



DH-SD8C448PA-HNF

4M 48x Starlight IR WizMind Network PTZ Camera





- 1/1.8" 4Megapixel STARVIS™ CMOS
- 48x optical zoom
- Starlight technology
- Max. 25/30 fps@4M
- IR distance up to 250 m
- · H.265 encoding
- · Two-way audio
- IR and white light, three night view modes
- IP67
- Auto-tracking
- · Perimeter protecton
- · Face recogniton

System Overview

Al series products adopt the most advanced Al technologies, including deep learning algorithms that primarily target people and vehicles, which provides higher flexibility and accuracy for end-users. This enables the Dahua Al series to offer various advanced applications such as Face Recognition, ANPR, Metadata, People Counting, and traffic data statistics. The complete lineup of Dahua Al includes network (PTZ) cameras, network video recorders, servers, and more devices. Beyond seeing the world, the power of Al allows devices to perceive the environment and understand the world in a better way.

Functions

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.

Starlight Technology

For challenging low-light conditions, Dahua's Starlight Ultra-low Light Technology offers the best in light sensitivity, capturing color in vivid detail, even in lighting as low as 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, producing clear images in dark environments.

PFA Technology

PFA technology has introduced new methods of judgment that ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms that ensure image clarity when zooming and that shorten focus time. This makes the camera highly advanced in its functions, substantially improving the quality of your experience.











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.

Auto-tracking

This feature controls the pan, tilt and zoom actions of the camera to automatically track an object in motion, to keep it in view of the camera. Tracking can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, a flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality videos without straining the network. Smart H.265+ technology outranks standard H.265 video compression, reducing bit rate and storage requirements by up to 70%.

Scene

The Dahua PTZ AI network camera adopts advanced CNN deep learning algorithms to support Perimeter Protection. This highly accurate camera possesses a wide monitoring range and the PFA algorithm, allowing it to always present a clear, focused image while zooming. Leveraging the latest in starlight technology, the camera has strong low light performance, smooth controls, high-grade protection, and produces high quality images, meeting most of the requirements of video surveillance applications.

Technical Specificat	tion				IVS (Perimeter	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms
Camera					Protection)	caused by animals, rustling leaves, bright lights, etc.
Image Sensor	1/1.8" CMOS				Face Recognition	Yes
Pixel	4 MP				Video	
Max. Resolution	2560 (H) × 144	-0 (V)			Video Compression	H.265; H.264M; H.264H; MJPEG; Smart H.265; Smart H.264
ROM	8 GB				Streaming Capability	3 streams
RAM	2 GB			Resolution	4M (2560 × 1440); 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA	
Electronic Shutter Speed	1/1 s-1/30,000 s				(640 × 480); CIF (352 × 288/352 × 240) Main stream: 4M/1080p/960p/720p (1–50/60 fps)	
Scanning System	Progressive				Video Frame Rate	Sub stream 1: D1/VGA/CIF (1–25/30 fps) Sub stream 2: 1080p/960p/720p (1–25/30 fps)
Min. Illumination	Color: 0.001 lu B/W: 0.0001 lu 0 lux (dual ligh	ıx@F1.4			Bit Rate Control	CBR; VBR
Illumination Distance	80 m (262.46 f	t) (dual light fu: 38 ft) (dual light			Video Bit Rate	H264: 512 kbps-13056 kbps H265: 204 kbps-7936 kbps
Illuminator On/Off	Zoom Prio: Ma	nual; Smart IR;	Off		Day/Night	Auto (ICR); Color; B/W
Control					BLC	Yes
Illuminator Number	10 (dual light f	usion)			WDR	120 dB
Wiper	Yes				HLC	Yes
Lens	6.25				White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Focal Length	6.25 mm-300 F1.4-F4.5	mm			Gain Control	Auto; manual
Max. Aperture				Noise Reduction	2D NR; 3D NR	
Field of View	H: 62.4 -1.7 ;	v: 36.6 –1.0 ; L): 69.8 –2.0		Motion Detection	Yes
Optical Zoom		ro, monuel			Region of Interest (RoI)	Yes
Focus Control			Defog	Optical		
Close Focus Distance	`	,			Digital Zoom	16×
DORI Distance	Detect	Observe	Recognize	Identify	Image Rotation	180°
John Jistanice	6,000 m (19,685.04 ft)	2,381 m (7,811.68 ft)	1,200 m (3,937.01 ft)	600 m (1,968.50 ft)	Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view
PTZ					S/N Ratio	≥55 dB
Pan/Tilt Range	Pan: 0° to 360° Tilt: -20° to +9				Audio	
Manual Control Speed	Pan: 0.1°/s-24 Tilt: 0.1°/s-100	,			Audio Compression	G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; PCM
Preset Speed	Pan: 0.1°/s-20	0°/s; Tilt: 0.1°/s	:60°/s		Network	
Preset	300				Network Port	RJ-45 (10/100 Base-T)
Tour	8 (up to 32 pre	sets per tour)			Network Protocol	HTTP; HTTPS; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; QoS; FTP; UPnP; ICMP; SNMP; IGMP; RTP; PPPoE; RTMP; TCP
Pattern	5				Interoperability	ONVIF (Profle S&G&T); GB/T28181; CGI
Scan	5				Streaming Method	Unicast; Multicast
Power-off Memory	Yes				User/Host	20 (total bandwidth: 64 M)
Idle Motion	Preset; Pattern	; Tour; Scan			Storage	FTP; Micro SD card (512 GB); NAS
PTZ Protocol	DH-SD Pelco-P/D (auto	o recognition)				IE 7 and later versions
Intelligence	. (,			Browser	Chrome 45 and later versions Firefox 52ESR and earlier versions Safari
Video Metadata	Support huma	n body, human image capture i			Management Software	Smart PSS; DSS; IVSS

motor vehicle image capture and attributes extraction.

Wiz Mind | DH-SD8C448PA-HNF

Mobile Client	iOS; Android	
Port		
Analog Output	1 channel (CVBS output, BNC)	
RS-485	1 (baud rate: 1200 bps–115200 bps)	
Audio Input	1 channel (LINE IN, bare wire)	
Audio Output	1 channel (LINE OUT, bare wire)	
Two-way Audio	Yes	
Alarm Input	7 (on-off value input: 0–5 VDC)	
Alarm Output	2	
Alarm Linkage	Capture; preset; tour; pattern; recordings on SD card; alarm digital input; client E-map; 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					
Model	Description				
DH-SD8C448PA- HNF	4M 48x Starlight IR WizMind Network PTZ Camera				
DH-SD8C448PA- HNF	4M 48x Starlight IR WizMind Network PTZ Camera				
DC36V/2.23A	Power Adapter				
PFB306W-S	Wall Mount Bracket				
PFB300C-S	Ceiling Mount Bracket				
PFA150 + PFB306W-S	Vertical Pole Mount Bracket				
PFA150 + PFB300C-S	Horizontal Pole Mount Bracket				
	Model DH-SD8C448PA-HNF DH-SD8C448PA-HNF DC36V/2.23A PFB306W-S PFB300C-S PFA150 + PFB306W-S PFA150 +				

12.5 kg (27.56 lb)

Accessories

Included:





DC36V/2.23A Power Adapter

PFB306W-S Wall Mount Bracket

Optional:



Ceiling Mount Bracket







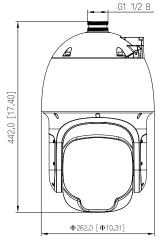
PFA150 + PFB306W-S Vertical Pole Mount

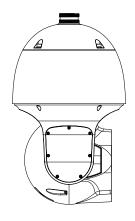
Bracket

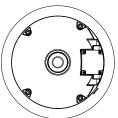
PFA150 + PFB300C-S Horizontal Pole Mount Bracket

Wall Mount	Ceiling Mount	Pole Mount(Vertical)
PFB306W-S	PFB300C-S	PFA150+PFB306W-S
Pole Mount(Horizontal)		
PFA150+PFB300C-S		

Dimensions (mm[inch])







Rev 002.000

Gross Weight

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