

DH-IPC-HDW2231T-ZS-S2

2MP WDR IR Eyeball Network Camera



- 2MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- · Outputs 2MP (1920 × 1080)@25/30 fps
- · H.265 codec, high compression rate, ultra-low bit rate
- · Built-in IR LED, max IR distance: 40 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, no SD card, SD card full, SD card error, network disconnected, IP conflict, illegal access, voltage detection
- · Supports max. 256 GB Micro SD card
- 12V DC/PoE power support
- · IP67 protection







Starlight





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 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.

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



Day/Night Auto(ICR)/Color/B/W Image Sensor 1/2.8" 2Megapixel progressive CMOS BLC Yes Effective Pixels 1920 (H) × 1080 (V) HLC Yes ROM 128 MB WDR 120 dB RAM 128 MB WDR 120 dB RAM 128 MB White Balance Auto/natural/street lamp/outdoor/manual/regional custom Castoming System Progressive Electronic Shutter Speed Auto/Manual 1/3 s-1/100000 s Moin Illumination 0.002 Lux@F1.5 Motion Detection 3D DNR IR Distance 40 m (131.23 ft) Motion Detection OFF/ON (4 areas, rectangular) IR LEDS Number 2 Fan 0"-360" Tit: 0"-78" Motion: 0"-360" Mirror Yes Areas Lens Pan 0"-360" Tit: 0"-78" Mirror Yes Lens Privacy Masking 4 areas Mount Type 414 Network Ri-45 (10/100 Base T) Protocol RPM; PMF; PMF; PFP; PMF; PSFP; Discop. DNDS, QOS, UPP; NTP; Multicast; ICMP; IGMP; NES; PPPGE; 802.1x; Bonjour Field of View Tit: 5"-16" Dagonal: 131-33" Interoperability Converted Senetace Conve	Technical Specification						Video Bit Rate	H.264: 32 Kbps-6144 Kbps H.265: 12 Kbps-6144 Kbps		
Effective Pixels							Day/Night			
HIC	Image Sensor		1/2.8" 2Megapixel progressive CMOS							
RAM	Effective Pixels		1920 (H) × 1080 (V)							
RAM 128 MB Scanning System Progressive Electronic Shutter Speed Auto/Manual 1/3 s-1/100000 s Min. Illumination 0.002 Lux@F1.5 IR Distance 40 m (131.23 ft) IR On/Off Control Auto/Manual REDISTANCE 2 Pan 0"-360" Pan 0"-3	ROM		128 MB							
Scanning System Progressive Electronic Shutter Speed Auto/Manual 1/3 s=1/100000 s Min. Illumination 0.002 Lux@F1.5 IR Distance 40 m (131.23 ft) IR On/Off Control Auto/Manual IR LEDS Number 2 Pan 0"-360" Pan/Tilt/Rotation Range Pan 0"-360" Titt: 0"-78" Rotation: 0"-360" Lens Lens Type Motorized vari-focal Mount Type 414 Focal Length 2.7 mm-13.5 mm Max. Aperture F1.5 Pan: 109"-28" Titt: 5"-16" Disgonal: 313"-33" Field of View Tites Profile G/Profile J.CGI; P2P; Milestone; Genetic Close Focus Distance 0.8 m-0.8 m (2.62 ft-2.62 ft) Lens Detect Observe Recognize Identify W 44.1 m 1.7.6 m 8.8 m 4.4 m 1.8 m 1.7.6 m 8.8 m 4.4 m 1.8 m 1.7.6 m 8.8 m 4.4 m 1.8 m 1.7.6 m 1.8 m 1.4 m 1.7 m 1.7 m 1.7 m 1.8 m 1.4 m 1.7 m 1.7 m 1.8 m 1.4 m 1.7 m 1.7 m 1.8 m 1.4 m 1.7 m 1.7 m 1.7 m 1.8 m 1.4 m 1.7 m 1.7 m 1.8 m 1.4 m 1.7 m	RAM		128 MB							
Electronic Shutter Speed Min. Illumination 0.002 Lux@F1.5 Motion Detection OFF/ON (4 areas, rectangular) Motion Detection OFF/ON (4 areas, rectangular) Motion Detection OFF/ON (4 areas, rectangular) Region of Interest(Rol) Yes (4 areas) Smart IR Yes Image Rotation Or/907/1807/270* (Supports 90*/270* with 1080p resolution and lower.) Mirror Yes Lens Lens Lens Type Motorized vari-focal Motorized vari-focal Motorized vari-focal Motorized vari-focal Motorized vari-focal Motorized vari-focal Network Network Network R-45 (10/100 Base-T) Protocol RCC; RTMP; SMTP; FTP; STP; DHCP; DNS; DDNS; QoS; UPP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour Iris Type Fixed aperture User/Host 20 Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS IE	Scanning System		Progressive				White Balance			
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Image Rotation 2							Region of Interest(RoI)	Yes (4 areas)		
Pan/Tilt/Rotation Range Pan 0°-360° Tilt: 0°-78° Rotation: 0°-360° Tilt: 0°-78° Rotation: 0°-360° Lens Lens Type Motorized vari-focal Mount Type Mount Type Mount Type Mount Type Focal Length 2.7 mm-13.5 mm Max. Aperture Field of View Tilt: 57°-16° Diagonal: 131°-33° Close Focus Distance Detect Description Description Description Lens Detect Description Description Description Description Mirror Yes Privacy Masking A areas Network Network RJ-45 (10/100 Base-T) Protocol Protocol Protocol Protocol Protocol Protocol Diagonal: 131°-35° Interoperability Diagonal: 131°-33° Close Focus Distance Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS Edge Storage Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS IE			2				Smart IR	Yes		
Rotation: 0°-360° Lens Lens Type Motorized vari-focal Metwork Network			Pan 0°-360°				Image Rotation			
Network	Pan/Tilt/Rotation Range			360°			Mirror	Yes		
Mount Type							Privacy Masking	4 areas		
Focal Length 2.7 mm-13.5 mm Protocol Pan: 109°-28° Filed of View Filed aperture							Network	Network		
Max. Aperture F1.5 Protocol Pan: 109°-28° Field of View Fixed aperture Fixed aperture Close Focus Distance Detect Detect Detect Detect Description Bear 17.6 m B			·				Network	RJ-45 (10/100 Base-T)		
Field of View Pan: 109°-28° Tilt: 57°-16° Diagonal: 131°-33° Interoperability ONVIF(Profile S/Profile G/Profile T);CGI; P2P; Milestone; Genetec User/Host 20 Close Focus Distance Onumber 100°-28° Diagonal: 131°-33° User/Host 20 Edge Storage Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS W 44.1 m 17.6 m 8.8 m 4.4 m 18.8 m 4.4 m 19.6 m 8.8 m 4.4 m 19.6 m 8.8 m 4.4 m 19.6 m 8.8 m 4.4 m 10.6 m 10.							Protocol	RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPOE; 802.1x;		
Diagonal: 131°–33° Interoperability ONVIF(Profile S/Profile G/Profile T); CGI; P2P; Milestone; Genetec User/Host 20 Close Focus Distance 0.8 m–0.8 m (2.62 ft–2.62 ft) Lens Detect Observe Recognize Identify W 44.1 m 17.6 m 8.8 m 4.4 m (14.6 G ft) (14.4 G ft) Interoperability User/Host 20 Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS	Field of View									
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Lens Detect Observe Recognize Identify Edge Storage Dahua Cloud; FTP; SFTP; Micro SD Card (support max. 256 GB); NAS W 44.1 m 17.6 m 8.8 m 4.4 m UNITED TO STAND (2007 FD) (14.4 M FD) (14.4 M FD)							User/Host	20		
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Smart Event Mobile Phone IOS; Android	Smart Event						Mobile Phone	IOS; Android		
General IVS Analytics Tripwire; intrusion Certification		·		usion			Certification	Certification		
CE-LVD: EN60950-1			H.265; H.264	; H.264B; MJPE	:G			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		
Smart Codec Yes FCC: 47 CFR FCC Part 15, Subpart B	Smart Codec		Yes				Certifications			
Main stream:							Davier			
1920 × 1080 (1 fps-25/30 fps) Video Frame Rate Sub stream: Power 1920 × 1080 (1 fps-25/30 fps)	Video Frame Rate		Sub stream:		s)			10112012 7 1000 2 1		
704 × 480 (1 fps-30 fps)			704 × 576 (1 fps-25 fps) 704 × 480 (1 fps-30 fps)							
Stream Capability 2 streams	Stream Capability		2 streams				Power Consumption < 6.4W			
Environment 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280	,		1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 ×720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)							
Resolution ×720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF Operating Conditions -30°C to +60°C (-22°F to +140°F)/less than ≤ 95% RH	Resolution							, in the second		
Bit Rate Control CBR/VBR Protection IP67	Bit Rate Control		CBR/VBR							

Lite Series | DH-IPC-HDW2231T-ZS-S2

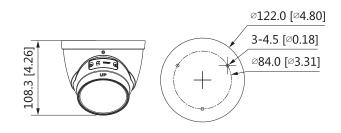
Structure

Casing	Metal
Dimensions	108.3 mm × Φ122 mm (4.26" × Φ1.80")
Net Weight	0.69 kg (1.52 lb)
Gross Weight	0.88 kg (1.94 lb)

Ordering Information							
Туре	Part Number	Description					
2MP Camera	DH-IPC-HDW2231TP-ZS-S2	2MP WDR IR Eyeball Network Camera,PAL					
	DH-IPC-HDW2231TN-ZS-S2	2MP WDR IR Eyeball Network Camera,NTSC					
	PFA130-E	Junction Box					
	PFB203W	Wall Mount					
	PFA106	Mount Adapter					
	PFB220C	Ceiling Mount					
Accessories (optional)	PFA152-E	Pole Mount					
(optional)	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	Ceiling Mount	Pole Mount
PFA130-E	PFB203W	PFA106+PFB220C	PFB203W+PFA152-E

Dimensions (mm[inch])



Accessories

Optional:



PFA130-E Junction Box



PFB220C Ceiling Mount



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



PFB203W Wall Mount



PFA152-E Pole Mount



PFM900-E Integrated Mount Tester



PFA106 Mount Adapter



PFM321D DC12V1A Power Adapter



PFM114 TLC SD Card

