

DH-SD8C848PA1-HNF

8MP 48x Starlight IR Network PTZ Camera





Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, NVR, PTZ, XVR, Thermal and software platform which adopts industry-leading deep learning algorithms. Focusing on customer's requirements, WizMind provides precise, reliable and comprehensive AI solutions for verticals.

System Overview

Embedded with an advanced AI chip, this series of cameras provides an all-in-one solution for video surveillance of large areas. Outranking conventional cameras with its extended monitoring range, it automatically tracks targets. It also produces vivid images whether day or night, using infrared technology. It is suitable for a wide variety of scenarios, such as advanced defense areas that require high levels of control.

Functions

Face Recognition

Face attributes are extracted from captured faces, and stored in a database where they can be conveniently searched for and compared against other images. Once a successful match is found, the system outputs the result. The Dahua Face Recognition camera supports a built-in database that stores up to 10,000 face images, allowing the camera to capture and compare face images in real time.

Perimeter Protection

Automatically filters out false alarms caused by animals, rustling leaves, bright lights, and more, and uses secondary recognition during target detection to improve alarm accuracy.

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.

- 1/1.8" 8Megapixel STARVIS™ CMOS.
- 48× optical zoom.
- · Starlight technology.
- Max. 25/30 fps@8M.
- IR distance up to 500 m.
- · H.265 encoding.
- · Auto-tracking.
- · Perimeter protection.
- · Face recognition.
- · Metadata.
- · IP67.









Video Metadata

Metadata is information on the attributes of targets that is extracted during monitoring. It can be used for data retrieval. There are four kinds of metadata supported by Dahua PTZ WizMind cameras: Human face, human body, motor vehicle and non-motor vehicle. Face information includes gender, age, glasses, masks, beards, and more. Human body information includes hat, top, top color, bottom, bottom color, bag, and more. Motor vehicle information includes plate color, type, vehicle color, sun visor, ornament, calling, seatbelt, smoking, annual inspection sticker, and more. Non-motor vehicle information includes type, color, top type, top color, people number, and more.

Environment (-40 °C to +70 °C, IP67)

Developed to operate in extreme conditions, Dahua camera can function in temperatures ranging from $-40\,^{\circ}\text{C}$ to $+70\,^{\circ}\text{C}$ ($-40\,^{\circ}\text{F}$ to $+158\,^{\circ}\text{F}$) at 95% humidity. It was subjected to rigorous dust and water immersion tests, gaining its IP67 Ingress Protection certification, making it suitable for demanding outdoor applications.

Scene

In scenes with low illumination, Dahua's Starlight Ultra-Low Light Technology increases the light-sensitivity of cameras, enabling them to produce vivid images even when lighting is as low as 0.005 lux. The camera also offers a set of optical features that balance light throughout the scene, strongly enhancing visibility in dark environment.

Technical Specification		IVG (Parise stee Parts stiers)	Tripwire; intrusion; climbing fences; loitering detection; abandoned/missing object; fast moving; parking	
Camera		IVS (Perimeter Protection)	detection; people gathering; vehicle/human alarm classification	
Image Sensor	1/1.8" CMOS	Face Recognition	Yes	
Pixel	8 MP	Auto Tracking	Yes	
Max. Resolution	3840 (H) × 2160 (V)	Video		
ROM	8 GB	Video Compression	H.264H; Smart H.265+; H.264; H.265; MJPEG (Sub Stream 1); Smart H.264+	
RAM	2 GB	Streaming Capability	3 streams	
Electronic Shutter Speed	1/1 s-1/30,000 s	Streaming capability	8M (3840 × 2160); 4M (2560 × 1440); 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)	
Scanning System	Progressive	Resolution		
Min. Illumination	Color: 0.005 lux@F1.4 B/W: 0.0005 lux@F1.4 0 lux (IR light on)	Video Frame Rate	Main stream: 8M/4M/1080p/960p/720p (1–25/30 fps) Sub stream 1: D1/VGA/CIF (1-25/30 fps) Sub stream 2: 1080p/960p/720p (1-25/30 fps)	
Illumination Distance	500 m (1,640.42 ft)	Bit Rate Control	CBR; VBR	
Illuminator On/Off Control	Zoom Prio; Manual; Smart IR; Off	Day/Night	Auto (ICR); Color; B/W	
Illuminator Number	10 (IR light)	BLC	Yes	
Wiper	Yes	WDR	120 dB	
Lens		HLC	Yes	
Focal Length	6.25 mm-300 mm	White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp	
Max. Aperture	F1.4–F4.5	Gain Control	Auto; manual	
Field of View	H: 64.9°–1.8°; V: 38°–1.3°; D: 71.3°–1.9°	Noise Reduction	2D NR; 3D NR	
Optical Zoom	48×	Motion Detection	Yes	
Focus Control	Auto; semi-auto; manual	Region of Interest (RoI)	Yes	
Close Focus Distance	0.5 m-2 m (1.64 ft-6.56 ft)	Defog	Optical	
0.001.01.1	Detect Observe Recognize Identify	Digital Zoom	16×	
DORI Distance	6,000 m 2,381 m 1,200 m 600 m (19,685.04 ft) (7,811.68 ft) (3,937.01 ft) (1,968.50 ft)	Image Rotation	180°	
PTZ		Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view; Multiple colors available	
Pan/Tilt Range	Pan: 0° to 360° endless Tilt: –20° to +90°	S/N Ratio	≥55 dB	
Manual Control Speed	Pan: 0.1°/s–240°/s Tilt: 0.1°/s–100°/s	Audio		
Preset Speed	Pan: 0.1°/s–200°/s; Tilt: 0.1°/s–60°/s	Audio Compression	PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723	
Preset	300	Network		
Tour	8 (up to 32 presets per tour)	Network Port	RJ-45 (10/100 Base-T)	
Pattern	5		FTP; RTMP; IPv6; Bonjour; IPv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x; HTTPS; SNMP; TCP/IP; DDNS; UPnP; NFS; ICMP; UDP; IGMP; SMB; HTTP; SSL; DHCP; SMTP; QOS; RTSP; ARP	
Scan	5	Network Protocol		
Power-off Memory	Yes	Interoperability	CGI; SDK; ONVIF (Profile S&G&T)	
Idle Motion	Pattern; Preset; Scan; Tour	Streaming Method	Unicast; Multicast	
PTZ Protocol	DH-SD Pelco-P/D (auto recognition)	User/Host	20 (total bandwidth: 64 M)	
Intelligence		Storage	FTP; Micro SD card (512 GB)	
Video Metadata	Support human body, human face, motor vehicle and non-motor vehicle image capture and attributes extraction.	Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions	

Wiz Mind | DH-SD8C848PA1-HNF

Mobile Client	iOS; Android			
Port				
Analog Output	1 channel (CVBS output, BNC)			
RS-485	1 (baud rate: 1,200 bps–115,200 bps)			
Audio Input	1 channel (LINE IN, bare wire)			
Audio Output	1 channel (LINE OUT, bare wire)			
Alarm I/O	7/2			
Audio I/O	1/1			
Alarm Linkage	Capture; preset; tour; pattern; recordings; alarm digital input; send email			
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; decoder state detection; memory card state detection; memory space detection; power exception detection			
Power				
Power Supply	36 VDC, 2.23 A (± 25%), Hi-PoE			
Power Consumption	Basic: 18 W Max.: 33 W (illuminator + PTZ)			
Environment				
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)			
Operating Humidity	≤95%			
Protection	IP67; TVS 8000 V lightning proof; surge protection; voltage transient protection			
Structure				
Product Dimensions	442 mm × Φ262 mm (17.40" × Φ10.31")			
Net Weight	10.3 kg (22.71 lb)			

Ordering Information				
Туре	Model	Description		
8M Camera	DH-SD8C848PA1-HNF	8MP 48x Starlight IR Network PTZ Camera		
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Accessories	DC36V/2.23A	Power Adapter		
	PFB306W-S	Wall Mount Bracket		
	PFB718C-SG	Ceiling Mount Bracket		
	PFB711C-SG	Ceiling Mount Bracket		
	PFA5500 + PFB306W-S	Vertical Pole Mount Bracket		
	PFA5500 + PFB718C-SG	Horizontal Pole Mount Bracket		
	PFA151 + PFB306W-S	Corner Mount Bracket		

12.5 kg (27.56 lb)

Accessories

Included:





DC36V/2.23A Power Adapter

PFB306W-S Wall Mount Bracket

Optional:









PFB718C-SG Ceiling Mount Bracket

PFB711C-SG Ceiling Mount Bracket

PFA5500 + PFB306W-S Vertical Pole Mount Bracket





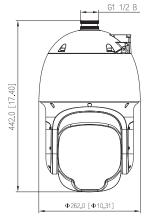


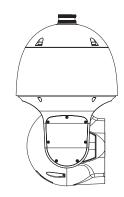
PFA5500 + PFB718C-SG Horizontal Pole Mount Bracket

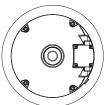
PFA151 + PFB306W-S Corner Mount Bracket

Wall Mount	Ceiling Mount	Ceiling Mount
PFB306W—S	PFB718C-SG	PFB711C-SG
Pole Mount (Vertical)	Pole Mount (Horizontal)	Corner Mount
PFB306W-S+PFA5500	PFB718C-SG+PFA5500	PFB306W-S+PFA151

Dimensions (mm[inch])







Gross Weight