

# DH-IPC-HDBW2431E-S-S2

4MP Lite IR Fixed-focal Dome Network Camera



- $\cdot$  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: 30 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



### **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.

### 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.



# Lite Series | DH-IPC-HDBW2431E-S-S2

# **Technical Specification**

Stream Capability

Camera						
Image Sensor		1/3" 4Megapixel progressive CMOS				
Max. Resolution		2688 (H) × 1520 (V)				
ROM		128 MB				
RAM		128 MB				
Scanning System		Progressive				
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100000 s				
Min. Illumination		0.008 Lux @ F1.6				
S/N Ratio		>56 dB				
Illumination Distance		30 m (98.43 ft)				
Illuminator On/Off Control		Auto/Manual				
Illuminator Number		3 (IR LED)				
Pan/Tilt/Rotation Range		Pan: 0°–355° Tilt: 0°–65° Rotation: 0°–355°				
Lens						
Lens Type		Fixed-focal				
Mount Type		M12				
Focal Length		2.8 mm 3.6 mm				
Max. Aperture		F1.6				
Field of View		2.8 mm: Horizontal 102.0° × Vertical 55.0° × Diagonal 121.0° 3.6 mm: Horizontal 84.0° × Vertical 45.0° × Diagonal 100.0°				
Iris Type		Fixed				
Close Focus Distance		2.8 mm: 0.9 m (2.95 ft) 3.6 mm: 1.6 m (5.25 ft)				
	Lens	Detect	Observe	Recognize	Identify	
DORI Distance	2.8mm	56 m (183.73 ft)	22.4 m (73.49 ft)	11.2 m (36.75 ft)	5.6 m (19.37 ft)	
	3.6mm	80 m (262.47 ft)	32 m (104.99 ft)	16 m (52.49 ft)	8 m (26.25 ft)	
Smart Event						
IVS		Tripwire; intrusion				
Video						
Video Compression		H.265; H.264; H.264B; MJPEG (only supported by the sub stream)				
Smart Codec		Smart H.265+/ Smart H.264+				
Video Frame Rate		Main stream: 2688 × 1520 (1 fps-20 fps) 2560 × 1440 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps)				

704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps)

2 streams

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)		
Bit Rate Control	CBR/VBR		
Video Bit Rate	H.264: 32 kbps-6144 kbps H.265: 12 kbps-6144 kbps		
Day/Night	Auto(ICR)/Color/B/W		
BLC	Yes		
HLC	Yes		
WDR	120 dB		
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom		
Gain Control	Auto/Manual		
Noise Reduction	3D NR		
Motion Detection	OFF/ON (4 areas, rectangular)		
Region of Interest(RoI)	Yes (4 areas)		
Smart Illumination	Yes		
Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 2688 ×1520 resolution and lower.)		
Mirror	Yes		
Privacy Masking	4 areas		
Alarm			
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; motion detection; video tampering; tripwire; intrusion; illegal access; voltage detection; safety exception		
Network			
Network	RJ-45 (10/100 Base-T)		
SDK and API	Yes		
Cyber Security	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 execution; trusted upgrade		
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		
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec		
User/Host	20		
Storage	FTP; Micro SD card (support max. 256 G); NAS; SFTP		
Browser	IE Chrome Firefox		
Management Software	Smart PSS; DSS; DMSS		
Mobile Phone	IOS; Android		

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### Certification

Certifications	CE-LVD: EN62368-1 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	< 5.2W			
Environment				
Operating Conditions	-40°C to +60°C (-40°F to +140°F)/less than $\leq$ 95% RH			
Storage Temperature	-40°C to +60°C (-40°F to +140°F)			
Protection	IP67; IK10			
Structure				
Casing	Metal			
Dimensions	81 mm × Φ109.9 mm (3.19" × Φ4.33")			
Net Weight	0.350 kg (0.77 lb)			
Gross Weight	0.491 kg (1.08 lb)			

### **Ordering Information**

Туре	Part Number	Description	
4MP Camera	DH-IPC-HDBW2431EP-S-S2	4MP Lite IR Fixed-focal Dome Network Camera,PAL	
	DH-IPC-HDBW2431EN-S-S2	4MP Lite IR Fixed-focal Dome Network Camera,NTSC	
Accessories (optional)	PFA136	Junction Box	
	PFA200W	Rain Shade	
	PFB203W	Wall Mount	
	PFA152-E	Pole Mount	
	PFA106	Mount Adapter	
	PFB220C	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	

# Accessories

# **Optional:**



PFA136

Junction Box



PFA200W

Rain Shade

PFA106

Mount Adapter



PFB203W Wall Mount



PFA152-E Pole Mount



PFM321D

LR1002-1ET/1EC

Single-port Long

Reach Ethernet over

Coax Extender



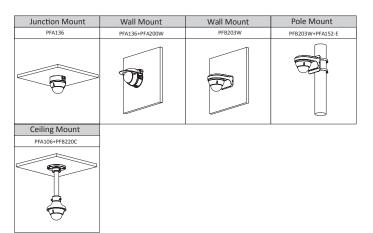
PFB220C

PFM900-E Integrated Mount Tester

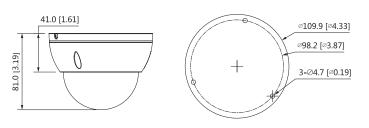
DC12V1A Power Adapter



PFM114 TLC SD Card



## Dimensions (mm[inch])



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