

# DH-IPC-HDB4231F-MPC

## 2MP People Counting Mini Dome Network Camera



- 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- H.265&H.264 triple-stream encoding
- 50/60fps@1080P(1920×1080)
- Smart Detection supported
- WDR(120dB), Day/Night(Electronic), 3DNR, AWB, AGC,BLC
- Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- 2.1mm fixed lens
- People Counting
- Micro SD memory, IP67, IK10, PoE



### System Overview

With upgraded H.265 encoding technology, Eco-savvy series brings high efficient video compression capability. It can save bandwidth and storage. Meanwhile, the series features starlight, smart IR technology and intelligent image analysis techniques. This series supports reminder function, meanwhile fully protected from dust and water, certified to IP67 and vandal resistant to IK10 standard.

intelligent features such as people counting. This function can be applied to business intelligence and bring extra values to customers. It is available to acquire daily, weekly, monthly and yearly people flow via people counting and output data report, which can provide valuable data support for commercial applications.

### Functions

#### Starlight Technology

Featuring Dahua's Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness (0.009 lux).

#### 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

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.

#### 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

#### 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.

#### Business intelligent analysis (People counting)

Besides basic IVS functions, Dahua Camera supports more advanced

## Technical Specification

### Camera

Image Sensor	1/2.8" 2Megapixel progressive scan CMOS
Effective Pixels	1920(H)x1080(V)
RAM/ROM	256MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s
Minimum Illumination	0.02Lux/F2.4 (Color,1/3s,30IRE) 0.08Lux/F2.4 (Color,1/30s,30IRE) 0.01Lux/F2.4 (B/W,1/3s,30IRE) 0.04Lux/F2.4 (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	Fixed				
Mount Type	Board-in				
Focal Length	2.1mm				
Max. Aperture	F2.0				
Angle of View	H: 132° , V:69°				
Optical Zoom	N/A				
Focus Control	N/A				
Close Focus Distance	0.4m				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.1 mm	36m(118ft)	14m(46ft)	7m(23ft)	3.5m(11ft)

### Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:-30°~30°; Tilt:0°~80°; Rotation:0°~360°
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### Intelligence

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

### Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	1080P(1920x1080)/1.3M(1280x960)/ 720P(1280x720)/D1(704x576/704x480)/ VGA(640x480)/CIF(352x288/352x240)
Frame Rate	Main Stream: 1080P (1~25/30fps)
	Sub Stream: D1(1~25/30fps)
	Third Stream: 1080P(1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24~9472Kbps H.265: 14~5632Kbps
Day/Night	Auto(Electronic) / Color / B/W
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 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
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 Area, Rectangle)

### Audio

Compression	G.711a/ G.711Mu/ AAC/ G.726
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### 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; ICMP; 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 E-mark(ECE-Regulation No.10) EN50155
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### Interface

Video Interface	N/A
Audio Interface	Built-in Mic
RS485	N/A
Alarm	N/A

### Electrical

Power Supply	DC12V, PoE (802.3af)(Class 0)
Power Consumption	< 3.5W

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	IK10

Construction

Casing	Metal
Dimensions	Φ106mm×50.3mm (4.17"×1.98")
Net Weight	0.4kg (0.88lb)
Gross Weight	0.44kg (0.97lb)

Ordering Information

Type	Part Number	Description
2MP camera	DH-IPC-HDB4231FP-MPC	2MP People Counting Mini Dome Network Camera, WDR, PAL
	DH-IPC-HDB4231FN-MPC	2MP People Counting Mini Dome Network Camera, WDR, NTSC
	IPC-HDB4231FP-MPC	2MP People Counting Mini Dome Network Camera, WDR, PAL
	IPC-HDB4231FN-MPC	2MP People Counting Mini Dome Network Camera, WDR, NTSC
Accessories (optional)	PFB204W	Wall mount
	PFA139	Junction box
	PFA152	Pole mount

Accessories

Optional:



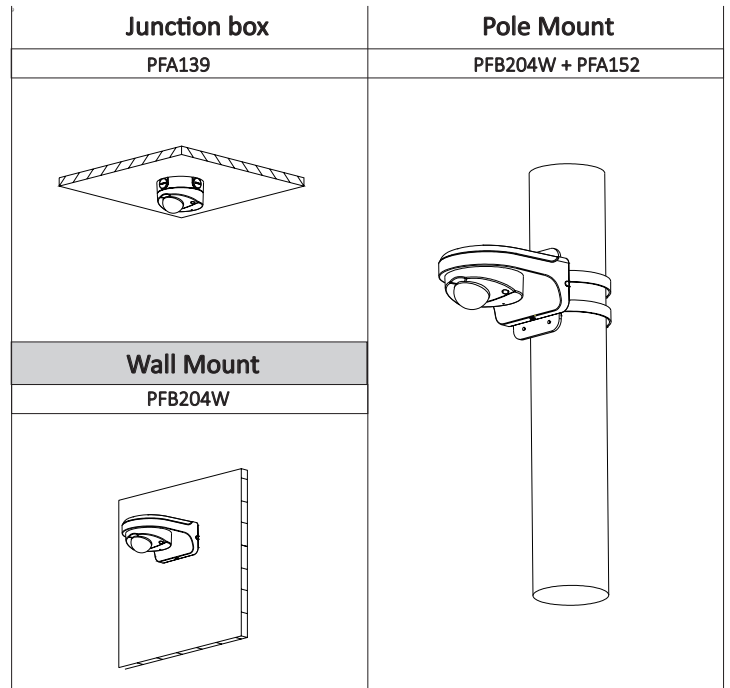
PFA139 Junction Box



PFB204W Wall Mount



PFA152 Pole Mount



Dimensions (mm/inch)

