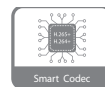


# DH-IPC-HDW2230T-AS-S2

2MP Lite IR Fixed-focal Eyeball Network Camera



- 2MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- Outputs 2MP (1920 × 1080)@25/30 fps
- H.265 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, DWDR, 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 and 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.

### 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. With UL CAP Certification, TÜV Rheinland Protected Privacy IoT Product Certification, and ETSI EN 303645 Certification, Dahua network camera better meets the demands of cyber security and privacy 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 works 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” 2Megapixel progressive CMOS				
Max. Resolution		1920 (H) × 1080 (V)				
ROM		128 MB				
RAM		128 MB				
Scanning System		Progressive				
Electronic Shutter Speed		Auto/Manual 1/3 s–1/100000 s				
Min. Illumination		0.005 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-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 110.0° × Vertical 59.0° × Diagonal 132.0° 3.6 mm: Horizontal 91.0° × Vertical 48.0° × Diagonal 109.0°				
Iris Type		Fixed				
Close Focus Distance		2.8 mm: 0.6 m ( 1.97 ft ) 3.6 mm: 1.1 m ( 3.61 ft )				
DORI Distance	Lens	Detect	Observe	Recognize	Identify	
	2.8 mm	37.3 m (122.38 ft)	14.9 m (48.88 ft)	7.5 m (24.61 ft)	3.7 m (12.14 ft)	
	3.6 mm	53.3 m (174.87 ft)	21.3 m (96.88 ft)	10.7 m (35.10 ft)	5.3 m (17.39 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: 1920 × 1080 (1 fps–25/30 fps) Sub stream: 704 × 576 (1 fps–25 fps) 704 × 480 (1 fps–30 fps)				
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		Auto/Manual	
Noise Reduction		3D NR	
Motion Detection		Disable/Enable (4 areas, rectangle)	
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	
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	
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 Google Firefox	
Management Software		Smart PSS; DSS; DMSS	
Mobile Phone		IOS; Android	

## 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
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## Power

Power Supply	12V DC/PoE
Power Consumption	Basic power consumption: 1.7W (12V DC), 2.1W (POE) Max power consumption (H.265, Max resolution, Max stream, WDR, IR full intensity, IVS): 5.1W (12V DC), 5.9W (POE)

## Environment

Operating Conditions	-40°C to +60°C (-40°F to +140°F)/Less than 95% RH
Storage Conditions	-40°C to +60°C (-40°F to +140°F)
Protection	IP67

## Structure

Casing	Metal + Plastic
Dimensions	100.9 mm × Φ109.9 mm (3.97" × Φ4.33")
Net Weight	0.39 kg (0.86 lb)
Gross Weight	0.52 kg (1.15 lb)

## Ordering Information

Type	Part Number	Description
2MP Camera	DH-IPC-HDW2230TP-AS-S2	2MP Lite IR Fixed-focal Eyeball Network Camera,PAL
	DH-IPC-HDW2230TN-AS-S2	2MP Lite IR Fixed-focal Eyeball Network Camera,NTSC
Accessories	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

## Accessories

### Optional:



PFA130-E  
Junction Box



PFB203W  
Wall Mount



PFA152-E  
Pole 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

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

## Dimensions (mm[inch])

