

# DH-IPC-HDBW2431R-ZS-S2

4MP Lite IR Vari-focal Dome Network Camera



Series Overview

With upgraded H.265 encoding technology, Dahua Lite series network camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better color image in the condition of low illumination. It supports SD card storage, dust-proof function, waterproof function and vandal-proof function, complying with the standards of IP67 and IK10 (Supported by some select models).

#### **Functions**

## Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Dahua smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

#### **WDR**

With advanced Wide Dynamic Range (WDR) technology, Dahua network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

# Starlight

With advanced image processing technology and optical technology, Dahua Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

- 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- Outputs 4MP (2560 × 1440)@25/30 fps, Max. supports 4MP (2688 × 1520)@20 fps
- · H.265 codec, high compression rate, ultra-low bit rate
- · Built-in IR LED. max IR distance: 40 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- · Intelligent detection: Intrusion, tripwire
- Abnormality detection: Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnected, IP conflict, illegal access, voltage detection
- · Supports max. 256 GB Micro SD card
- 12V DC/PoE power supply
- IP67, IK10 protection













#### **IVS**

With advanced video algorithm, Dahua IVS technology supports intelligent functions, such as tripwire and intrusion.

## **Cyber Security**

Dahua network camera is equipped with a series of key security technologies, such as security authentication and authorization, access control, trusted protection, encrypted transmission, and encrypted storage, which improve its security defense and data protection, and prevent malicious programs from invading the device.

#### Protection (IP67, IK10, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

IK10: The enclosure can stand the punch more than 5 times from a 5 kg hammer falling from a height of 40 m (Impact energy is 20J). Wide voltage: The camera allows  $\pm 30\%$  input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.





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Technical Specification						Bit Rate Control	CBR/VBR	
Camera				Video Bit Rate	H.264: 32 kbps-6144 kbps H.265: 12 kbps-6144 kbps			
Image Sensor		1/3" 4Megapixel progressive CMOS					Day/Night	Auto(ICR)/Color/B/W
Max. Resolution		2688 (H) × 1520 (V)					BLC	Yes
ROM		128 MB					HLC	Yes
RAM		128 MB					WDR	120 dB
Scanning System		Progressive					White Balance	Auto/natural/street lamp/outdoor/manual/regional
Electronic Shutter Speed		Auto/Manual 1/3 s–1/100000 s					Gain Control	custom Auto/Manual
Min. Illumination		0.008 Lux @ F1.5					Noise Reduction	3D NR
S/N Ratio		>56 dB					Motion Detection	OFF/ON (4 areas, rectangular)
Illumination Distance		40 m (131.23 ft)						
Illuminator On/Off Control		Auto/Manual					Region of Interest(RoI)	Yes (4 areas)
Illuminator Numl	ber	2 (IR LED)					Smart Illumination	Yes 0°/90°/180°/270° (Supports 90°/270° with 2688 × 1520
Pan/Tilt/Rotation Range		Pan: 0°–355° Tilt: 0°–75°					Image Rotation	resolution and lower.)
rany my notation name		Rotation: 0°–355°					Mirror	Yes
Lens							Privacy Masking	4 areas
Lens Type		Motorized vari-focal					Alarm	
Mount Type		ф14					Alama Frant	No SD card; SD card full; SD card error; network disconnection; IP conflict; motion detection; video
Focal Length		2.7 mm-13.5 mm					Alarm Event	tampering; tripwire; intrusion; illegal access; voltage detection; safety exception
Max. Aperture		F1.5					Network	
Field of View		Horizontal: 104°–27° Vertical: 55°–15° Diagonal: 124°–31°					Network	RJ-45 (10/100 Base-T)
Iris Type		Fixed					SDK and API	Yes
Close Focus Dista	ance	0.8 m-0.8 m	(2.62 ft–2.62 ft	:)				Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted
	Lens	Detect	Observe	Recognize	Identify		Cyber Security	
DORI Distance	W	64 m (209.97 ft)	25.6 m (83.99 ft)	12.8 m (41.99 ft)	6.4 m (21 ft)			execution; trusted upgrade
	Т	220 m (721.78 ft)	88 m (288.71 ft)	44 m (144.36 ft)	22 m (72.18 ft)		Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; Bonjour
Smart Event							Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone;
IVS		Tripwire; intrusion					interoperability	Genetec
Video							User/Host	20
Video Compressi	ion	H.265; H.264; H.264B; MJPEG (only supported by the sub stream)					Storage	FTP; Micro SD card (support max. 256 G); NAS; SFTP
Smart Codec		Smart H.265+/ Smart H.264+					Browser	IE Chrome Firefox
		Main stream: 2688 × 1520 (1 fps-20 fps) 2560 × 1440 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps)					Management Software	Smart PSS; DSS; DMSS
Video Frame Rate							Mobile Phone	IOS; Android
							Certification	
Stream Capability		2 streams						CE-LVD: EN62368-1
Resolution		2688 × 1520 (2688 × 1520); 2560 × 1440 (2560 × 1440); 2304 × 1296 (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 ×480); CIF (352 × 288/352 × 240)					Certification	CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07



# Power

Power Supply	12V DC/PoE (802.3af)
Power Consumption	< 6.5W

#### Environment

Operating Conditions	-30°C to $+60$ °C ( $-22$ °F to $+140$ °F)/less than ≤ 95% RH		
Storage Temperature	-40°C to +60°C (-40°F to +140°F)		
Protection	IP67; IK10		

#### Structure

Casing	Metal
Dimensions	Ф122 mm × 88.9 mm (Ф4.80" × 3.50")
Net Weight	0.47 kg (1.04 lb)
Gross Weight	0.63 kg (1.39 lb)

#### **Ordering Information** Type Part Number Description 4MP Lite IR Vari-focal Dome DH-IPC-HDBW2431RP-ZS-S2 Network Camera, PAL 4MP Camera 4MP Lite IR Vari-focal Dome DH-IPC-HDBW2431RN-ZS-S2 Network Camera, NTSC PFA137 Junction Box PFB203W Wall Mount PFA152-E Pole Mount PFA200W Rain Shade PFA106 Mount Adapter PFB220C Celling Mount Accessories (optional) PFB200C In-Celling Mount DC12V1A Power Adapter PFM321D Single-port Long Reach Ethernet LR1002-1ET/1EC over Coax Extender PFM900-E Integrated Mount Tester PFM114 TLC SD Card

# **Accessories**

# **Optional:**







PFA152-E

Pole Mount

PFA137 Junction Box

L37 PFB203W n Box Wall Moun

Wall Mount





PFA200W Rain Shade

DW PFA106

PFB220C





Mount Adapter



Celling Mount

PFB200C In-Celling Mount

PFM321D DC12V1A Power Adapter

LR1002-1ET/1EC Single-port Long Reach Ethernet over Coax Extender



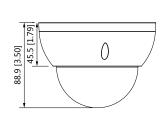
PFM900-E Integrated Mount Tester

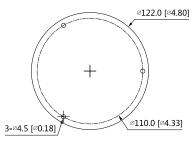


PFM114 TLC SD Card

Junction Mount	Wall Mount	Wall Mount	Pole Mount
PFA137	PFA137+PFA200W	PFB203W	PFB203W+PFA152-E
Ceiling Mount	In-Ceiling Mount		
PFA106+PFB220C	PFB200C		
	(B)		

# Dimensions (mm[inch])





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