

# DH-IPC-HF5231E

2MP WDR Box Network Camera



- · 1/2.8" 2Megapixel progressive scan STARVIS™ CMOS
- · H.264&H.265 triple-stream encoding
- ·50/60fps@1080P(1920×1080)
- · Smart Detection supported
- · WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC
- $\cdot$  Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 2/1 Alarm in/out, 1/1 audio in/out(Built-in Mic)
- · Auto back focus(ABF)
- · Micro SD memory, PoE













## **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.

camera is designed for extreme temperature environments.

#### Protection

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

#### Smart H.264+

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.264 .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



With a temperature range of-30 °C to +60 °C (-22 °F to +140 °F), the



BLC Mode

BLC / HLC / WDR(120dB)

Technical Specification		White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Camera		Gain Control	Auto/Manual
Image Sensor	1/2.8" 2Megapixel progressive scan CMOS	Noise Reduction	3D DNR
Effective Pixels	1920(H) x 1080(V)	Motion Detetion	Off / On (4 Zone, Rectangle)
RAM/ROM	256MB/32MB	Region of Interest	Off / On (4 Zone)
Scanning System	Progressive	Electronic Image Stabilization	N/A
Electronic Shutter Speed	Auto/Manual, 1/3~1/100000s	(EIS) Smart IR	N/A
Minimum Illumination	0.004Lux/F1.2(Color,1/3s,30IRE) 0.04Lux/F1.2(Color,1/30s,30IRE) 0.002Lux/F1.2(B/W,1/3s,30IRE) 0.02Lux/F1.2(B/W,1/30s,30IRE)	Defog	N/A
S/N Ratio	More than 50dB	Digital Zoom	16x 0°/90°/180°/270°
IR Distance	N/A	Flip	
IR On/Off Control	N/A	Mirror	Off / On
·	N/A	Privacy Masking	Off / On (4 Area, Rectangle)
IR LEDs	NO	Audio	
Lens		Compression	G.711a/ G.711Mu/ AAC/ G.726
Lens Type	N/A	Network	
Mount Type	C/CS	Ethernet	RJ-45 (10/100Base-T)
Focal Length  Max. Aperture	N/A	Protocol	HTTP; HTTPs; TCP; ARP; RTSP; RTP; UDP; SMTP; FTP; DHCP; DNS; DDNS; PPPOE; IPv4/v6; QoS; UPnP;NTP; Bonjour; 802.1x; Multicast; ICMP;
Angle of View	N/A	Laborator and Miller	IGMP; SNMP
Optical Zoom	N/A	Interoperability	ONVIF, PSIA, CGI
Focus Control	N/A	Streaming Method	Unicast / Multicast
Close Focus Distance	N/A	Max. User Access	10 Users /20 Users
Pan/Tilt/Rotation		Edge Storage	NAS Local PC for instant recording Mirco SD card 128GB
Pan/Tilt/Rotation Range	N/A	Web Viewer	IE, Chrome, Firefox, Safari
Intelligence		Management Software	Smart PSS, DSS, Easy4ip
IVS	Tripwire, Intrusion, Object Abandoned/Missing	Smart Phone	IOS, Android
Advanced Intelligent Functions	Face Detection	Certifications	
Video			CE (EN 60950:2000)
Compression	H.265+/H.265/H.264+/H.264	Certifications	UL:UL60950-1 FCC: FCC Part 15 Subpart B
Streaming Capability	3 Streams	Interface	
Resolution	1080P(1920x1080)/1.3M(1280x960)/ 720P(1280×720)/D1(704×576/704×480)/ VGA(640×480)/CIF(352×288/352×240)	Video Interface	1 port(BNC,1Vp-p,75Ω)
Frame Rate	Main Stream: 1080P(1~50/60fps)	Audio Interface	1/1 channel In/Out, 1 Built-in Mic
	Sub Stream:D1(1~50/60fps)	RS485	1 port
	Third Stream: 1080P(1~25/30fps)	Alarm	2 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC
Bit Rate Control	CBR/VBR	Electrical	
Bit Rate	H.264: 24~9472Kbps H.265: 14~5632Kbps	Power Supply	DC12V, AC24V, PoE(802.3af)(Class 0)
Day/Night	Auto(ICR) / Color / B/W	Power Consumption	<5W

## Environmental

Operating Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Strorage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	N/A
Vandal Resistance	N/A

## Construction

Casing	Metal
Dimensions	135.4mm×74.4mm×65.5mm (5.33"×2.93"×2.58")
Net Weight	0.66Kg (1.46lb)
Gross Weight	0.77Kg (1.7lb)

Ordering Information			
Туре	Part Number	Description	
2MP camera	DH-IPC-HF5231EP	2MP Box Network Camera, WDR, PAL	
	DH-IPC-HF5231EN	2MP Box Network Camera, WDR, NTSC	
	IPC-HF5231EP	2MP Box Network Camera, WDR, PAL	
	IPC-HF5231EN	2MP Box Network Camera, WDR, NTSC	
Accessories (optional)	PFB110W	Wall mount	
	PFB121W	Wall mount	

## Accessories

## **Optional:**



Wall Mount	Wall/Ceiling/Plane Mount
PFB121W	PFB110W

## Dimensions (mm/inch)





