

# DH-IPC-HFW4231E-S-S4

2MP WDR IR Mini Bullet Network 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

#### 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 (0.005 lux).

#### Wide Dynamic Range

Embeded with industry leading wide dynamic range (WDR) technology, vivid picutures 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

- · 1/2.8" 2Megapixel progressive scan STARVIS<sup>™</sup> CMOS
- · H.265&H.264 triple-stream encoding
- · 25/30fps@2M(1920×1080)
- · 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)
- Max. IR LEDs Length 40m
- · Micro SD memory 256GB, IP67, PoE,



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 enviorments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.

#### Protection

Supporting  $\pm 30\%$  input voltage tolerance, this camera suits even the most unstable conditions for outdoor applications. Its 2KV lightning rating provides protectection 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.



# **Technical Specification**

Camera	
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Camera						
Image Sensor		1/2.8" 2Megapixel progressive scan CMOS				
Effective Pixels		1920(H) x 1080(V)				
RAM/ROM		256MB/32MB				
Scanning System	m	Progressive				
Electronic Shutt	er Speed	Auto/Manual, 1/3(4)~1/100000s				
Minimum Illumination		0.005Lux/F2.0( Color,1/3s,30IRE) 0.03Lux/F2.0( Color,1/30s,30IRE) 0Lux/F2.0(IR on)				
IR Distance		Distance up to 40m (131ft)				
IR On/Off Contr	rol	Auto/ Manual				
IR LEDs		2				
Lens						
Lens Type		Fixed				
Mount Type		Board-in				
Focal Length		3.6mm (6mm optional)				
Max. Aperture		F2.0 (F2.0)				
Angle of View		H: 84° (53°), V: 45° (40°)				
Optical Zoom		N/A				
Aperture Type		Fixed				
Close Focus Dis	tance	0.9m/2.0m				
	Lens	Detect	Observe	Recognize	Identify	
DORI Distance	3.6 mm	55m(180ft)	22m(72ft)	11m(36ft)	6m(20ft)	
	6.0 mm	83m(272ft)	33m(108ft)	17m(56ft)	8m(26ft)	
Pan/Tilt/Rotation						
Pan/Tilt/Rotati	on Range	Pan:0°~360°; Tilt:0°~90°; Rotation:0°~360°				
Intelligence						
IVS		Tripwire, Intrusion, Object Abandoned/Missing				
Advanced Intel	ligent Functions	Face Detection				
Video						
Compression		H.265+/H.265/H.264+/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(352×288/352×240)				
Frame Rate		Main Stream: 1080P (1~25/30fps)				
		Sub Stream: D1(1~25/30fps)				
		Third Stream: 1080P(1~5/0fps)				
Bit Rate Control		CBR/VBR				
Bit Rate		H.264: 192~10240Kbps H.265: 80~6144Kbps				
Day/Night		Auto(ICR) / 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	Support
Defog	N/A
Digital Zoom	16x
Flip	0°/90°/180°/270°
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)
Audio	
Compression	N/A
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 256GB
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
Interface	
Video Interface	N/A
Audio Interface	N/A
RS485	N/A
Alarm	N/A
Electrical	
Power Supply	DC12V, PoE (802.3af)(Class 0)
Power Consumption	<7.3W

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#### Environmental

Operating Conditions	-30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH
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Ingress Protection	IP67
Vandal Resistance	N/A
Construction	
Casing	Metal
Dimensions	180mm×70mm×70mm (7.09"×2.76"×2.76")
Net Weight	0.43kg (0.95lb)
Gross Weight	0.56 kg (1.23lb)

### **Ordering Information**

Туре	Part Number	Description
	DH-IPC- HFW4231EP-S- 0360B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL
	DH-IPC- HFW4231EN-S- 0360B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC
	IPC-HFW4231EP-S- 0360B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL
4MP camera	IPC-HFW4231EN-S- 0360B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC
4MP Camera	DH-IPC- HFW4231EP-S- 0600B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL
	DH-IPC- HFW4231EN-S- 0600B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC
	IPC-HFW4231EP-S- 0600B-S4	4MP IR Mini Bullet Network Camera, WDR, PAL
	IPC-HFW4231EN-S- 0600B-S4	4MP IR Mini Bullet Network Camera, WDR, NTSC
Accessories (optional)	PFA121	Junction box
	PFA152-E	Pole Mount

#### Accessories

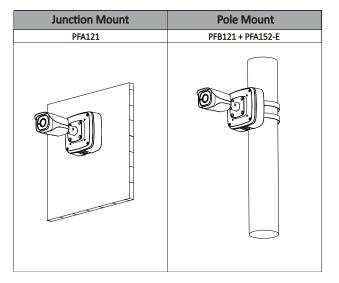
## **Optional:**





PFA121 Junction box

PFA152-E Pole Mount



# Dimensions (mm/inch)

