

# DH-IPC-HF8231F-E

2MP WDR Box Network Camera





#### System Overview

Ultra series adopts high performance DSP and Sony advanced image sensor technology, which can provide excellent image effects for users. With Dahua advanced software algorithm, the series is able to support people counting and heat map which brings extra business analysis value for customers.

#### Functions

#### ePoE technology

The ePoE technology of Dahua, designed internally, adopts advanced 2D-PAM3 coding modulation from physical layer, and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. Besides, it supports PoE and PoC power supply technology which has greatly simplified construction and wiring. Dahua ePoE technology offer a new way to accomplish long distance transmission between IP camera and network switch. It allows more flexible surveillance system design, improves reliability and saves construction and wiring cost.

#### Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.003lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

#### Ultra WDR

Standard WDR/HDR camera can provide 120dB dynamic range, However, for some scenes with wider contrast range, 120dB is slightly insufficient. By adopting the latest technology, Dahua Cameras can provide an amazing dynamic range up to140dB.

#### Business intelligent analysis (People counting, Heatmap)

Dahua Camera also supports more advanced intelligent features such as people counting and heat map besides basic IVS functions. These two functions can be applied to business intelligence and bring extra values

- · 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- · H.265&H.264 triple-stream encoding
- · 50/60fps@1080P(1920×1080)
- · WDR(140dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- $\cdot$  Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · Auto back focus(ABF)
- · Micro SD memory, PoE



to customers. It is available to acquire daily, weekly, monthly and yearly people flow via people counting and output data report. Heat map can be based on a moving object in time of space movement for analysis, find the most active area and output the report, which is to provide valuable data support for commercial applications.

#### Smart Scene Adaptive (SSA)

Smart Scene Adaptive (SSA) is a Dahua self-developed intelligent image technology, the camera automatically evaluates the change in scene, in particular strong lights. In a strong backlight environment, it will automatically regulate exposure parameters to get better image quality. This can effectively address the impact of traffic lights, providing excellent video quality.

#### Smart Codec (H.265+ & H.264+)

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.



### **Technical Specification**

Са	m	e	ra

Camera	
Image Sensor	1/2.8" 2Megapixel progressive scan CMOS
Effective Pixels	1920(H)x1080(V)
RAM/ROM	1024MB/128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.003Lux/F1.2(Color,1/3s,30IRE) 0.03Lux/F1.2(Color,1/30s,30IRE) 0.001Lux/F1.2(B/W,1/3s,30IRE) 0.01Lux/F1.2(B/W,1/30s,30IRE)
S/N Ratio	More than 50dB
IR Distance	N/A
IR On/Off Control	N/A
IR LEDs	N/A
Lens	
Lens Type	N/A
Mount Type	c/cs
Focal Length	N/A
Max. Aperture	N/A
Angle of View	N/A
Optical Zoom	N/A
Focus Control	N/A
Close Focus Distance	N/A
Pan/Tilt/Rotation	
Pan/Tilt/Rotation Range	N/A
Intelligence	
Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection , IP address conflict, Illegal Access, Storage anomaly
IVS	Tripwire, Intrusion, Object Abandoned/Missing
Advanced Intelligent Functions	Face Detection, People Counting, Heat Map
Video	
Compression	H.265/H.264/H.264B/H.264H/MJPEG(Sub Stream)
Smart Codec	Support H.265+/H.264+
Streaming Capability	3 Streams
Resolution	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: 1080P(1~50/60fps)
	Sub Stream: D1 (1 ~ 50/60fps)
	Third Stream: 1080P(1~50/60fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24~ 10240Kbps H.265: 14~ 6144Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(140dB)/ SSA

White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Electronic Image Stabilization (EIS)	Support
Smart IR	N/A
Defog	Support
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 (100/1000Base-T)
Protocol	HTTP;HTTPs;TCP;ARP;RTSP;RTP;UDP;RTCP;SMTP; FTP;DHCP;DNS;DDNS;PPPOE;IPv4/v6;QoS;UPnP; NTP;Bonjour;IEEE 802.1x;Multicast;ICMP;IGMP;S NMP;TLS
Interoperability	ONVIF Profile S&G, API
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, DMSS
Smart Phone	IOS, Android
Certifications	
Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B
Interface	
Video Interface	1 port(BNC,1Vp-p,75Ω)
Audio Interface	2/1 channel In/Out, 1 Built-in Mic
RS485	1 port
Alarm	2 channel In: 5mA 5VDC 2 channel Out: 1A 30VDC / 0.5A 50VAC
Electrical	
Power Supply	DC12V, AC24V, PoE(802.3af)(Class 0)
Power Consumption	<5.5W
Power Out	165mA 12VDC

## Ultra Series | DH-IPC-HF8231F-E

Environmental	
Operating Conditions	-30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH
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Ingress Protection	N/A
Vandal Resistance	N/A
Construction	
Casing	Metal
Dimensions	161.6mm×85.5mm×74.0mm (6.36"×3.37"×2.91")
Net Weight	0.72Kg (1.59lb)
Gross Weight	0.92Kg (2.03lb)

#### **Ordering Information**

Ordening information				
Туре	Part Number	Description		
2MP camera	DH-IPC-HF8231FP-E	2MP WDR Box Network Camera, PAL		
	DH-IPC-HF8231FN-E	2MP WDR Box Network Camera, NTSC		
	IPC-HF8231FP-E	2MP WDR Box Network Camera, PAL		
	IPC-HF8231FN-E	2MP WDR Box Network Camera, NTSC		
Accessories (optional)	PFB110W	Wall mount		
	PFB121W	Wall mount		
	PLZ1040-D	2.7~12mm Lens		
	PFL0550-E6D	5~50mm Lens		
	PFH610 Series	Housings		

#### Accessories

#### **Optional:**







PLZ1040-D

PFB110W Wall mount

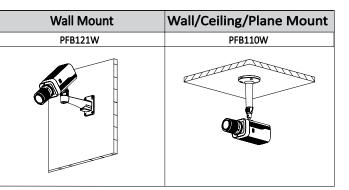
PFB121W Wall mount



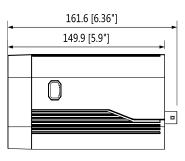


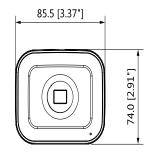
PFL0550-E6D





#### Dimensions (mm/inch)







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