



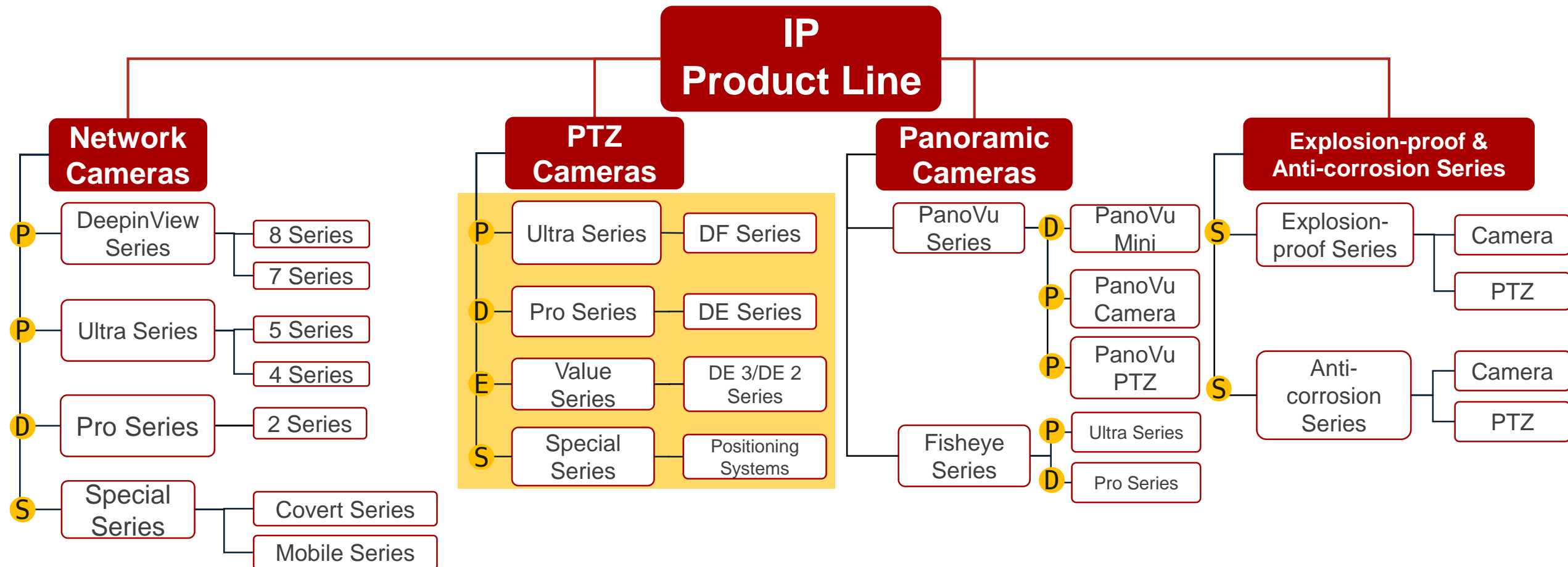
PTZ Introduction

Ultra / Pro / Value/ Special/ Analog

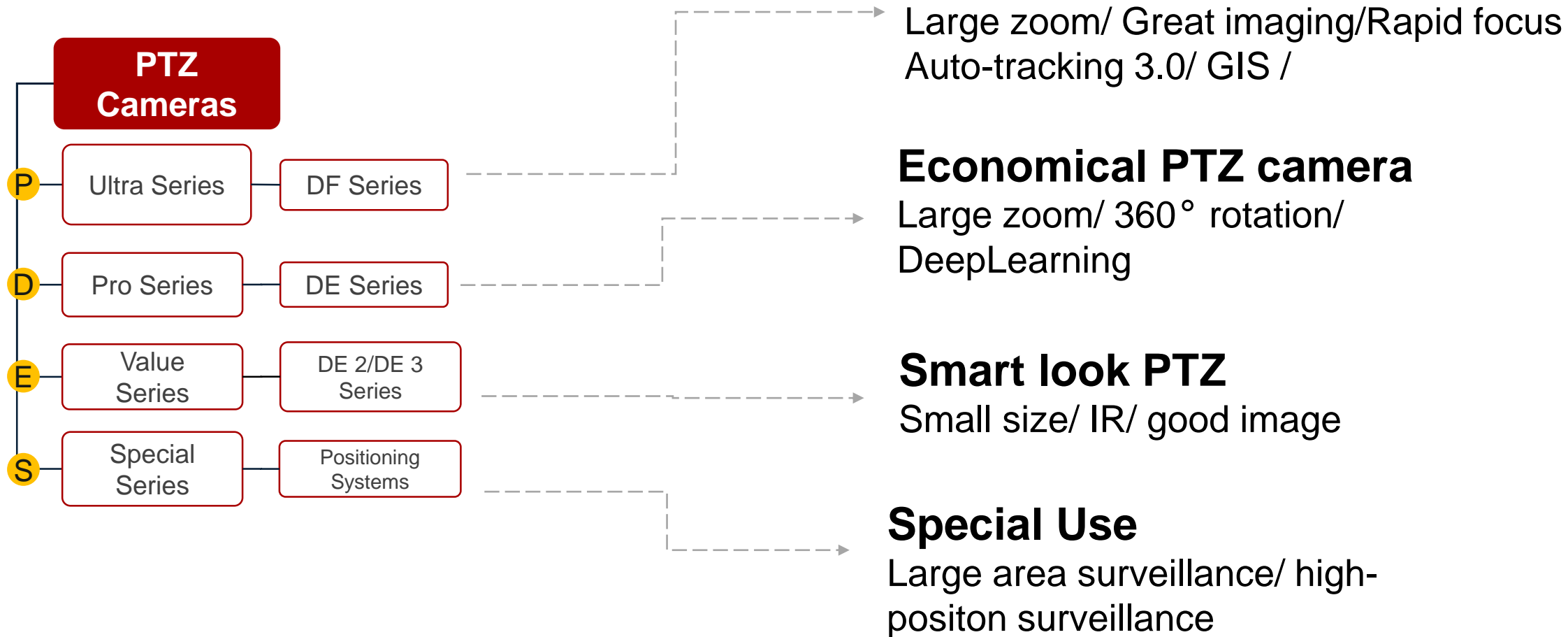


IP Product System (Front End)

HIKVISION



Positioning



PTZ Family Highlights

Image

Function



- DarkFighterX imaging
- **ANPR / Face capture (DF9C)**
- **Sales Promotion**



- DarkFighter
- **Face/ANPR tracking (June)**
- 25x/42x/ **48x (H2)**
- GIS / Rapid focus



Powered by
DarkFighter



DE series

- AcuSense 2.0
- 15x/32x



Large Zoom



- 110° HOV
- **3 km detection distance**



Perimeter



- **Audio & strobe light warning (no radar)**
- Dual lens cover large scene (bullet PTZ)
- Radar + PTZ linkage



Special



- Body structure
- **Illegal parking detection**
- Wrong driving detection

DF PTZ Key Features

HIKVISION

GIS/OIS

Image stabilization helps camera obtain a stable image even installed at a high area



High Resolution & DarkFighter/ DarkFighterX
2MP/4MP, Good night vision, 0.002Lux



Auto-Homing

When the position of lens is changed accidentally, it will return back automatically.



IK10 & IP67



Rapid Focus
Focus Accurately and Fast



**Face Capture /
Plate Recognition**



Auto-tracking 3.0
Support tracking specified target
based on face image and plate
number



DarkFighterX - Only in HikVision



DS-2DF8225IH-AEL
DS-2DF8225I5H-AEL



DS-2DF9C435IHS-DLW(T2)
DS-2DF9C245IHS-DLW(T2)

Features

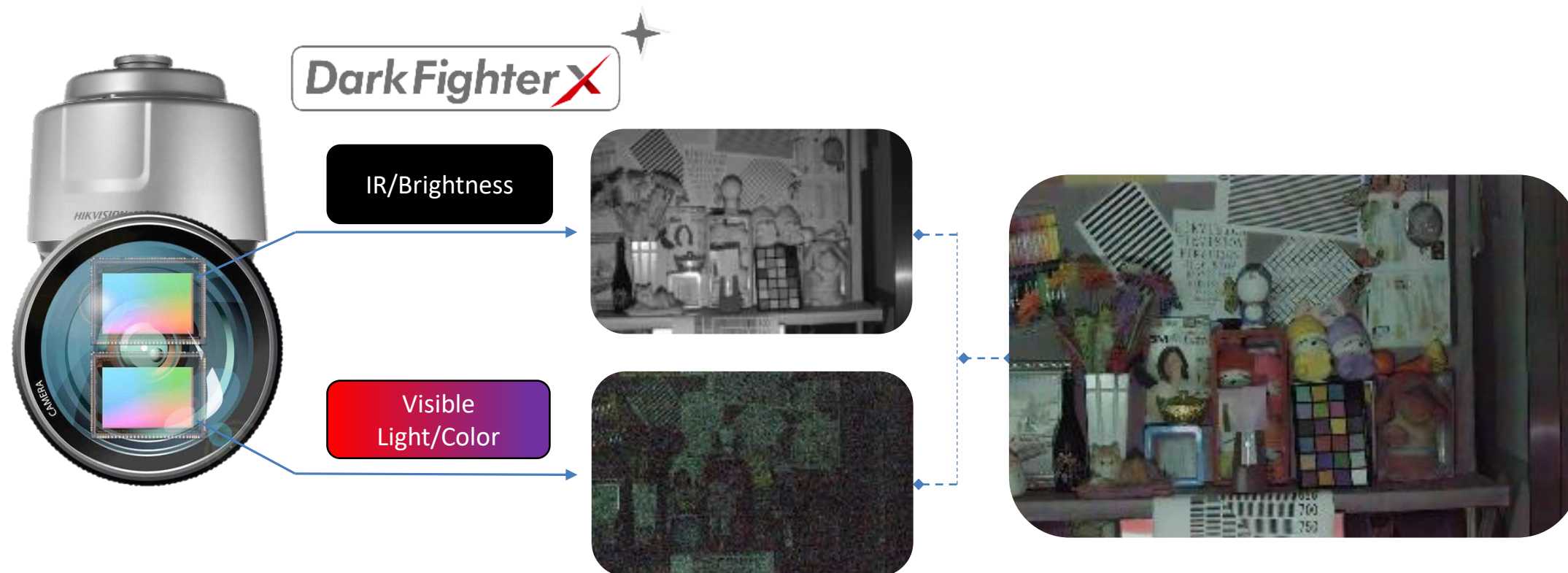
- 4 MP DarkFighterX technology
- Face capture / ANPR
- Auto-tracking 3.0 – specific target tracking
- Rapid focus – instant focus without blurred image
- Auto wiper (DF9C)



Auto wiper video

DarkFighterX

Hikvision patented **DarkFighterX** technology has innovative dual-sensor design. One sensor captures B/W images with high brightness while the other captures colorful images. Two images integrate into a single, bright and colorful image.



DarkFighterX Performance



Recorded by
conventional camera



Recorded by
DarkFighter camera



Recorded by
DarkFighterX camera

High Performance PTZ



DF9C IR

DS-2DF9C473IXS-DLW(T2)



DF8C IR

DS-2DF8C260IXS-AELW(T2)
(Aug)
DS-2DF8C442IXS-AELW(T2)
DS-2DF8C842IXS-AELW(T2)



DF8 IR

DS-2DF8225IX-AELW(T3)
DS-2DF8242IX-AELW(T3)
DS-2DF8425IX-AELW(T3)
DS-2DF8442IXS-AELW(T2)

DS-2DF8250I8X-AEL(W)
DS-2DF8250I5X-AEL(W)



DF8A IR

DS-2DF8A442IXS-AEL(T2)
DS-2DF8A842IXS-AEL(T2)



DF6A Non-IR

DS-2DF6A225X-AEL(T3)
DS-2DF6A236X-AEL(T3)
DS-2DF6A425X-AEL(T3)
DS-2DF6A436X-AEL(T3)

Features

- 4 MP DarkFighter technology
- 73x/60x Super large FOV
- 50x optical zoom + Optical image stability
- Face capture / ANPR
- Auto-tracking 3.0 – specific target tracking
- Rapid focus – instant focus without blurred image



7''IR

DS-2DF7225IX-AEL
DS-2DF7232IX-AEL



6'' Non-IR

DS-2DF6225X-AEL



5'' Non-IR

DS-2DF5225X-AEL
DS-2DF5232X-AEL

High Resolution & DarkFighter

Hikvision patented **High Resolution & DarkFighter** technology provides bright and color image at night.

Test Environment: Darkroom(0.045LUX)

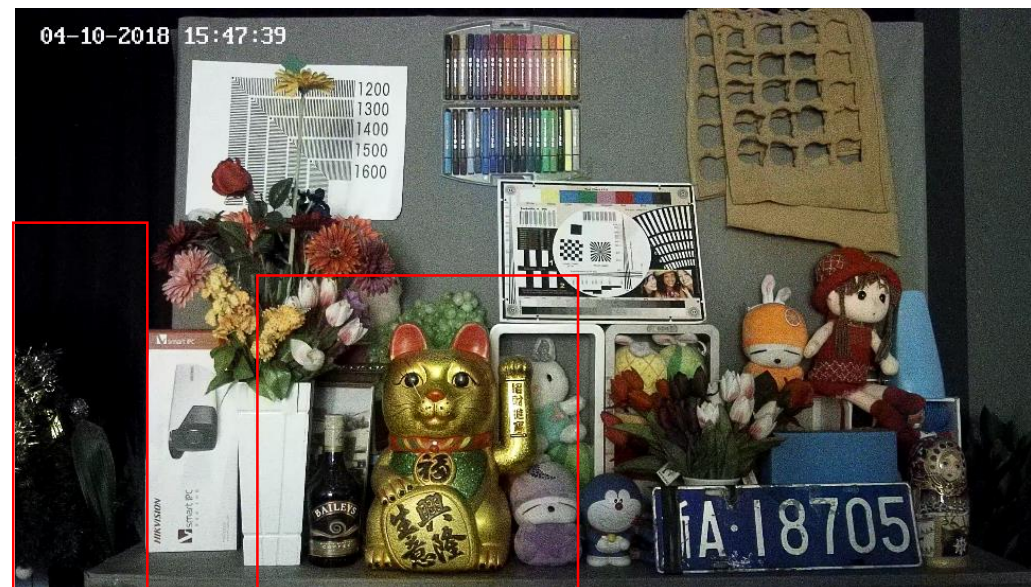
DarkFighter



2

1

Recorded by 4MP DE camera



2

1

Recorded by 4MP DF camera

Super Zoom - 73x / 60x

Super zoom camera is equipped with **two lenses** which enables large field of view of **110°** and large zoom. Two lens works seamlessly when zooming up to check details to ensure a excellent image.



Dual Optical
Lens

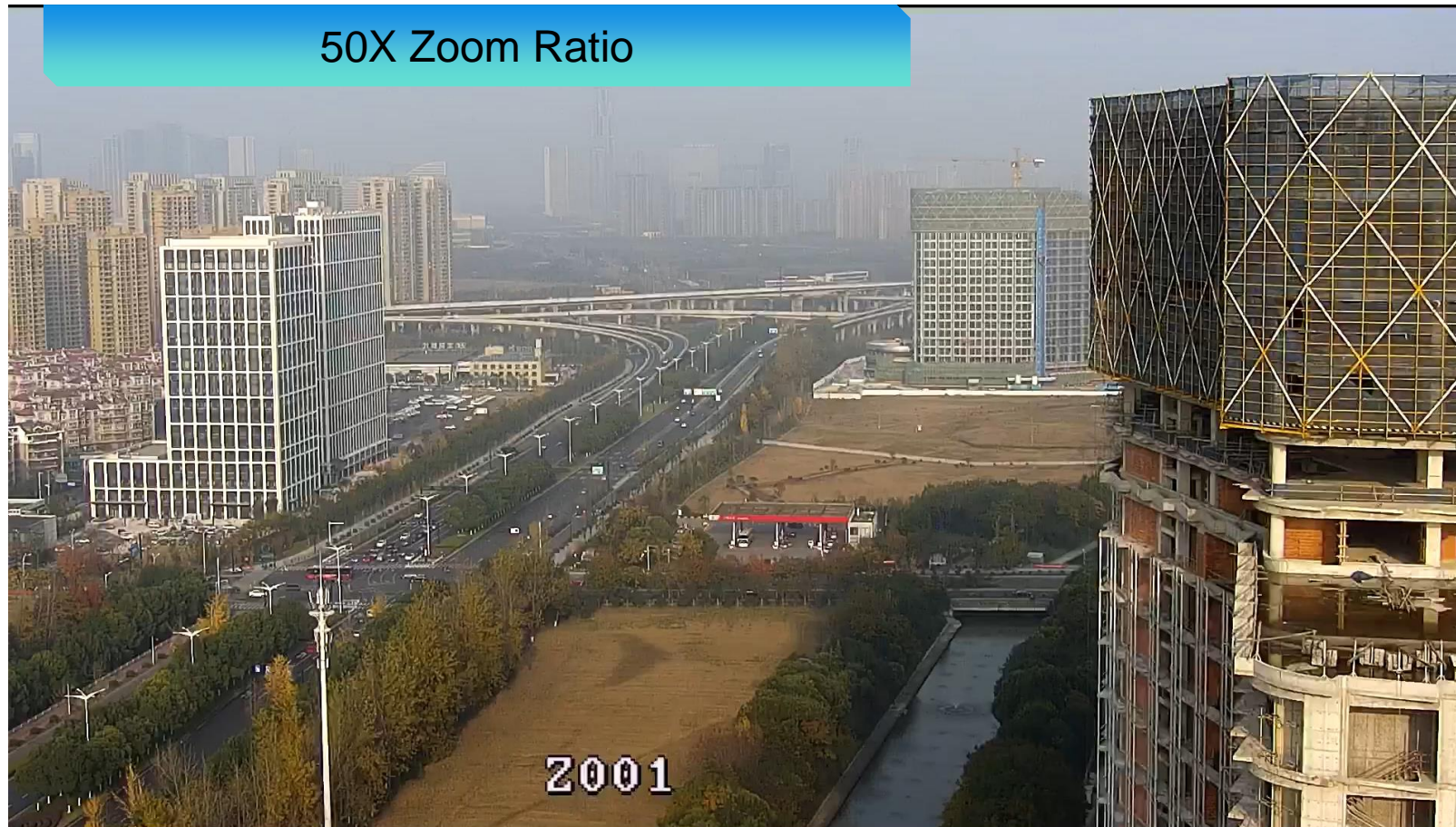
Super wide
FOV

Recorded by **73x camera**

* 60x will be released in 2020H2.



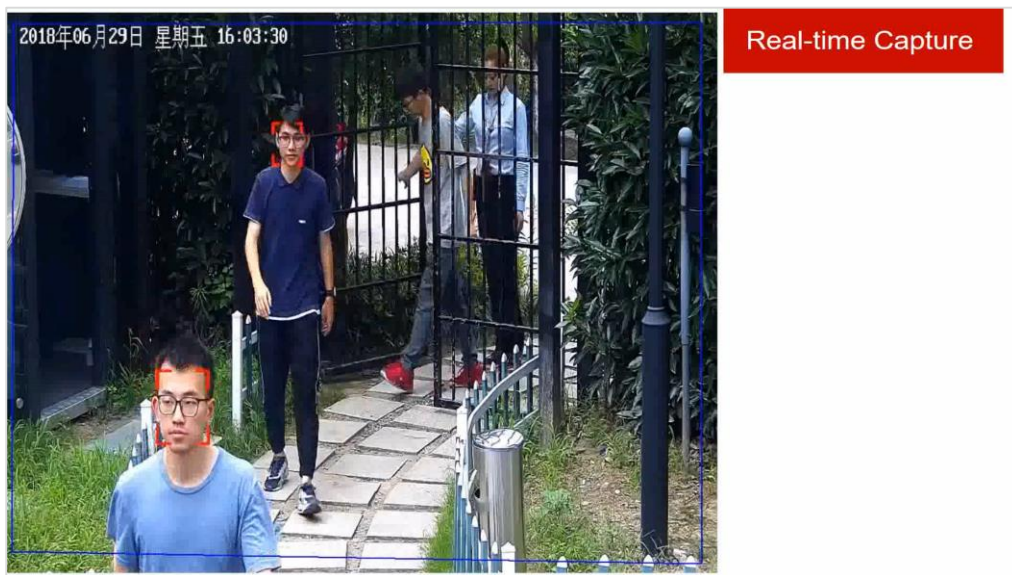
50X Zoom Ratio PTZ Camera



Recorded by 50X DF camera

Face Capture

PTZ camera supports 3 different face capture modes, which is more flexible in installation, maintenance, and capture targets to greater distance.



Checkpoint Mode

Capturing in a fixed zone with an up-to-150-meters radius

› Manual Capture Mode

To capture faces on the screen with one-click

› Checkpoint Mode

To capture faces in a fixed area

› Auto-switch Mode

To set multiple capturing areas and switch automatically in between

ANPR — Automatic Number Plate Recognition

HIKVISION

The screenshot displays the Hikvision ANPR software interface. On the left, there is a control panel with various icons and a list of 7 preset points. The main area shows a live camera feed from 'Camera 01' dated 2020-03-26 14:18:37. Two vehicles are detected and highlighted with red bounding boxes. To the right of the feed, a 'Real-time Analysis' (实时分析) panel provides details for the selected vehicle (浙A319XS):

Vehicle Name	Plate Number	Vehicle Type	Vehicle Brand	Vehicle Color
Camera 01	浙A319XS	92式民用车	奥迪 A6L	黑色

Below the main feed, a 'Vehicle Detection' (车辆检测) section shows a grid of six smaller images, each with a corresponding plate number: 浙A319XS, 浙A0B1161, 浙A8S790, 浙AF08720, 车牌号码未知, and 浙AME157.

**250m
Plate Recognition**

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Supports overall 84 countries' plate recognition overseas:

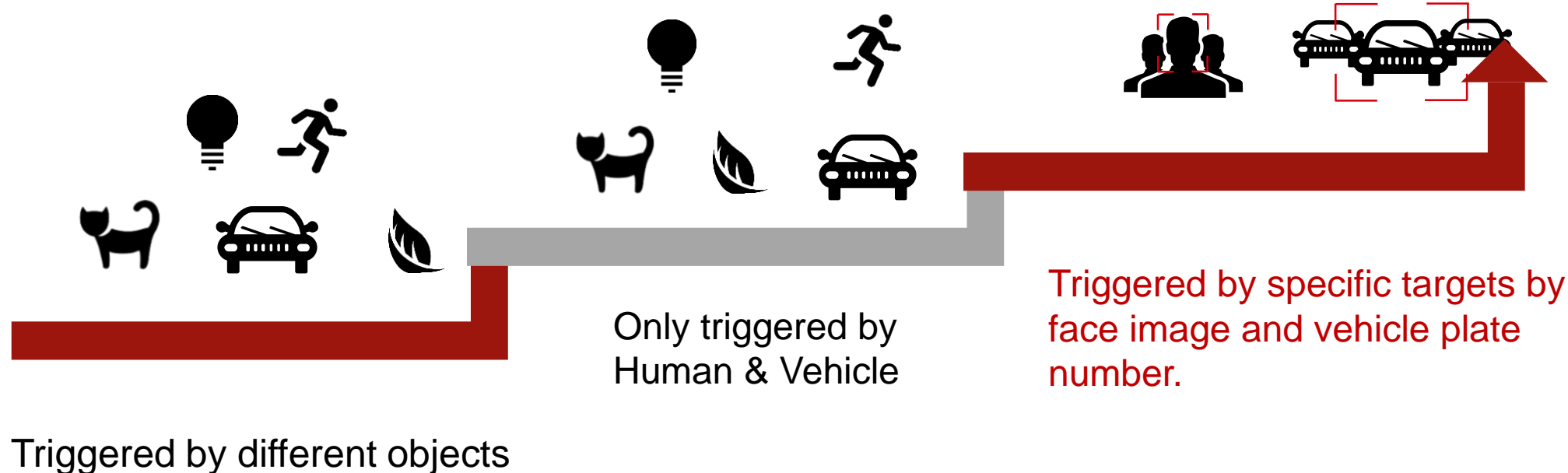
1. European/Russian
2. Asia
3. MENA
4. America & Africa

250m ANPR demonstration (daytime)

Auto-Tracking 3.0 – Specific target tracking

Intelligent Applications: Triggered by human, vehicle or VCA rule, a PTZ camera will track the target for checking details (auto-tracking).

Auto-tracking 1.0 > Auto-tracking 2.0 > Auto-tracking 3.0



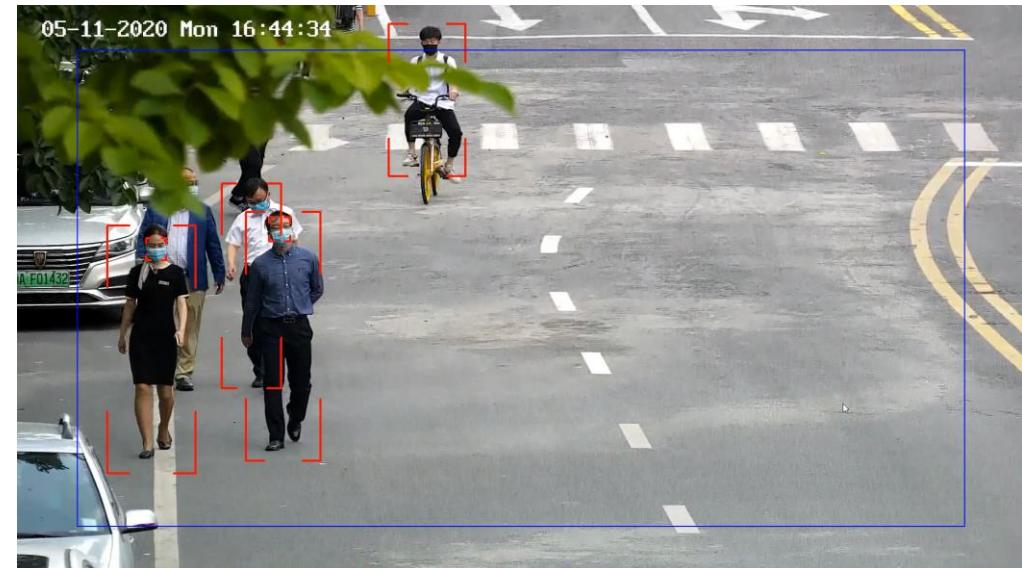
Auto-Tracking 3.0 – Performance

Specific Vehicle Tracking



When the camera recognizes vehicle plate number, it will start tracking.

Specific Human Tracking



Only the person in the face list can trigger tracking.



OIS

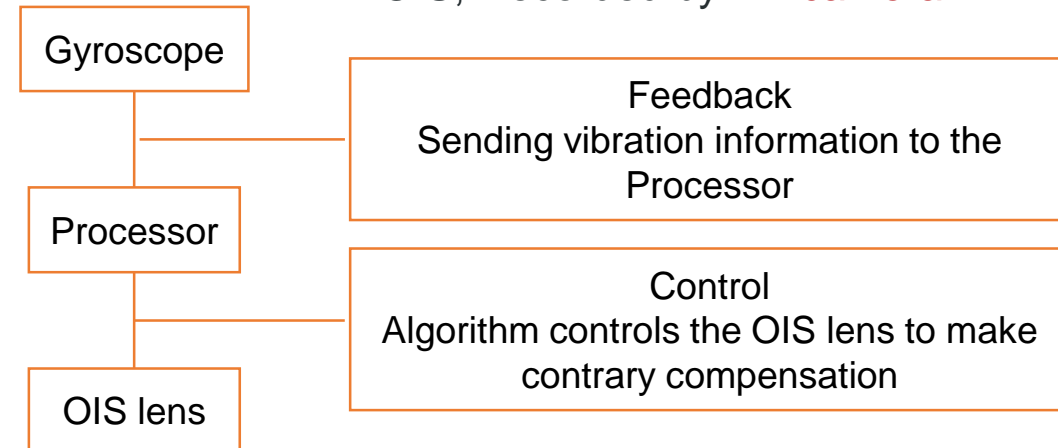


EIS, Recorded by **conventional camera**

OIS, Recorded by **DF camera**

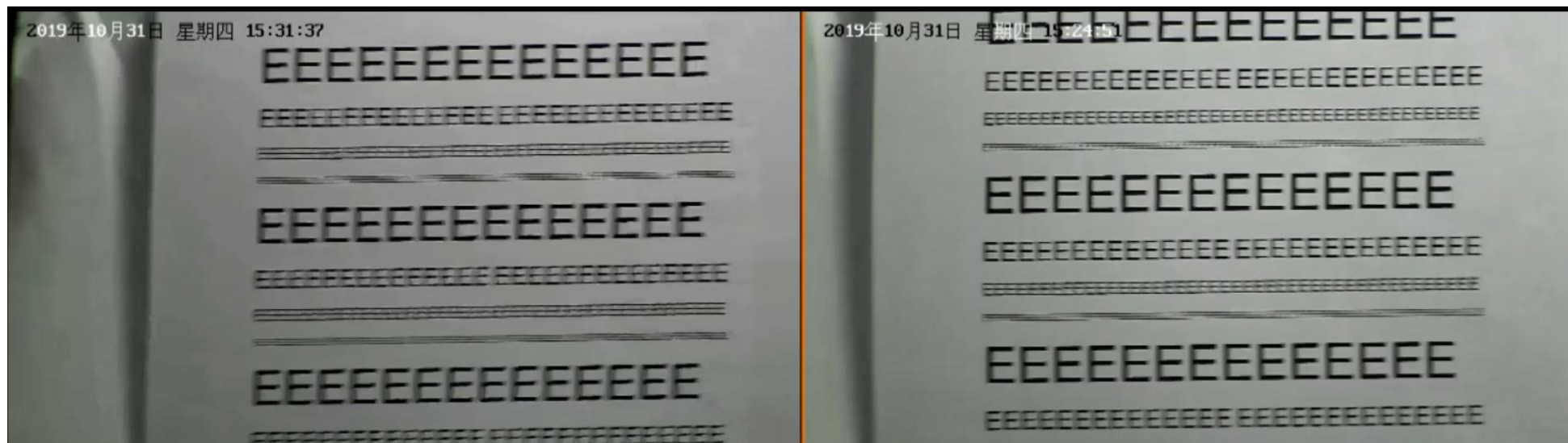
➤ Principle

Shaking image always be generated when camera at high zoom rate or deployed on the bridge . With OIS technology, camera can solve the issue very well.



OIS > GIS > EIS

Image Performance: Better image performance comes with gyroscope image stabilization (GIS).



EIS on

GIS on

Rapid Focus

With Hikvision **Rapid Focus** technology, camera focus accurately and fast when zoom ratio changed .



Recorded by **conventional camera**
Take time to focus when zoom in and out



Recorded by **DF camera**
Focus fast and accurately



Optical Defog

HIKVISION

Conventional Defog



Recorded by conventional camera

Optical Defog

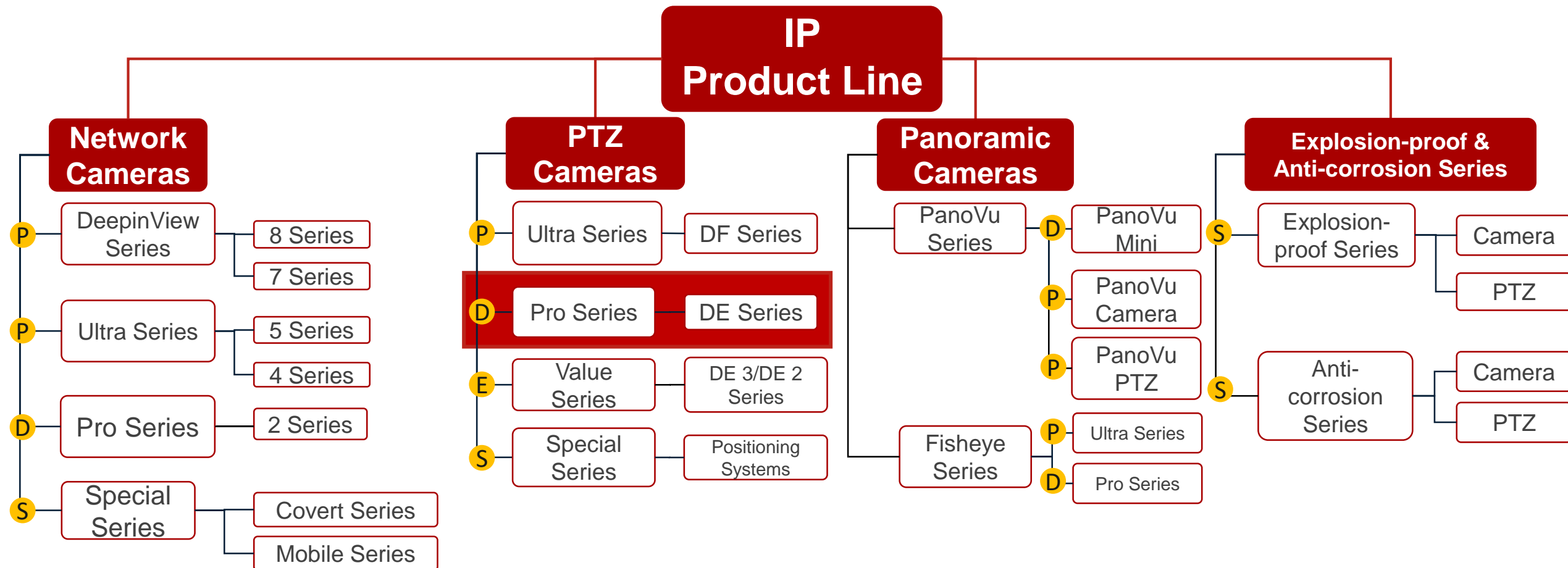


Recorded by DF camera

















IP Product System (Front End)

HIKVISION



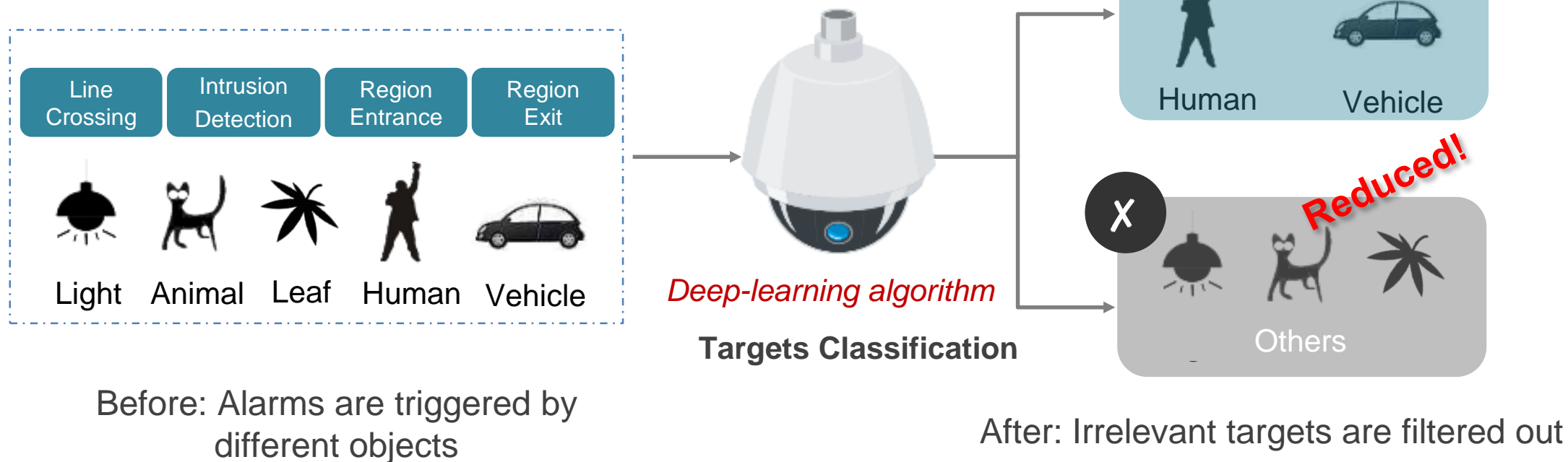
DE PTZ Camera Product Map

	IR		Non-IR	
	7-inch	5-inch	4-inch	3-inch
7-inch	 <p>2/4/5 MP 25x / 30x / 32x IK10 (except the lens)</p> <p>DE7 / DE7 (S5) </p>	 <p>4MP 32X 2MP 45X</p> <p>DE7A </p>		
5-inch	 <p>2/4 MP 25x / 32x</p> <p>DE5 / DE5 (S5) </p>		 <p>2/4 MP 25x / 32x IK10</p> <p>DE5</p>	
4-inch	 <p>2/4 MP 15x / 25x</p> <p>DE4 / DE4 (S5) </p>	 <p>2/4 MP 4x / 15x / 25x</p> <p>DE4A</p>	 <p>2/4 MP 15x / 25x</p> <p>DE4</p>	
3-inch	 <p>4 MP 4x</p> <p>DE3A</p>		 <p>2/3 MP 4x IK10</p> <p>DE3</p>	
2-inch	 <p>2/4 MP 4x IK10</p> <p>DE2A</p>			
	IR		Non-IR	

Deep Learning Technology

False Alarm Reduction

HIKVISION®



Deep learning algorithm reduces false alarm caused by irrelevant targets such as animals, leaves or light. It greatly improves the accuracy of perimeter protection.

DE PTZ Overview



7A IR

DS-2DE7A232MW-AE(T3)



7'' IR

DS-2DE7530IW-AE
DS-2DE7430IW-AE
DS-2DE7425IW-AE
DS-2DE7232IW-AE
DS-2DE7225IW-AE



5'' Non-IR

DS-2DE5425W-AE
DS-2DE5232W-AE
DS-2DE5225W-AE



4A'' IR

DS-2DE4A425IW-DE
DS-2DE4A225IW-DE
DS-2DE4A215IW-DE
DS-2DE4A404IW-DE
DS-2DE4A204IW-DE



5'' IR

DS-2DE5432IW-AE
DS-2DE5425IW-AE
DS-2DE5232IW-AE
DS-2DE5225IW-AE



4'' IR

DS-2DE4425IW-DE
DS-2DE4415IW-DE
DS-2DE4225IW-DE
DS-2DE4215IW-DE



4'' Non-IR

DS-2DE4425W-DE
DS-2DE4415W-DE3
DS-2DE4225W-DE
DS-2DE4225W-DE3
DS-2DE4215W-DE3

Features

- Outdoor/indoor surveillance
- Powered by DarkFighter
- True 120 dB WDR
- **Auto-tracking 2.0** (DE7, 5, 4)
- 32x optical zoom



True WDR

HIKVISION

Hikvision **True WDR** technology provides images without losing details under strong backlight.



Recorded by **conventional camera**

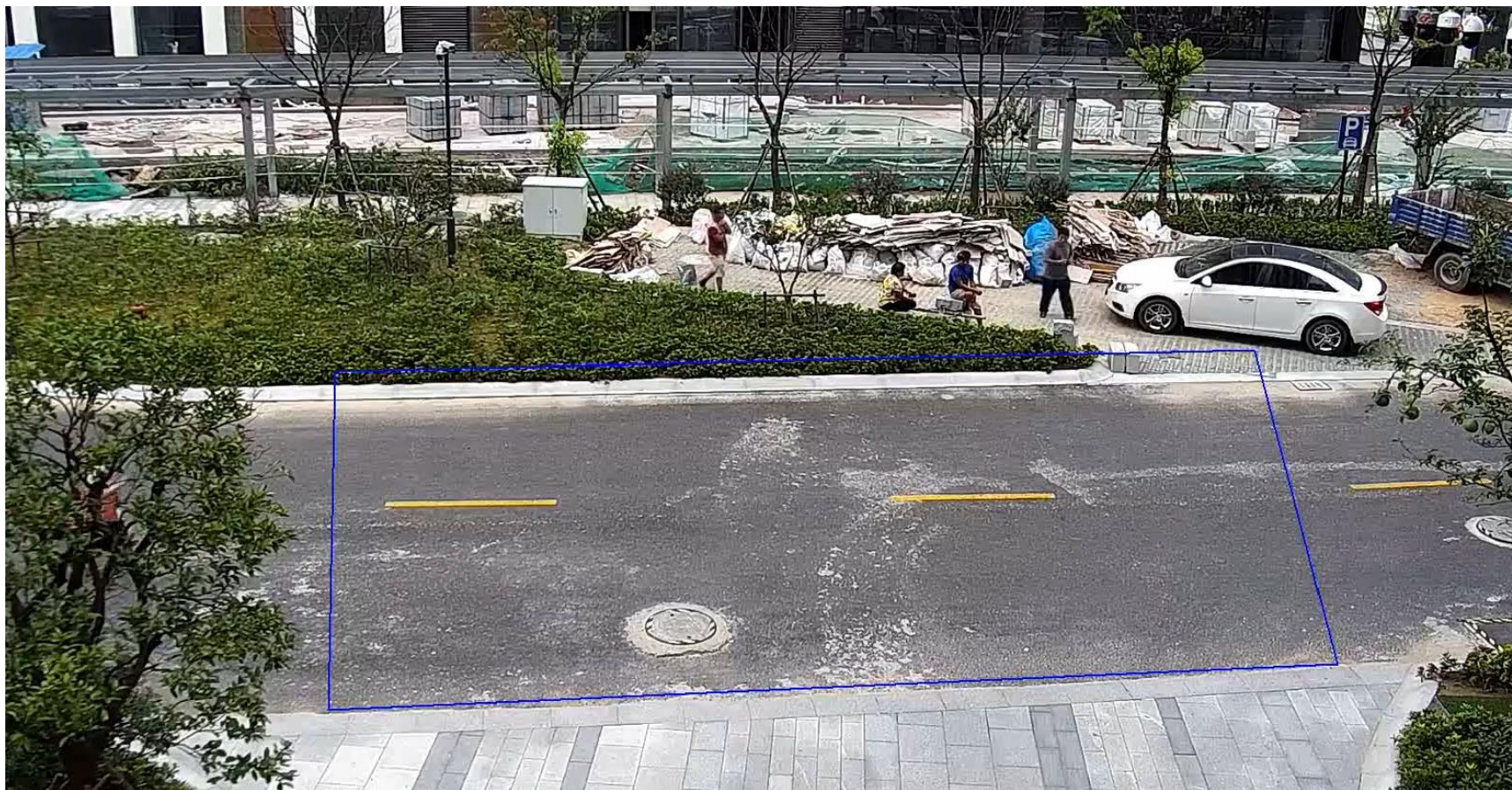


Recorded by **DE series camera**

Audio and Strobe Light Alarm

HIKVISION

Based on human and vehicle classification, it warns off the intruders in real time.



DS-2DE7A232MW-AE(T3)

Intrusion alarm on vehicle

Difference Between DF & DE

HIKVISION



DF

VS

DE



**High-end
Project Camera**
Large zoom/ Great
imaging / Rapid
focus/ auto tracking
3.0

Hot Models

DF9C435IHS-DLW
DF8A442IXS-AEL
DF824215X-AELW

2/3", 1/1.8"



8 MP

73x/60x50x/42x/25x

800/500/400 m

Wiper / Rapid Focus
Face Capture/ ANPR
Auto Tracking 3.0
IP67 IK10 / -40°

Sensor

Imaging

Resolution (Max.)

Optical Zoom

IR (laser)

**Smart
Function**

[MORE](#)

1/2.8", 1/1.9"

Powered by **DARKFIGHTER**

5 MP

32x/25x/15x

150 m / NA

Auto Tracking 2.0

**Economical
PTZ camera**

Large zoom/ 360°
rotation

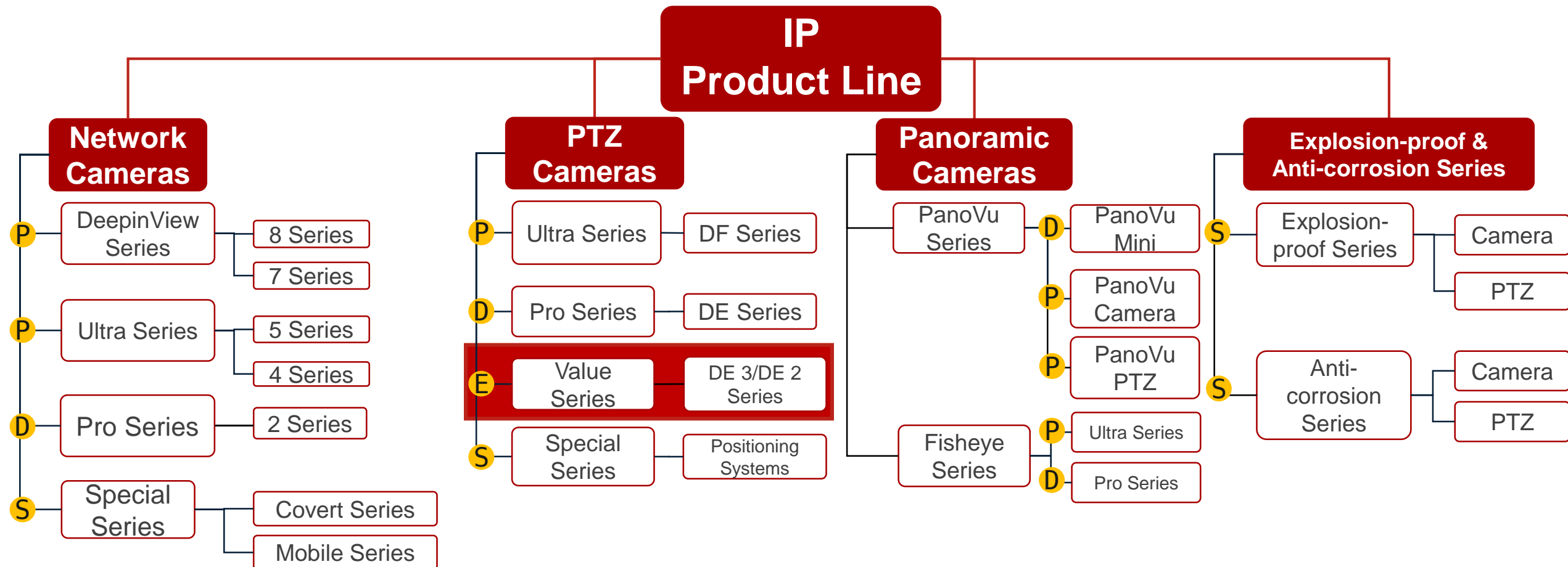
Hot Models

DE7232IW-AE
DE4225IW-DE
DE4A225IW-DE



IP Product System (Front End)

HIKVISION



Mini PTZ



**3" I
R**

DS-2DE3A404IW-DE
DS-2DE3A404IW-DE/W



2.5" IR & Non-IR

DS-2DE2A404IW-DE3
DS-2DE2A404W-DE3
DS-2DE2A204IW-DE3
DS-2DE2A204W-DE3

Features

- Small size / smart look
- Wi-Fi access
- Accessible control over internet
- Audio and strobe light

Image Performance

HIKVISION



WDR



Powered by DarkFighter

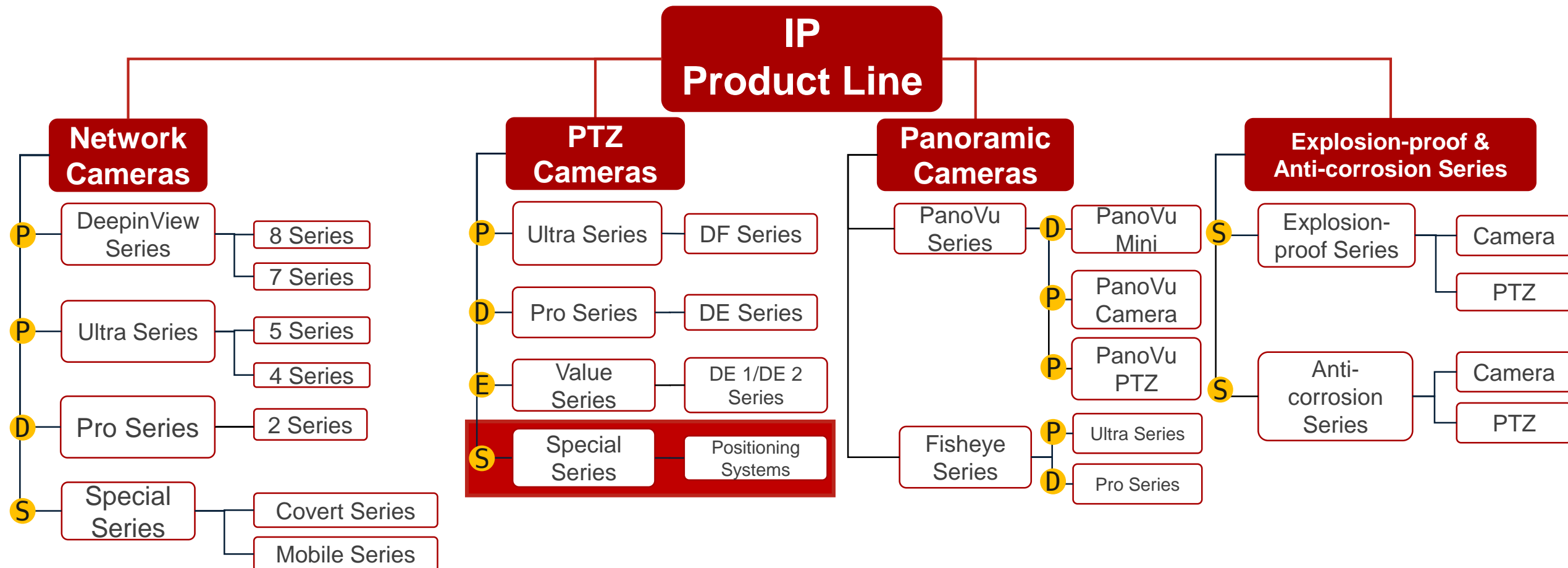


IR



IP Product System (Front End)

HIKVISION



Positioning System PTZ

HIKVISION

Hierarchy

DY3



- **20x**
- 100m IR
- Tilt: -40° to 30°
- **Stand / Wall mounting**

DY5



- DarkFighter
- **Tilt: -90° to 90°**
- **Mobile certificate**
- Hi-PoE (AE models)

DY7



- **36x**
- **DarkFighter**
- 150m IR
- Tilt: -90° to 10°

DY9



- 36x / **50x**
- **Up to 1000m laser**
- Tilt: -90° to 40°
- Alarm I/O: 7/2

DY9



- **DarkFighterX**
- 25x
- 2 MP
- Tilt: -90° to 40°
- Alarm I/O: 7/2

Features

Positioning System PTZ



Features

- Durability – heat radiation/Heater/anti-fog/anti-frost
- Great imaging – DarkFighter technology / Long distance IR
- Large surveillance area – install in high position
- Wide tile angle: $+40^{\circ}$ to -90°



Highway



Railway



Airport



Shipping



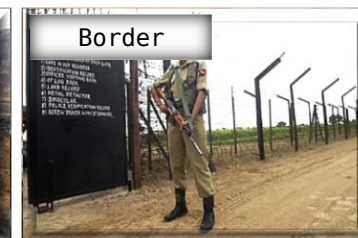
Harbor



Electric



Gas/oil



Border



High ground



Road



Construction site



Prison



DeepinView

HIKVISION



Target Capture Camera
iDS-2PT9A144MXS-D/T2 (1352/6)



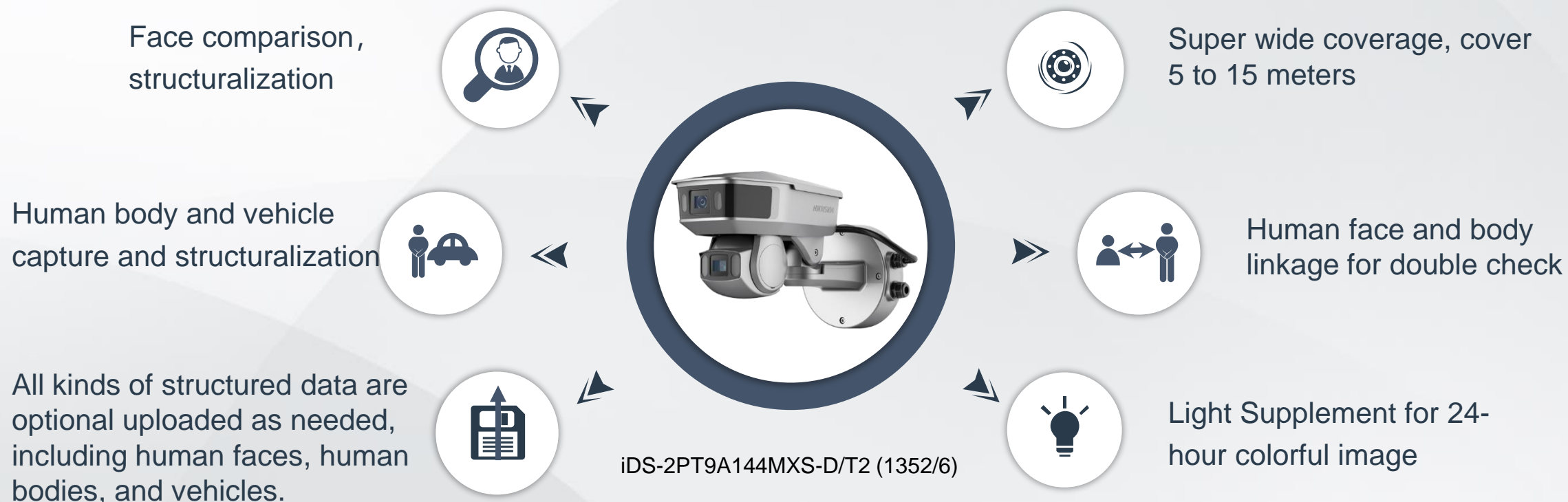
Traffic Violation Detection
iDS-2VS435-F840-EY



Bullet PTZ
iDS-2SK8144IXS-D/J

Target Capture Camera

Hikvision PanoVu PT Series 4 MP + 4 MP Target Capture Camera is able to get both panoramic views and close-ups with the integration design of a PanoVu camera and a PTZ camera.



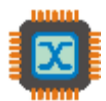
Face Capture with Rapid Focus



- Exclusive mechanism to reduce repeated capture rate
- Rapid focus for clear face captured image
- Pupil distance larger than 40 pixels, which can guarantee the facial comparison accuracy later

Traffic PTZ Camera

Algorithm is upgraded with deep learning feature to ensure high detection accuracy



GPU-supported Deep Learning Algorithm

H.265 Codec

Saving bandwidth greatly



DarkFighter

Detecting illegal parking and providing colorful images with street lamps

Rapid focus

Instant focus with no blur

iDS-2VS435-F840-EY

Function



Features

Illegal Vehicle Event Detection

Illegal Parking

Wrong direction driving

Illegal lane change

Over lane line

Wrong U-turn



24/7 working hours



Weather adaptive



Vehicle plate number accurate recognition



Real-time alarm and record

Bullet Linkage PTZ

HIKVISION®

Audio & Strobe light

- Audio warning up to 40 m (audio message is customizable)



Bullet Lens Support PT Movement

- Pan range: $-45^{\circ} \sim 45^{\circ}$
- Tilt range: $-5^{\circ} \sim 30^{\circ}$
- HFOV: 90°
- Focal: 2.8~12 mm
- 50m IR

PTZ

- 4 MP @ 40X
- IR 400 m

iDS-2SK8144IXS-D/J

Release time: June

Event

- Face capture/ANPR
- Specific target tracking
- PTZ & Bullet linkage

Showcase



Applications



City council

Square



Detention Center



Analog AE PTZ

Analog PTZ

HIKVISION

4 in 1 Analog PTZ Camera

1 BNC, 4 Switchable Video Output TVI/AHD/CVI/CVBS



7"IR

DS-2AE7225TI-A (D)
DS-2AE7232TI-A (D)
DS-2AE7225TI-D (D)
DS-2AE7232TI-D (D)



5" IR

DS-2AE5225TI-A (D)
DS-2AE5232TI-A (D)



5" Non-IR

DS-2AE5225T-A3 (D)
DS-2AE5232T-A3 (D)
DS-2AE5225T-A (D)
DS-2AE5232T-A (D)



4" IR

DS-2AE4225TI-A (E)
DS-2AE4215TI-A (E)
DS-2AE4225TI-D (E)
DS-2AE4215TI-D (E)
DS-2AE4115TI-D (Non 4 in 1)



4" Non-IR

DS-2AE4225T-A3 (D)
DS-2AE4225T-D3 (D)
DS-2AE4215T-A3 (D)
DS-2AE4215T-D3 (D)
DS-2AE4225T-A (D)
DS-2AE4215T-A (D)
DS-2AE4225T-D (D)
DS-2AE4215T-D (D)

HDTVI Series

HIKVISION

Multiple Appearances

Different shapes meet different scenario requirement



True WDR

120dB true WDR



4 in 1 Video Output

1 BNC,
4 Switchable Video Output
TVI/AHD/CVI/CVBS



Good Night Vision

Color: 0.005 Lux @(F1.6, AGC ON)



High Definition

1920 * 1080



Thanks for Watching !