



Surging power for SMB market

Dahua technology

IPC Product Overview

Pro series

High quality, powerful performance
Design for the SMB market.



Lite series

High cost performance, high definition.
Design for the distribution market.



Special series

Pinhole camera, mobile camera.
Design for the industry market.

Ultra series

High end products
Project oriented, for the safe city.



Panoramic

All in one design, multi-sensor camera, fisheye.
Design for the industry market.

IPC Product Overview

Ultra-AI

- Target market : government , enterprise industry project
- Product strategy : high end project, some algorithms can be used simultaneously
- High lights : **8** AI algorithms , **30** metadata



IPC7 Series

Pro-AI

- Target market : SMB market
- Product strategy : Design for SI and installer, support 4 AI functions
- High lights : **4** AI algorithms , **6** metadata
- (face capture/people counting/metadata/perimeter protection)



IPC5 Series

Value-AI

- Target market : distribution market
- Product strategy : Enter level choice for AI solution popularization
- High lights : **2** AI algorithms
- (human/vehicle classification, perimeter protection)



IPC3 Series

Pro series | Product family

Vari-focal



HF5241E-E
HF5442E-E
HF5541E-E



HFW5241E-ZE/ZHE/Z5E/Z12
HFW5442E-ZE/ZHE
HFW5541E-ZE/ZHE/Z5E



HDBW5241E-ZE/ZHE/Z5E
HDBW5442E-ZE/ZHE
HDBW5541E-ZE/ZHE/Z5E



April
HDPW5241G-Z
HDPW5442G-Z
HDPW5541G-Z

Active deterrence



HDW5241H-AS-PV
HDW5541H-AS-PV



HFW5241T-AS-PV
HFW5541T-AS-PV

Fixed lens



HDBW5241R-S/ASE
HDBW5442R-S/ASE
HDBW5541R-S/ASE



HDW5241TM-AS
HDW5442TM-AS
HDW5541TM-AS



HFW5241T-S/ASE
HFW5442T-S/ASE
HFW5541T-S/ASE



HFW5241E-S
HFW5442E-S
HFW5541E-S

Full color



HDW5241T-AS-LED
HDW5442T-AS-LED



HFW5241T-AS-LED
HFW5442T-AS-LED

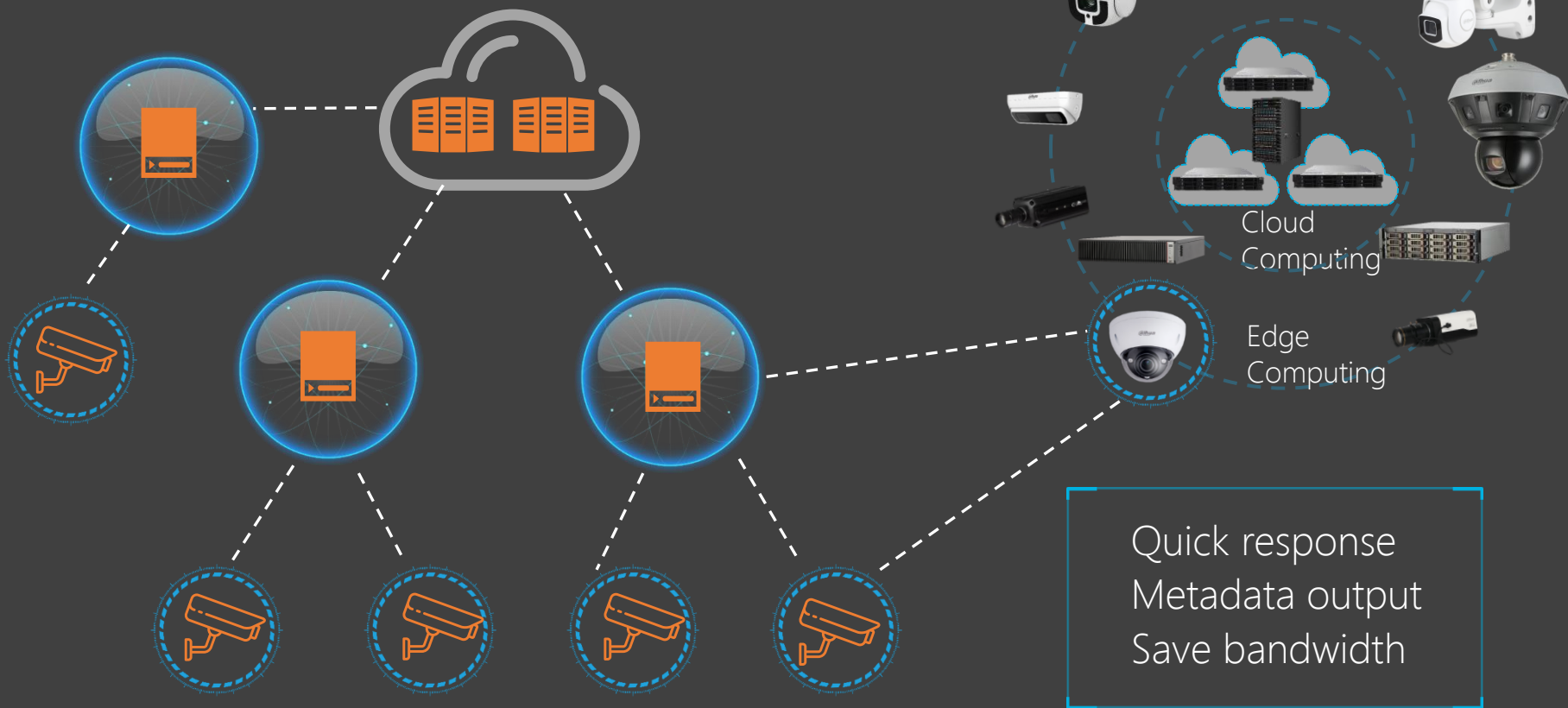
120dB WDR / **Starlight+ Technology (4Mp)** / Smart IR Technology / ePOE (-E,-ASE,ZE,ZHE)

SSA Technology / H.265+ Smart Codec / 7~35mm long-focus Lens(**F1.3**) / IP67 Waterproof / IK10 Vandal proof /

Pro Series | More functions create more value



Edge computing structure



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Perimeter protection

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Face capture (Metadata)

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Advantages of face capture

Customer business



Barrier control



Blacklist alarm



Face search



Face track

Application

Typical application



Safe city



Airport



Railway station



Barrier



Casino



Industry park



Advantage

AI by camera



4 FR cameras



NVR5216-8P-4KS2

AI by NVR



16 FD cameras



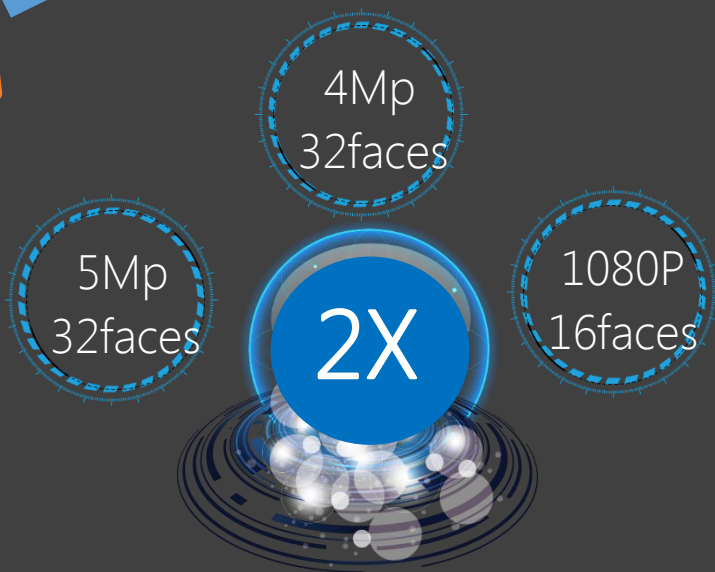
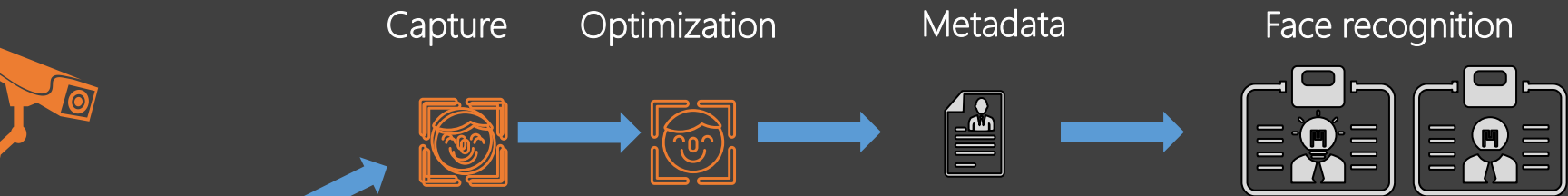
NVR5216-8P-I



80%

Reduce cost per channel

Detection improvement : 2X

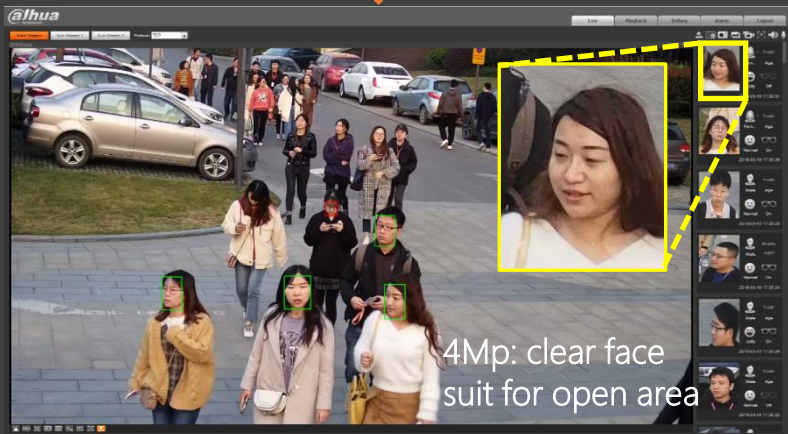


Solve problem:
Reduce missing rate in crowd capture



Large area face capture

Open square



Long and narrow corridor



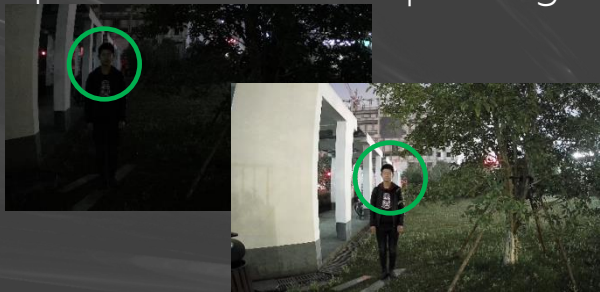
Aspect ratio 4:3

Cover long distance, ensure capture all faces

Unrestraint application | all day, all scenes

4Mp Starlight+

Capture clear face in poor light



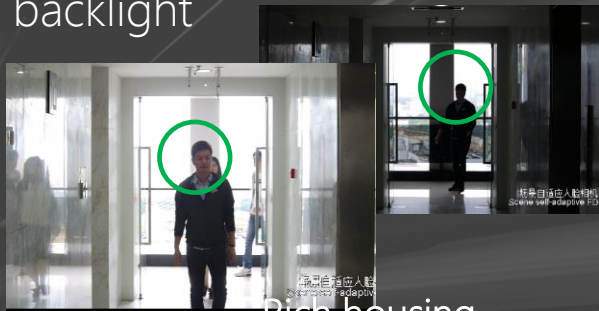
Powerful face detection

Max. 32 faces per picture, suitable for subway



SSA

Capture clear face even in backlight



Rich housing

Different housing, different lens, suitable for different scenes



Unrestraint application | all day, all scenes



Constant F1.3

large aperture
when zoom in and zoom out



Suitable for the open and low light scene

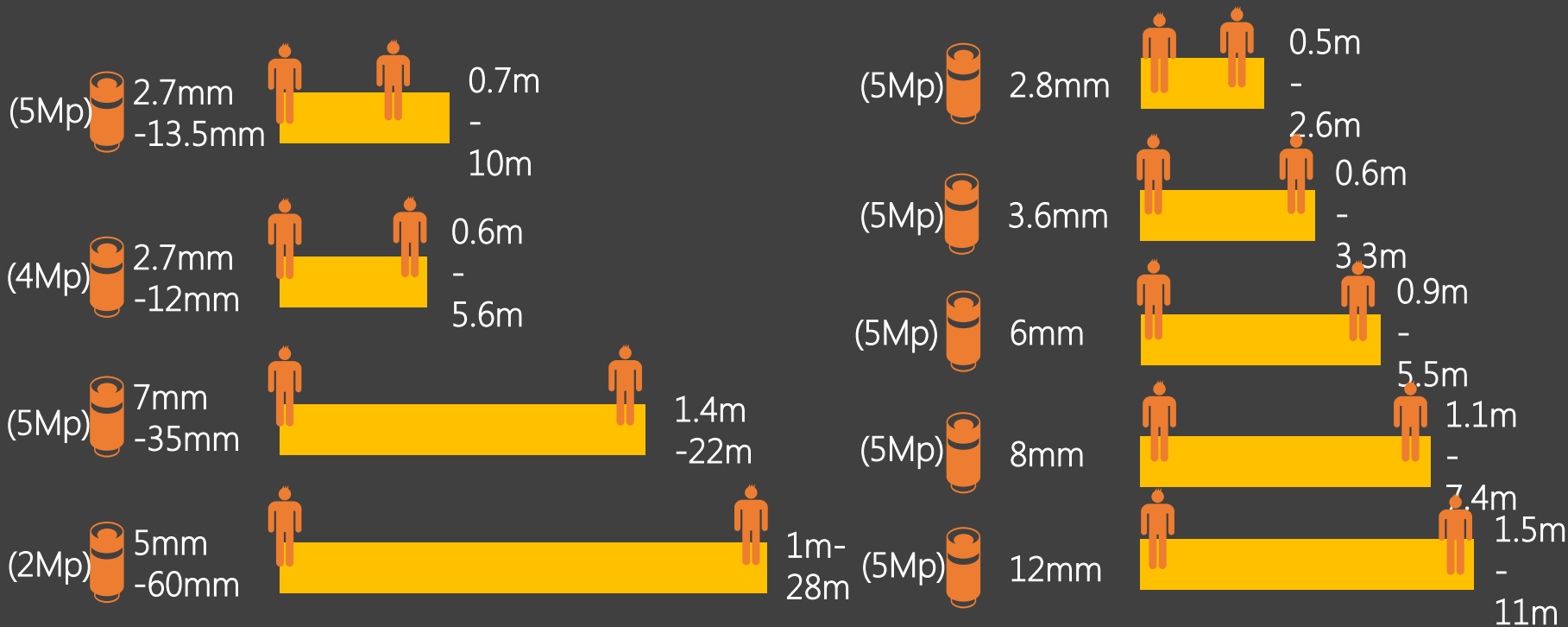


Normal camera



IPC-HFW5241E-Z5E

Cover distance for face capture

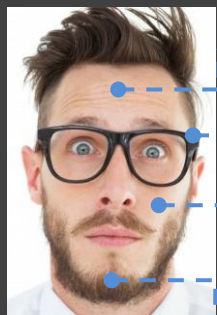


Note : camera height > 2.5m, people height 1.7m, face pixel size: 80*80

Metadata: quick search and commercial freemium

Quick search, instant response

Commercial freemium



Age

Glasses
Express

ion

Gender



Security application



Client portrait



Practical application of face capture



Application value

Blacklist alarm
Ensure the plane safe
Offer advice for the airline

Application background

There are some unwelcome passengers in airline's database: like **fighting or criminal record**. Even though they have passed the airport safety check, the airline also can **refuse them to board, especially when the tickets are overbooked**.

Application value

Arrest the crime
Ensure the stadium safe
Provide the fair booking environment

Application background

For the famous sports event, there are some **ticket scalpers**, they will **resell the tickets** by the more expensive price, and earning the Price spread. It harts both the fans and organizers.



Application value

Blacklist alarm
Ensure the pub safe
Reduce the pub's loss

Application background

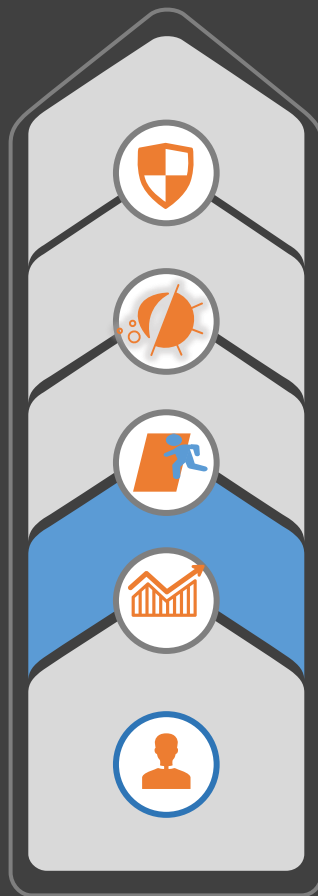
There are some unwelcome customers in operator's database: like **fighting or criminal record**. When they arrive the pub, the system can **push a notification** to the staff, to make a **close notice** about the target.

Surging power for SMB market

Design for **SMB** market

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Active deterrence

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Full color

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Perimeter protection

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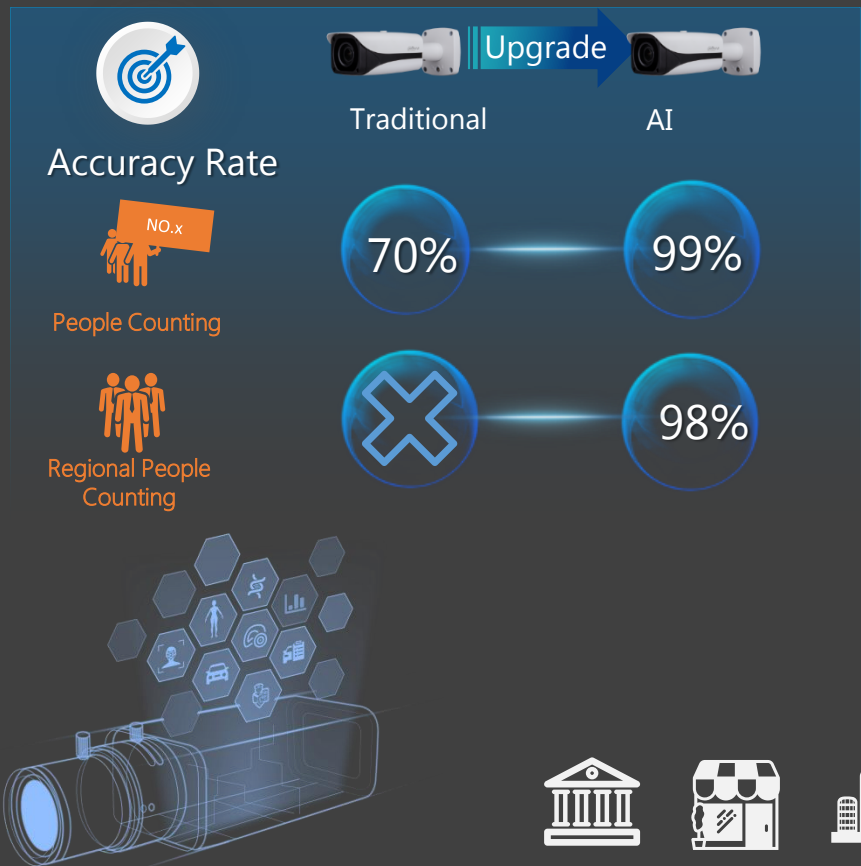
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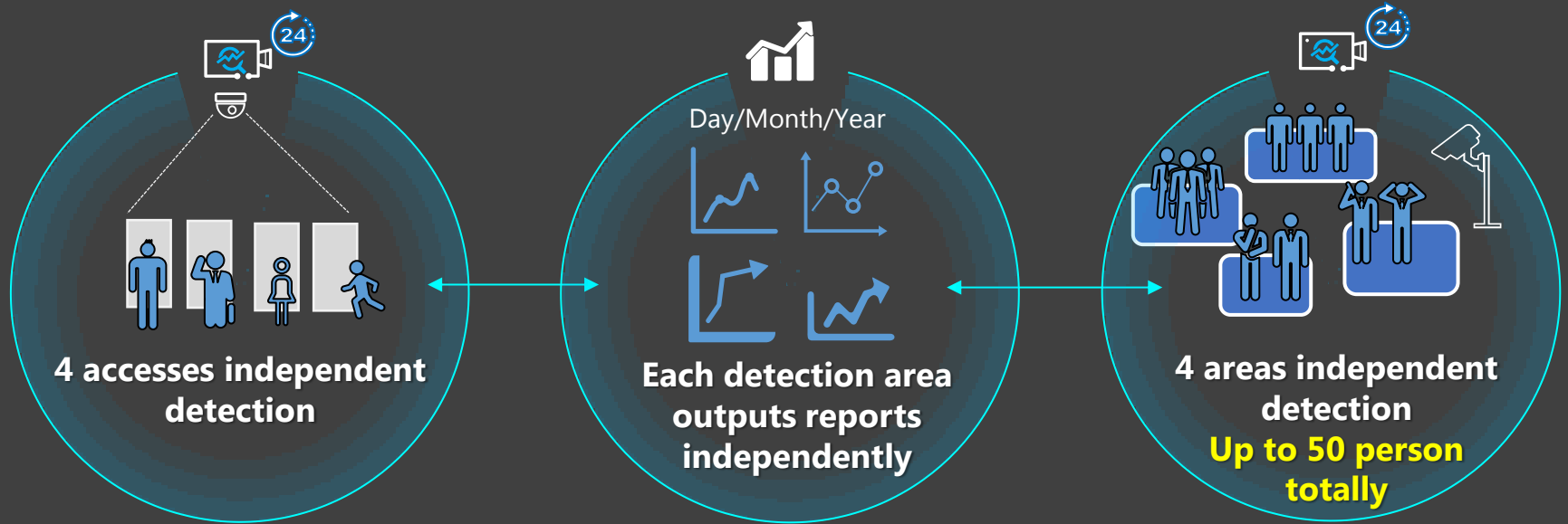
People counting- Performance improvement



Ensure Surveillance & People Counting



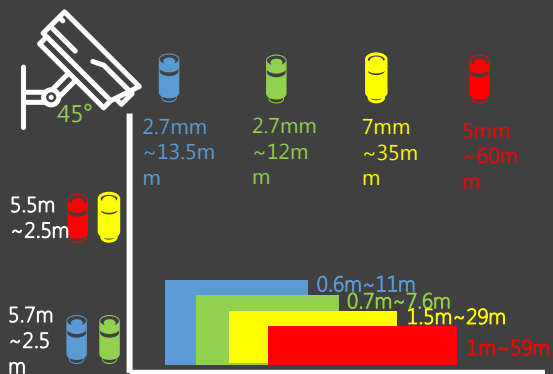
People Counting – Upgrade of algorithm



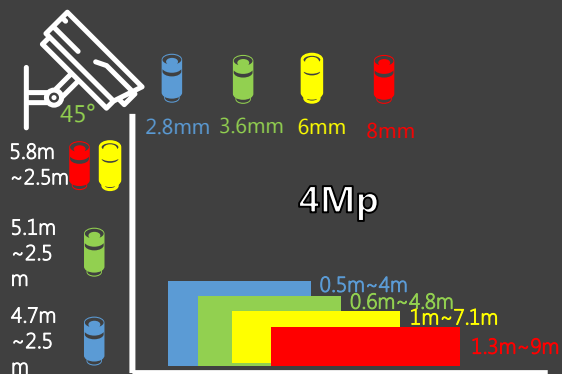
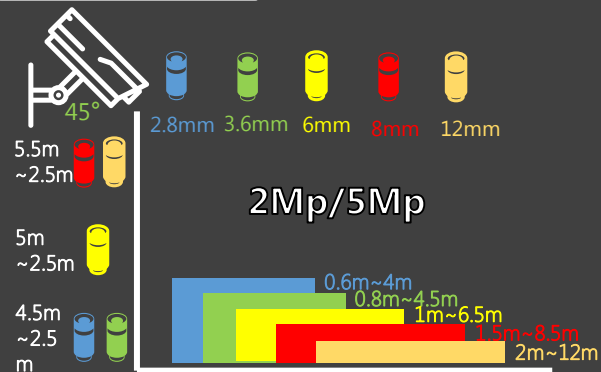
4x Efficient

People Counting – Cover distance

Vari-focal



Fixed-lens



People Counting – Typical scenario



- Measure the number of customers or visitors
- Evaluate and improve marketing and promotional activities
- Analyze relevant footfall statistics

Mall



- Optimize staffing schedules and daily operations
- Security monitoring

Bank



- Measure the number of customers or visitors
- Optimize staffing schedules and daily operations
- Analyze and share relevant footfall statistics
- Security monitoring

Retail



- Measure the number of visitors
- Analyze and share relevant footfall statistics
- Security monitoring

Museum

- People counting
- Output reports

- Multi-area people counting
- Long time detention alarm
- Output reports

- Multi-area people counting
- Long time detention alarm
- Output reports

- Multi-access people counting
- Output reports

Access Counting

Queuing Management

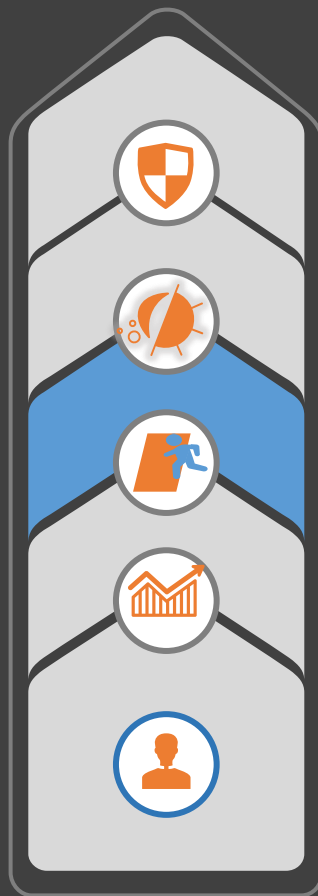
Regional Hotspot Analysis

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SMD(Smart motion detection)



False
Alarm



Precise
Notification



Easy to set up
(No rule lines)



False alarm filter

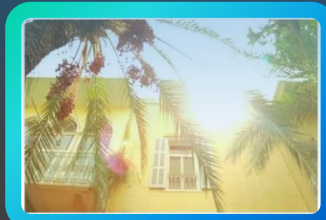
Tree movement



Animals pass by



Bright light



Shadows



Traditional IVS



Perimeter protection

Super Anti-interference Ability by AI

High accuracy



Border



School

Preventing abnormal intrusion



Traditional

AI



70%

>96%



70%

>97%



<10%

<2%

False Negatives Rate



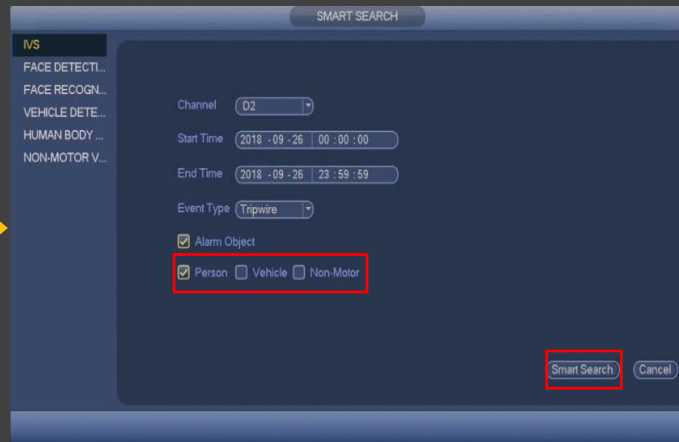
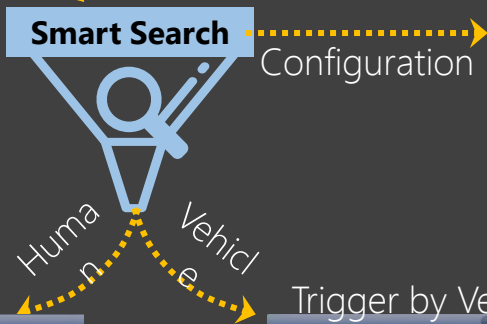
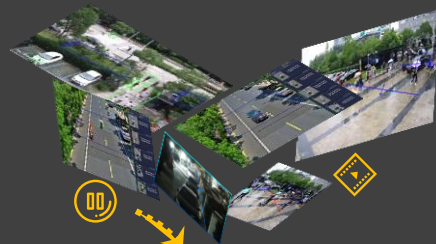
Industry



Residence

Target classification retrieval

Search by human or vehicle which can greatly reduce video search time.



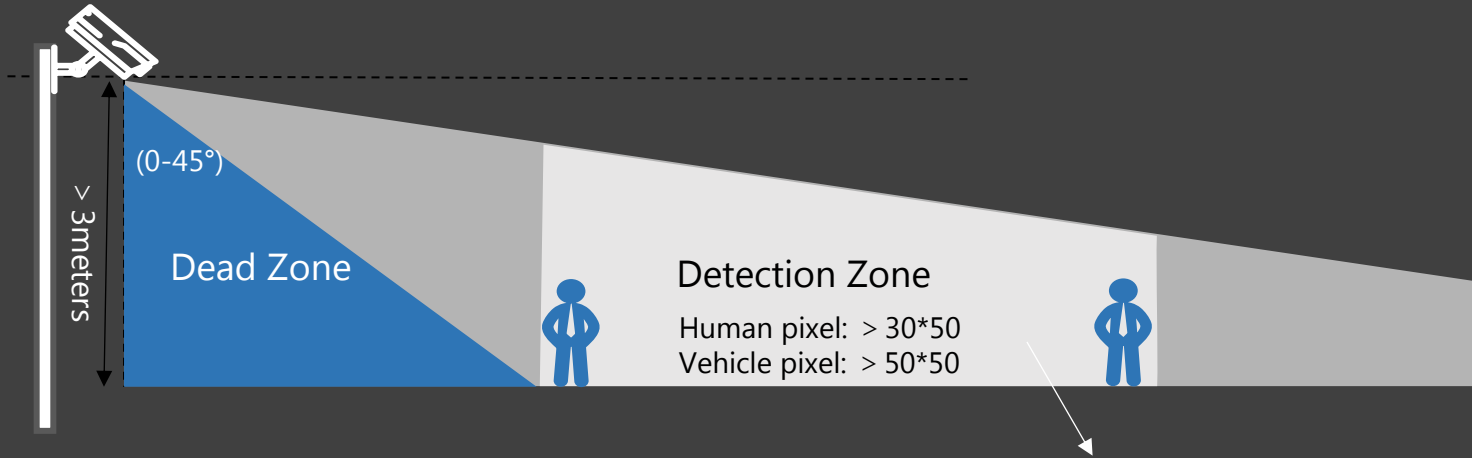
Trigger by human



Trigger by Vehicle



Installation Guide – mounting height



Resolution	2MP				4MP	5MP			
Vari-focal Lens	2.7-13.5mm		7-35mm	5-60mm	2.7-12mm	2.7-13.5mm	7-35mm		
Detection Distance /m	3-25		12-60	25-100	2-23	4-37		10-80	
Resolution	2MP / 3MP				4MP	5MP			
Fixed Lens	2.8mm	3.6mm	6mm	8mm	12mm	2.8mm	3.6mm	6mm	12mm
Detection Distance /m	1-6	1-7/8	2-12/13	3-17/18	4-25	1-4	2-6	2-9	3-27

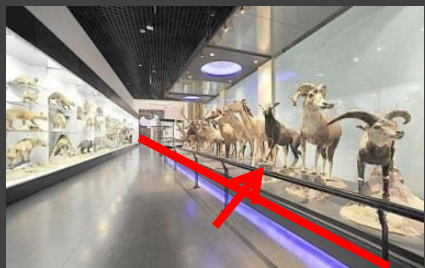
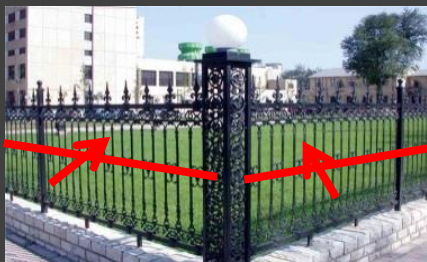
Typical Applications of Active Deterrence

Requirement background:

1. Pay long time to play back the recording to check what has happened after the incident .
2. Can not prevent incident timely before it happened.

Monitoring Area

Private land, no entry!
Valuables! Don't touch!



Limited Access Area

No parking here!
Warning zone, keep off!



Danger Area

Dangerous zone, keep away!
Deep water, be cautious!

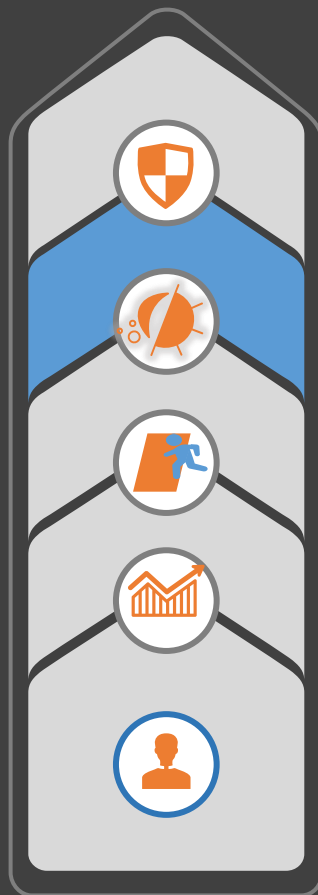


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Full color – 7/24 colorful image



Normal camera



Starlight camera



Full-color camera



3200K warm light

All day full-color image

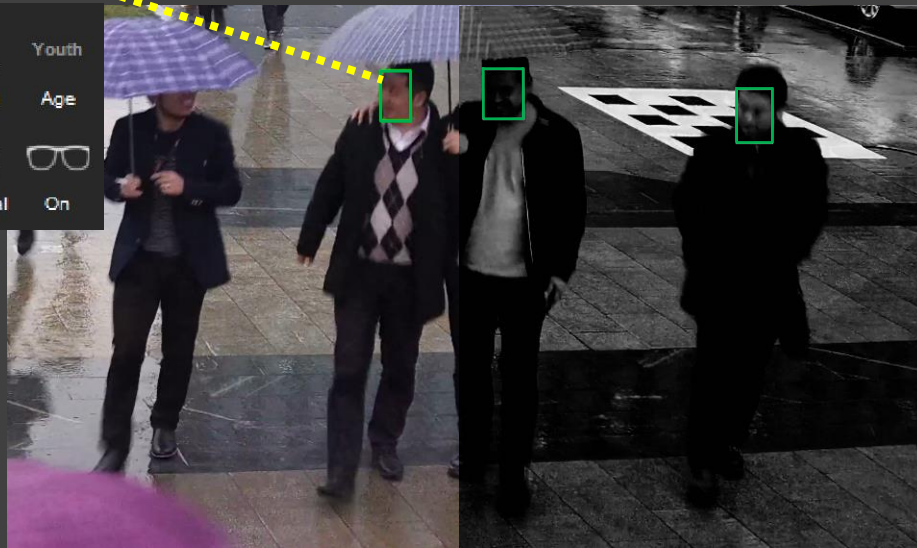
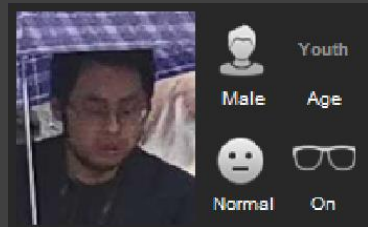


HDW5241T-AS-LED
HDW5442T-AS-LED

HFV5241T-AS-LED
HFV5442T-AS-LED

Full color – Strong adaptability

Color image can provide more face attributes



Better AI experience by full color

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Active deterrence



Remote
alarm

Network



105dB siren buzz



10 kinds voices

1 customized voice (2M)

Precise Alarm

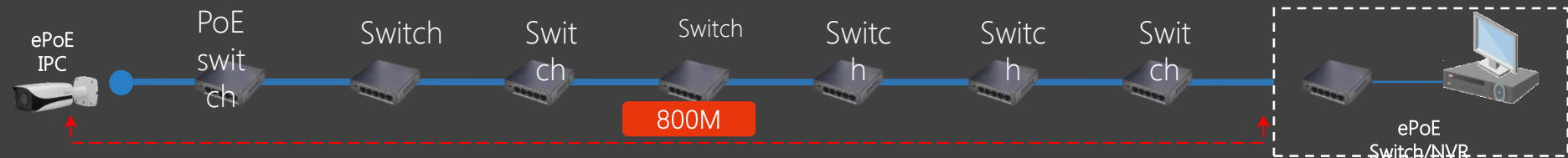
Based AI technology, false alarm filter, and target classification

Active deterrence

retrieval
Effectively expels intruder and provides clear evidence and details.

ePOE | Eco-friendly

Power consumption per switch is 3W, saves **21W** in total



One day saves
0.5kWh



One month save
15kWh



One year saves
182.5kWh



Reduce carbon emission
143kg per year

EoC | Ethernet over coax

Easy upgrade from analog to **IP** system



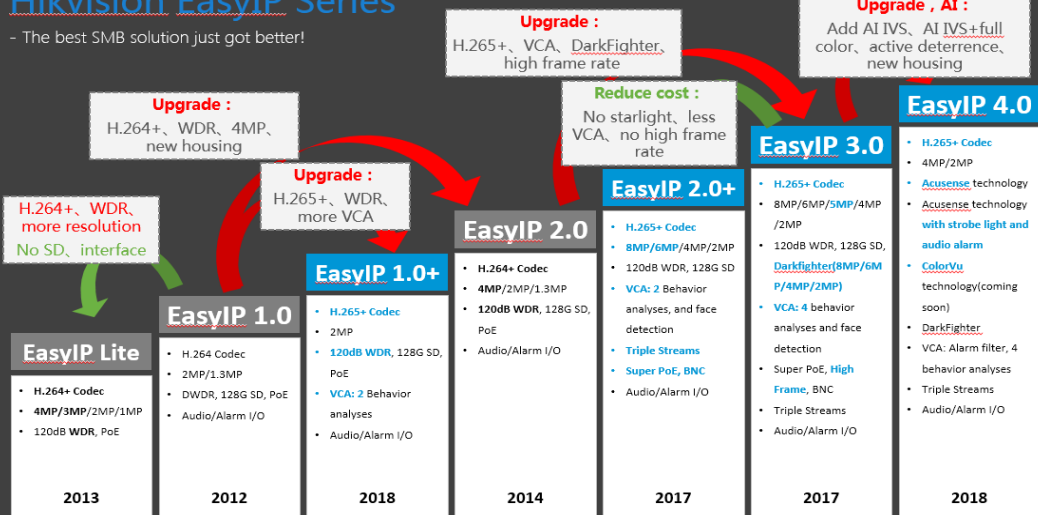
Support power over coax, no need of extra power supply

Competition | EasyIP 4.0 series



Hikvision EasyIP Series

- The best SMB solution just got better!



Advantages:



2.7mm-13.5mm



Face capture (Metadata)



High resolution (5Mp)



People counting(8 rules)



Upgrade relation



Traditional generation





Surging power for **SMB** market