

# DH-IPC-HFW2431S-S-S2

4MP WDR IR Bullet Network Camera



## System Overview

With upgraded H.265 encoding technology, Dahua Lite series camera has efficient video encoding capacity, which saves bandwidth and storage space. This camera adopts the latest starlight technology and displays better colorful image in the environment of low illumination. It supports SD card storage, waterproof function, dust-proof function, complying to the standards of IP67.

## Functions

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

Adopting advanced algorithm of auto stream control according to the environment, Dahua smart encoding technology realizes the higher efficiency than (H.265 & H.264 ), providing high-quality video, and reducing the cost of storage and transmission.

### Wide dynamic range (WDR)

Dahua adopts advanced Wide Dynamic Range (WDR) technology. You can get clear details in the environment of strong brightness contrast. In high brightness and back-light environment, bright region and dark region with strong light source, you can also get clear images.

### Starlight

Dahua Starlight technology mainly applies to the environment of low illumination, and it can provide clear colorful video. Even in the the environment of min. illumination, the technology can guarantee the good image effect.

### Intelligent Video Analysis (IVS)

With advanced video algorithm, Dahua camera supports intelligent detection, such as tripwire and intrusion and so on.

### Protection (IP67, 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.

- 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- Outputs 4MP (2560 × 1440)@25/30fps, Max. supports 4MP (2688 × 1520)@20 fps
- H.256 coding, high compression ration, 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 DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire
- Abnormality detection: Motion detection, video tempering, no SD card, SD card full, SD card error, network disconnected, IP conflict, illegal access, voltage detection
- 256 G SD card
- 12V DC/POE power support
- IP67 protection grade



**Wide voltage:** The camera allows  $\pm 30\%$  input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification						Stream Capability		Main stream; sub stream	
Camera								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–8192 Kbps H.265: 12 Kbps–8192 Kbps  Day/Night ICR switch  BLC Yes  WDR 120 dB  White Balance Auto/natural/street lamp/outdoor/manual/regional custom  Gain Control Manual/Auto  Noise Reduction 3D DNR  Motion Detection Disable/Enable (4 areas, rectangle)  Region of Interest(Rol) Yes (4 areas)  Smart IR Yes (Adjust by user)  Digital Zoom 16 times  Image Rotation 0°/90°/180°/270° (Supports 90°/270° with 1080p resolution.)  Mirror Yes  Privacy Masking 4 areas	
Image Sensor		1/3″ CMOS							
Effective Pixels		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		0.01 Lux@F1.6							
IR Distance		30 m (98.43 ft) (IR)							
IR On/Off Control		Auto							
IR LEDs Number		1 (IR LED)							
Pan/Tilt/Rotation Range		Horizontal: 0°–360° Vertical: 0°–90° Rotation: 0°–360°							
Lens									
Lens Type		Fix focal							
Mount Type		M12							
Focal Length		2.8 mm 3.6 mm							
Max. Aperture		F1.6 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 (3.61 ft)							
DORI Distance	Lens	Detect	Observe	Recognize	Identify				
	2.8 mm	56 m (183.73 ft)	22.4 m (73.49 ft)	11.2 m (36.75 ft)	5.6 m (18.37 ft)				
	3.6 mm	80 m (262.47 ft)	32.0 m (104.99 ft)	16.0 m (52.49 ft)	8.0 m (26.25 ft)				
Smart event									
General IVS Analytics		Intrusion; tripwire							
Video									
Video Compression		H.265; H.264; H.264B; MJPEG							
Smart Codec		H.264: Yes H.265: Yes							
Video Frame Rate		50Hz Main stream (2560 × 1440@25 fps); sub stream (704 × 576@25 fps) Main stream (2688 × 1520@20 fps); sub stream (704 × 576@20 fps) 60Hz Main stream (2560 × 1440@30 fps); sub stream (704 × 480@30 fps) Main stream (2688 × 1520@20 fps); sub stream (704 × 480@20 fps)							
Power									
Power Supply		12V DC/POE							
Power Consumption		Basic power consumption: 2.2W (12V DC), 2.7W (POE) Max power consumption (H.265, Max resolution, Max stream, WDR, IR full intensity, IVS): 4.2W (12V DC), 5W (POE)							

## Environment

Operating Temperature	-40°C to +60°C (-40°F to +140°F)
Operating Humidity	≤95%
Storage Temperature	-30°C to +70°C (-22°F to +158°F)
Storage Humidity	≤95%
Protection Grade	IP67

## Structure

Casing	Metal
Dimensions	166.2 mm × Φ70 mm (6.54" × Φ2.76")
Net Weight	0.48 kg (1.06 lb)
Gross Weight	0.57 kg (1.26 lb)

## Ordering Information

Type	Part Number	Description
4MP Camera	DH-IPC-HFW2431SP-S-S2	4MP WDR IR Bullet Network Camera,PAL
	DH-IPC-HFW2431SN-S-S2	4MP WDR IR Bullet Network Camera,NTSC
Accessories	PFA134	Junction Box
	PFA152-E	Pole 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:



PFA134  
Junction Box



PFA152-E  
Pole Mount



PFM321D  
DC12V1A  
Power adapter



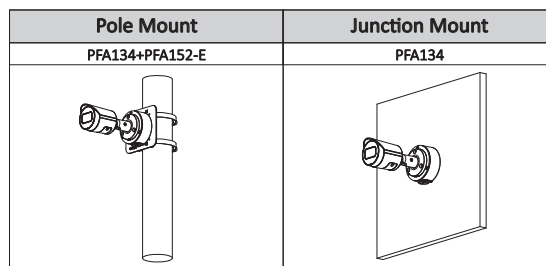
LR1002-1ET/1EC  
Single-port long reach  
ethernet over coax  
extender



PFM900-E  
Integrated mount  
tester



PFM114  
TLC SD card



## Dimensions (mm[inch])

