alhua TECHNOLOGY

DH-IPC-HDW3888EMP-AS-AUS

8MP WDR Eyeball Network CAMERA

WizSense

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 3 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

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.

Motion Detection
When moving objects appear in the monitoring image, Dahua Motion Detection technology triggers alarm or records.

WDR
With advanced Wide Dynamic Range (WDR) technology, Dahua network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

- 8 MP 1/1.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 8 MP (3840 × 2160)@30 fps. H.265 codec, high compression rate, ultra-low bit rate.
- Built-in IR LED, and the max. illumination distance is 50 m.
- ROI, SMART H.264 +/H.265+, AI 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.
- Intelligent monitoring: Intrusion, tripwire, (the two functions support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, privacy masking, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Supports max. 256 G Micro SD card.
- 12 VDC/PoE power supply.
- IP67 protection.
- SMD 3.0

8Mp	Smart Codec	Motion Detection	WDR	IP67

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.

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	1/1.8" CMOS
Max. Resolution	3840 (H) × 2160 (V)
ROM	128 MB
RAM	1 GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.003 lux@F1.4 (Color, 30 IRE); 0.0004 lux@F1.4 (B/W, 30 IRE); 0 lux (Illuminator on)
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
Lens Mount	M16
Focal Length	2.8 mm; 3.6 mm
Max. Aperture	F1.4
Field of View	2.8 mm: H 111°; V: 59°; D: 131° 3.6 mm: H: 87°; V: 47°; D: 102°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.8 m (5.91 ft) 3.6 mm: 2.5 m (8.20 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	85.4 m (280.18 ft)	34.2 m (112.20 ft)	17.1 m (56.10 ft)	8.5 m (27.89 ft)
	3.6 mm	106.0 m (347.77 ft)	42.4 m (139.11 ft)	21.2 m (69.55 ft)	10.6 m (34.78 ft)

Intelligence

IVS (Perimeter Protection)	Intrusion, tripwire(the two functions support the classification and accurate detection of vehicle and human)
SMD 3.0	Yes
Smart Search	Works 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+
AI Coding	AI H.265;AI H.264

Video Frame Rate	Main stream: 3840 × 2160 (1 fps–25/30 fps); Sub stream: D1 (1 fps–25/30 fps); Third stream: 1080p (1 fps–25/30 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	3 streams
Resolution	3840 × 2160; 3072 × 2048; 3072 × 1728; 2592 × 1944; 2688 × 1520; 2048 × 156; 2304 × 1296; 1080p (1920 × 1080); 1.3 M (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.264:3 kbps–20480 kbps; H.265:3 kbps–20480 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	140 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)
Defog	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 4 M resolution and lower)
Mirror	Yes
Privacy Masking	8 areas

Audio

Built-in MIC	Yes
Audio Compression	PCM; G.711a; G.711Mu; G.726; G.723

Alarm

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

Network

Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
Network Protocol	IPv4; IPv6; HTTP; HTTPS; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; 802.1x; SNMP
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; P2P
User/Host	20 (Total bandwidth: 80 M)

Storage	FTP; SFTP; Micro SD card (Support max. 256 G); NAS
Browser	IE: IE8 and later; Chrome; Firefox
Management Software	Smart PSS; DSS; DMSS
Mobile Client	iOS; Android
Cyber Security	Configuration encryption; trusted execution; Digest; security logs; WSSE; account lockout; syslog; video encryption; 802.1x; IP/MAC filtering; HTTPS; trusted upgrade; trusted boot; firmware encryption; generation and importing of X.509 certification

Certification

Certifications	CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL62368-1 & CAN/CSA C22.2 No. 62368-1-14 RCM

Power

Power Supply	12 VDC/PoE (802.3af)
Power Consumption	Basic: 3.7 W (12 VDC); 4.6 W (PoE) Max. (H.265 + 3 streams + intelligence + IR): 6.7 W (12 VDC); 7.8 W (PoE);Basic: 3.7 W (12 VDC); 4.6 W (PoE) Max. (H.265 + 3 streams + intelligence + IR): 6.7 W (12 VDC); 7.8 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

Structure

Casing Material	Metal
Product Dimensions	93.6 mm × Φ106.0 mm (3.69" × Φ4.17")
Net Weight	0.5 kg (1.10 lb)
Gross Weight	0.68 kg (1.50 lb)

Ordering Information

Type	Model	Description
8MP Camera	DH-IPC-HDW3888EMP-AS-AUS	8MP WDR Eyeball Network CAMERA
Accessories (Optional)	PFA130-E	Water-proof Junction Box
	PFB204W	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFA106	Mount Adapter
	PFB220C	Ceiling Mount Bracket
	PFM321D	12 VDC 1 A Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	MicroSD Memory Card

Accessories

Optional:

PFA130-E Water-proof Junction Box

PFB204W Wall Mount Bracket

PFA152-E Pole Mount Bracket

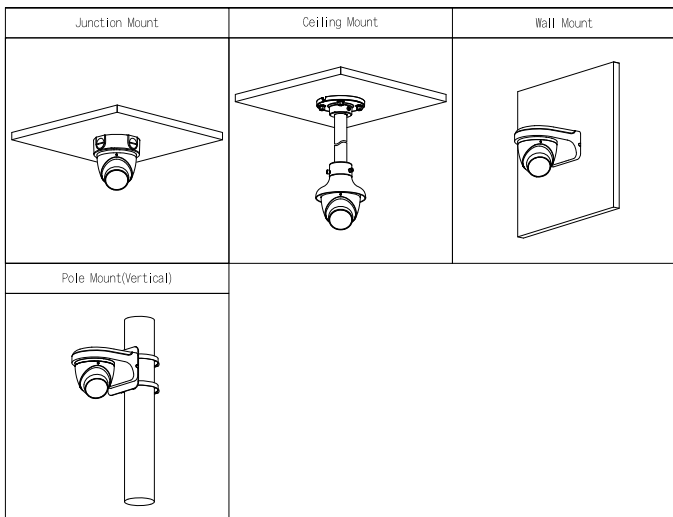PFA106 Mount Adapter

PFB220C Ceiling Mount Bracket

PFM321D 12V DC 1A Power Adapter

PFM900-E Integrated Mount Tester

TF-P100 MicroSD Memory Card

Junction Mount	Ceiling Mount	Wall Mount

Pole Mount(Vertical)

Dimensions (mm[inch])

99.2 [3.9]

⌀106.0 [⌀4.17]

⌀69.0 [⌀2.72]

4-⌀4.5 [⌀0.18]