

## CCTV Camera Singapore Offer, Security System Package



The 441D CCTV Package (4MP solution) comes with;

- 1 x Pentabrid Dahua 4-Channel CCTV DVR ( 4 Megapixel )
- 4 x 4MP Dahua HD Infrared Dome CCTV Camera
- 1 x 2TB CCTV-grade hard disk storage
- 1 x Complete CCTV installation including cabling works and setup on customer's router & smartphones for remote viewing
- 1-Year On-Site Warranty for all CCTV products

### ***CCTV Cameras & Security Specialists***

Assista offers CCTV System solutions for a wide range of customers across different industry groups such as Office, Education, Retail, Warehouse, Factory, Entertainment & Homes.

### **CCTV Customer Support Hotline ( Singapore )**

**6337 2148**

( available 9am – 9pm, Singapore time everyday, including Public Holidays )

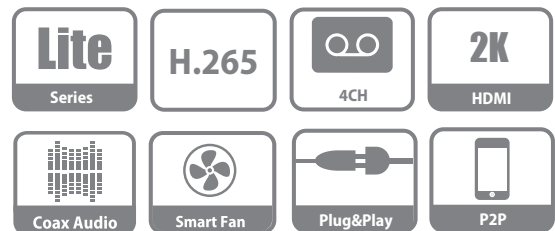
CCTV Testing Centre & Office: 11 Woodlands Close #09-23 Woodlands 11 Singapore 737853.

# DH-XVR5104H-4KL-X

## 4 Channel Penta-brid 4K Mini 1U Digital Video Recorder



- H.265+/H.265 dual-stream video compression
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 6 channels IP camera inputs, each channel up to 8MP; Max 24Mbps Incoming Bandwidth
- Smart Search and Intelligent Video System



### System Overview

With the surveillance operators pursuing to HD/UHD which further adds the storage and transmission cost, HDCVI H.265+/H.265 has been released to incredibly decrease the required bitrate while ensuring the video quality in realizing high resolution surveillance such as 4MP/4K.

The Lite Series is designed for high cost performance and quality. The range offers a great solution for users facing budget constraints who both require quality and performance. And with the adoption of Smart H.265+/H.265, the series improves encoding efficiency, saving on bandwidth/storage costs, and significantly reducing the Total Cost of Ownership (TCO).

### Functions

#### Smart H.265+

Smart Codec, H.265+ can reduce up to 90% bit rate and storage requirements compared with H.264 without having to invest in new cameras.

#### HDCVI/AHD/TVI/CVBS Auto-detect

The XVR can auto recognize the signal of front-camera without any setting. It makes operation more friendly and convenient.

#### 8MP Resolution

The XVR supports up to 8MP HD resolution (3840 x 2160) HDCVI camera and IP camera input.

#### Coaxial Audio/Upgrade/Alarm

The integrated design can reduce wiring troubles which makes it much more cost-effective and convenient for installation.

#### Long Distance Transmission

The HDCVI system supports long distance transmission over coaxial cable and UTP, max. 700m for 4K/4MP, 800m for 1080P and 1200m for 720P.

#### Smart Fan Design

The smart fan can automatically turn on or turn off according to the CPU temperature. This function can effectively reduce the fan noise to provide a better user experience.

#### Intelligent Video System (IVS)

With built-in intelligent video analytics, the XVR has the ability to detect and analyze moving objects for improved video surveillance. The XVR provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a pre-determined line has been crossed.

#### Face Detection

It is a typical technology being used in a variety of applications for searching or identification of individuals.

#### Smart Search

This function helps you get more motion detect video during a short time through drawing a region when playback. It is very useful when an emergency occurs.

### Technical Specification

#### System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

#### Video and Audio

Analog Camera Input	4 Channel, BNC
HDCVI Camera	4K, 6MP, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps
AHD Camera	5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30fps
TVI Camera	5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30fps
CVBS Camera	PAL/NTSC
IP Camera Input	4+2 Channel, each channel up to 8MP
Audio In/Out	1/1, RCA
Two-way Talk	Reuse audio in/Out, RCA

#### Recording

Compression	H.265+/H.265/H.264+/H.264
Resolution	4K, 6MP, 5MP, 4K-N, 4MP, 3MP, 4M-N, 1080P, 720P, 960H, D1, CIF
Record Rate	Main stream: the 1st channel 4K(1~7fps), 6MP(1~10fps), 5MP(1~12fps), 4MP/3MP(1~15fps), others 4K-N(1~7fps), 4MP/3MP(1~15fps); 4M-N/1080P/720P/960H/D1/CIF (1~25/30fps) Sub stream: 960H(1~15fps); D1/CIF(1~25/30fps)
Bit Rate	32Kbps ~ 6144Kbps Per Channel
Record Mode	Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop
Record Interval	1 ~ 60 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec
Audio Compression	AAC(only for the 1st channel), G.711A, G.711U, PCM
Audio Sample Rate	8KHz, 16 bit Per Channel
Audio Bit Rate	64Kbps Per Channel

#### Display

Interface	1 HDMI, 1 VGA
Resolution	HDMI: 2560x1440, 1920x1080, 1280x1024, 1280x720 VGA: 1920x1080, 1280x1024, 1280x720
Multi-screen Display	When IP extension mode not enabled: 1/4 When IP extension mode enabled: 1/4/6
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

#### Network

Interface	1 RJ-45 Port (100M)
Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, Wi-Fi, 3G/4G, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, P2P, IP Search (Supports Dahua IP camera, DVR, NVS, etc.)
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 16.12, CGI Conformant

#### Video Detection and Alarm

Trigger Events	Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 x 18), Video Loss, Tampering and Diagnosis
Alarm input	N/A
Relay Output	N/A

#### Playback and Backup

Playback	1/4
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)
Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom
Backup Mode	USB Device/Network

#### Storage

Internal HDD	1 SATA Port, up to 10TB capacity
eSATA	N/A

#### Auxiliary Interface

USB	2 USB Ports (2 USB 2.0)
RS232	N/A
RS485	1 Port, for PTZ Control

#### Electrical

Power Supply	DC12V/2A
Power Consumption (without HDD)	<10W

#### Construction

Dimensions	Mini 1U, 325mmx255mmx55mm (12.8" x 10" x 2.2")
Net Weight (without HDD)	1.2kg (2.6 lb)
Gross Weight	1.8kg (4.0 lb)
Installation	Desktop installation

#### Environmental

Operating Conditions	-10°C ~ +55°C (+14°F ~ +131°F), 10% ~ 90% RH
Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F), 0% ~ 90% RH

#### Third-party Support

Third-party Support	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more
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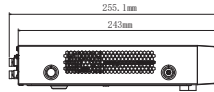
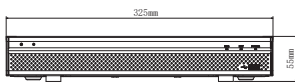
#### Certifications

Certifications	FCC: Part 15 Subpart B
	CE: CE-LVD: EN 60950-1/IEC 60950-1 CE-EMC: EN 61000-3-2, EN 61000-3-3, EN 55032, EN 50130, EN 55024
	UL: UL 60950-1

Ordering Information

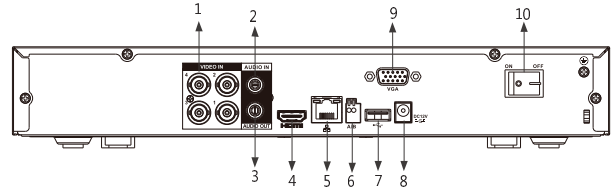
Type	Part Number	Description
4 Channel XVR	DH-XVR5104H-4KL-X	4 Channel Penta-brid 4K Mini 1U Digital Video Recorder

Dimensions (mm)



Rear Panel

DH-XVR5104H-4KL-X



- |   |                          |    |                    |
|---|--------------------------|----|--------------------|
| 1 | VIDEO IN                 | 6  | RS485 Interface    |
| 2 | AUDIO IN, RCA Connector  | 7  | USB Interface      |
| 3 | AUDIO OUT, RCA Connector | 8  | DC 12V Power Input |
| 4 | HDMI Interface           | 9  | VGA Interface      |
| 5 | Network Interface        | 10 | Power Switch       |

# DH-HAC-HDW1400M

4MP HDCVI IR Eyeball Camera

## HDCVI



- Max 30fps@4MP
- HD and SD output switchable
- 3.6mm fixed lens (2.8mm, 6mm optional)
- Max. IR length 30m, Smart IR
- IP67, DC12V



### System Overview

Experience superior clarity of real-time 4Mega-pixel video with the simplicity of using existing cabling infrastructure. The Lite series features compact design and high quality image at friendly price. It offers various vari-focal/fixed lens models with multi-language OSD and HD/SD switchable output. The structure flexibility and best cost-performance makes lite series camera an ideal choice for SMB solutions.

### Functions

#### 4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio\*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the HCVR, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

\* Audio input is available for some models of HDCVI cameras.

#### Long Distance Transmission

HDCVI technology guarantees long-distance and real-time transmission without any loss. It supports up to 700m for 4MP HD video via coaxial cable, and up to 300m via UTP cable.\*

\*Actual results verified by real-scene testing in Dahua's test laboratory.

#### Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

#### Smart IR

The camera is designed with microcrystalline LED IR illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity in B/W image under low illumination. Dahua's unique Smart IR adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object, and prevents IR LEDs from overexposing images as the object come closer to the camera.

#### HD/SD Switchable

The camera supports switchable HDCVI high definition video output and CVBS standard definition video output. The two formats can be switched over through OSD menu or by PFM820(UTC controller). This feature makes the camera to be compatible with both HCVRs and existing analog DVRs and also facilitates debugging through analog testers.

#### Multi-language OSD

OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. The OSD menu includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

#### Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments.

With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments.

Supporting ±25% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

## Technical Specification

### Camera

Image Sensor	1/3" CMOS
Effective Pixels	2688(H)×1520(V), 4.1MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25~1/100000s NTSC: 1/30~1/100000s
Minimum Illumination	0.03Lux/F2.0, 30IRE, 0Lux IR on
S/N Ratio	More than 65dB
IR Distance	Up to 30m (98feet)
IR On/Off Control	Auto / Manual
IR LEDs	12

### Lens

Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	3.6mm (2.8mm, 6mm Optional)
Max Aperture	F2.0
Angle of View	H: 84.8° (99.7°/52.5°)
Focus Control	N/A
Close Focus Distance	1100mm (800mm/2200mm) 43.3" (31.5"/86.6")

### DORI Distance

Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

	DORI Definition	Distance
Detect	25px/m (8px/ft)	2.8mm: 63m(208ft) 3.6mm: 80m(262ft) 6mm: 117m(385ft)
Observe	63px/m (19px/ft)	2.8mm: 25m(83ft) 3.6mm: 32m(105ft) 6mm: 47m(154ft)
Recognize	125px/m (38px/ft)	2.8mm: 13m(42ft) 3.6mm: 16m(53ft) 6mm: 23m(77ft)
Identify	250ppm (76px/ft)	2.8mm: 6m(21ft) 3.6mm: 8m(26ft) 6mm: 12m(39ft)

### Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 360° Tilt: 0° ~ 90° Rotation: 0° ~ 360°
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### Video

Resolution	4MP (2560×1440)
Frame Rate	25/30fps@4MP, 25/30fps@1080P, 25/30fps@720P
Video Output	1-channel BNC high definition video output / CVBS video output (Can switch)

Day/Night	Auto (ICR) / Manual
OSD Menu	Multi-language
BLC Mode	BLC / HLC / DWDR
WDR	DWDR
Gain Control	AGC
Noise Reduction	2D
White Balance	Auto / Manual
Smart IR	Auto / Manual

### Certifications

Certifications	CE (EN55032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)
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### Interface

Audio Interface	N/A
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### Electrical

Power Supply	12V DC ±25%
Power Consumption	Max 3.2W (12V DC, IR on)

### Environmental

Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH * Start up should be done at above -40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 90% RH
Ingress Protection & Vandal Resistance	IP67

### Construction

Casing	Aluminium
Dimensions	Φ93.4mm×79.4mm (Φ3.68"×3.13")
Net Weight	0.28kg (0.62lb)
Gross Weight	0.35kg (0.77lb)

**Ordering Information**

Type	Part Number	Description
4MP Camera	DH-HAC-HDW1400MP 2.8mm	4MP HDCVI IR Eyeball Camera, PAL
	DH-HAC-HDW1400MP 3.6mm	
	DH-HAC-HDW1400MP 6mm	
	DH-HAC-HDW1400MN 2.8mm	4MP HDCVI IR Eyeball Camera, NTSC
	DH-HAC-HDW1400MN 3.6mm	
	DH-HAC-HDW1400MN 6mm	
Accessories	PFA13A	Junction box (For use alone)
	PFB204W	Wall mount (For use alone or with PFA152 pole mount)
	PFA152	Pole mount (For use with PFB204W wall mount)
	PFM800	Passive HDCVI Balun
	PFM801	Passive HDCVI Balun with Power
	PFM809-4CH	4 Channel Passive HDCVI Balun
	PFM809	16 Channel Passive HDCVI Balun
	PFM810	POC Transceiver

**Accessories**

Optional:



PFA13A  
Junction box



PFB204W  
Wall mount



PFA152  
Pole mount



PFM800  
Passive HDCVI Balun



PFM801  
Passive HDCVI Balun with Power



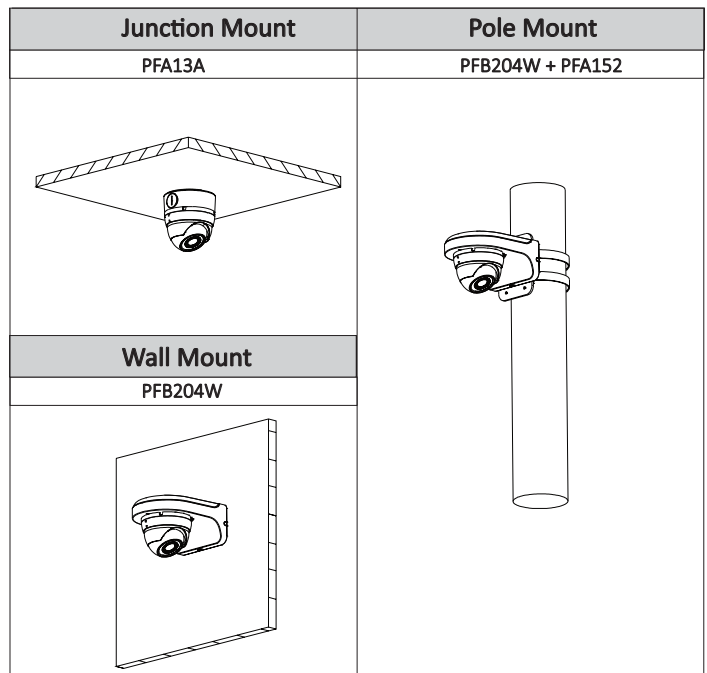
PFM809-4CH  
4 Channel Passive HDCVI Balun



PFM809  
16 Channel Passive HDCVI Balun



PFM810  
POC Transceiver



**Dimensions (mm/inch)**

