

# DH-IPC-HUM8431-E1

## 4MP Covert Pinhole Network Camera-Main Box



- H.265&H.264 triple-stream encoding
- Support Smart H.265+/H.264+
- 25/30fps@4M(2688x1520)
- Day/Night(Electronic), WDR, 3DNR, AWB, AGC, BLC
- Smart detection
- Micro SD memory, PoE
- Multiple Lens type optional
- Require a Lens Unit to work together



### System Overview

Dahua covert camera used modular design, this product provides an independent main unit, with multiple lens types for customers to choose separately. It can be easily installed into any indoor environments, which makes this camera ideal for the ATMs(Automatic Teller Machines), banks, stores, hotels and offices.

### Functions

#### Intelligent Video System (IVS)

Dahua camera has a built-in video analysis based on intelligent algorithms and can achieve the following: Tripwire, Intrusion, Abandoned/ Missing can timely, quickly and accurately respond to monitoring events in specific area. It enhances monitoring efficiency. At the same time, the camera can support face detection, it can quickly capture a face and upload the image to the server. In addition the camera also supports intelligent tamper detection, through dramatic changes in the scene it will send out warning information to ensure effective monitoring.

#### Protection

Supporting  $\pm 30\%$  input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning.

#### HEVC (H.265)

H.265 ITU-T VCEG is a new video coding standard. H.265 following standard developed around the existing video coding standard H.264, some retain the original technology, while some of the relevant technology to improve the new technology uses advanced technology to improve the relationship between the code stream, encoding quality, and the delay between algorithm complexity, optimize settings specific contents include: Improve compression efficiency, improve the robustness and error recovery capabilities, real-time to reduce the delay, reduce channel acquisition time and a random access delay, reduce complexity, etc.

#### Smart H.265+

Deliver high quality video without straining the network, Smart H.265+ is the optimized implementation of H.265. The Smart H.265+ encoding technology includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing saving of up to 70% of bandwidth and storage when compared with standard H.265.

#### Wide Dynamic Range (WDR)

Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. For applications with both bright and low lighting conditions that change quickly, True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

**Technical Specification**

## Camera

RAM/ROM	512MB/32MB
S/N Ratio	More than 50dB

## Intelligence

IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection

## Video (working together with lens unit)

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	4M(2688×1520) / 3M(2304×1296) / 1080P(1920×1080) / 1.3M(1280×960) / 720P(1280×720) / D1(704×576/704×480) / VGA(640×480) / CIF(352×288/342×240)
Frame Rate	Main Stream: 4M (1~25/30fps)
	Sub Stream: D1 (1 ~ 25/30fps)
	Third Stream: 720P (1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24Kbps~10240Kbps H.265: 14Kbps~9984Kbps
Day/Night	Electronic
BLC Mode	BLC / HLC / WDR(120dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detetion	Off / On (4 Zones, Rectangle)
Region of Interest	Off / On (4 Zones)
Electronic Image Stabilization (EIS)	N/A
Smart IR	N/A
Defog	N/A
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Areas, Rectangle)
Audio	
Compression	G.711a/ G.711Mu/ AAC/ G.726

## Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	HTTP;HTTPS;TCP;ARP;RTSP;RTP;UDP;SMTP;FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP;NTP;Bonjour;802.1x;Multicast;IGMP;SNMP
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users/20 Users
Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	Smart PSS, DSS, Easy4ip
Smart Phone	IOS, Android

## Certifications

Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B
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## Interface

Video Interface	N/A
Audio Interface	1/1 channel In/Out
RS232	1 port
Alarm	2 channel In: 5mA 5VDC 2 channel Out: 1A 30VDC / 0.5A 50VAC

## Electrical

Power Supply	DC12V, PoE(802.3af)(Class 0)
Power Consumption	<6W (working together with lens unit)

## Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Storage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	N/A
Vandal Resistance	N/A

## Construction

Casing	Metal
Dimensions	110.0mm×82.7mm×24.0mm (4.33"×3.26"×0.95")
Net Weight	0.21Kg (0.46lb)
Gross Weight	0.30Kg (0.66lb)

**Ordering Information**

Type	Part Number	Description
4MP Camera Main Box	DH-IPC-HUM8431P-E1	4MP Covert Pinhole Network Camera Main Box, PAL
	DH-IPC-HUM8431N-E1	4MP Covert Pinhole Network Camera Main Box, NTSC
	IPC-HUM8431P-E1	4MP Covert Pinhole Network Camera Main Box, PAL
	IPC-HUM8431N-E1	4MP Covert Pinhole Network Camera Main Box, NTSC
Accessories (Required)	IPC-HUM8431-L1	4MP Cylindrical Pinhole Lens Unit with 8 meters Cable
	IPC-HUM8431-L3	4MP Cylindrical Pinhole Lens Unit with 8 meters Cable
	IPC-HUM8431-L4	4MP Rectangular Pinhole Lens Unit with 8 meters Cable
	IPC-HUM8431-L5	4MP Rectangular Pinhole Lens Unit with 8 meters Cable

Link: [http://www.dahuasecurity.com/products\\_category/4-megapixel-4281.html](http://www.dahuasecurity.com/products_category/4-megapixel-4281.html)

**Dimensions (mm/inch)**

