

DH-SD8A440FA-HNP-AID

4MP 40x Starlight IR Network PTZ Camera for Traffic Event



WizMind

Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, IVSS, 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.

Series 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. You can also have the camera custom-made with an anti-corrosion structure and IK10.

Functions

Multi-scenario Tour

Configure tour plan and set up two intelligent modes to activate multi-scenario tour for greater control of your camera.

Protection (IP67, TVS 6000 V)

IP67, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

- 1/1.8" 4Megapixel STARVIS™ CMOS
- 40x optical zoom
- Starlight technology
- Max. 50/60 fps@4MP
- H.265 encoding
- Traffic Event



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.

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%.

Traffic Events

With its deep learning algorithms, the device monitors and detects road events such as wrong-way driving, parking, traffic accidents, traffic congestion and the presence of pedestrians. It also collects data on these incidents, generates information on traffic flow and triggers alarms, sending them to the platform.

Scene

Suitable for use on highways that require extensive monitoring and the detection of a wide variety of events.

Technical Specification

Camera

Image Sensor	1/1.8" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	8 GB
RAM	4 GB
Electronic Shutter Speed	1/1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.001 lux@F1.4 B/W: 0.0001 lux@F1.4 0 lux (IR light on)
Illumination Distance	500 m (1,640.42 ft) (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Smart IR; Off
Illuminator Number	10 (IR)
Wiper	Smart wiper

Lens

Focal Length	5.6 mm–223 mm
Max. Aperture	F1.4–F4.5
Field of View	H: 61.8°–2.2°; V: 36.3°–1.3°; D: 69.2°–2.4°
Optical Zoom	40×
Focus Control	Auto; semi-auto; manual
Close Focus Distance	0.5 m–2 m (1.64 ft–6.56 ft)
Iris Control	Auto

	Lens	Detect	Observe	Recogniz e	Identify
DORI Distance	5.6 mm– 223 mm	3,030 m	1,204 m	606 m	303 m
*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.					

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: –30° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°/s–240°/s Tilt: 0.1°/s–100°/s
Preset Speed	Pan: 240°/s; Tilt: 120°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5

Power-off Memory	Yes
Idle Motion	Preset;Pattern;Tour;Scan
PTZ Protocol	DH-SD Pelco-P/D (Auto recognition)

Intelligence

Traffic Information Acquisition	Collects traffic flow data for the lanes. Up to 8 lanes can be added to each preset.
Traffic Event	Radius of monitoring area: 135 m (442.91 ft) for multiple scenes and 35 m (114.83 ft) for a single-scene. Detects wrong-way driving, parking, traffic accident, pedestrians and traffic congestion in the set area. 8 polygon detection areas can be added to each preset.

Video

Video Compression	Smart H.265+;H.265;Smart H.264+;H.264;H.264B;H.264H;MJPEG(Sub Stream 1)
Streaming Capability	3 streams
Resolution	4M (2560 × 1440); 3M (2048 × 1536); 1080P (1920 × 1080); 1.3M (1280 × 960); 720P (1280 × 720); D1 (704 × 576); VGA (640 × 480); CIF (352 × 288)
Video Frame Rate	Main stream: 4M/3M/1080p/1.3M/720p@(1–25/30 fps) Sub stream 1: D1/VGA/CIF@(1–25/30 fps) Sub stream 2: 1080p/1.3M/720p@(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 512 kbps–13056 kbps H.265: 204 kbps–7936 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	140dB
HLC	Yes
White Balance	Auto; indoor; outdoor; tracking; manual; auto sodium lamp; sodium lamp; auto outdoor
Gain Control	Auto; manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Electronic Image Stabilization (EIS)
Defog	Optical
Digital Zoom	16×
Image Rotation	180°
Privacy Masking	Up to 24 areas can be set, with up to 8 areas in the same view
S/N Ratio	≥ 55 dB

Audio

Audio Compression	G.711a; G.711mu; G.726; G722.1; G.729; MPEG2-Layer2; G723; PCM
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Network

Network Port	RJ-45 (10/100 Base-T)
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Network Protocol	HTTP;HTTPS;IPv4;RTSP;UDP;SMTP;NTP;DHCP;DNS;DDNS;IPv6;802.1x;QoS;FTP;UPnP;IGMP;SNMP;IGMP;RTP;PPPoE;RTMP;TCP
Interoperability	ONVIF (Profile S & Profile G & Profile T);CGI
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	FTP; Micro SD card (512 GB)
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Management Software	CyberCity

Port

Analog Output	1 channel (CVBS output, BNC)
RS-485	1 (baud rate: 1200 bps–9600 bps)
Audio Input	1 channel (LINE IN, bare wire)
Audio Output	1 channel (LINE OUT, bare wire)
Alarm Input	7 (on-off value input: 0–5 VDC)
Alarm Output	2 channels
Alarm Linkage	Capture; preset; tour; pattern; recordings on SD card; alarm digital input; send email; client E-map
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; encoder state detection; memory card state detection; memory space detection; power fault detection
Alarm I/O	7/2
Audio I/O	1/1

Power

Power Supply	36V DC/2.23A±25% HI-PoE
Power Consumption	Basic: 20 W Max.: 31 W (IR light on)
Power Adapter	Included

Environment

Operating Temperature	–40 °C to +70 °C (–40 °F to +158 °F)
Operating Humidity	≤ 95%
Protection	IP67;TVS 6000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	415.9 mm × Φ262.0 mm (16.37" × Φ10.31")
Net Weight	8.5 kg (18.74 lb)
Gross Weight	12.5 kg (27.56 lb)

Ordering Information

Type	Model	Description
NETWORK PTZ CAMERA	DH-SD8A440FA-HNP-AID	4MP 40x Starlight IR Network PTZ Camera for Traffic Event
	PFB306W	Wall Mount Bracket
	DC36V/2.23A	Power Adapter
Accessories	PFA118	PFA118
	DH-PFB301C	Ceiling Mount Bracket
	DH-PFB301S-E	Plane Mount Bracket
	DH-PFA151	Corner Mount Bracket
	DH-PFA5510	Quick-install Pole Mount Bracket
	DH-PFA150	Pole Mount Bracket

Accessories

Included:



PFB306W
Wall Mount Bracket

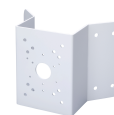


DC36V/2.23A
Power Adapter

Optional:



DH-PFA150
Pole Mount Bracket



DH-PFA151
Corner Mount Bracket



DH-PFA5510
Quick-install Pole Mount Bracket



DH-PFB301C
Ceiling Mount Bracket



DH-PFB301S-E
Plane Mount Bracket

Dimensions (mm[inch])

Wall Mount PFB306W+PFA126 	Ceiling Mount PFA118+PFB710C 	Ceiling Mount PFA118+PFB301C 
Pole Mount(Vertical) PFB306W+PFA150 	Corner Mount PFB306W+PFA151 	Pole Mount(Horizontal) PFA118+PFB301C+PFA150 
Plane Mount PFB301S-E 		

