each face model is compared with face models stored in the known faces database to identify each face.



Face Search

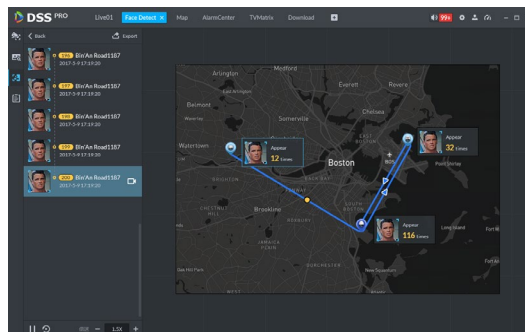
Image search function refers to the use of facial, human body, or vehicle images to search for related pictures and video information.





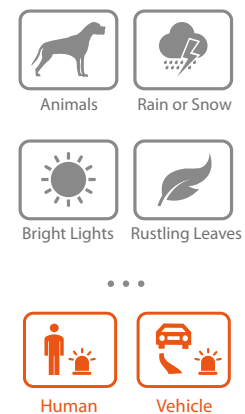
Flow Path

Video frames from AI cameras at different locations are integrated to trace target movement via image matching and image searching techniques.



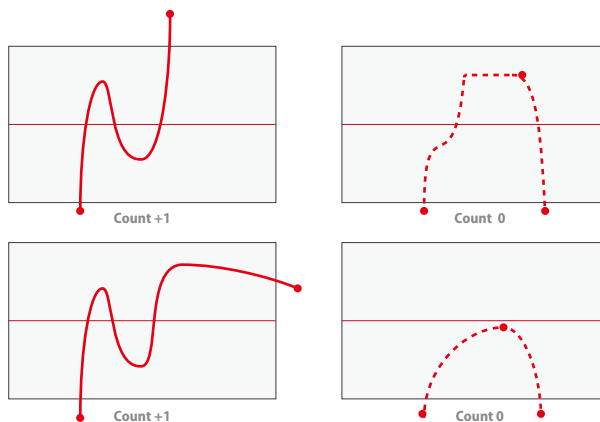
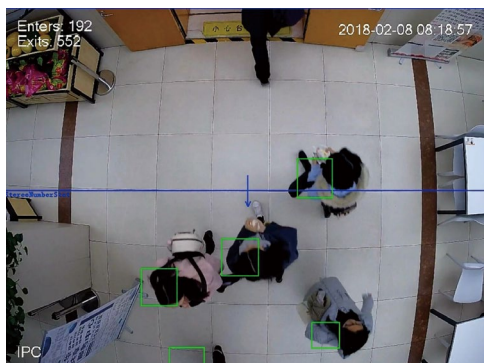
Perimeter Protection

Further analysis is performed on detected behaviors or events, automatically filtering out false alarms introduced by animals, rustling leaves, bright lights, rain or snow, etc., greatly improving alarm accuracy.



People Counting

The number of people that enter/leave/pass some specific areas within specific time periods is counted after filtering out non-important targets (shopping carts, wandering personnel, etc.)



Product Overview

Dahua AI series products adopt the most advanced AI technologies, including deep learning algorithms that primarily target people and vehicles, which provides higher flexibility and accuracy for end-users. This enables the Dahua AI series to support various advanced applications such as face recognition, ANPR, metadata collection and analysis, people counting, image search, facial flow, traffic incident detection, traffic data statistics, etc.






The Dahua AI series includes network (PTZ) cameras, network video recorders, servers, and more devices. Network (PTZ) cameras support photo gallery storage, which provides a complete “all in one” solution. The integration of advanced GPU, cloud computing, and other high-performance hardware makes back-end computing more powerful than you can imagine. Beyond seeing the world, Dahua AI series products provide a better way of understanding it.



Product Overview






Network Camera

Perimeter Protection

Model	IPC-HF8241F	IPC-HFW8241E-Z	IPC-HFW8241E-Z5	IPC-HDBW8241E-Z	IPC-HDBW8241E-Z5
Appearance					
Image Sensor	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS
Lens	--	2.7~13.5mm motorized	7~35mm motorized	2.7~13.5mm motorized	7~35mm motorized
FOV-H	--	107°~31.8°	34.5°~10.7°	107°~31.8°	34.5°~10.7°
Min. Illumination	0.004Lux/F1.2(Color,1/3s,30IRE) 0.04Lux/F1.2(Color,1/30s,30IRE) 0.002Lux/F1.2(B/W,1/3s,30IRE) 0.02Lux/F1.2(B/W,1/30s,30IRE)	0.006Lux/F1.6 (Color,1/3s,30IRE) 0.05Lux/F1.6 (Color,1/30s,30IRE) 0Lux/F1.6 (IR on)	0.006Lux/F1.4 (Color,1/3s,30IRE) 0.05Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)	0.006Lux/F1.6 (Color,1/3s,30IRE) 0.05Lux/F1.6(Color,1/30s,30IRE) 0Lux/F1.6(IR on)	0.006Lux/F1.4 (Color,1/3s,30IRE) 0.05Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)
WDR	140dB	140dB	140dB	140dB	140dB
Max. IR Distance	--	50	100	50	100
Ingress Protection	--	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10
Perimeter Protection	Support	Support	Support	Support	Support

Network Camera





Perimeter Protection

Model	IPC-HF3241F	IPC-HFW3241E-Z	IPC-HFW3241E-Z5	IPC-HDBW3241E-Z	IPC-HDBW3241E-Z5
Appearance					
Image Sensor	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS
Lens	--	2.7~13.5mm motorized	7~35mm motorized	2.7~13.5mm motorized	7~35mm motorized
FOV-H	--	110°~31°	36°~13°	110°~31°	36°~13°
Min. Illumination	0.005Lux/F1.4 (Color,1/3s,30IRE) 0.05Lux/F1.4 (Color,1/30s,30IRE) 0.0005Lux/F1.4 (B/W,1/3s,30IRE) 0.005Lux/F1.4 (B/W,1/30s,30IRE)	0.005Lux/F1.4 (Color,1/3s,30IRE) 0.05Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)	0.005Lux/F1.4 (Color,1/3s,30IRE) 0.05Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)	0.005Lux/F1.4 (Color,1/3s,30IRE) 0.05Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)	0.005Lux/F1.4 (Color,1/3s,30IRE) 0.05Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)
WDR	120dB	120dB	120dB	120dB	120dB
Max. IR Distance	--	50	100	50	100
Ingress Protection	--	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10
Perimeter Protection	Support	Support	Support	Support	Support

Product Overview





Network Camera

Face Capture

Model	IPC-HF8242F-FD	IPC-HFW8242E-Z4FD-IRA-LED	IPC-HFW8242E-Z20FD-IRA-LED	IPC-HDBW8242E-Z4FD
Appearance				
Image Sensor	1/1.9"2Mp Sony STARVIS™ CMOS	1/1.9"2Mp Sony STARVIS™ CMOS	1/1.9"2Mp Sony STARVIS™ CMOS	1/1.9"2Mp Sony STARVIS™ CMOS
Lens	CS	8-32mm/F1.53 Motorized	6.7-134mm/F1.4 Motorized	8-32mm/F1.53 Motorized
FOV-H	--	40°~12.9°	60°~4.1°	40°~12.9°
Min. Illumination	0.001Lux/F1.2 (Color,1/3s,30IRE) 0.01Lux/F1.2 (Color,1/30s,30IRE) 0.0005Lux/F1.2 (B/W,1/3s,30IRE) 0.005Lux/F1.2 (B/W,1/30s,30IRE)	0.002Lux/F1.53 (Color,1/3s,30IRE) 0.01Lux/F1.53 (Color,1/30s,30IRE) 0Lux/F1.53(IR on)	0.005Lux/F1.4 (Color,1/3s,30IRE) 0.03Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)	0.002Lux/F1.53 (Color,1/3s,30IRE) 0.01Lux/F1.53 (Color,1/30s,30IRE) 0Lux/F1.53(IR on)
WDR	120dB	120dB	120dB	120dB
Max. IR Distance	--	10 (White LED)	30 (White LED)	100
Ingress Protection	--	IP67, IK10	IP67, IK10	IP67, IK10
Face Capture	Support	Support	Support	Support
Metadata	Metadata of gender, age, expression, glasses, moustache, mouth mask	Metadata of gender, age, expression, glasses, moustache, mouth mask	Metadata of gender, age, expression, glasses, moustache, mouth mask	Metadata of gender, age, expression, glasses, moustache, mouth mask
Face Recognition	--	--	--	--

Network Camera







Face Recognition

Model	IPC-HF8242F-FR	IPC-HFW8242E-Z4FR-IRA-LED	IPC-HFW8242E-Z20FR-IRA-LED	IPC-HDBW8242E-Z4FR
Appearance				
Image Sensor	1/1.9"2Mp Sony STARVIS™ CMOS	1/1.9"2Mp Sony STARVIS™ CMOS	1/1.9"2Mp Sony STARVIS™ CMOS	1/1.9"2Mp Sony STARVIS™ CMOS
Lens	CS	8-32mm/F1.53 Motorized	6.7-134mm/F1.4 Motorized	8-32mm/F1.53 Motorized
FOV-H	--	40°~12.9°	60°~4.1°	40°~12.9°
Min. Illumination	0.001Lux/F1.2 (Color,1/3s,30IRE) 0.01Lux/F1.2 (Color,1/30s,30IRE) 0.0005Lux/F1.2 (B/W,1/3s,30IRE) 0.005Lux/F1.2 (B/W,1/30s,30IRE)	0.002Lux/F1.53 (Color,1/3s,30IRE) 0.01Lux/F1.53 (Color,1/30s,30IRE) 0Lux/F1.53(IR on)	0.005Lux/F1.4 (Color,1/3s,30IRE) 0.03Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)	0.002Lux/F1.53 (Color,1/3s,30IRE) 0.01Lux/F1.53 (Color,1/30s,30IRE) 0Lux/F1.53(IR on)
WDR	120dB	120dB	120dB	120dB
Max. IR Distance	--	10 (White LED)	30 (White LED)	100
Ingress Protection	--	IP67, IK10	IP67, IK10	IP67, IK10
Face Capture	Support	Support	Support	Support
Metadata	Metadata of gender, age, expression, glasses, moustache, mouth mask	Metadata of gender, age, expression, glasses, moustache, mouth mask	Metadata of gender, age, expression, glasses, moustache, mouth mask	Metadata of gender, age, expression, glasses, moustache, mouth mask
Face Recognition	Up to 16 face pic/s face recognition 5 face database with up to 10,000 face images in total	Up to 16 face pic/s face recognition 5 face database with up to 10,000 face images in total	Up to 16 face pic/s face recognition 5 face database with up to 10,000 face images in total	Up to 16 face pic/s face recognition 5 face database with up to 10,000 face images in total

Product Overview




Network Camera

Events/Data

Model	IPC-HF8241F	IPC-HFW8241E-Z	IPC-HFW8241E-Z5	IPC-HDBW8241E-Z	IPC-HDBW8241E-Z5	IPC-HDW8341X-3D
Appearance						
Image Sensor	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"2Mp STARVIS™ CMOS	1/2.8"3Mp STARVIS™ CMOS
Lens	--	2.7~13.5mm motorized	7~35mm motorized	2.7~13.5mm motorized	7~35mm motorized	2.8mm/3.6mm
FOV-H	--	107°~31.8°	34.5°~10.7°	107°~31.8°	34.5°~10.7°	106.31°/78.5°
Min. Illumination	0.004Lux/F1.2(Color,1/3s,30IRE) 0.04Lux/F1.2(Color,1/30s,30IRE) 0.002Lux/F1.2(B/W,1/3s,30IRE) 0.02Lux/F1.2(B/W,1/30s,30IRE)	0.006Lux/F1.6 (Color,1/3s,30IRE) 0.05Lux/F1.6 (Color,1/30s,30IRE) 0Lux/F1.6 (IR on)	0.006Lux/F1.4 (Color,1/3s,30IRE) 0.05Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)	0.006Lux/F1.6 (Color,1/3s,30IRE) 0.05Lux/F1.6(Color,1/30s,30IRE) 0Lux/F1.6(IR on)	0.006Lux/F1.4 (Color,1/3s,30IRE) 0.05Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)	0.009Lux/F1.8 (Color,1/3s,30IRE) 0.08Lux/F1.84 (Color,1/30s,30IRE) 0Lux/F1.8(IR on)
WDR	120dB	120dB	120dB	120dB	120dB	DWDR
Max. IR Distance	--	50	100	50	100	10
Ingress Protection	--	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67
People Counting	Support	Support	Support	Support	Support	Support

PTZ Camera




Full Intelligence

Model	SD8A240WA-HNF	SD8A440WA-HNF	SD8A840WA-HNF
Appearance			
Image Sensor	1/1.9" CMOS	1/1.8" CMOS	1/1.8" STARVIS™ CMOS
Lens	5.6~223mm (40x Optical zoom)	5.6~223mm (40x Optical zoom)	5.6~223mm (40x Optical zoom)
FOV-H	60.6°~1.8°	63.9°~2.0°	63.9°~2.0°
Min. Illumination	0.001Lux@F1.4(Color) 0Lux@F1.4 (IR on)	0.001Lux@F1.4(Color) 0Lux@F1.4 (IR on)	0.002Lux@F1.4(Color) 0Lux@F1.4 (IR on)
WDR	120dB	120dB	120dB
Max. IR Distance	450m (1476ft)	450m (1476ft)	450m (1476ft)
Ingress Protection	IP67	IP67	IP67
Perimeter Protection	Support	Support	Support
Human/Motor Vehicle/Non-motor Vehicle Capture	Support	Support	Support
Human Metadata	Human Body: Hat, Top Type, Top Color, Bottom Type, Bottom Color,Backpack Face: Gender, Age, Glasses, Mask, Expression, Moustache&Beard	Human Body: Hat, Top Type, Top Color, Bottom Type, Bottom Color,Backpack Face: Gender, Age, Glasses, Mask, Expression, Moustache&Beard	Human Body: Hat, Top Type, Top Color, Bottom Type, Bottom Color,Backpack Face: Gender, Age, Glasses, Mask, Expression, Moustache&Beard
Motor Vehicle Metadata	Logo, Car Type, Car Color, Safety Belt, Sun Shield, Smoking Status, Calling Status	Logo, Car Type, Car Color, Safety Belt, Sun Shield, Smoking Status, Calling Status	Logo, Car Type, Car Color, Safety Belt, Sun Shield, Smoking Status, Calling Status
Non-motor Vehicle Metadata	Car Type, Car Color, Top Type, Top Color, People Number	Car Type, Car Color, Top Type, Top Color, People Number	Car Type, Car Color, Top Type, Top Color, People Number
Face Recognition	Up to 16 face pic/s face recognition 5 face database with up to 10,000 face images in total	Up to 16 face pic/s face recognition 5 face database with up to 10,000 face images in total	Up to 16 face pic/s face recognition 5 face database with up to 10,000 face images in total







Product Overview

Traffic Camera

Traffic Camera

Model	ITC231-RU1A-(IR)L	ITC952-RFIA-IRL	ITC352-RFIA-IRL
Appearance			
Image Sensor	1/1.9inch CMOS(8.58mm)	1inch Global Shutter COMS	1/1.8 inch Global Shutter COMS
FOV-H	10.5-42mm 3.6-17mm	10-- 40mm	10-- 40mm
WDR	100dB	64dB	64dB
Max. LED Distance	25m	25m	25m
Ingress Protection	IP66	IP67	IP67
Video Detection Trigger	Support	support	support
ANPR	Support	support	support
Vehicle Logo Recognizing	Support	support	support
Traffic Data Counting	Performance: Up to 3 lanes for traffic data counting Vehicle type: Passenger Car, Large Truck, Mid Truck, Saloon Car, Micro bus, Micro Truck, Motorbike, Pedestrian Statistical data of each lane: time, date, statistical period, lane, Traffic flow, occupancy, headway, average speed, queue length, vehicle type of each line	Feature: License plate, color, logo, car system, type, annual inspection, safety belt, telephone, sunshade board, pendant and box, etc Traffic flow detection: Traffic flow, queue length, average speed, lane occupancy, etc	Feature: License plate, color, logo, car system, type, annual inspection, safety belt, telephone, sunshade board, pendant and box, etc Traffic flow detection: Traffic flow, queue length, average speed, lane occupancy, etc
Traffic Counting Range	15-80m	15-80m	15-80m

Network Video Recorder & Server







Model	NVR4216-I	NVR4208-8P-I	NVR4216-16P-I	NVR4416-16P-I	NVR4432-I	NVR4832-I
Appearance						
IP Video Inputs	16 channel	8 channel	16 channel	16 channel	32 channel	32 channel
Max Decoding	2ch@8MP/8ch@1080P	2ch@8MP/8ch@1080P	2ch@8MP/8ch@1080P	2ch@8MP/8ch@1080P	2ch@8MP/8ch@1080P	2ch@8MP/8ch@1080P
Max HDD	2x8TB	2x8TB	2x8TB	4x8TB	4x8TB	8x8TB
Alarm In/Out	4/2	4/2	4/2	16/4	16/4	16/4
Ethernet	1 Gigabit Port	1 Gigabit Port	1 Gigabit Port	1 Gigabit Port	2 Gigabit Port	2 Gigabit Port
POE	--	130w 1-8 PoE ports for ePoE&EoC	130w 1-8 PoE ports for ePoE&EoC	150w 1-8 PoE ports for ePoE&EoC	--	--
Perimeter Protection	Up to 4 channel	Up to 4 channel	Up to 4 channel	Up to 4 channel	Up to 4 channel	Up to 4 channel
Face Recognition	Up to 12 face pic/s face recognition 2 channel video stream 8 channel picture stream 10 face database with up to 20,000 face images in total Up to 300,000 face images storage	Up to 12 face pic/s face recognition 2 channel video stream 8 channel picture stream 10 face database with up to 20,000 face images in total Up to 300,000 face images storage	Up to 12 face pic/s face recognition 2 channel video stream 8 channel picture stream 10 face database with up to 20,000 face images in total Up to 300,000 face images storage	Up to 12 face pic/s face recognition 2 channel video stream 8 channel picture stream 10 face database with up to 20,000 face images in total Up to 300,000 face images storage	Up to 12 face pic/s face recognition 2 channel video stream 8 channel picture stream 10 face database with up to 20,000 face images in total Up to 300,000 face images storage	Up to 12 face pic/s face recognition 2 channel video stream 8 channel picture stream 10 face database with up to 20,000 face images in total Up to 300,000 face images storage
Metadata	Face(gender/age/expression/ glasses/moustache/mouth mask)	Face(gender/age/expression/ glasses/moustache/mouth mask)	Face(gender/age/expression/ glasses/moustache/mouth mask)	Face(gender/age/expression/ glasses/moustache/mouth mask)	Face(gender/age/expression/ glasses/moustache/mouth mask)	Face(gender/age/expression/ glasses/moustache/mouth mask)
Metadata Search	Support	Support	Support	Support	Support	Support
Face Search	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Up to 8 target face images search at same time
People Counting (Front-end)	Support	Support	Support	Support	Support	Support
ANPR (Front-end)	Support	Support	Support	Support	Support	Support

Product Overview

Network Video Recorder & Server





Model	NVR5216-8P-I	NVR5232-16P-I	NVR5432-16P-I	NVR5832-I	NVR5864-I	IVSS7008-1T	IVSS7012-2T
Appearance							
IP Video Inputs	16 channel	32 channel	32 channel	32 channel	64 channel	128 channel	128 channel
Max Decoding	4ch@8MP/16ch@1080P	4ch@8MP/16ch@1080P	4ch@8MP/16ch@1080P	4ch@8MP/16ch@1080P	4ch@8MP/16ch@1080P	5ch@8MP/20ch@1080P	5ch@8MP/20ch@1080P
Max HDD	2×8TB	2×8TB	4×8TB	8×8TB	8×8TB	8×8TB	12×8TB
Alarm In/Out	4/2	4/2	16/6	16/6	16/6	16/8	16/8
Ethernet	1 Gigabit Port	1 Gigabit Port	1 Gigabit Port	2 Gigabit Ports	2 Gigabit Ports	4 Gigabit Ports	4 Gigabit Ports
POE	8 Ports (IEEE802.3at/af), Max 130W 1-8 PoE ports for ePoE&EoC	16 Ports (IEEE802.3at/af), Max 130W 1-8 PoE ports for ePoE&EoC	16 Ports (IEEE802.3at/af), Max 150W 1-8 PoE ports for ePoE&EoC	--	--	--	--
Perimeter Protection	Up to 16 channel	Up to 16 channel	Up to 16 channel	Up to 16 channel	Up to 16 channel	--	--
Face Recognition	Up to 24 face pic/s face recognition 4 channel video stream 16 channel picture stream 20 face database with up to 100,000 face images in total Up to 1,500,000 face images storage	Up to 24 face pic/s face recognition 4 channel video stream 16 channel picture stream 20 face database with up to 100,000 face images in total Up to 1,500,000 face images storage	Up to 24 face pic/s face recognition 4 channel video stream 16 channel picture stream 20 face database with up to 100,000 face images in total Up to 1,500,000 face images storage	Up to 24 face pic/s face recognition 4 channel video stream 16 channel picture stream 20 face database with up to 100,000 face images in total Up to 1,500,000 face images storage	Up to 24 face pic/s face recognition 4 channel video stream 16 channel picture stream 20 face database with up to 100,000 face images in total Up to 1,500,000 face images storage	Up to 10 face pic/s face recognition 4 channel video stream 10 channel picture stream 20 face database with up to 300,000 face images in total Up to 10,000,000 face image storage	Up to 20 face pic/s face recognition 8 channel video stream 20 channel picture stream 20 face database with up to 300,000 face images in total Up to 10,000,000 face image storage
Metadata	Face(gender/age/expression/ glasses/moustache/ mouth mask) Human body (tops style/tops color/bottom style/bottom color/cap/bag/ etc.) Non-motor vehicle (ttype/color/helmet/etc.)	Face(gender/age/expression/ glasses/moustache/ mouth mask) Human body (tops style/tops color/bottom style/bottom color/cap/bag/ etc.) Non-motor vehicle (ttype/color/helmet/etc.)	Face(gender/age/expression/ glasses/moustache/ mouth mask) Human body (tops style/tops color/bottom style/bottom color/cap/bag/ etc.) Non-motor vehicle (ttype/color/helmet/etc.)	Face(gender/age/expression/ glasses/moustache/ mouth mask) Human body (tops style/tops color/bottom style/bottom color/cap/bag/ etc.) Non-motor vehicle (ttype/color/helmet/etc.)	Face(gender/age/expression/ glasses/moustache/ mouth mask) Human body (tops style/tops color/bottom style/bottom color/cap/bag/ etc.) Non-motor vehicle (ttype/color/helmet/etc.)	Face(gender/age/expression/ glasses/moustache/ mouth mask)	Face(gender/age/expression/ glasses/moustache/ mouth mask)
Metadata Search	Support	Support	Support	Support	Support	Support	Support
Face Search	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Up to 10 target face images search at same time	Up to 10 target face images search at same time
People Counting (Front-end)	Support	Support	Support	Support	Support	--	--
ANPR (Front-end)	Support	Support	Support	Support	Support	--	--

Network Video Recorder & Server






Model	IVSS7016DR-4T	IVSS7024DR-8T	IVS-F7200-P	IVS-F7500-P	IVS-F7500-2P	IVS-T7000
Appearance						
IP Video Inputs	256 channel	256 channel	--	--	--	--
Max Decoding	6ch@8MP/24ch@1080P	6ch@8MP/24ch@1080P	--	--	--	--
Max HDD	16x8TB	24x8TB	Include 16T HDD	Include 20T HDD	Include 20T HDD	Include 1T HDD
Alarm In/Out	16/8	16/8	--	--	--	--
Ethernet	4 Gigabit Ports	4 Gigabit Ports	2 Gigabit Ports	2 Gigabit Ports	2 Gigabit Ports	2 Gigabit ports
PoE	--	--	--	--	--	--
Perimeter Protection	--	--	--	--	--	--
Face Recognition	Up to 40 face pic/s face recognition 16 channel video stream 40 channel picture stream 20 face database with up to 300,000 face images in total Up to 10,000,000 face image storage	Up to 80 face pic/s face recognition 32 channel video stream 80 channel picture stream 20 face database with up to 300,000 face images in total Up to 10,000,000 face image storage	Up to 30 face pictures per second processing capacity: 30 channel picture stream face recognition. 999 face databases with up to 300,000 face images in total.	Up to 100 face pictures per second processing capacity: 100 channel picture stream face recognition. 999 face databases with up to 300,000 face images in total. The face database for static queries has a capacity of 20,000,000.	Up to 200 face pictures per second processing capacity: 200 channel picture stream face recognition. 999 face databases with up to 300,000 face images in total. The face database for static queries has a capacity of 40,000,000.	--
Metadata	Face(gender/age/expression/glasses/moustache/mouth mask)	Face(gender/age/expression/glasses/moustache/mouth mask)	Metadata of gender, age, expression, glasses, moustache, mouth mask etc.	Metadata of gender, age, expression, glasses, moustache, mouth mask etc.	Metadata of gender, age, expression, glasses, moustache, mouth mask etc.	plate number
Metadata Search	Support	Support	Support	Support	Support	--
Face Search	Up to 10 target face images search at same time	Up to 10 target face images search at same time	Support	Support	Support	--
People Counting(Front-end)	--	--	--	--	--	--
ANPR (Front-end)	--	--	--	--	--	Up to 10 channels ANPR. One core recognition software. Support to recognize 1080P picture. For each license plate logs: License plates amount (up to 3 on the same image). Timestamp, camera ID, country, etc. Location of the license plate in the image.

Product Overview

HDCVI Recorder

Model	XVR8208A-4K-I	XVR8216A-4KL-I	XVR8816S-4KL-I	XVR8208A-4KL-I
Appearance				
CVBS Input	8CH, 1.0Vp-p, 75Ω	16CH, 1.0Vp-p, 75Ω	16CH, 1.0Vp-p, 75Ω	8CH, 1.0Vp-p, 75Ω
Max HDCVI Recording Rate	15fps@4K 20fps@6MP 20fps@5MP 30fps@4MP 30fps@1080P	7fps @4K 10fps @6MP 12fps @5MP 15fps @4MP 30fps @1080P	7fps @4K 10fps @6MP 12fps @5MP 15fps @4MP 30fps @1080P	7fps @4K 10fps @6MP 12fps @5MP 15fps @4MP 30fps @1080P
Max Decoding	8CH@4K/8CH@1080P	16CH@4K/16CH@1080P	16CH@4K/16CH@1080P	8CH@4K/8CH@1080P
Max HDD	2×10TB	2×10TB	8×10TB	2×10TB
Alarm In/Out	16/3	16/3	16/6	16/3
Ethernet	2 Gigabit ports	2 Gigabit ports	2 Gigabit ports	2 Gigabit Ports
Perimeter Protection	Up to 8 channels	Up to 16 channels	Up to 16 channels	Up to 4 channels
Face Recognition	Up to 24 face pic/s face recognition 4 channel video stream 20 face database with up to 100,000 face images in total Up to 1,500,000 face images storage	Up to 24 face pic/s face recognition 4 channel video stream 20 face database with up to 100,000 face images in total Up to 1,500,000 face images storage	Up to 24 face pic/s face recognition 4 channel video stream 20 face database with up to 100,000 face images in total Up to 1,500,000 face images storage	Up to 12 face pic/s face recognition 2 channel video stream 10 face database with up to 20,000 face images in total
Metadata	Metadata of gender, age, expression, glasses, moustache, mouth mask	Metadata of gender, age, expression, glasses, moustache, mouth mask	Metadata of gender, age, expression, glasses, moustache, mouth mask	Metadata of gender, age, expression, glasses, moustache, mouth mask
Metadata Search	Support	Support	Support	Support
Face Search	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Up to 8 target face images search at same time	Support

VMS

Model	DSS Express	DSS Pro	DSS4004-S2-W	DSS4004-S2	DSS7016D-S2
Appearance					
Type	Software	Software	All-in-one	All-in-one	All-in-one
OS	Windows	Windows	Windows	Linux	Linux
Type of Deployment	Single-server	Distribute Cascade	Single-server	Single-server	Distribute
Video Channels Per Server	512	2000	64	512	2000
Maximum Video Input Bandwidth Per Server	350Mbps	600Mbps	350Mbps	350Mbps	700Mbps
Maximum Video Output Bandwidth Per Server	350Mbps	600Mbps	350Mbps	350Mbps	700Mbps
AI functions					
People Counting: Provides daily, Weekly, Monthly, Yearly reports.	√	√	√	√	√
Face Recognition	√	√	√	√	√
Face Searching By Face Feature	√	√	√	√	√
Face Searching By Face Image	√	√	√	√	√
Generate The Track for The Specific Face	√	√	×	×	√
Generate The Attribute Report Based On The Gender and Age	√	√	√	√	√
Face Alarm and Alarm Linkage	√	√	√	√	√
License Plate Recognition	√	√	√	√	√
Generate The Vehicle Trajectory	×	√	×	×	√
Vehicle Blacklist Arming	×	√	×	√	√
Intelligent Server(IVS-T and IVS-F)	×	√	×	×	√
Add on module based on AI					
Business Intelligence	×	√	×	×	×
Traffic Module(Violation, Flow, Interval Speed Measurement)	×	√	×	×	×

Recommended Models

IPC-HF8241F
IPC-HFW8241E-Z
IPC-HFW8241E-Z5
IPC-HDBW8241E-Z
IPC-HDBW8241E-Z5



AI People Counting/Perimeter Protection Camera

- People counting
- Perimeter protection

IPC-HF3241F
IPC-HFW3241E-Z
IPC-HFW3241E-Z5
IPC-HDBW3241E-Z
IPC-HDBW3241E-Z5



AI Perimeter Protection Camera

- Perimeter protection

IPC-HF8242F-FD
IPC-HFW8242E-Z4FD-IRA-LED
IPC-HFW8242E-Z20FD-IRA-LED
IPC-HDBW8242E-Z4FD



AI Face Capture Camera

- Face capture, optimized snap, snap angle filter
- Face capture speeds up to 16faces/s
- Metadata

IPC-HF8242F-FR
IPC-HFW8242E-Z4FR-IRA-LED
IPC-HFW8242E-Z20FR-IRA-LED
IPC-HDBW8242E-Z4FR



AI Facial Recognition Camera

- Face recognition. Supports storage of 10,000 images
- Face capture speeds up to 16faces/s
- Metadata
- Blacklist alarm

IPC-HDW8341X-3D



AI Dual-lens People Counting Camera

- 3D stereo camera
- People counting
- Height detection
- Loitering filter

SD8A240WA-HNF
SD8A440WA-HNF
SD8A840WA-HNF



AI PTZ Camera

- Human, motor vehicle and non-motor vehicle capture
- Face recognition. support up to 10000 face images storage
- Metadata
- Perimeter protection
- 1080P/4MP/4K Resolution
- 40x optical zoom
- Smart wiper
- Starlight, WDR
- 450m IR distance

Recommended Models

ITC231-RU1A-(IR)L



AI ANPR Camera

- Vehicle capture
- ANPR
- Vehicle recognition
- Metadata
- Traffic data statistics (traffic flow, queue length, lane occupancy, speed, traffic status, etc.)

ITC952/352-RF1A-IRL



AI ANPR Camera

- Vehicle capture
- ANPR
- Vehicle recognition
- Traffic incident detection and capture (reversing, wrong-way driving, illegal U-turn, speeding, driving too slow, debris, illegal lane change, crossing solid line, traffic jams, pedestrians, etc.)

IVSS7008-1T IVSS7012-2T IVSS7016-4T IVSS7024-8T



AI 128ch/256ch Recognition & Analysis IVSS

- 8/16/24 HDDs
- Max. 32 channel face recognition. Real time notification when target face detected. Image search by face images
- Max. 32 channel face metadata. Real time notification when target face metadata (age, gender, glasses, expression, mask, beard), detected- no need for continuous manned monitoring
- Video search by face metadata- no need to search videos frame by frame and whether with or without face image
- 20 face database with up to 300,000 face images in total
- Max. 10 million face metadata or face images
- 400Mbps/512Mbps input bandwidth
- 8K decoding capacity

NVR5216-8P-I NVR5232-16P-I NVR5432-16P-I NVR5832/5864-I



AI 16ch/32ch/64ch Recognition & Analysis NVR

- 2/4/8 HDDs
- Max. 64 channels IPC inputs, up to 16MP
- Up to 16 channel perimeter protection to effectively filter false alarms
- Up to 24 face pic/s face recognition
 - 4 channel video stream
 - 16 channel picture stream
- 20 face database with up to 100,000 face images in total
- Up to 1,500,000 face images storage
- Metadata of face, human body, non-motor vehicle
- AI search including search by image and search by metadata, no need to search video frame by frame

NVR4208-8P-I NVR4216-I NVR4216-16P-I NVR4416-16P-I NVR4432-I NVR4832-I



AI 8ch/16ch/32ch Recognition & Analysis NVR

- 2/4/8 HDDs
- Max. 32 channels IPC inputs, up to 12MP
- Up to 4 channel perimeter protection to effectively filter false alarms
- Up to 12 face pic/s face recognition
 - 2 channel video stream
 - 8 channel picture stream
- 10 face database with up to 20,000 face images in total
- Up to 300,000 face images storage
- Metadata of face
- AI search including search by image and search by metadata, no need to search video frame by frame

XVR8208A-4K-I XVR8216A-4KL-I XVR8816S-4KL-I XVR8208A-4KL-I



AI 8ch/16ch Recognition & Analysis XVR

- 4K cameras input and recording
- 2/8 HDDs
- Max. 64 channels IPC inputs, each up to 12MP
- Support Raid 0, 1, 5, 6, 10
- Up to 4/8/16 channels perimeter protection to effectively filter false alarms
- Up to 12/24 face pic/s face recognition for 2/4 channels video stream
- 10/20 face database with up to 20,000/100,000 face images in total
- AI search including search by image and search by metadata, no need to search video frame by frame

Recommended Models

IVS-F7500-P



AI Facial Recognition & Analysis Server

- Up to 100 channels face recognition
- Dynamic Database 300,000; Static Database 20,000,000
- A thousand comparisons per second
- Search by image
- Blacklist alarm
- 128GB DDR4 ECC memory
- 20T, 5 × 4T SATA HDD

IVS-F7500-2P



AI Facial Recognition & Analysis Server

- Up to 200 channels face recognition
- Dynamic Database 300,000; Static Database 40,000,000
- A thousand comparisons per second
- Search by image
- Blacklist alarm
- 256GB DDR4 ECC memory
- 20T, 5×4T SATA HDD

IVS-T7000



AI Vehicle Recognition Server

- Support for storage of up to 2 million car images (1080P)
- Support for up to 10 ANPR camera channels camera in entrance port (3 lane).
- Support for up to 500 parking detector channels (3 parking)
- ANPR accuracy rate more than 95%
- Supports flow path applications via intergration with Dahua DSS platform

IVS-F7200-P



AI Facial Recognition & Analysis Server

- Up to 30 channels face recognition
- Dynamic Database 300,000
- A thousand comparisons per second
- Search by image
- Blacklist alarm
- 64GB DDR4 ECC memory
- 16T, 4 × 4T SATA HDD

DSS Pro



DSS Pro, Comprehensive and Expandable Dahua VMS, is a flexible, scalable, highly reliable and powerful central management system. Besides its basic CCTV functions, it supports AI functions such as Face Recognition, ANPR, People Counting, it also integrates add-ons like Business Intelligence, Traffic. DSS Pro can be applied to many security surveillance solutions.

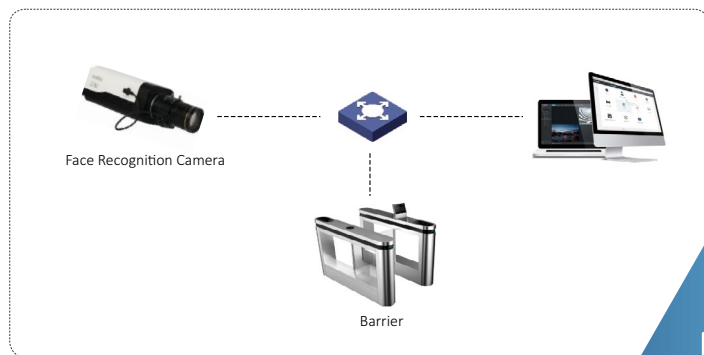
DSS Express



DSS Express is easy-to-use and reliable VMS for single-server installation, which can meet the core requirements of video surveillance in small and mid-sized projects. It can extend the devices by license easily and provide the unified solution with access control, VDP and alarm controller for some small and medium organizations. It is the ideal VMS for small and mid-sized projects.

Overview

Face recognition makes building management simple and smart. Access authorization, target search and visitor record will be available based on the face recognition, it contributes to improve the passing efficiency, building management level and building safety.



Smart
Building

Highlights



Access
Authorization



Target Search



Visitor Record

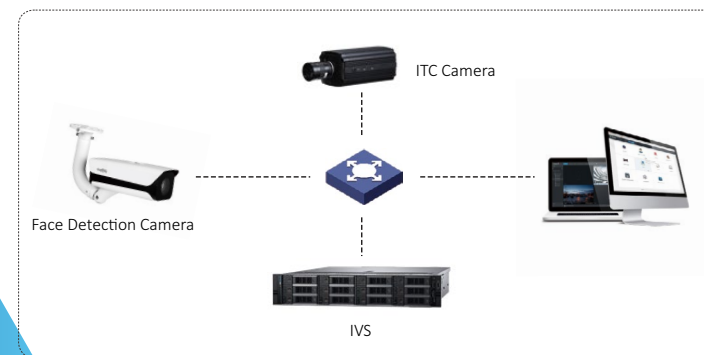
- DSS manages access authority
- Easy to retrieval visiting record
- Face comparison in front end
- Low delay, high efficiency



Smart City

Overview

Face recognition ensure the city safety and smart, help police track the target. Blacklist alarm can be used for target manhunt. ITC cameras collect all kinds of the traffic data and detect the vehicle behavior, improving the city traffic situation



Highlights



Blacklist Alarm



Search by Image/Features



Target Track



Illegal Parking



Behavior Detection

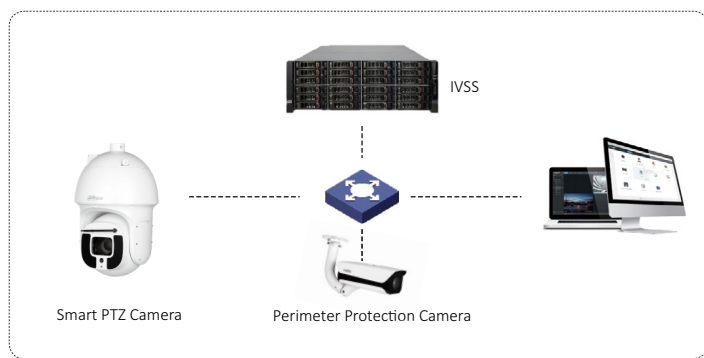


ANPR

- DSS manages all devices and events
- Face recognition ensure the safety
- Intelligent traffic camera collect the traffic data

Overview

When the unauthorized target invade the industrial park, the target will be detected and trigger alarm. Featured with deep learning algorithm, it can reduce the false alarm and choose the target to track.



Smart Industrial Park

Highlights



Access Authorization



Target Search



Deep IVS



Target Classification



Blacklist Alarm

- DSS manages access authority
- Easy to retrieval visiting record
- Classify the human and vehicle, choose the target
- Reduce the false alarm, better user experience

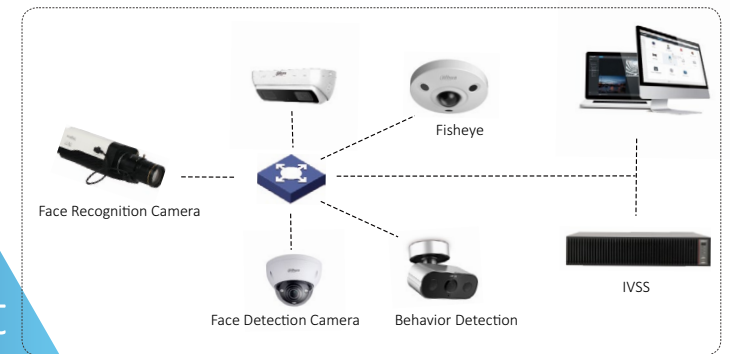




Smart Retail

Overview

Better service will be provided as long as the VIP customer enters the shop, also the alarm reminder will be pushed when the thief is detected. Those intelligent functions (people counting, smart ads and heat map) make contribute to increasing benefits for the shop owners.



Highlights



- VIP customer reminder
- Push the suitable ads
- Thief recognition, reduce the theft losses
- Heat map, shows the most welcomed area
- People counting, generates the visitor statistic
- Passenger flow, adjust the layout, improve the profit

ENABLING A SAFER SOCIETY AND SMARTER LIVING

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* Design and specifications are subject to change without notice.

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