IPC 2 Series

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Product Overview

Fixed-focal Series

- ➢ 2MP, 4MP, 5MP, 8MP
- ➢ 2.8mm; 3.6mm; 6mmm,8mm (Only T Bullet support 6mm,8mm)
- ➢ Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
- ➢ Built in Mic, -AS model support Alarm 1/1, Audio 1/1
- ➢ Built-in IR LED, Supports max. 256 G Micro SD card
- ➢ 12 VDC/PoE power supply
- ➢ IP67 protection， IK10(Supported by Dome)
- ➢ 5MP S bullet appearance has switched to E bullet appearance, and doesn't have T bullet appearance.

IPC-HFW2241S-S
IPC-HFW2441S-S
IPC-HFW2841S-S

IPC-HDW2241T-S
IPC-HDW2441T-S
IPC-HDW2541T-S
IPC-HDW2841T-S

Upgraded

IPC-HFW2241T-AS
IPC-HFW2441T-AS
IPC-HFW2841T-AS

Upgraded

IPC-HDW2241TM-S
IPC-HDW2441TM-S
IPC-HDW2541TM-S
IPC-HDW2841TM-S

Upgraded

IPC-HDBW2241E-S
IPC-HDBW2441E-S
IPC-HDBW2541E-S
IPC-HDBW2841E-S

E Bullet

IPC-HFW2541E-S

Note: For the detailed release date of the products, please refer to the product list.

Product Overview

Vari-focal Series

- 2MP, 4MP, 5MP, 8MP
- 2.7-13.5mm
- Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
- Built in Mic （Excluded 5MP Bullet & Dome), -ZAS model support Alarm 1/1, Audio 1/1
- Built-in IR LED, Supports max. 256 G Micro SD card
- 12 VDC/PoE power supply
- IP67 protection，IK10(Supported by Dome)
- 5MP T Bullet & R Dome uses the old version appearance, can not support built-in MIC.

Upgraded

IPC-HFW2241T-ZAS
IPC-HFW2441T-ZAS
IPC-HFW2841T-ZAS

IPC-HFW2241T-ZS
IPC-HFW2441T-ZS
IPC-HFW2841T-ZS

IPC-HDW2241T-ZS
IPC-HDW2441T-ZS
IPC-HDW2541T-ZS
IPC-HDW2841T-ZS

Upgraded

IPC-HDBW2241R-ZAS
IPC-HDBW2441R-ZAS
IPC-HDBW2841R-ZAS

IPC-HDBW2241R-ZS
IPC-HDBW2441R-ZS
IPC-HDBW2841R-ZS

Old Appearance

IPC-HFW2541T-ZAS
IPC-HFW2541T-ZS

Old Appearance

IPC-HDBW2541R-ZAS
IPC-HDBW2541R-ZS

Note: For the detailed release date of the products, please refer to the product list.

Key Features

SMD Plus

Reduce false alarm, focus on human and vehicle

Perimeter Protection

Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)

WDR

WDR: 120dB
clear details in the environment of strong brightness contrast.

Smart H.265+ & Smart H.264+

Higher encoding efficiency
High-quality video, reduces the cost of storage and transmission.

SD Card

All support SD Card
Max. 256 G Micro SD card

Built-in Mic

WizSense 2 Series support Built-in Mic

(Exclude 2541 vari-focal Dome and Bullet)

IP67&IK10(optional)

Support IP67&IK10 (Optional) Protection

*Wiz Sense*
IPC 2 Series

alhua
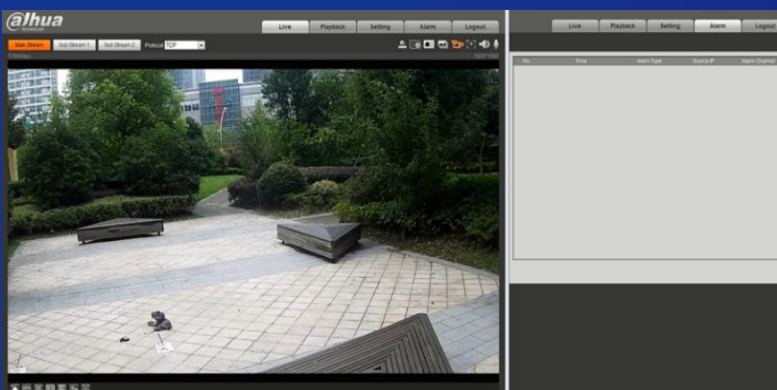TECHNOLOGY

Key Features-SMD Plus

After capturing the target within monitoring range, camera filter leaves, lights, pets and other disturbing objects, focus on Human and Vehicle.

False Alarm Filtering
- Filter leaves, lights, pets and other disturbing objects

Simple
- Simple configuration, enable in only one single button

Quick Target Search
- Human & Vehicle optional
- saving event retrieval time

Inclusive
- High Cost-effective, let world share Security by AI

Alarm Visualization
- Deliver real-time alarm prompt.
- Monitor video anytime and anywhere.

Key Features-SMD Plus

	SMD Plus
Detection accuracy rate (Human & Vehicle)	98%
Human Detection Distance	Up to 6m (2.8mm fixed-focal camera)
Vehicle Detection Distance	Up to 9m (2.8mm fixed-focal camera)
Small animals false alarm rate (cats, dogs)	< 2%
Large animals false alarm rate (cattle, horse, sheep, deer)	<10%

Key Features-SMD Plus

After capturing the target within monitoring range, camera filter leaves, lights, pets and other disturbing objects, focus on Human and Vehicle.
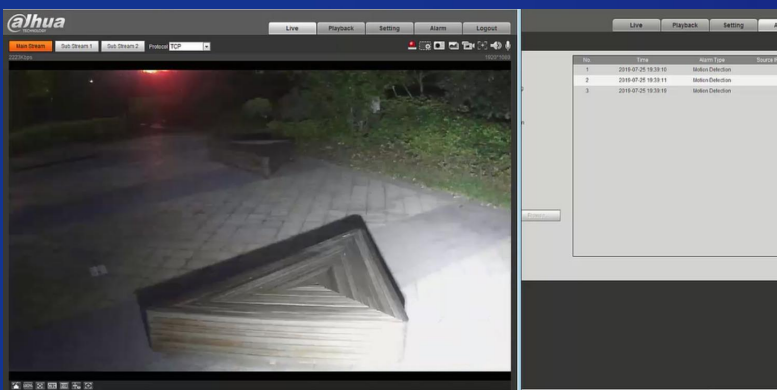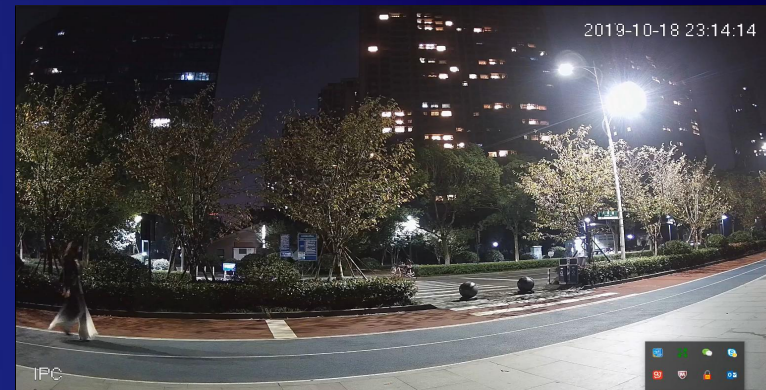

Filtering useless information(lights)
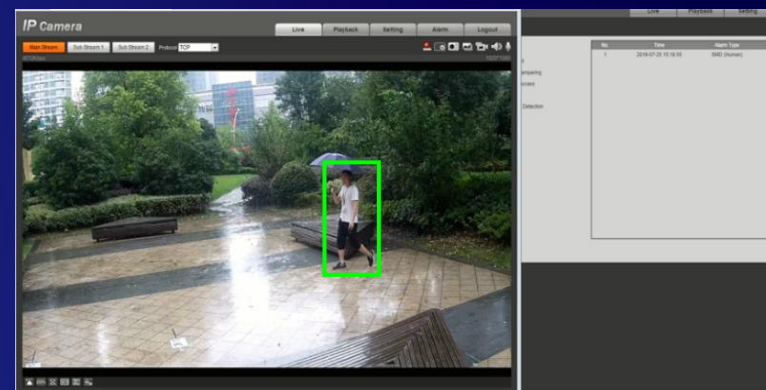
Push alarm caused by human

Filtering useless information(pets)

Push alarm caused by human and vehicle

Key Features-Perimeter Protection

With deep learning algorithm, Dahua Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion) are largely reduced.

Traditional IVS

1 Serious false and missed alarm.

2 Inefficient to inquire video recording

3 Poor adaptability

Perimeter Protection

1 Human and Vehicle classification.

2 Quick search

3 Meet a variety of scenes

Key Features-SMD Plus & Perimeter Protection

Differences between Perimeter Protection and SMD:

|	Perimeter Protection	SMD
Supported channels (for back-end intelligence)	Several channels	Up to Full channels
Configuration	Draw tripwire or intrusion rules	Enable via single button
Application Scenario	Applicable to specific areas, especially places that needs direction	Whole scene by default

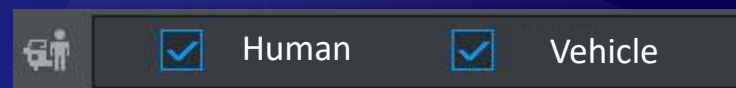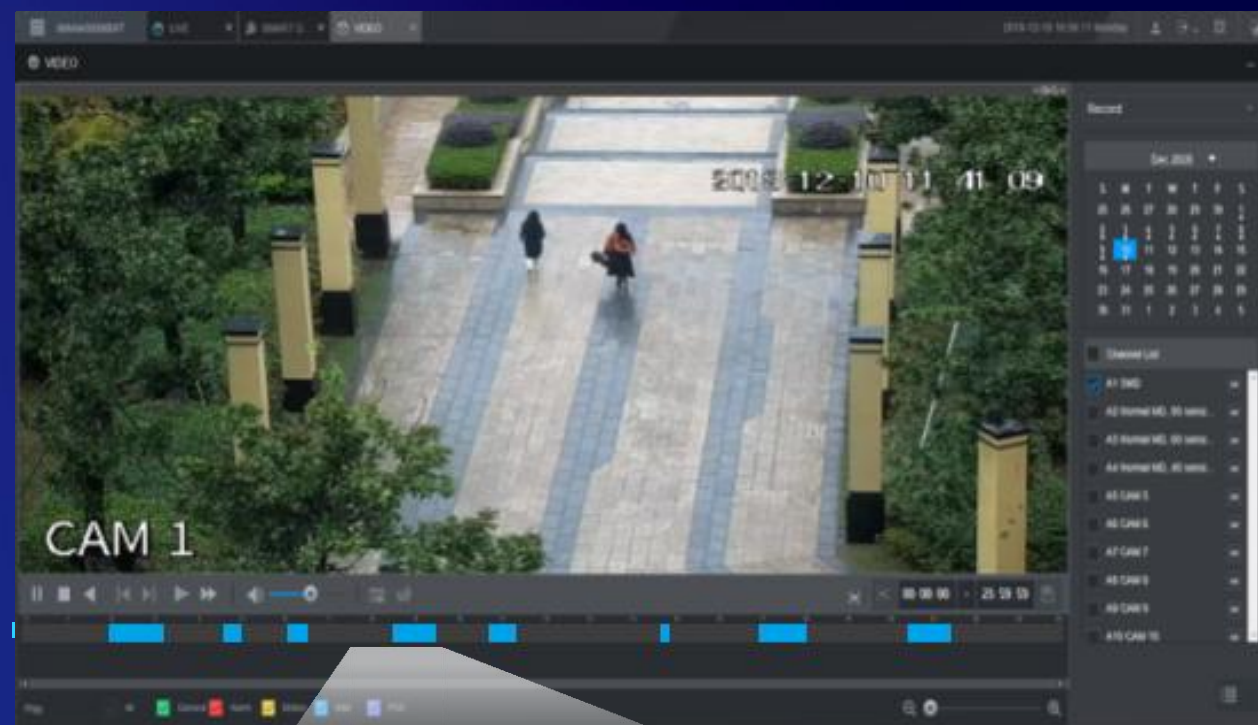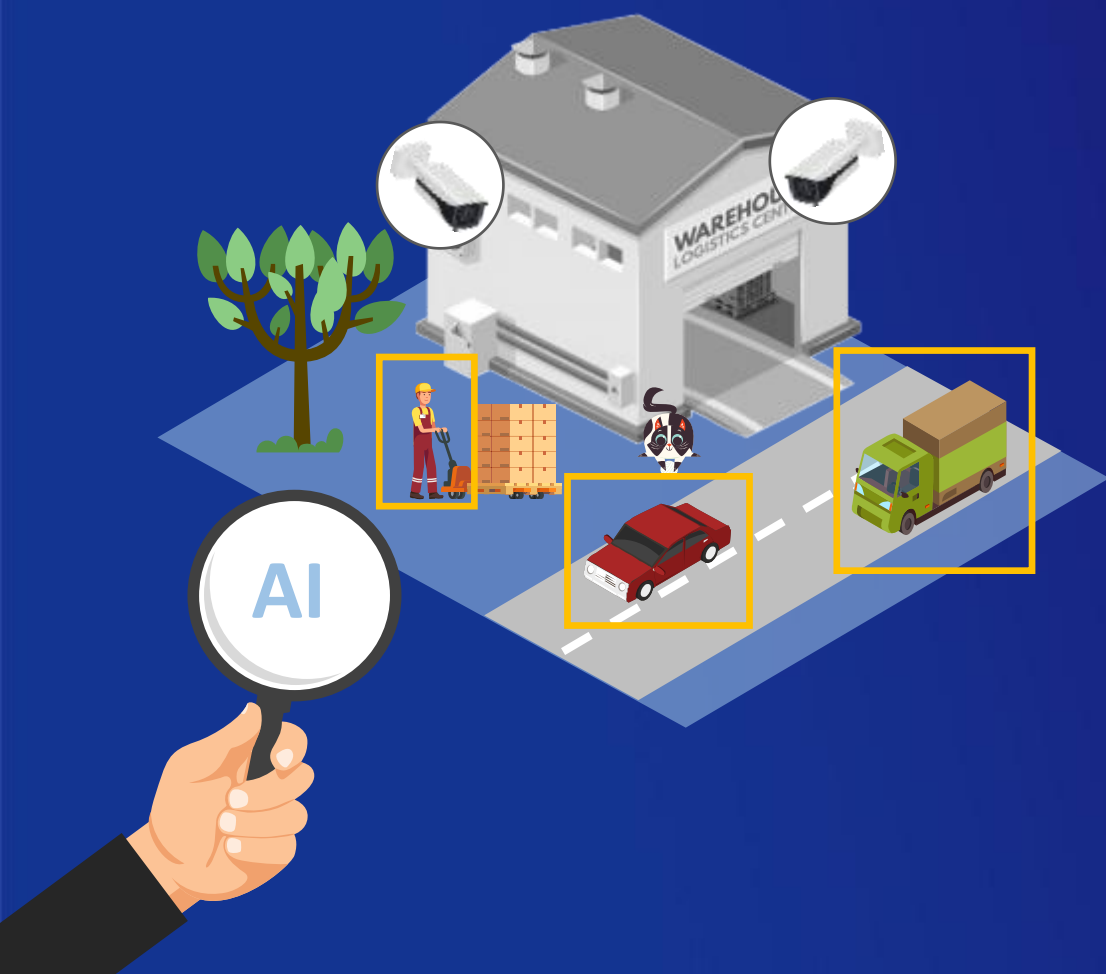# Key Features-SMD Plus & Perimeter Protection

SMD Plus
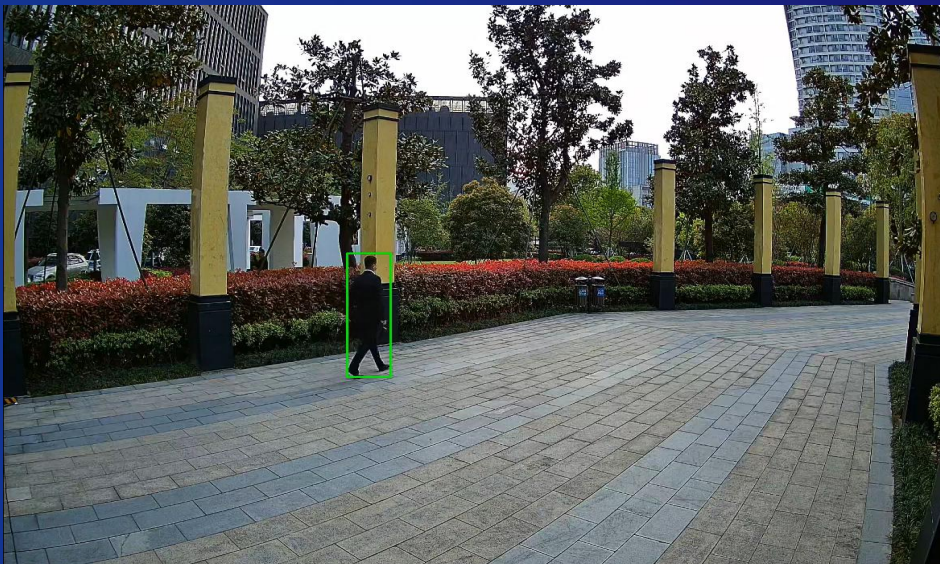
Perimeter Protection
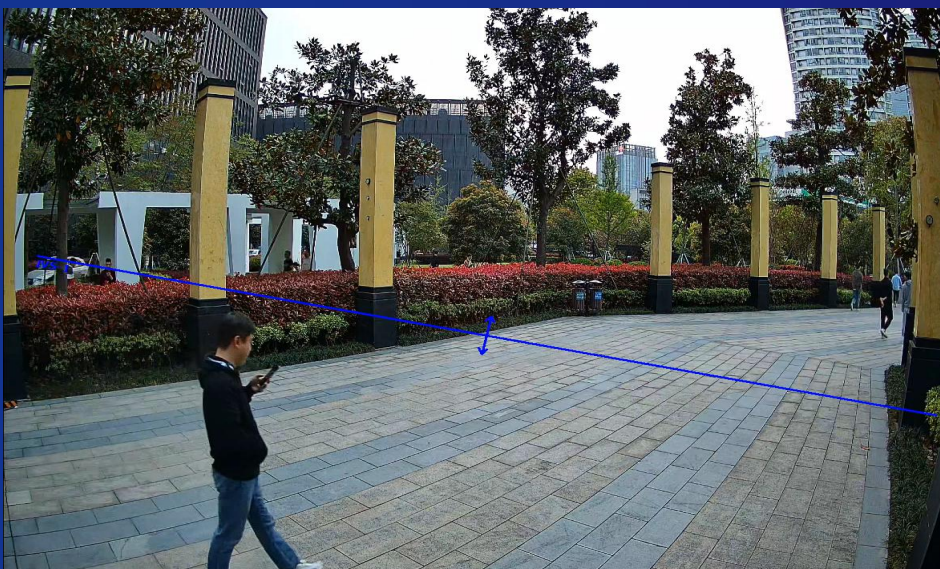
Key Features-Quick Target Search

Extract and classify human and vehicles from massive video data, easy for end users to trace historical information and analyze. Human & Vehicle optional for playback to achieve quick target search, saving event retrieval time.

AI

CAM 1

Human   Vehicle

Key Features-Smart Codec

Adopting advanced algorithm of auto stream control according to the environment, Dahua smart codec technology realizes the higher efficiency than (H.265 & H.264), providing high-quality video, and reducing the cost of storage and transmission.

General Camera HDD Requirement   Low Bit-rate Camera HDD Requirement
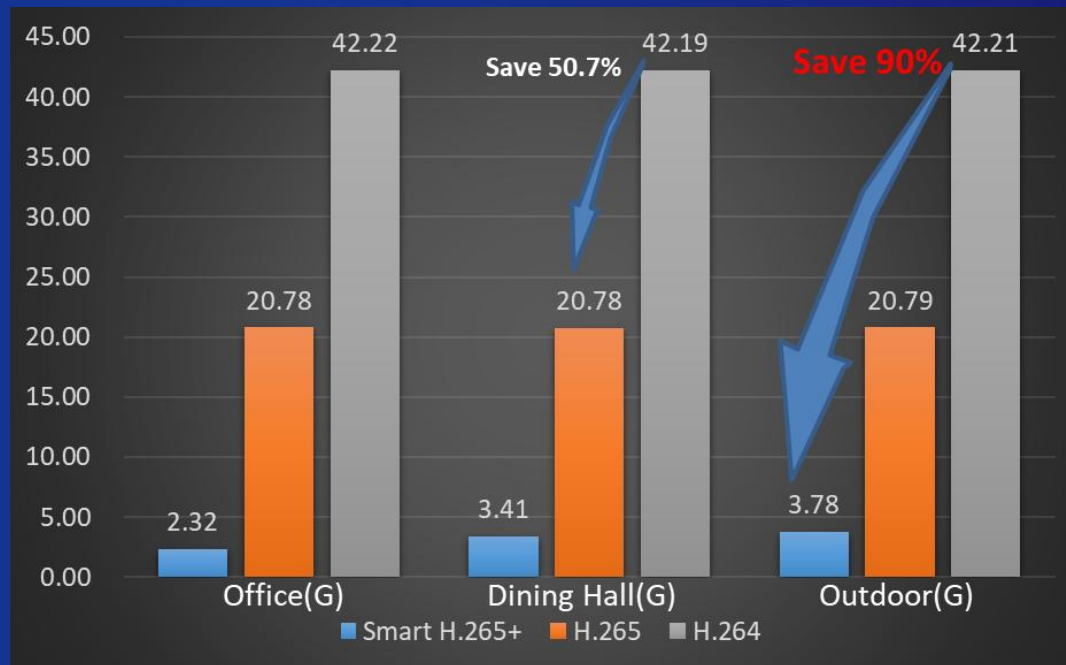
With the same scenario, the storage cost of 1080P low bit-rate scheme one day is more than 90% lower than that of H.264
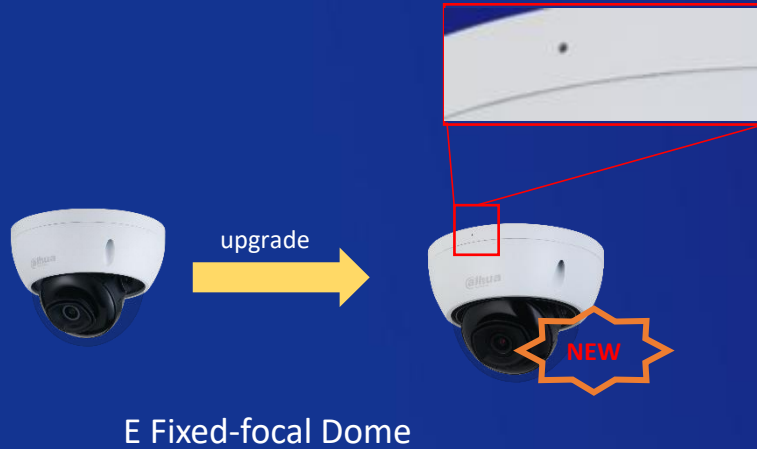
17GB saved per day，510GB saved per month

$=$

Camera Free

Key Features-Structure Appearance Upgrade

E Fixed-focal Dome

➤ Support built-in Mic

➤ 3 IR LED, high quality night vision

➤ Increase the tilt angle from 65° to 69°, covering a wider monitoring range.

➤ IP67, IK10 protection

Note: Due to the 5MP(2592 × 1944), 4:3 can cover larger vertical monitoring area, 5MP fixed-focal dome's tilt angle is 0-65°.

R Vari-focal Dome
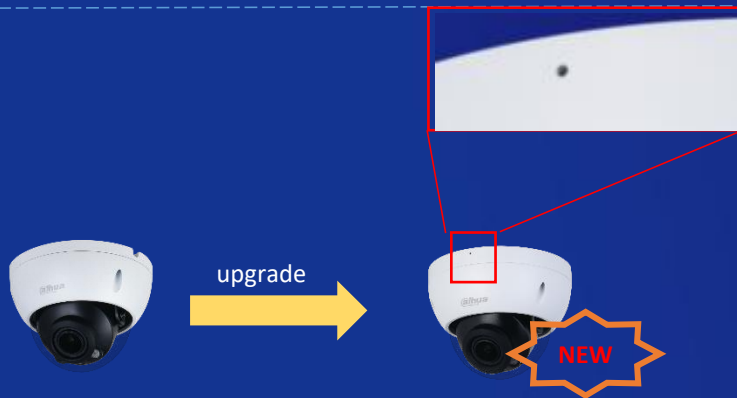
➤ Support built-in Mic (Exclude 5MP Fixed-focal Dome)

➤ 3 IR LED, high quality night vision

➤ IP67, IK10 protection

Key Features-Structure Appearance Upgrade

integrated sunshade cover

upgrade

NEW
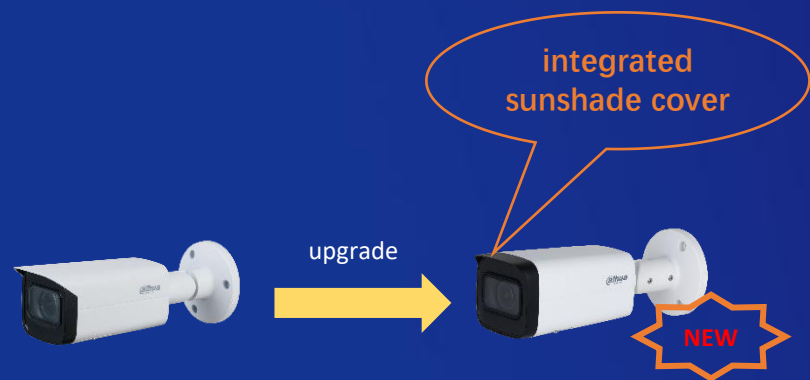
T Bullet

➢ New design of integrated sunshade cover, more aesthetic

➢ Support Alarm in/out, Audio in/out

➢ 3.6mm, 6mm, 8mm, 2.7-13.5mm

➢ IP67 protection

Plastic mounting Plate

Metal mounting Plate

upgrade

Plastic Decoration Ring

Metal Cover

Metal Inner Core

NEW

TM Fixed-focal Eyeball

➢ Metal mounting plate, not easy to break when mounting, more stable installation

➢ Support quick installation

Key Features-WEB 5.0

WEB 5.0 Login Page

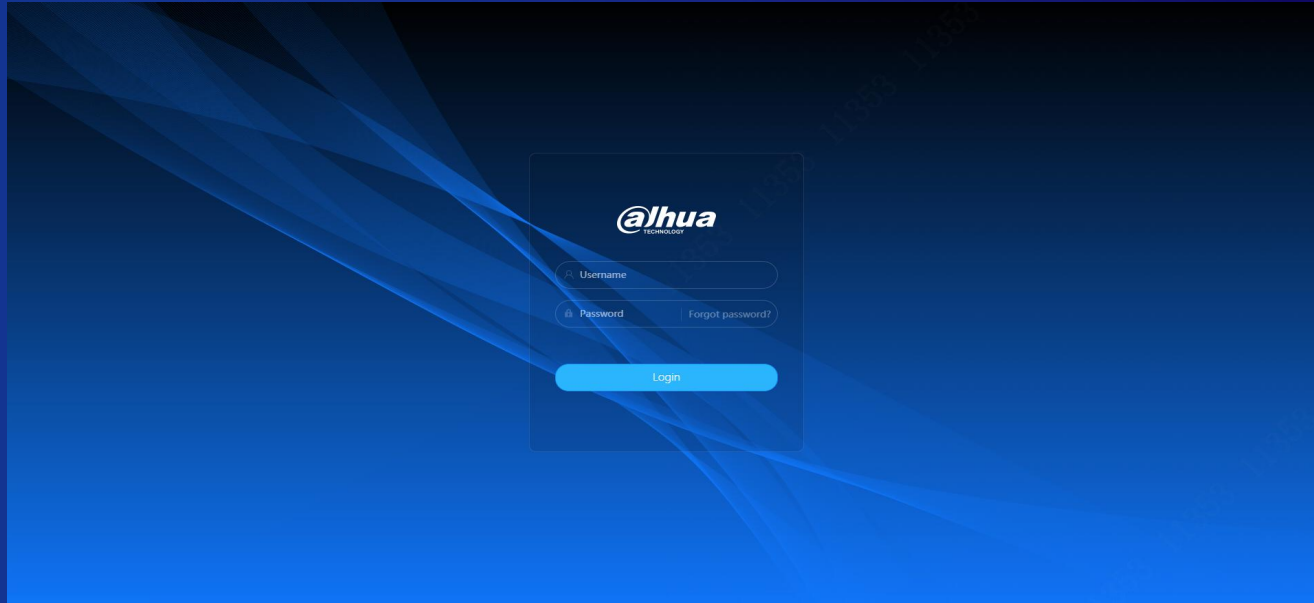|	Chrome >= 45	Chrome < 45	Firefox >= 46	Firefox < 46	Edge	Mac	IE
Support non plug-in	YES	NO	YES	NO	YES	YES	NO
Support plug-in	YES	YES	YES	YES	YES(>78)	NO	YES

WEB 5.0 Support Status of Plug-in

➢ WizSense 2 Series IPC will support WEB 5.0. The new interface design brings users a new visual feeling and operation feeling.

➢ Web 5.0 can support different versions of browsers and good compatibility.

Baseline for WizSense 2 series cameras to support Web 5.0 will be released in 2022, Q4

Series Comparison

	IPC 2x41 Series	IPC 2X31 Series	IPC 3X41-S2 Series
Stream Capability	2 Streams	2 Streams	3 Streams
Resolution	5MP(2592x1944) 20fps (4:3)	5MP(2592x1944) 20fps (4:3)	5MP(2960x1668) 20fps (16:9)
	8MP (3840 × 2160) @20 fps	8MP (3840 × 2160) @15 fps	8MP (3840 × 2160) @25/30 fps
Video Compression	Smart Codec(Smart H.265+ & Smart H.264+)	Smart Codec(Smart H.265+ & Smart H.264+)	Smart Codec/AI Coding
Intelligence	Perimeter Protection (Tripwire/Intrusion: the two functions support the classification and accurate detection of vehicle and human)	Traditional IVS	Perimeter Protection (Tripwire/Intrusion)
	SMD Plus	/	SMD 4.0, Quick Pick, AI SSA
Built-in Mic	Built-in Mic (Exclude 5MP Vari-focal Bullet & Dome)	Only Fixed-focal T & TM Eyeball	Built-in Mic
POE	POE	POE	POE
WEB Version	WEB 5.0 (WEB 5.0 will be supported in 2022.Q4)	WEB 3.0	WEB 5.0

Competitor Comparison

	IPC 2x41 Series	2CD2XX3 Series
Stream Capability	2 Streams	3 Streams
Lens	2.7-13.5mm	2.8-12mm
Resolution	2MP, 4MP, 5MP, 8MP	2MP, 4MP, 6MP, 8MP
	5MP(2960x1668) 20fps (4:3)	6MP(3200x1800) 20fps (16:9)
Video Compression	Smart Codec(Smart H.265+ & Smart H.264+)	H.265/H.264/H.264+/H.265+
Intelligence	Perimeter Protection (Tripwire/Intrusion: the two functions support the classification and accurate detection of vehicle and human)	Perimeter Protection (Line crossing detection, intrusion)
	SMD Plus With advanced deep learning algorithm, focus on human and vehicle	Focusing on human and vehicle classification based on deep learning
Built-in Mic	Built-in Mic (Exclude 5MP Vari-focal Bullet & Dome)	-U: Built-in microphone for real-time audio security
POE	POE	POE
Face Detection	N/A	YES

Application Scenarios

Typical Application

Restaurant
Ensure the basic security of the restaurant.

Shop
Monitor shop security, focus on human and vehicle.

Building
Real-time monitoring to ensure the safety of apartment residents.

School
Focus on Human and vehicle, attention to real threats.

Station
Ensure the basic security of the station.

Solutions & Products

Recommended Solution 1

IP Solution	SMD Plus IP Cameras + SMD Plus NVR

DSS Express (DSS mobile)

DMSS

(SMD Plus NVR)

Switch

SMD Plus IP camera

Highlights:

- Flexible deployment, adjustment and management for complex scenarios
- Focus on human and vehicle, attention to real threats
- Supports full-channel AI function

Product Selection:

Cameras
- WizSense IPC 2 series

Recorders
- NVR2000-I series
- NVR4000-I series

Platform
- DSS Express

APP
- DMSS

Recommended Solution 2

IP Solution	SMD Plus IP Cameras + Conventional NVR

DSS Express (DSS mobile)

DMSS

(Conventional NVR)

Switch

SMD Plus IP camera

Highlights:

- Allows easy deployment, adjustment and management
- Offers fast processing and accurate alarms
- Focus on human and vehicle, attention to real threats

Product Selection:

Cameras
- WizSense IPC 2 series

Recorders
- Conventional NVR

Platform
- DSS Express

APP
- DMSS

NVR & Software Firmware Version

Product	Model	Firmware
NVR	NVR2-4KS2	2.6.01.02.12618 DH_NVR2XXX-4KS2_MultiLang_V4.001.0000005.0.R.210709.zip
	NVR2-S3	2.6.01.02.15192 General_NVR2XXX-S3_MultiLang_V4.000.0000000.0.R.211126.zip
	NVR2-I2	2.6.01.02.12709 DH_NVR2XXX-I2_Mul_V4.002.0000000.0.R.210709.zip
	NVR4-4KS2/L	2.6.01.02.16709 DH_NVR4x-4KS2L_MultiLang_V4.002.0000000.3.R.220322.zip
	NVR5-4KS2	2.6.01.02.16717 General_NVR5XXX-4KS2_MultiLang_V4.002.0000000.3.R.220322.zip
DSS	DSS pro	2.7.01.02.02597 General_DSS-Professional_Win64_IS_V8.000.0000003.0.R.20210729.exe
	DSS Express	2.7.01.02.02598 General_DSS-Express_win32_IS_V8.000.0000003.0.R.20210729.exe
DMSS	DMSS	Download from AppStore & Google Play
Tool	Smartplayer	2.8.02.01.00494 General_SmartPlayer-Win32_Chn_IS_V4.001.0000001.0.R.200916.zip 2.8.02.01.00493 General_SmartPlayer-Win32_Eng_IS_V4.001.0000001.0.R.200916.zip
	ConfigTool	2.8.02.01.00580 General_ConfigTool_ChnEng_V5.000.0000001.6.R.20210126.zip

ENABLING A SAFER SOCIETY AND SMARTER LIVING