

# DH-IPC-HDW1230T1-S5

2 MP Entry IR Fixed-Focal Eyeball Network Camera



- 2-MP 1/2.8" CMOS image sensor, low illuminance, high image definition.
- Outputs max. 2 MP (1920 × 1080) @25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in efficient IR illuminator, and the max. illumination distance is 30 m.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, DWDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Abnormality detection: Motion detection, video tampering, network disconnection, IP conflict, and illegal access.
- 12 VDC/PoE power supply.
- IP67 protection.



## Series Overview

With features of simple installation, easy operation, and high performance-cost ratio, Dahua Entry series network 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+ & 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.

### Smart Illumination

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

### Motion Detection

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

### Image Flip

For narrow and long scenes, Dahua image flip technology flips the image by 90°/180°/270° to realize better surveillance in rotation mode.

## Cyber Security

Dahua network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising 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 ±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	1/2.8" CMOS
Max. Resolution	1920 (H) × 1080 (V)
ROM	16 MB
RAM	64 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.01 lux@F2.0 (Color, 30 IRE) 0.001 lux@F2.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	30 m (98.4 ft) (IR)
Illuminator On/Off Control	Auto; manual
Illuminator Number	1 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–355° Tilt: 0°–78° Rotation: 0°–360°

#### Lens

Lens Type	Fixed-focal				
Lens Mount	M12				
Focal Length	2.8 mm; 3.6 mm				
Max. Aperture	2.8 mm: F2.0 3.6 mm: F2.0				
Field of View	2.8 mm: Horizontal: 102°; Vertical: 54°; Diagonal: 120° 3.6 mm: Horizontal: 88°; Vertical: 47°; Diagonal: 104°				
Iris Control	Fixed				
Close Focus Distance	2.8 mm: 0.5 m (1.6 ft) 3.6 mm: 0.8 m (2.6 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	38.6 m (126.6 ft)	15.4 m (50.5 ft)	7.7 m (25.3 ft)	3.9 m (12.8 ft)
	3.6 mm	49.7 m (163.1 ft)	19.9 m (65.3 ft)	9.9 m (32.5 ft)	5.0 m (16.4 ft)

#### 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: 1920 × 1080@1–25/30 fps Sub stream: 704 × 576@1–25 fps 704 × 480@1–30 fps *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.
Stream Capability	2 streams
Resolution	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	DWDR
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Manual; auto
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° (Support 90°/270° with 1080p resolution and lower)
Mirror	Yes
Privacy Masking	4 areas

#### Alarm

Alarm Event	Network disconnection; IP conflict; illegal access; motion detection; video tampering; security exception
-------------	---

#### Network

Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
Cyber Security	Video encryption; Configuration encryption; Digest; WSSE; Account lockout; Security logs; Generation and importing of X.509 certification; Trusted boot; Trusted upgrade
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; SMTP; FTP; DHCP; DNS; DDNS; NTP; Multicast
Interoperability	ONVIF(Profile S); CGI; P2P
User/Host	6 (Total bandwidth: 36 M)
Storage	FTP
Browser	IE; Chrome; Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Client	iOS; Android

#### Certification

Certifications	CE-LVD: EN 62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B
----------------	--

#### Power

Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 1.4W (12 VDC); 2.2 W (PoE) Max. (ICR + H.265+IR intensity): 3.5 W (12 VDC); 4.6 W (PoE)

#### Environment

Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
-----------------------	--------------------------------------

Operating Humidity	≤ 95%
Storage Temperature	-40 °C to +60 °C (-40 °F to +140 °F)
Protection	IP67
<b>Structure</b>	
Casing	Inner core: Metal + Plastic Cover: Plastic Decoration ring: Plastic Pedestal: Plastic
Product Dimensions	85.5 mm × Ø109 mm (3.4" × Ø4.3")
Net Weight	0.24 kg (0.5 lb)
Gross Weight	0.37 kg (0.8 lb)

Ordering Information		
Type	Model	Description
2 MP Camera	DH-IPC-HDW1230T1-S5	2 MP Entry IR Fixed-Focal Eyeball Network Camera
Accessories (optional)	PFB203W	Pole Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFA106	Mount Adapter
	PFB220C	Ceiling Mount Bracket
	PFM321D	12 VDC 1A Power Adapter
	PFM900-E	Integrated Mount Tester

## Accessories

### Optional:



PFB203W  
Pole Mount Bracket



PFA152-E  
Pole Mount Bracket



PFA106  
Mount Adapter



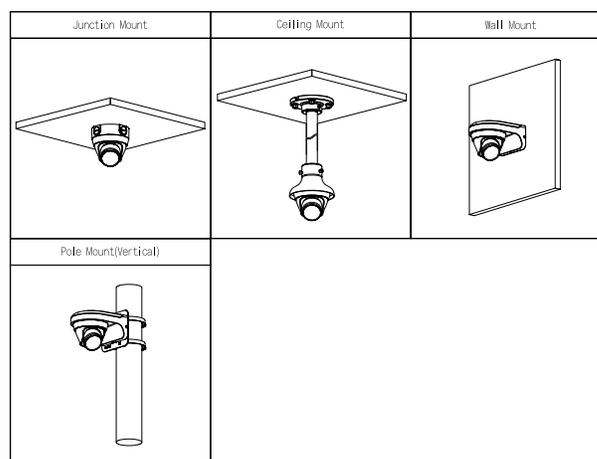
PFB220C  
Ceiling Mount Bracket



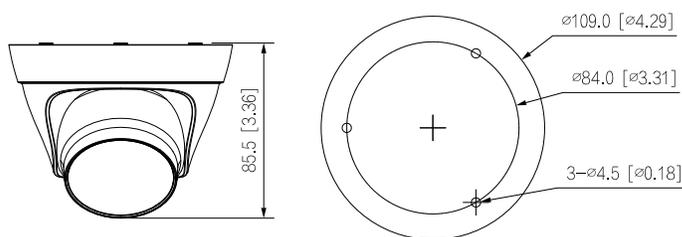
PFM321D  
12 VDC 1A Power Adapter



PFM900-E  
Integrated Mount Tester



## Dimensions (mm[inch])



# DHI-NVR1104HS-P-S3/H

4 Channel Compact 1U 1HDD 4PoE Lite H.265 Network Video Recorder



- New 4.0 user interface
- P2P remote surveillance, video play on mobile device
- 4-ch@1080p (30 fps), self-adaptive decoding capability
- Support for mainstream cameras of ONVIF and RTSP protocol
- Smart H.265+/Smart H.264+
- VGA/HDMI simultaneous video output, maximum resolution of HDMI is 1080p
- Remote configuration and management of IPCs, such as setting parameters, acquiring information and upgrading IPCs of the same model in batches
- DHCP (Dynamic Host Configuration Protocol), HTTP (Hypertext Transfer Protocol), NTP (Network Time Protocol) and DDNS (Dynamic Domain Name System)

## Series Overview

This network video recorder is a highly cost-effective product, providing functions such as local live view, multi-screen display, real-time storage on local HDD, fast operation by mouse, and remote management and control.

## Functions

### New User Interface

Local and web interfaces adopt the new UI 4.0 style which is more consistent with users' habits. Functional modules are divided clearer and easier to understand.

### Decoding (Smart H.265+/Smart H.264+)

Dahua smart encoding (H.265+/H.264+) is the optimized implementation of (H.265/H.264) codec that uses a scene-adaptive encoding strategy, providing more efficiency in the encoding process and higher video quality, and reducing the cost of storage and transmission significantly.

This NVR supports the corresponding decoding.

## Security Center

Security Center provides a whole picture of device security and helps protect the NVR with security scan, attack defense, certificate management, audio and video encryption and security settings. Security warnings will be sent through many ways such as email, message, voice prompts.

## Scene

This NVR is suitable for places such as retail stores, families, courtyards and public areas.

## Technical Specification

### System

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

### Video

Access Channel	4 channels
Network Bandwidth	80 Mbps for access, 80 Mbps for storage and 60 Mbps for forwarding
Resolution	8MP; 5MP; 4MP; 3MP; 1080p; 720p; D1; CIF
Decoding Capability	1-ch@8MP (30 fps) or 1-ch@5MP (30 fps) or 2-ch@4MP (30 fps) or 2-ch@3MP (30 fps) or 4-ch@1080p (30 fps)
Video Output	1 VGA/1 HDMI simultaneous video output, maximum resolution 1080p
Multi-screen Display	1/4
Third Party Camera Access	Onvif, RTSP

### Compression

Video	Smart H.265+/H.265/Smart H.264+/H.264
Audio	PCM; G711A; G711U; G726

### Network

Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; IPv6; RTSP; UDP; NTP; DHCP; DNS; P2P
Mobile Phone Access	iDMSS (iOS); gDMSS (Android)
Access Standard	ONVIF (profile T/profile S/profile G); CGI; SDK
Browser	Chrome; IE9 or above; Firefox

### Record Playback

Multi-channel Playback	Up to 4 channels playback
Record Mode	Priority of record mode: Manual recording > alarm recording > motion detection recording > timed recording
Storage	Local HDD and network
Backup	USB 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

### Alarm

General Alarm	Motion detection, privacy masking, video loss, PIR alarm, IPC alarm
Anomaly Alarm	Front-end device going offline, storage error, full storage, IP conflict, MAC conflict, login lock, network security anomaly
Alarm Linkage	Video recording, snapshot, log, preset, tour

### External Port

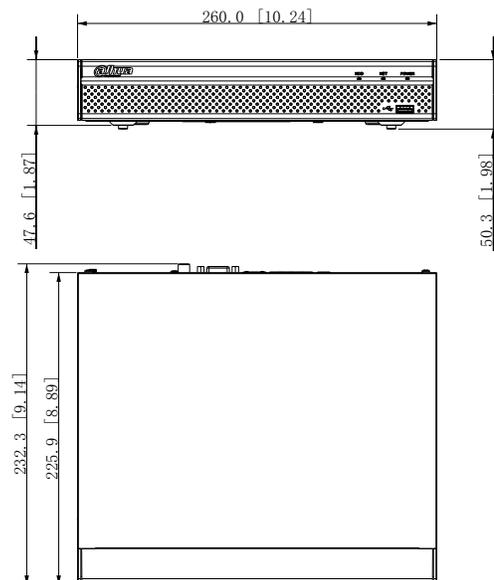
HDD	1 SATA 2.0 port, up to 8 TB for a single HDD. The maximum HDD capacity varies with environment temperature
-----	--

USB	1 front USB 2.0 port, 1 rear USB 2.0 port
HDMI	1
VGA	1
RCA Input	1
RCA Output	1
Alarm	None
Network	1 RJ-45 port (10/100 Mbps), 4 RJ-45 ports with PoE power supply (10/100 Mbps)

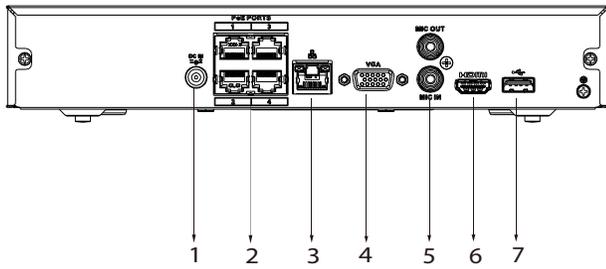
### General Parameter

Power Supply	DC 48V/53V, 1.25A/1.22A
Power Consumption	Total output of NVR is ≤ 10W (without HDD) Total output power of PoE is 36W, the maximum output power of a single port is 25.5W
Net Weight	0.84 kg (1.85 lb)
Gross weight	1.86 kg (4.10 lb)
Product Dimensions	260 mm × 225 mm × 47.6 mm (W × L × H)
Box Dimensions	87 mm × 331 mm × 312 mm (W × L × H)
Operating Temperature	-10°C to 45°C (+34°F to +113°F)
Storage Temperature	0°C to 40°C (+32°F to +104°F)
Operating Humidity	10%~93%
Storage Humidity	30%~85%
Operating Altitude	3000 m (9843 ft)
Installation	Desktop mounting
Certification	CE/FCC

### Dimensions (mm[inch])



## Panels



- |                               |             |
|-------------------------------|-------------|
| 1 Power Input                 | 2 PoE Ports |
| 3 Network Port                | 4 VGA Port  |
| 5 AUDIO IN/OUT, RCA Connector | 6 HDMI Port |
| 7 USB Port                    |             |