

DH-IPC-HDW1431S

4MP WDR IR Eyeball Network Camera

www.PadVokam.by



System Overview

The IR Megapixel Fixed camera delivers 4MP resolution with a 2.8mm/ 3.6mm fixed lens. The camera's elegant blend of aesthetics combined with a range of easy mounting solutions provides an excellent choice for a variety of small to mid-size applications at an affordable price.

Functions

Smart Codec (H.265+ & H.264+)

Smart Codec is the optimized implementation of standard video compression (H.265 & H.264) that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart Codec technology reduces bit rate and storage requirements by up to 70% when compared to the standard video compression.

Intelligent Video Analysis (IVS)

Dahua camera is equipped with a built-in intelligent analytic algorithm based on video, which can realize intelligent functions like Tripwire and Intrusion, to quickly and accurately respond to monitoring events in specific area, It can enhance monitoring efficiency. In addition, the camera supports intelligent tamper detection, which is to generate warning message via detecting dramatic scene change and to guarantee effective video surveillance.

Wide Dynamic Range (WDR)

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, true WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Smart IR Technology

With IR illumination, detailed images can be captured in low light or

- · 1/3" 4Megapixel progressive CMOS
- · H.265& H.264 dual-stream encoding
- · 20fps@4M(2688×1520) &25/30fps@3M(2304×1296)
- · WDR(120dB), Day/Night(ICR), 3DNR, HLC, AGC, BLC
- \cdot Multiple network monitoring: Web viewer, CMS(DSS/PSS) & DMSS
- · 2.8 mm fixed lens (3.6mm optional)
- · Max IR LEDs Length 30m
- · IP67, PoE











total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 30m (98ft).

Protection (IP67, wide voltage)

The camera allows for $\pm 25\%$ input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) , the camera is the choice for installation in even the most unforgiving environments.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-30° C to +60° C (-22° F to +140° F) with 95% humidity.

Image Flip

Capturing unnecessary data such as surrounding hallway walls can increase storage requirements without any added value. The image flip feature allows the camera's image to be rotated in 90° increments for better video optimization.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.



Image Sensor	Technical Specification						
Effective Pixels	Camera						
Scanning System	Image Sensor		1/3" 4Megapixel progresive CMOS				
Progressive Progressive Progressive Electronic Shutter Speed Auto/Manual, 1/3*1/1000005 O.3Lux/F2.0(Color,1/3s,30IRE) O.3Lux/F2.0(Color,1/3s,30IRE) O.3Lux/F2.0(Ron) O.3Lux/F2.0(Ron)	Effective Pixels		2688(H) x1520(V)				
Electronic Shutter Speed	RAM/ROM		512MB/32MB				
Minimum Illumination 0.08Lux/F2.0(Color,1/3os,30IRE) 0.3Lux/F2.0(R on) S/N Ratio More than50dB IR Distance Distance up to 30m(98ft) IR On/Off Control Auto/ Manual IR LEDs 12 Lens Lens Lens Type Fixed Mount Type Board-in Focal Length 2.8 mm (3.6 mm optional) Max. Aperture F2.0/F2.0 Angle of View H-104/87*, V:57*/48* Focus Control Fixed Close Focus Distance N/A DORI Distance N/A Lens Detect Observe Recognize Identify DORI Distance 2.8 mm 63(207ft) 25(82ft) 13(43ft) 6(20ft) PTZ Pan/Tilt Range Pan:0* ~360*; Tilt:0* ~90*; Rotation:0* ~360* Proceed the procedure of the procedur	Scanning System	Scanning System		Progressive			
Minimum Illumination 0.3Lux/F2.0 (Color,1/30s,30IRE) OLux/F2.0(IR on) S/N Ratio More than50dB IR Distance Distance up to 30m(98ft) IR On/Off Control Auto/ Manual IR LEDS 12 Lens Lens Lens Type Fixed Mount Type Board-in Focal Length 2.8 mm (3.6 mm optional) Max. Aperture F2.0/F2.0 Angle of View H:104*/87*, V:57*/48* Focus Control Fixed Close Focus Distance N/A DORI Distance N/A Lens Detect Observe Recognize Identify DORI Distance 2.8 mm 63(207ft) 25(82ft) 13(43ft) 6(20ft) PTZ Pan/Tilt Range Pan:0* ~360*; Tilt:0* ~90*; Rotation:0* ~360* PTZ Pan/Tilt Range Pan:0* ~360*; Tilt:0* ~90*; Rotation:0* ~360* Intelligence Motion detection, Video tampering, Scene changing, Network disconnection, Ip address conflict, Illegal access, Storage anomaly IVS Tripwire, Intrusion Video Support H.265+/H.	Electronic Shutter Speed		Auto/Manual, 1/3~1/100000s				
IR Distance	Minimum Illumination		0.3Lux/F2.0(Color,1/30s,30IRE)				
R Con/Off Control Auto/ Manual	S/N Ratio		More than 50dB				
Lens Lens Type Fixed Fixed	IR Distance		Distance up to 30m(98ft)				
Lens Fixed Mount Type Board-in Focal Length 2.8 mm (3.6 mm optional) Max. Aperture F2.0/F2.0 Angle of View H:104°/87°, V:57°/48° Focus Control Fixed Close Focus Distance N/A DORI Distance N/A Lens Detect Observe Recognize Identify DORI Distance 2.8 mm 63(207ft) 25(82ft) 13(43ft) 6(20ft) PTZ Pan:0° ~360° ;Tilt:0° ~90° ;Rotation:0° ~360° Re(26ft) Recognize Identify PAD/Tilt Range Pan:0° ~360° ;Tilt:0° ~90° ;Rotation:0° ~360° Intelligence Intelligence Event Trigger Motion detection, Video tampering, Scene changing, Network disconnection, lp address conflict, Illegal access, Storage anomaly IVS Tripwire, Intrusion Video Video Suport H.265+/H.264+/MJPEG(Sub Stream) Smart Codec Support H.265+/H.264+ Streaming Capability 2 Streams 4M(2688x1520)/3M(2304×1296)/1080P(19 20×1296)/1080P(19 20×1080)/720P(1280x720)/VGA(640x480)/D1(704×576/704×480)/CIF(352×288/352×240) Resolution Main Stream: 4M(1 ~ 20fps)	IR On/Off Contro	ol	Auto/ Manual				
Mount Type	IR LEDs		12				
Mount Type	Lens						
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PTZ Pan/Tilt Range Pan:0° ~360°; Tilt:0° ~90°; Rotation:0° ~360° Intelligence Event Trigger Motion detection, Video tampering, Scene changing, Network disconnection, Ip address conflict, Illegal access, Storage anomaly IVS Tripwire, Intrusion Video Compression H.265/H.264H/MJPEG(Sub Stream) Smart Codec Support H.265+/H.264+ Streaming Capability 2 Streams AM(2688x1520)/3M(2304x1296)/1080P(19 20x1080)/720P(1280x720)/VGA(640x480)/D1(704x576/704x480)/CIF(352x288/352x240) Main Stream: 4M(1 ~ 20fps)/3M (1 ~ 25/30fps) Frame Rate Sub Stream: D1(1 ~ 25/30fps)	DORI Distance	2.8 mm	63(207ft)	25(82ft)	13(43ft)	6(20ft)	
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Event Trigger Network disconnection, Ip address conflict, Illegal access, Storage anomaly IVS Tripwire, Intrusion Video Video Compression H.265/H.264H/MJPEG(Sub Stream) Smart Codec Support H.265+/H.264+ Streaming Capability 2 Streams Resolution 4M(2688x1520)/3M(2304×1296)/1080P(19 20×1080)/720P(1280x720)/VGA(640×480)/D1(704×576/704×480)/CIF(352×288/352×240) Frame Rate Main Stream: 4M(1 ~ 20fps)/3M (1 ~ 25/30fps) Sub Stream: D1(1 ~ 25/30fps)	Intelligence						
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Resolution 20×1080)/720P(1280×720)/VGA(640×480)/ D1(704×576/704×480)/CIF(352×288/352×240) Main Stream: 4M(1 ~ 20fps)/3M (1 ~ 25/30fps) Frame Rate Sub Stream: D1(1 ~ 25/30fps)	Streaming Capal	Streaming Capability		2 Streams			
Frame Rate Sub Stream: D1(1 ~ 25/30fps)	Resolution		20×1080)/720P(1280×720)/VGA(640×480)/				
Sub Stream: D1(1 ~ 25/30fps)	Frame Rate		Main Stream: 4M(1 ~ 20fps)/3M (1 ~ 25/30fps)				
Bit Rate Control CBR/VBR	Tune nate		Sub Stream: Di	L(1 ~ 25/30fps)		
	Bit Rate Control	Bit Rate Control		CBR/VBR			

Bit Rate	H.265: 12K ~ 8448Kbps H.264: 32K ~ 10240Kbps		
Day/Night	Auto(ICR) / Color / B/W		
BLC Mode	BLC / HLC / WDR(120dB)		
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual		
Gain Control	Auto/Manual		
Noise Reduction	3D DNR		
Motion Detection	Off / On (4 Zone, Rectangle)		
Region of Interest	Off / On (4 Zone)		
Electronic Image Stabilization (EIS)	N/A		
Smart IR	Support		
Digital Zoom	16x		
Flip	0°/90°/180°/270°		
Mirror	Off/On		
Privacy Masking	Off / On (4 Area, Rectangle)		
Audio			
Compression	N/A		
Network			
Ethernet	RJ-45 (10/100Base-T)		
Protocol	HTTP;HTTPS;TCP;ARP;RTSP;RTP;RTCP;UDP;SMTP; FTP;DHCP;DNS;DDNS;PPP0E;IPV4/V6;QoS;UPnP; NTP;Bonjour;IEEE 802.1X;Multicast;ICMP;IGMP;TLS		
Interoperability	ONVIF Profile S&G, API		
Streaming Method	Unicast / Multicast		
Max. User Access	10 Users / 20 Users		
Edge Storage	NAS Local PC for instant recording		
Web Viewer	IE, Chrome, Firefox, Safari		
Management Software	Smart PSS, DSS, DMSS		
Smart Phone	IOS, Android		
Certifications			
Certifications	CE (EN 60950:2000) UL:UL60950-1 FCC: FCC Part 15 Subpart B		
Interface			
Video Interface	N/A		
Audio Interface	N/A		
RS485	N/A		
Alarm	N/A		
Electrical			
Power Supply	DC12V, PoE (IEEE 802.3af)(Class 0)		
Power Consumption	< 5.5W		

Environmental

Operating Conditions	-30° C $^{\sim}$ +60° C (-22° F $^{\sim}$ +140° F) / Less than 95% RH
Stroage Conditions	-30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	N/A

Construction

Casing	Metal+Plastic
Dimensions	Ф108mm×84.9mm(4.25"x3.15")
Net Weight	0.23Kg(0.51lb)
Gross Weight	0.387Kg(0.85lb)

Ordering Information				
Туре	Part Number	Description		
4MP camera	DH-IPC-HDW1431SP -0280B	4MP IR Eyeball Network Camera, 2.8mm,PAL		
	DH-IPC-HDW1431SN -0280B	4MP IR Eyeball Network Camera, 2.8mm,NTSC		
	IPC-HDW1431SP -0280B	4MP IR Eyeball Network Camera, 2.8mm,PAL		
	IPC-HDW1431SN -0280B	4MP IR Eyeball Network Camera, 2.8mm,NTSC		
	DH-IPC-HDW1431SP -0360B	4MP IR Eyeball Network Camera, 3.6mm,PAL		
	DH-IPC-HDW1431SN -0360B	4MP IR Eyeball Network Camera, 3.6mm,NTSC		
	IPC-HDW1431SP -0360B	4MP IR Eyeball Network Camera, 3.6mm,PAL		
	IPC-HDW1431SN -0360B	4MP IR Eyeball Network Camera, 3.6mm,NTSC		
Accessories (optional)	PFA130-E	Junction box		
	PFB203W	Wall mount		
	PFA152-E	Pole mount		

Accessories

Optional:







PFA130-E Junction Box

PFB203W Wall mount

PFA152-E Pole moun

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

Dimensions (mm/inch)





