

# DH-IPC-HDBW2431F-AS-S2

## 4MP Lite IR Fixed-focal Dome Network Camera



- 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- Outputs max. 4MP (2688 × 1520) @20 fps, and supports 2560 × 1440 (2560 × 1440) @25/30 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 DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire
- Abnormality detection: Motion detection, video tampering, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; built-in Mic; 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 to the standards of IP67 and IK10.

### 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

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

#### IVS

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

#### 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 work 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 cm (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.

**Technical Specification**

<b>Camera</b>	
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–1/100,000 s
S/N Ratio	> 56 dB
Minimum Illumination	0.008 Lux @ F1.6
Illumination Distance	30 m (98.4 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	8 (IR LED)
Pan/Tilt/Rotation Range	Pan: –30°–30° Tilt: 0°–80° Rotation: 0°–360°

<b>Lens</b>					
Lens Type	Fixed-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° × Vertical 55° × Diagonal 121° 3.6 mm:Horizontal 84° × Vertical 45° × Diagonal 100				
Iris Type	Fixed				
Close Focus Distance	2.8 mm: 0.9 m (3.0 ft) 3.6 mm: 1.6 m (5.2 ft)				
DORI Distance	<b>Lens</b>	Detect	Observe	Recognize	Identify
	2.8mm	56.0 m (183.7 ft)	22.4 m (73.5 ft)	11.2 m (36.7 ft)	5.6 m (8.5 ft)
	3.6mm	80.0 m (262.5 ft)	32.0 m (105.0 ft)	16.0 m (52.5 ft)	8.0 m (26.2 ft)

<b>Smart Event</b>	
IVS	Tripwire; intrusion

<b>Video</b>	
Video Compression	H.265; H.264; H.264B; MJPEG (only supported by 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 × 480 (1 fps-30 fps)
Stream Capability	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 DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Yes
Privacy Masking	4 areas

<b>Audio</b>	
Built-in MIC	Yes
Audio Compression	G.711a; G.711Mu; G.726; AAC

<b>Alarm</b>	
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio detection; voltage detection; security exception; local alarm

<b>Network</b>	
Network	RJ-45 (10/100 Base-T)
SDK and API	Yes
Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec; P2P
User/Host	20
Edge Storage	Dahua Cloud; FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser	IE Chrome Firefox
Management Software	Smart PSS, DSS, DMSS
Mobile Phone	IOS; Android

<b>Certification</b>	
Certifications	CE-LVD: EN60950-1 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

Port

Audio Input	1 channel (RCA port)
Audio Output	1 channel (RCA port)
Alarm Input	1 channel in: 5mA 3V-5V DC
Alarm Output	1 channel out: 300mA 12V DC

Power

Power Supply	12V DC/PoE
Power Consumption	<5.4W

Environment

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

Structure

Casing	Metal
Dimensions	55 mm × Φ108.9 mm (2.2" × Φ4.3")
Net Weight	0.38 kg (0.8 lb)
Gross Weight	0.52 kg (1.1 lb)

Ordering Information

Type	Part Number	Description
4MP Camera	DH-IPC-HDBW2431FP-AS-S2	4MP Lite IR Fixed-focal Dome Network Camera,PAL
	DH-IPC-HDBW2431FN-AS-S2	4MP Lite IR Fixed-focal Dome Network Camera,NTSC
Accessories (optional)	PFA139	Junction Box
	PFB204W	Wall Mount
	PFA152-E	Pole Mount
	PFB220C	Mount Adapter
	PFA106	Ceiling Mount
	PFM321D	12V DC 1A Power Adapter
	LR1002-1ET/1EC	Single-port Long Reach Ethernet over Coax Extender
	PFM900-E	Integrated Mount Tester
	PFM114	TLC SD Card

Accessories

Optional:



PFA139 Junction Box



PFB204W Wall Mount



PFA152-E Pole Mount



PFB220C Ceiling Mount



PFA106 Mount Adapter



PFM321D 12V DC 1A Power Adapter



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



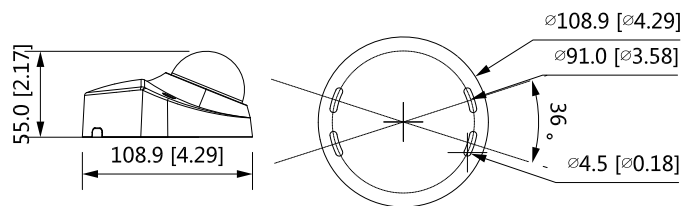
PFM900-E Integrated Mount Tester



PFM114 TLC SD Card

Junction Mount	Wall Mount	Pole Mount	Ceiling Mount
PFA139	PFB204W	PFB204W+PFA152-E	PFB220C+PFA106

Dimensions (mm[inch])



# DH-IPC-HDW2531T-AS-S2

## 5MP Lite IR Fixed-focal Eyeball Network Camera



- 5MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs max. 5MP (2592 × 1944) @20 fps, and supports 2688 × 1520 (2688 × 1520) @25/30 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, built-in MIC
- 12V DC/PoE power supply
- IP67 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 (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, wide voltage)

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

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

### Technical Specification

#### Camera

Image Sensor	1/2.7" 5Megapixel progressive CMOS
Max. Resolution	2592 (H) × 1944 (V)
ROM	128 MB
RAM	256 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	2 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

#### Lens

Lens Type	Fixed				
Mount Type	M12				
Focal Length	2.8 mm 3.6 mm				
Max. Aperture	F1.6 F1.6				
Field of View	2.8 mm: Horizontal 103.0° × Vertical 71.0° × Diagonal 132.0° 3.6 mm: Horizontal 84.0° × Vertical 58.0° × Diagonal 110.0°				
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

IVS	Tripwire; intrusion
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#### 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: 2592 × 1944 (1 fps-20 fps) 2688 × 1520 (1 fps-25/30 fps) Sub stream: 704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps)
Stream Capability	2 streams

Resolution	2592×1944(2592×1944); 2688×1520(2688×1520); 3M(2048×1536); 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	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(Rol)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Supports 90°/270° with 2592 × 1944 resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

#### Audio

Built-in MIC	Yes
Audio Compression	G.711A; G.711Mu; G.726

#### 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; audio detection; safety exception
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#### 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
<b>Certification</b>	
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
<b>Power</b>	
Power Supply	12V DC/PoE (802.3af)
Power Consumption	< 7.2W
<b>Environment</b>	
Operating Conditions	-40°C to +60°C (-40°F to +140°F)/less than ≤ 95%
Storage Temperature	-40°C to +60°C (-40°F to +140°F)
Protection	IP67
<b>Structure</b>	
Casing	Metal + Plastic
Dimensions	100.9 mm × Φ109.9 mm (3.97" × Φ4.33")
Net Weight	0.39 kg (0.9 lb)
Gross Weight	0.56 kg (1.2 lb)

**Accessories**

**Optional:**



PFA130-E  
Junction Box



PFB203W  
Wall Mount



PFA152-E  
Pole Mount



PFM321D  
DC12V1A  
Power Adapter






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



PFM900-E  
Integrated Mount  
Tester



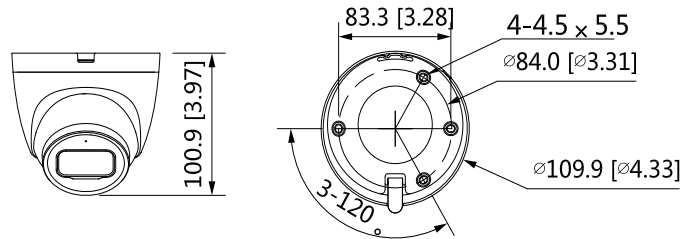
PFM114  
TLC SD Card

Junction Mount	Wall Mount	Pole Mount
PFA130-E	PFB203W	PFA152-E+PFB203W
		

**Ordering Information**

Type	Part Number	Description
SMP Camera	DH-IPC-HDW2531TP-AS-S2	SMP Lite IR Fixed-focal Eyeball Network Camera, PAL
	DH-IPC-HDW2531TN-AS-S2	SMP Lite IR Fixed-focal Eyeball Network Camera, NTSC
Accessories (optional)	PFA130-E	Junction Box
	PFB203W	Wall Mount
	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])**



# DH-IPC-HFW1431T-ZS-S4

## 4MP Entry IR Vari-focal Bullet Network Camera



- 4MP, 1/3" CMOS image sensor, low illuminance, high image definition
- Outputs 4MP (2560 × 1440) @25/30 fps, and supports max. 4MP (2688 × 1520) @20 fps
- H.265 codec, high compression rate, ultra-low bit rate
- Built-in IR LED, max. IR distance: 50 m
- ROI, SMART H.264/H.265, flexible coding, applicable to various bandwidth and storage environments
- Image Rotation, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Abnormality detection: Motion detection, video tampering, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, voltage detection
- Supports max. 256 GB SD card
- 12V DC/PoE power support
- IP67 protection



### System Overview

With features of simple installation, easy operation, and high performance-cost ratio, Dahua Entry Series camera is applicable to small and medium-sized scenes, such as homes/residences, small-sized retail stores, and other small and medium-sized enterprises.

### Functions

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

#### Motion Detection

When moving objects appear in the monitoring image, Dahua Motion Detection (General) technology triggers alarm or records.

#### Wide Dynamic Range (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.

#### Smart IR

Dahua Smart IR technology can display image in the environment of low illuminance or completely dark environment. According to the distance of the targets, the camera adjusts IR LEDs intensity automatically to display the details of the moving target.

#### 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.

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**

**Camera**

Image Sensor	1/3 "4Megapixel progressive CMOS
Effective Pixels	2688 (H) x1520 (V)
ROM	128 MB
RAM	128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100000 s
Min. Illumination	0.03 Lux @ F1.7
IR Distance	50 m (164.0 ft)
IR On/Off Control	Auto/Manual
IR LEDs Number	2
Pan/Tilt/Rotation Range	Horizontal: 0°-360° Vertical: 0°-90° Rotation: 0°-360°

**Lens**

Lens Type	Motorized vari-focal				
Mount Type	φ14				
Focal Length	2.8 mm-12 mm				
Max. Aperture	F1.7				
Field of View	Horizontal: 98°-31° Vertical: 55°-18° Diagonal: 116°-36°				
Iris Type	Fixed aperture				
Close Focus Distance	0.8 m (2.6 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	66.0 m (183.7 ft)	26.4 m (73.5 ft)	13.2 m (36.7 ft)	6.6 m (18.4 ft)
	T	200.0 m (656.2 ft)	80.0 m (262.5 ft)	40.0m (131.2 ft)	20.0 m (65.6 ft)

**Video**

Video Compression	H.265; H.264; H.264B; MJPEG
Smart Codec	Yes
Video Frame Rate	Main Stream: 2688 x 1520 (1 fps-20 fps) 2560 x 1440 (1 fps-25/30 fps) Sub Stream: 704 x 576 (1 fps-20/25 fps) 704 x 480 (1 fps-20/30 fps)
Stream Capability	2 streams
Resolution	2688 x 1520 (2688 x 1520); 2560 x 1440 (2560 x 1440); 2304 x 1296 (2304 x 1296); 1080p (1920 x 1080); 1.3M (1280 x 960); 720p (1280 x 720); D1 (704 x 576/704 x 480); VGA (640 x 480); CIF (352 x 288/352 x 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	Manual/Auto
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest(Rol)	Yes (4 areas)
Smart IR	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 x 1520 resolution.)
Mirror	Yes
Privacy Masking	4 areas

**Network**

Network	RJ-45 (10/100 Base-T)
Protocol	HTTP; TCP; ARP; RTSP; RTP; UDP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; PPPoE; IPv4/v6; QoS; UPnP; NTP; RTMP; Multicast; HTTPS; SFTP; 802.1x; ICMP; IGMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone;
User/Host	20
Edge Storage	Dahua Cloud; FTP; SFTP; Micro SD card (support max. 256 GB); NAS
Browser	IE Chrome Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Phone	IOS; Android

**Certification**

Certifications	CE-LVD: EN60950-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B
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**Power**

Power Supply	12V DC/POE (802.3af)
Power Consumption	< 7.4W

**Environment**

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

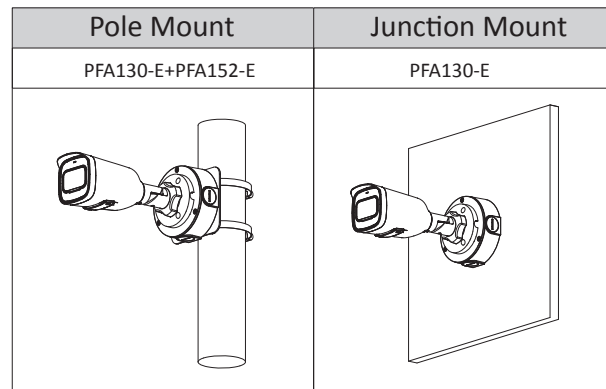


Structure

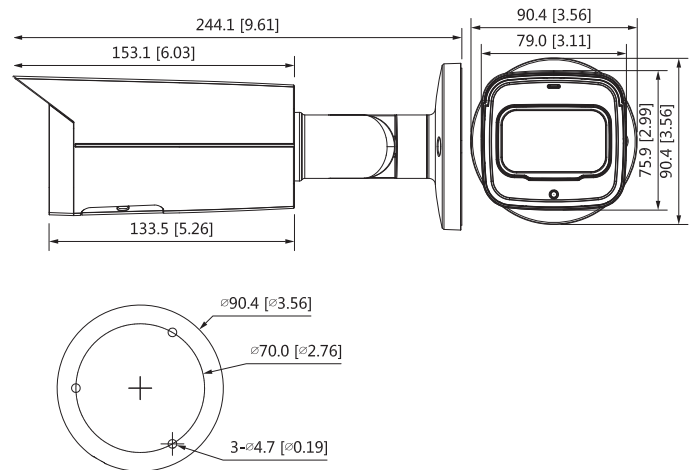
Casing	Metal
Dimensions	244.1 mm × Φ90.4 mm (9.6" × Φ3.6")
Net Weight	0.85 kg (1.9 lb)
Gross Weight	1.10 kg (2.4 lb)

Ordering Information

Type	Part Number	Description
4MP Camera	DH-IPC-HFW1431TP-ZS-S4	4MP Entry IR Vari-focal Bullet Network Camera,PAL
	DH-IPC-HFW1431TN-ZS-S4	4MP Entry IR Vari-focal Bullet Network Camera,NTSC
Accessories (optional)	PFA130-E	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])



Accessories

Optional:



PFA130-E  
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

# DHI-NVR608-32-4KS2

32 Channel 2U 8HDDs Ultra series Network Video Recorder



## Series Overview

Dahua's next generation network video recorder offers unparalleled recording technology for IP video surveillance applications. For applications where details are critical for identification, this enterprise-level NVR provides a powerful Intel processor with up to 4K resolution. Additionally, the NVR features a mouse shortcut operation menu, remote management and control, centre storage, edge storage, and back up storage.

This NVR is ideal for a wide range of applications such as public safety, transportation stations, government institutions, hotel resorts, shopping malls, city centers, and financial institutions, where demand expansion flexibility, high reliability and centralized storage management.

The NVR is compatible with numerous third-party devices making it the perfect solution for surveillance systems with or without a video management system (VMS). Its open architecture supports multi-user access and is compatible with ONVIF.

## Functions

### Perimeter Protection by Camera

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

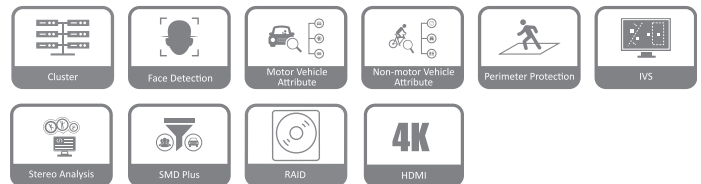
### SMD Plus by Camera

With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

### Video Metadata by Camera

With deep learning algorithm, Dahua Video Metadata technology can detect, track, capture vehicle, non-motor vehicle and people, and select the best images, and extract attributes.

- New 4.0 user interface
- 16-channel decoding@1080p (30 fps); self-adaptive decoding capability
- Access, storage or forwarding at 384 Mbps
- Simultaneous video output for VGA and HDMI1; 4K heterogeneous output for the 2 HDMI ports
- Multiple data mode such as Raid0, Raid1, Raid5, Raid6, and Raid10
- Remote configuration and management of IPCs, such as setting parameters, acquiring information and upgrading IPCs of the same model in batches
- AI-by-camera functions such as perimeter protection, face detection and recognition, SMD Plus, video metadata, ANPR and 3D behavior analysis
- N+M cluster. When the host fails, the standby device will continue to record; once the host recovers, video recorded on the standby device will be transmitted back



### ANPR by Camera

With deep learning algorithm, Dahua ANPR technology can recognize the number plate information of vehicles in the image with ANPR cameras. Support block/allowlist mode, searching target vehicles from recorded video.

### Stereo Analysis by Camera

With deep learning algorithm and scene 3-dimensional information, Dahua Stereo Analysis technology can recognize people's behaviors, such as fall detection, violence detection, strand detection, and space exception, and then generates alarm signals and triggers linkage.

### N+M Hot Standby

The highly reliable redundancy N+M Hot Standby design provides a secure, failover technique ensuring immediate backup. In the event of a system failure, the sub instantly takes over the main ensuring no data is lost.

### RAID

Support RAID 0, RAID 1, RAID 5, RAID 6, RAID 10 (optional). It can improve your storage speed, while ensuring data security.

## Technical Specification

### System

Main Processor	Industrial embedded micro-processor
Operating System	Embedded Linux
Operation Interface	Web/local GUI

### Perimeter Protection

Performance	24 channels
AI Search	Search pictures by channel, time, event type

### Face Detection By Camera

Performance	24 channels
Face Attributes	6 attributes: Gender, age, glasses, expression, mouth mask, and beard
AI Search	Search pictures by channel, time and face attributes

### SMD Plus By Camera

Performance	32 channels
AI Search	Search by target classification (Human, Vehicle)

### Video Metadata By Camera

Performance	12 channels
Human Body	Top, top color, bottom, bottom color, hat, bag, gender, age, umbrella
Vehicle	Plate No., type, color, vehicle type, logo, plate color, ornament, calling, seatbelt, region
Non-motor Vehicle	Type, color, number of passengers, helmet
AI Search	Support search target video by metadata

### ANPR By Camera

Performance	8 channels
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### Stereo Analysis by Camera

Performance	32 channels
AI Search	Search by target classification (Fall Detection, People Approach Detection, People No. Exception Detection, People Staying Detection, Violence Detection)

### Video

Access Channel	32
Network Bandwidth	384 Mbps for access, 384 Mbps for storage and 384 Mbps for forwarding
Resolution	12 MP/8 MP/6 MP/5 MP/4 MP/3 MP/1080p/960p/720p/D1/CIF/QCIF
Decoding Capability	16-ch@1080p (30 fps)
Video Output	VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 HDMI1/HDMI2: 3840 × 2160@30 fps, 3840 × 2160@25fps, 1920 × 1080, 1280 × 1024, 1280 × 720 1 channel VGA output, 2 channels HDMI output, VGA and HDMI 1 homologous output, double HDMI heterogeneous output. Support 4K display for both HDMI1 and HDMI2
Multi-screen Display	1st Screen: 1/4/8/9/16/25/36 2nd Screen: 1/4/8/9/16

Third Party Camera Access	Panasonic, Sony, Samsung, Axis, Pelco, Arecont, Onvif, Canon and more
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### Compression

Video	Smart H.265+/H.265/Smart H.264+/H.264/MPEG4/MJPEG
Audio	MP2/G726/G729/G722/G723/G711A/G711U/PCM

### Network

Network Protocol	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search (Support Dahua IP camera, DVR, NVS, etc.), P2P, iSCSI
Mobile Phone Access	iOS, Android
Interoperability	ONVIF (profile T/S/G), CGI, SDK
Browser	Chrome, IE9 or later, Firefox

### Record Playback

Multi-channel Playback	1/4/9/16
Record Mode	Manual, Schedule (General, MD (Motion Detection), Alarm, MD & Alarm, Intelligent, POS)
Storage Method	Local HDD and network
Backup	Hard drive, USB device, eSATA device
Playback Function	1. Play, pause, stop, fast forward, fast backward, rewind, play by frame 2. Full screen, backup (cut/file), partially enlarge, audio on/off

### Storage

Disk Group	Support
Raid Support	RAID 0/1/5/6/10

### Alarm

General Alarm	Motion detection, privacy masking, video loss, local alarm, PIR alarm, IPC alarm
Anomaly Alarm	Camera offline, storage error, full storage, IP conflict, MAC conflict, login lock, network security anomaly
Intelligent Alarm	Perimeter protection, face detection, face recognition, SMD, video metadata (human, motor-vehicle, non-motor vehicle), ANPR, people counting, stereo analysis, crowd distribution, heatmap, video quality diagnosis
Alarm Linkage	Record, snapshot, IPC external alarm output, buzzer, log, preset, email

### External Port

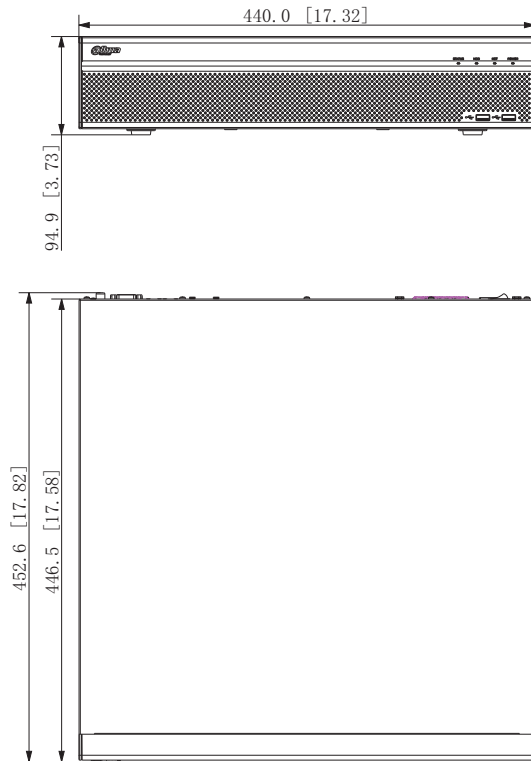
Audio Input	1 channel, RCA connector
Audio Output	1 channel, RCA connector
HDD	8 SATA III ports, up to 10 TB for a single HDD. The maximum HDD capacity varies with environment temperature.
Alarm Input	16 channels
Alarm Output	8 channels
eSATA	1 eSATA

RS-232	1 channel, used to debug and pass through serial data
RS-485	1 channel, used to control PTZ, and it supports multiple protocols
USB	2 front USB 2.0 ports, 2 rear USB 3.0 ports

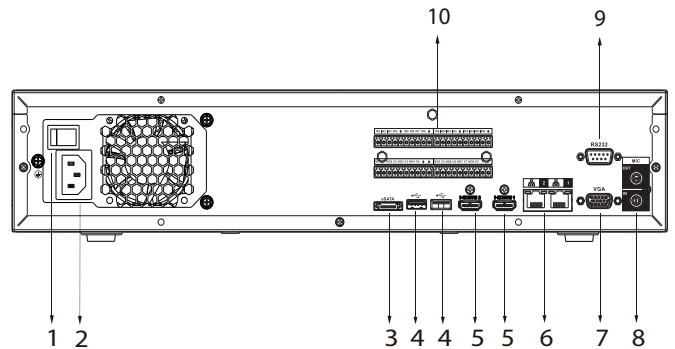
## General Parameter

Power Supply	Single, AC100V~240V, 50~60 Hz
Power Consumption	< 20 W (Without HDD)
Net Weight	9 kg (19.8 lb) (Without HDD)
Gross Weight	10.5 kg (23.1 lb) (Without HDD)
Product Dimensions	440 mm × 452.6 mm × 94.9 mm (W × L × H) 17.32 inch × 17.82 inch × 3.73 inch (W × L × H)
Package Dimensions	571 mm × 571 mm × 225 mm (W × L × H) 22.48 inch × 22.48 inch × 8.86 inch (W × L × H)
Operating Conditions	-10°C to +55°C (+14°F to +131°F), +35°C (+95°F) when raid enabled
Storage Conditions	0°C to +40°C (+32°F to +104°F)
Operating Humidity	10%~93% (RH)
Storage Humidity	30%~85% (RH)
Operating Altitude	3000 m (9843 ft)
Certifications	CE: EN55022, EN55024, EN50130-4, EN60950-1 FCC: Part 15 Subpart B, ANSI C63.4-2014 UL: UL 60950-1 and CAN/CSA C22.2 No.60950-1

## Dimensions (mm[inch])



## Panels



- |                |                               |
|----------------|-------------------------------|
| 1 Power Switch | 2 Power Input                 |
| 3 eSATA Port   | 4 USB Ports                   |
| 5 HDMI Ports   | 6 Network Ports               |
| 7 VGA Port     | 8 AUDIO IN/OUT, RCA Connector |
| 9 RS-232 Port  | 10 Alarm In/Out               |

## Ordering Information

Type	Model	Description
32 Channel NVR	DHI-NVR608-32-4KS2	32 Channel Ultra Series 4K H.265 Network Video Recorder
Accessories	ESS1504C	4 HDDs eSATA Storage (Please confirm with Technical Support for HDD capacity & compatibility)

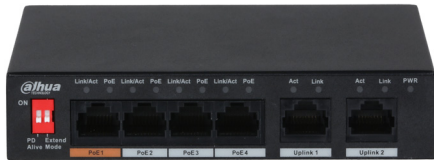
## Accessories



ESS1504C  
4 HDDs eSATA Storage (Please confirm with Technical Support for HDD capacity & compatibility)

# DH-PFS3006-4ET-60

6-Port 10/100Mbps Unmanaged Desktop Switch with 4 PoE Ports



## System Overview

6-Port 10/100Mbps Unmanaged Desktop Switch with 4 PoE Ports is a type of layer two commercial switch. It provides 4 10/100 Mbps Ethernet ports and 2 10/100 Mbps uplink ports. The product is equipped with two types of transmission modes (Extend Mode On/Extend Mode Off). It also supports PoE watchdog to avoid manually maintenance and device restart, which can realize the intelligent management and reduce the cost.

## Functions

### Intelligent PoE

Adopt PoE power consumption management strategy, and supply power to important ports first. When total power consumption exceeds the set threshold value of the system, power down the ports from large port number to small port number. Adopt smart detection to prevent outage.

Supply power with ultra-wide power range, and adapt to IPC power consumption fluctuations in severe environment.

### Hi-PoE 60W (Orange Port)

Besides IEEE802.3af and IEEE802.3at, orange port also supports maximum 60W output.

### Long Distance PoE

Breaking the IEEE 100 m transmission limit, the device supports 250 m long distance PoE transmission with a more flexible networking.

### All Metal Design

With all metal design, the device has good heat dissipation, and can work in severe environments.

### POE Watchdog

Adopt the PoE watchdog function to avoid manually maintenance and device restart, which can realize the intelligent management and reduce the cost.

\* The parameters and datasheets below can only be applied to V2.0 (version 2.0)

- Layer two commercial switch
- Supports IEEE802.3, IEEE802.3u, IEEE802.3ab and IEEE802.3x standards
- MDI/MDIX self-adaptation
- RJ-45 port supports 10/100 Mbps self-adaptation, and confirms to 802.3at, and 802.3af power supply standards
- Port 1 supports Hi-PoE 60W power supply
- 250 m PoE power supply
- Wall mounting and mechanical anti-theft
- 53V DC power supply
- Supports PoE watchdog



## Scene

Suitable for supermarkets, hotels, shops, corridors and other small monitoring places.

## Technical Specification

### Hardware

Ethernet Port	4
Optical Port	0
Ethernet Port Rate	100 Mbps
Number of Business Card Slots	Port 1-4: 4 × RJ-45 10/100 M (PoE) Port 5-6: 2 × RJ-45 10/100 M (uplink)
Power Supply	53V DC
Operating Temperature	-10°C to +55°C (+14°F to +131°F)
Operating Humidity	5%–95%
Storage Temperature	-20°C to +70°C (-4°F to +158°F)
Storage Humidity	5%–95%
Power Consumption	Idling: 1.5W Full load: 60W

### Performance

Switching Capacity	1.80 Gbps
Packet Forwarding Rate	0.89 Mpps
Packet Buffer Size	1 Mbit

# Desktop PoE Switch | DH-PFS3006-4ET-60

MAC Table Size	2K
Communication Standard	IEEE802.3, IEEE802.3u, IEEE802.3x

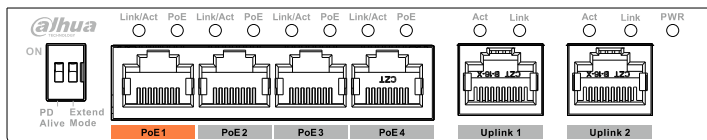
## PoE

PoE Standard	IEEE802.3af/IEEE802.3at/Hi-PoE
PoE Power	60W
PoE Power Consumption Management	Yes
PoE Pin Assignment	PoE/Hi-PoE: 1, 2, 4, 5 (V+), 3, 6, 7, 8 (V-)
Far Distance Mode	250 m @10 Mbps

## General

ESD	Air discharge: 8kV Contact discharge: 6kV
Thunderproof	Common mode: 2kV Differential mode: 1kV
Net Weight	0.3 kg (0.66 lb)
Gross Weight	0.9 kg (1.98 lb)
Product Dimensions	130 mm × 85 mm × 26 mm (5.12" × 3.35" × 1.02")
Packaging Dimensions	267 mm × 239 mm × 77 mm (10.51" × 9.41" × 3.03")

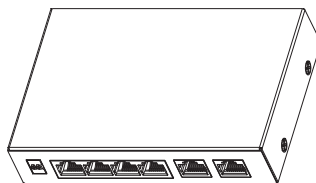
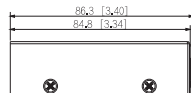
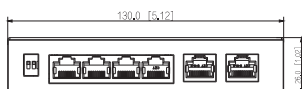
## Panels



## Application



## Dimensions (mm[inch])



# DH-PFS3010-8ET-96

10-Port Unmanaged Desktop Switch with 8 Port PoE



\* The parameters and datasheets below can only be applied to V2.0 (version 2.0)

- Intelligent PoE
- BT 90W
- 8-pin assignment PoE power supply
- Long distance PoE
- PoE watchdog
- Wide working temperature



## System Overview

DH-PFS3010-8ET-96 is an unmanaged Desktop Switch with 8 × 10/100Mbps PoE Ports. It provides 8 × 10/100 Mbps Ethernet ports and 2 × 10/100/1000 Mbps uplink ports. The product is equipped with two types of transmission modes (Extend Mode On/Extend Mode Off). The red port supports the IEEE802.3bt and the Hi-PoE standards. The maximum power consumption is 90W. It also supports PoE watchdog to avoid manually maintenance and device restart, which can realize the intelligent management and reduce the cost.

## Functions

### Intelligent PoE

Adopt PoE power consumption management strategy, and supply power to important ports first. When total power consumption exceeds the set threshold value of the system, power down the ports from large port number to small port number. Adopt smart detection to prevent outage. Supply power with ultra-wide power range, and adapt to IPC power consumption fluctuations in severe environment.

### BT 90W

The red port supports the IEEE802.3bt and the Hi-PoE standards. The maximum power consumption is 90 W.

### PoE Watchdog

Adopt the PoE watchdog function to avoid manually maintenance and device restart, which can realize the intelligent management and reduce the cost.

## Long Distance PoE

Breaking the IEEE 100 m transmission limit, the device supports 250 m long distance PoE transmission with a more flexible networking.

## 8-pin Assignment PoE Power Supply

The Eight-PIN Ethernet port supports power supply, to enhance front-end and rear-end compatibility. Reduce cable loss and promote loading capacity.

## Scene

The device is applicable for use in different scenarios, including home, office, server farm, and small mall.

