

# DH-IPC-HDW1431T1P-A-0280B

## 4 MP Entry IR Fixed-focal Eyeball Network Camera



### 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.

#### 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.

- 4-MP 1/2.7" CMOS image sensor, low luminance, and high definition image.
- Outputs 4 MP (2560 × 1440) @25/30 fps, and supports max. 4 MP (2688 × 1520) @20 fps
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, and the max. illumination distance is 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.
- Abnormality detection: Motion detection, video tampering, network disconnection, IP conflict, audio detection and illegal access.
- Built-in MIC.
- 12 VDC/PoE power supply.
- IP67, IK10 protection



### 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 normally 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" CMOS			
Max. Resolution		2688 (H) × 1520 (V)			
ROM		16 MB			
RAM		128 MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual 1/3 s–1/100,000 s			
Min. Illumination		0.01 lux@F1.6 (Color, 30 IRE), 0.003 lux@F1.6 (B/W, 30 IRE) 0 lux (Illuminator on)			
S/N Ratio		1 (IR LED)			
Illumination Distance		40 m (98.43 ft) (IR)			
Illuminator On/Off Control		Auto; manual			
Illuminator Number		1 (IR LED)			
Pan/Tilt/Rotation Range		Pan: 0°–360° 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: 104°; Vertical: 58°; Diagonal: 124° 3.6 mm: Horizontal: 88°; Vertical: 48°; Diagonal: 103°			
Iris Control		Fixed			
Close Focus Distance		2.8 mm: 0.7 m (2.30 ft) 3.6 mm: 1.2 m (3.94 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	56.0 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	76.0 m (249.34 ft)	30.4 m (99.74 ft)	15.2 m (49.87 ft)	7.6 m (24.93 ft)
Video					
Video Compression		H.265; H.264; H.264H; 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–20/25 fps) 704 × 480 (1 fps–20/30 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		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° (Support 90°/270° with 2688 × 1520 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	Network disconnection; IP conflict; illegal access; motion detection; video tampering; audio detection; 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 execution; trusted upgrade
Network Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; SMTP; FTP; DHCP; DNS; DDNS; NTP; Multicast
Interoperability	ONVIF (Profile S/Profile T); CGI; P2P; Genetec
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: 1.9 W (12 VDC); 2.9 W (PoE) Max. (ICR + H.265 + IR intensity): 3.8 W (12 VDC); 5 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, IK10

Structure

Casing	Metal + Plastic
Product Dimensions	85.5 mm × Φ109 mm (3.37" × Φ4.29")
Net Weight	0.25 kg (0.6 lb)
Gross Weight	0.37 kg (0.8 lb)

Ordering Information

Type	Model	Description
IP CAMERA	DH-IPC-HDW 1431T1P-A-0280B	4 MP Entry IR Fixed-focal Eyeball Network Camera
Accessories (optional)	PFA136	Junction Box
	PFB203W	Wall 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:



PFA136  
Junction Box



PFB203W  
Wall 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

Junction Mount	Ceiling Mount	Wall Mount
Pole Mount (Vertical)		

Dimensions (mm[inch])

