

# DH-IPC-HFW4431D-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 -30 °C to +60 °C (-22 °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
- H.265&H.264&MJPEG triple-stream encoding
- 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
- 6mm fixed lens
- 1/1 Alarm in/out, 1/1 audio in/out
- Max. IR LEDs Length 80m
- Micro SD memory, 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	6mm
Max Aperture	F1.9
Focus Control	Manual
Angle of View	H: 55°
Lens Type	Fixed lens
Mount Type	Board-in Type
Pan/Tilt/Rotation	
Pan/Tilt/Rotation Range	Pan:0°~360°; Tilt:0°~87°; Rotation:0°~360°
Intelligence	
IVS	Tripwire, Intrusion, Object Abandoned/Missing,Face detect,Scene Change
Advanced Intelligent Functions	Face Detection
Video	
Compression	H.265+/H.265/H.264/H.264H/H.264B/MJPEG
Streaming Capability	3 Streams
Resolution	4M(2592×1520)/4M(2560×1440)/3M(2048×1536)/1080P(1920×1080)/720P(1280×720)/D1(704×576/704×480)/CIF(352×288/352×240)
Frame Rate	Main Stream: 4M(1~20fps)/3M(1~25/30fps)
	Sub Stream: D1/CIF(1~20fps)
	Third Stream: 720P(1-20fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32Kbps~10Mbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)
Max. IR LEDs Length	80m

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.711Mu/ AAC/ G.726

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	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
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-HFW4431D-AS-H	4MP HD WDR Network LXIR Bullet Camera
	IPC-HFW4431D-AS-H	4MP HD WDR Network LXIR Bullet Camera
Accessories (optional)	PFA135	Junction box
	PFA150-E	Pole Mount

Accessories

Optional:



PFA150-E  
Pole Mount



PFA135  
Junction Box

Dimensions (mm/inch)

