

# DH-IPC-HFW4431B-AS-H

## 4MP HD WDR Network LXIR Bullet Camera



### System Overview

Eco-savvy products by upgrading H.265 encoding technology, bringing high efficient video compression. It saves bandwidth and storage, energy-saving design to enhance the monitoring system. Meanwhile, the series offers features such as starlight, Smart IR technology, intelligent image analysis techniques. It provides excellent image quality and intelligent and efficient event reminders. This series provides IP67 weatherproof and IK10 vandal-proof protection feature. Give customers more value

### Functions

#### Wide Dynamic Range

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.

#### Intelligent Video System (IVS)

With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera 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, ideal for business intelligence, and Facial Detection, for searching or identification of individuals.

#### Environmental

With a temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

#### Protection

- 1/3" 4Megapixel progressive scan CMOS
- Support H.264&MJPEG dual codec
- Max 20fps@4M(2592×1520) & 25/30fps@3M(2304×1296)
- Smart Detection supported
- WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 3.6mm fixed lens (6mm optional)
- 1/1 Alarm in/out, 1/1 audio in/out(only for-AS)
- Max. IR LEDs Length 50m
- Micro SD memory (only for-AS), IP67, PoE



Supporting ±30% input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

#### 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.

#### 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

## Technical Specification

### Camera

Image Sensor	1/3" 4Megapixel progressive scan CMOS
Effective Pixels	2592(H)x1520(V)
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3(4)~1/100000s
Min. Illumination	0.01Lux/F2.0 (Color), 0Lux/F2.0(IR on)
S/N Ratio	More than 50dB
Video Output	N/A

### Lens

Focal Length	3.6mm (6mm optional)				
Max Aperture	F2.0(F1.9)				
Focus Control	Manual				
Angle of View	H:81°(55°)				
Lens Type	Fixed lens				
Mount Type	Board-in Type				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	3.6 mm	80m(262ft)	32m(105ft)	16m(52ft)	8m(26ft)
	6.0 mm	117m(384ft)	47m(154ft)	23m(75ft)	12m(39ft)

### Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0°~360°; Tilt:0°~87°; Rotation:0°~360°
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### Intelligence

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

### Video

Compression	H.265+/H.265/H.264/H.264H/H.264B/MJPEG
Streaming Capability	3 Streams
Resolution	4M(2592x1520)/4M(2560x1440)/3M(2048x1536)/1080P(1920x1080)/720P(1280x720)/D1(704x576/704x480)/CIF(352x288/352x240)
Frame Rate	Main Stream: 4M(1~20fps)/3M(1~25/30fps)
	Sub Stream: D1/CIF(1~20fps)
	Third Stream: 720P(1-20fps)
Bit Rate	H.264: 32Kbps~10Mbps
Corridor Mode	Support
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)
Max. IR LEDs Length	50m

White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detetion	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Electronic Image Stabilization (EIS)	N/A
Smart IR	Support
Defog	N/A
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

### Audio

Compression	G.711a/ G.711u/ AAC
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### Network

Ethernet	RJ-45 (10/100Base-T)
Wi-Fi	N/A
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP,
Compatibility	ONVIF, PSIA, CGI
Max. User Access	20 users
Smart Phone	iPhone, iPad, Android, Windows Phone

### Certifications

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

Memory Slot	Micro SD Max 128GB
RS485	N/A
Alarm	1/1 channel In/Out N/A
PIR Sensor Range	N/A

### Electrical

Power Supply	DC12V, PoE (802.3af)
Power Consumption	Max 4.9W

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## 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	IP67
Vandal Resistance	N/A

## Construction

Casing	Metal
Dimensions	Φ90.4mm×241.8mm
Weight	0.61Kg(with package 0.80kg)

## Ordering Information

Type	Part Number	Description
4MP camera	DH-IPC-HFW4431B-AS-H	4MP HD WDR Network LXIR Bullet Camera, WDR, PAL
	IPC-HFW4431B-AS-H	4MP HD WDR Network LXIR Bullet Camera, WDR, NTSC
Accessories (optional)	PFA135	Junction box
	PFA150-E	Pole Mount

## Accessories

### Optional:



PFA150-E  
Pole Mount



PFA135  
Junction Box

## Dimensions (mm/inch)

