HDCVI 6.0

Leading HD-Over-Coax AI Evolution

4K Real-time

· 25/30 fps@**4K**

Enhanced AI

· False alarm rate<**2%**

AI Coding

· **90%** lower bit-rate than **H.264**

Two-way Talk

· **SNR≥20dB**

Active Deterrence with PIR

· **10m/110°**detecting range/angle

PoC

· Max Distance **400m**

Overview

HDCVI 6.0 is introduced with industry's first 4K real-time and AI capabilities, providing superior 4K real-time image both in live view and playback while maintaining the same HDD storage. The two-way talk realizes real-time communication with a broadcast-quality audio. Moreover, this series will identify humans and vehicles in a video with an alarm alert sent.

4K Real-time

- 4K real-time **(4K@25/30fps)** is a unique and leading technology in HD-Over-Coax market.
- It restores monitoring location with 30 fps for a better visual experience.
- Offers superior clarity in collecting even tiny details within a large monitoring coverage.
- AI coding saves storage costs, allowing users to enjoy the advantages of upgrading to higher resolution while maintaining the current storage expense.


- 4K Real-time   • 4K Non-real time

HDCVI 6.0

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| Enhanced AI

What is Enhanced AI ?

- Adopting independent AI chip with up to 4T computing power and advanced deep-learning algorithm, HDCVI enables precise recognition of human, motor vehicle and non-motor vehicle.

- Enhanced AI supports face recognition, perimeter protection, metadata, SMD Plus etc. that can be used for potential risk prevention, real-time event alarm, and quick inquiry.

Focus on Human & Vehicle

AI Chip + Deep-learning Algorithm

1.

Perimeter Protection

Face Recognition

Metadata Search

SMD Plus
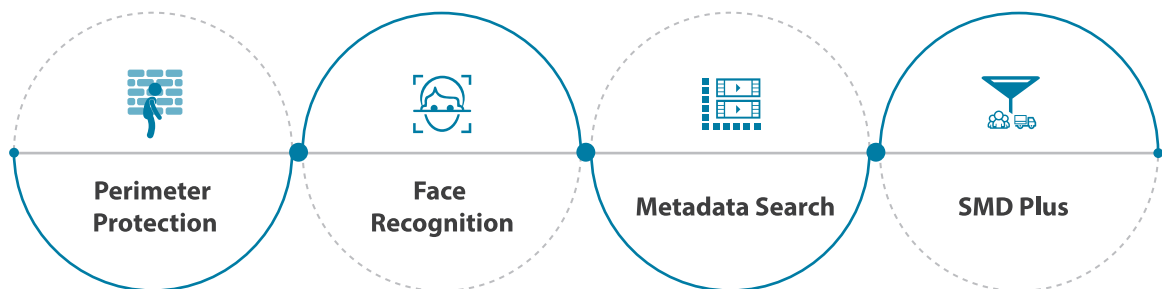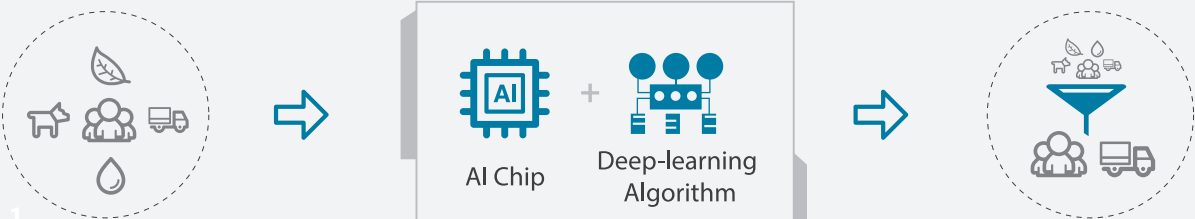
False alarm rate <**2%**

Face Recognition accuracy > **95%**

9 human body attributes search
8 car attributes search

False alarm rate <**2%**

Benefits

Compared with traditional video surveillance, HDCVI AI classifies human and vehicle in an image, making it easy for users to focus on real threats, enhancing target search efficiency, and significantly reducing labor costs.

In addition, Dahua provides a complete end-to-end AI solution with 4K UHD and full-color camera to ensure high accuracy and to provide high management efficiency through unified DSS & DMSS.

1.

Precise identification of human face
Provides valuable business applications such as VIP recognition, blacklist alarm, access control etc.

2.

Accurate alarm for human and vehicle
Filters false alarms caused by leaves, birds and lights etc., avoiding unnecessary actions.

3.

Real-time alerts and linkage
Linkage of active deterrence camera can warn off intruders with built-in siren and white light.

4.

Quick target search
Utilizes "AI search" feature to quickly search video footages of target people or vehicles.

AI Coding: 90% lower bit-rate than H.264

- Dahua AI takes the video compression to a new level of content-aware encoding which can avoid noise and can produce a more detailed image.

- Automatically encodes with a target perceptual quality through recognition of moving human or vehicle,significantly improving the streaming quality compared with H.265+.

- Decreases the bandwidth when there is no real target in sight,allowing efficient handling of videos to save HDD storage cost.

AI Coding Scheme

1 — H.264 / H.264+
2 — H.265 / H.265+
3 — AI Coding
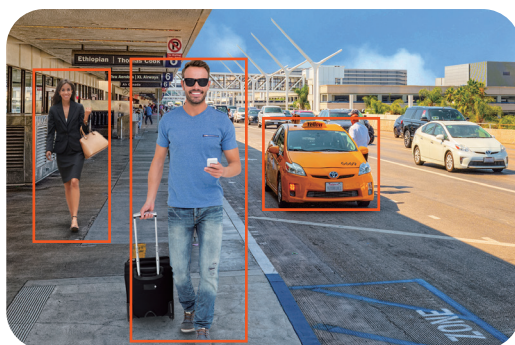
Step1: Recognizes moving person and vehicle
Step2: Automatically improves encoding efficiency with the same image quality

Step1: Analysis shows that there is no person or vehicle in the picture
Step2: Lowers the bandwidth when no real targets appear

Two-way Talk

- Two-way talk is a unique and leading technology in HD-Over-Coax market and a breakthrough innovation in Audio-Over-Coax technology.
- Aside from satisfying users' demand for auxiliary audio information, Two-way talk also enables bi-directional audio intercom that can be used to warn off intruders and to provide guidance when an accident occurs.
- Advanced audio noise reduction technology provides "broadcast level" audio quality **(SNR ≥20dB)**, providing users with a multi-dimensional and high quality video surveillance solution.

HDCVI 1.0
Audio-over-Coax

2012

2017

HDCVI 4.0
Broadcast-quality Audio
(SNR ≥20dB)

2019 - 2020

HDCVI 6.0
Two-way Talk

HDCVI 6.0 Two-way Talk

Video & Audio →

Video & Audio →

← Audio

← Audio

Camera

XVR

DSS & DMSS

Two-way Talk Application

HDCVI Camera

Audio

Audio-over-Coax

User gets intrusion alarm, then warns the intruder via DSS & DMSS

XVR
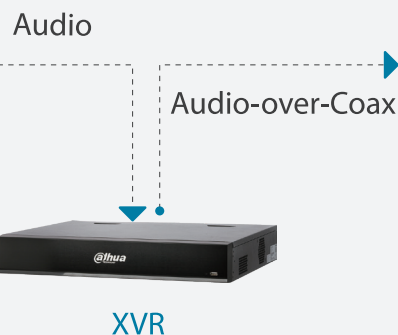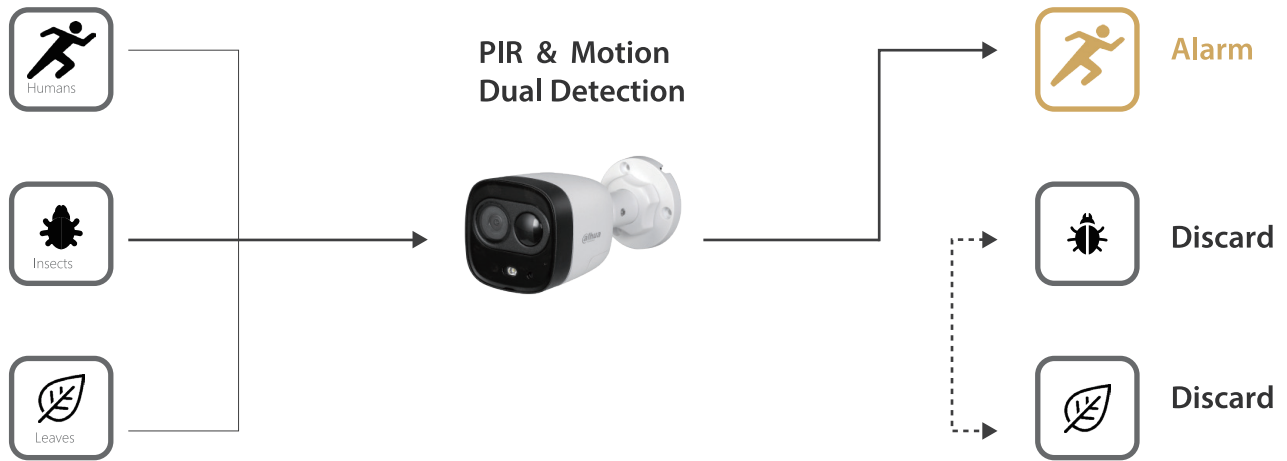
HDCVI camera broadcasts the audio to warn off the intruder

Active Deterrence with PIR

- PIR & Motion Dual Detection accurately detects human intrusion and filters out false alarms, saving storage space for motion-triggered recordings and avoiding overreactions.


PoC

- Poc,short term for Power over Coax, transmits both video and electrical power over a single coaxial cable. By eliminating separate camera power supplies,HDCVI POC technology further simplifies HDCVI system deployment,therefore reducing time and cost.

Benefits:

i. Saves up to **30%** on system deployment costs and enhances power stability.

Scan the QR code to watch the video
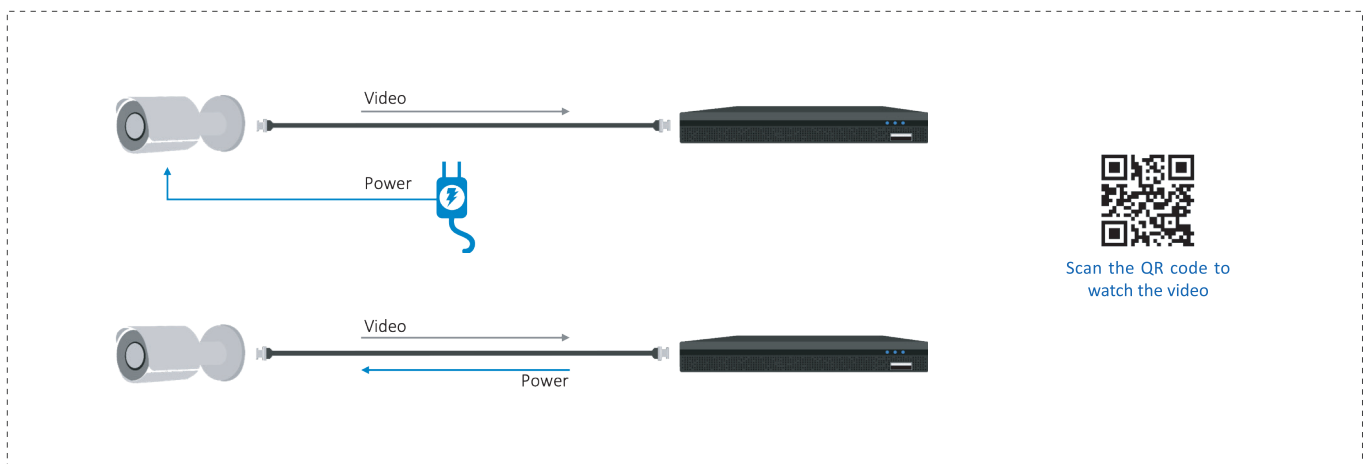
ii. It can support maximum of **400m** transmission distance.

HDCVI 6.0 Product Family

- HDCVI Cameras

4K

4K real-time fixed lens

HAC-HFW1800T(-A)

4K real-time fixed lens

HAC-HDW1800TL(-A)

4K motorized lens

HAC-HFW1801R-Z-IRE6-A

4K motorized lens

HAC-HDW1801T-Z-A

5MP

5MP fixed lens

HAC-HFW1500T(-A)

5MP fixed lens

HAC-HDW1500TL(-A)

5MP motorized lens

HAC-HFW1500R-Z-IRE6-A

5MP motorized lens

HAC-HDW1500T-Z-A

PoC

5MP PoC fixed lens

HAC-HFW1500T-A-POC

5MP PoC fixed lens

HAC-HDW1500EM-A-POC

5MP PoC motorized lens

HAC-HFW1500R-Z-IRE6-POC

5MP PoC motorized lens

HAC-HDW1500T-Z-A-POC

Active Deterrence

PIR + White light + Siren

HAC-ME1500D

PIR + White light

HAC-ME1500E-LED

- **HDCVI Recorder**

4K

1 HDD	2 HDDs	4 HDDs
4-ch: XVR7104HE-4K-I2	16ch: XVR7216A-4K-I2	16-ch: XVR7416L-4K-I2
8-ch: XVR7108HE-4K-I2		

4K Lite/5MP

1 HDD	2 HDDs	4 HDDs
4-ch: XVR5104HS-4KL-I2	16-ch: XVR5216AN-4KL-I2	16-ch: XVR5416L-4KL-I2
8-ch: XVR5108HS-4KL-I2	32-ch: XVR5232AN-4KL-I2	32-ch: XVR5432L-4KL-I2

5MP Lite/1080P

1 HDD	2 HDDs
4-ch: XVR5104HS-I2	16-ch: XVR5216AN-I2
8-ch: XVR5108HS-I2	32-ch: XVR5232AN-I2

PoC

5MP Lite/1080P, 1 HDD	5MP Lite/1080P, 2 HDDs	4K Lite/5MP, 1 HDD	4K Lite/5MP, 2HDDs
4-ch: XVR5104H-X-4P	16-ch: XVR5216AN-X-16	8-ch:XVR5108H-4KL-X-8P	16ch: XVR5216AN-4KL-X-16P
8-ch: XVR5108H-X-8P			