DH-IPC-PDW2849-A180-S-PV

2x4MP Duo Splicing Fixed-focal Eyeball WizSense Network Camera



Launched by Dahua Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

Series Overview

With advanced deep learning algorithm, Dahua WizSense 2 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

Functions

EPTZ

With advanced target detection and tracking algorithms, Dahua EPTZ technology can simultaneously zoom in and track multiple humans and vehicles that trigger alarms. It provides rich details and a panoramic view at the same time.

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.

- Intelligent monitoring: Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, video tampering, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Outputs 180° wide angle splicing image.
- Outputs max. 8 MP (4096 ×1860)@20fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED and warm light, the max. IR distance is 25 m and the max. warm light distance is 20 m.
- WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Max. 512 GB Micro SD card; built-in dual Mic; built-in speaker; supports two-way talk.
- 12 VDC/PoE power supply, easy for installation.
- IP67 protection.
- SMD 3.0.



Perimeter Protection

With deep learning algorithm, Dahua Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

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 ±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 (×2)
Max. Resolution	4096 (H) × 1860 (V)
ROM	128 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.005 lux@F1.4 (Color, 30 IRE) 0.0005 lux@F1.4 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>56 dB
Illumination Distance	2.8 mm: Up to 25 m (82.02 ft) (IR) Up to 20 m (65.62 ft) (Warm light)
Illuminator On/Off Control	Auto;Manual
Illuminator Number	2 (IR LED); 2 (Warm light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–77° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	2.8 mm
Max. Aperture	F1.4
Field of View	2.8 mm: H: 180°; V: 86°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 0.8 m (2.62 ft)

DORI Distance

Lens	Detect	Observe	Recognize	Identify
2.8 mm	50.6 m (166.01 ft)	20.2 m (66.27 ft)	10.1 m (33.14 ft)	5.1 m (16.73 ft)

*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.

Intelligence

EPTZ	Enlarge and track the targets of intelligent alarms
IVS (Perimeter Protection)	Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)
SMD	SMD 3.0
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos

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: 4096 × 1860@(1–20 fps) Sub stream: 1200 × 536@(1–20 fps) Third stream: 1920 × 860@(1–20 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.
Streaming Capability	3 streams
Resolution	8M (4096 × 1860); 6M (3632 × 1632); 4M (3040 × 1368); 1200 × 536; 1920 × 860; 960 × 432; D1 (704 × 576/704 × 480)
Bit Rate Control	VBR;CBR
Video Bit Rate	H.264: 6 kbps–16384 kbps; H.265: 6 kbps–16384 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation (SSA)	Yes
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
Smart Dual Light	Yes
Defog	Yes
Privacy Masking	4 areas

Audio

Built-in MIC	Yes, built-in dual Mic
Built-in Speaker	Yes, built-in speaker;Max power consumption: 2 W; max sound level at 10 cm: 110 dB * Test results from laboratory
Audio Compression	G.711a; G.711Mu; G.726; PCM

Alarm

Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; audio detection; voltage detection; SMD; security exception

Network

Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
Network 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; SNMP; P2P

Interoperability	ONVIF (Profile S & Profile G & Profile T & Profile M); CGI
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS
Browser	IE: IE 8 and later; Chrome; Firefox
Management Software	SmartPSS Lite; DSS; DMSS; DoLynk Care
Mobile Client	iOS;Android
Security	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

Function

Light Warning	Warm light warning Flash/Solid on duration: 5 s–30 s Flash frequency: high, medium, low
Sound Warning	Offers 11 sound alarms and supports importing 10 custom sound alarms Sound: 0–100 Play times can be set from 1 to 10

Certification

Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU

Power

Power Supply	12 VDC (±30%); PoE (802.3af)
Power Consumption	Basic: 4.5 W (12 VDC); 5.3 W (PoE); Max.: 9.7 W (12 VDC); 11.2 W (PoE) (H.265 + WDR + light on + intelligence on)

Environment

Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	≤ 95% (RH), non-condensing
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Storage Humidity	≤ 95% (RH), non-condensing
Protection	IP67
Anti-corrosion Level	Basic Protection *The products are designed for general use and are applicable even in areas with no specific requirements for anti-corrosion protection.

Structure

Casing Material	Metal
Product Dimensions	135.2 mm × Φ122.0 mm (5.32" × Φ4.80")
Net Weight	0.95 kg (2.09 lb)
Gross Weight	1.11 kg (2.45 lb)

Ordering Information

Type	Model	Description
IP CAMERA	DH-IPC-PDW2849-A180-S-PV	2x4MP Duo Splicing Fixed-focal Eyeball WizSense Network Camera
Accessories (Optional)	DH-PFB220C	Ceiling Mount Bracket
	DH-PFA109	Mount Adapter
	DH-PFB305W	Wall Mount Bracket
	DH-PFA151	Corner Mount Bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFA156	Pole Mount Bracket
	DH-PFB2203W	Wall Mount Bracket
	DH-PFA137	Junction Box
	DH-PFM321-EN	DC12V1A power adapter
	DH-PFM325D-1210EN	DC12V 1A Power Adapter
	DH-PFM320D-EN	DC12V2A power adapter

Accessories

Optional:



DH-PFB220C
Ceiling Mount Bracket



DH-PFA109
Mount Adapter



DH-PFB305W
Wall Mount Bracket



DH-PFA151
Corner Mount Bracket



DH-PFA150
Pole Mount Bracket



DH-PFA156
Pole Mount Bracket



DH-PFB2203W
Wall Mount Bracket



DH-PFA137
Junction Box



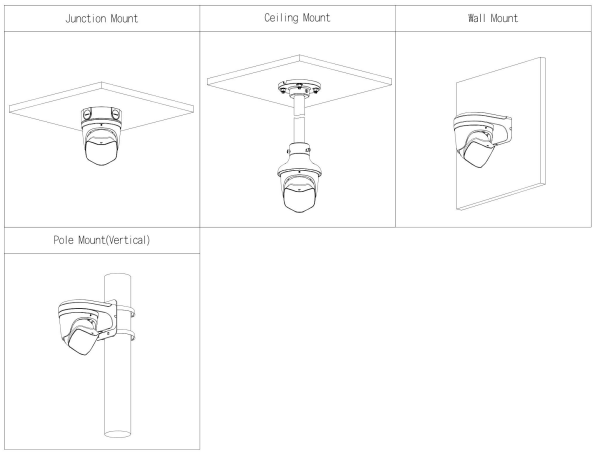
DH-PFM321-EN
DC12V1A power adapter



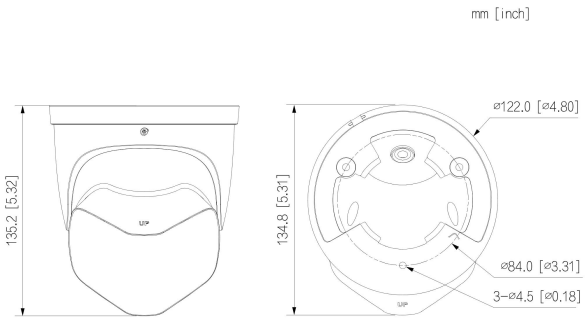
DH-PFM325D-1210EN
DC12V 1A Power Adapter



DH-PFM320D-EN
DC12V2A power adapter



Dimensions (mm[inch])



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