



DH-SD8A845QA-HNF

8MP 45x OIS IR Network PTZ Camera





Series Overview

With CNN algorithm, Dahua WizMind speed dome supports intelligent functions like tripwire and intrusion; and supports video structuralization function that recognizes motor vehicle, non-motor vehicle, and human to analyze their detailed information (plate number, vehicle brand, age and gender, etc.). With PFA algorithm, the speed dome can get clear images all the time during zooming. In addition, silent motor driver integrated circuits enable the speed dome to make faint sounds during rotation.

Functions

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.

Optical Image Stabilization (OIS)

With OIS, external jitter data can be obtained through the gyroscope to produce clear, high-quality images. The image stabilization algorithm drives the internal movable lens to accurately control the reverse movement of the lens in real time, changing the optical imaging route to offset the influence of external physical jitter. This eliminates image jitter, allowing the device to display clear images.

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.

- 1/1.8" 8Megapixel STARVIS™ CMOS• 45× optical zoom, 16× digital zoom
- 45x optical zoom
- · OIS
- IR distance up to 500 m
- · Perimeter protection
- Auto-tracking
- Face recognition
- Metadata
- · IP67, IK10 (without wiper)
- Smart Wiper











Face Recognition

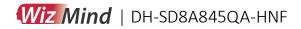
Face attributes are extracted from captured faces, and stored in a database where they can be conveniently searched for and compared against other images. Once a successful match is found, the system outputs the result. The Dahua Face Recognition camera supports a built-in database that stores up to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

Video Metadata

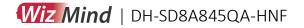
Metadata is information on the attributes of targets that is extracted during monitoring. It can be used for data retrieval. There are four kinds of metadata supported by Dahua PTZ WizMind cameras: Human face, human body, motor vehicle and non-motor vehicle. Face information includes gender, age, glasses,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

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.



Technical Specificati	on				Intelligence	
Camera					Video Metadata	Support human body, human face, motor vehicle
Image Sensor	1/1.8" CMOS				Video ivietadata	and non-motor vehicle image capture and attributes extraction.
Pixel	8 MP				N/C (Daving at an Duata ation)	Tripwire; intrusion; climbing fences; loitering detection; abandoned/missing object; fast moving; parking
Max. Resolution	3840 (H) × 2160 (V)				IVS (Perimeter Protection)	detection; people gathering; vehicle/human alarm classification
ROM	8 GB				Face Recognition	Yes
RAM	4 GB				Auto Tracking	Yes
Electronic Shutter Speed	1/1 s-1/30,000 s				Video	
Scanning System	Progressive				Video Compression	Smart H.265+; H.265; Smart H.264+; H.264M; H.264H; MJPEG (Sub Stream 1)
Min. Illumination	Color: 0.005 lux@F1.5 B/W: 0.0005 lux@F1.5 0 lux (IR light on)				Streaming Capability	3 Streams
Illumination Distance	500 m (1,640.42 ft) (IR)				Resolution	4K (3840 × 2160); 4M (2560 × 1440); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 ×
Illuminator On/Off Control	Zoom Prio; Manual; Off					576); VGA (640 × 480); CIF (352 × 288)
Illuminator Number	10 (IR)				50 Hz: Main stream: 3840 × 2160@25 fps/2560 × 1440@25 fps/1920 × 1080@25 fps/1280 × 960@25 fps/1280 × 720@25 fps Sub stream: 704 × 576@25 fps/640 × 480@25 fps/352 ×	
Wiper	Smart Wiper					
Lens						288@25 fps Third stream: 1920 × 1080@25 fps/1280 × 960@25
Focal Length	5.5 mm-248 mm				Video Frame Rate fps/1280 × 720@25 fps 60 Hz:	
Max. Aperture	F1.5-F5.3				Main stream: 3840 × 2160@30 fps/2560 × 1440@30 fps/1920 × 1080@30 fps/1280 × 960@30 fps/1280 × 720@30 fps Sub stream: 704 × 480@30 fps/640 × 480@30 fps/352 × 240@30 fps Third stream: 1920 × 1080@30 fps/1280 × 960@30 fps/1280 × 720@30 fps	
Field of View	H: 64.4°-2.0°; V: 38.4°-1	H: 64.4°–2.0°; V: 38.4°–1.1°; D: 69.6°–2.3°				
Optical Zoom	45x					
Focus Control	Auto; semi-auto; manual				Bit Rate Control	CBR; VBR
Close Focus Distance	0.1 m-5 m (0.33 ft-16.40	ft)			Video Bit Rate	H.264: 3328 kbps–16384 kbps
Iris Control	Auto				Day/Night	H.265: 1280 kbps–9984 kbps Auto (ICR); Color; B/W
	Detect Observe	Recognize	Identify		BLC	Yes
DORI Distance	4,420 m 1,768 m (14,501.31 ft) (5,800.52		442 m (1.450.13 ft)		WDR	Yes
PTZ	(= 1,2===== 1,7	(=)=======	(=, := ::== ::,		HLC	Yes
Pan/Tilt Range	Pan: 0° to 360° endless Tilt: –30° to +90°, auto fli	190°			White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp;
Manual Cantual Canad	Pan: 0°/s-240°/s	7 180				natural light; street lamp
Manual Control Speed	Tilt: 0°/s-100°/s				Gain Control	Auto; Manual
Preset Speed	Pan: 90°/s; Tilt: 60°/s				Noise Reduction	2D NR; 3D NR
Preset	300				Motion Detection	Yes
Tour	8 (up to 32 preset per to	ir)			Region of Interest (RoI)	Yes
Pattern	5				Image Stabilization	Optical
Scan	5				Defog	Optical
Power-off Memory	Yes				Digital Zoom	16X
Idle Motion	Preset; Pattern; Tour; Sca	1			Image Rotation	180° Up to 24 areas can be set, with up to 8 areas in the same
PTZ Protocol	DH-SD Pelco-P/D (auto recogniti	on)			Privacy Masking	view
					S/N Ratio	≥55 dB



Audio	
Audio Compression	G.711a; G.711Mu; G726; MPEG2-Layer2; G722.1; G729
Network	
Network Port	RJ-45 (100/1000 Base-T)
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; 802.1x; SSL; QoS; FTP; UPnP; ICMP; SNMP; SNMP v1/v2c/v3 (MIB-2); IGMP; ARP; RTCP; RTP; PPPoE; IP Filter; RTMP; Bonjour; TCP; SMB; NFS
Interoperability	ONVIF (Profile S&G&T); CGI; Dahua SDK; API
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; Micro SD card (512 GB)
Browser	IE 7 and later versions Chrome 45 and later versions Firefox 52ESR and earlier versions
Mobile Client	iOS; Android; iPhone; iPad; Windows Phone
Port	
Analog Output	1 channel (CVBS output, BNC)
RS-485	1 (baud rate: 1200 bps–9600 bps)
Audio Input	1 channel
Audio Output	1 channel
Alarm I/O	7/2
Audio I/O	1/1
Alarm Linkage	Capture; preset; tour; pattern; recordings on SD card; digital output; send email
Alarm Event	Motion/tampering detection; audio detection; disk full; disk fault; external alarm; security alarm; smart event; scene change
Power	
Power Supply	36 VDC, 2.23 A (±25%) (included) Hi-PoE
Power Consumption	Basic: 21 W Max.: 45 W (IR + PTZ + wiper)
Environment	
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Operating Humidity	≤95%
Protection	IP67; IK10(Without Wiper) TVS 6000 V lightning proof; surge protection; voltage transient protection
Structure	
Casing	ADC12
Product Dimensions	415.6 mm × Φ262 mm (16.36" × Φ10.31")
Net Weight	10 kg (22.05 lb)
Gross Weight	12 kg (26.46 lb)

Ordering Information					
Туре	Part Number	Description			
8M WizMind	DH-SD8A845QA-HNF	8MP 45x OIS IR Network PTZ Camera			
PTZ Camera	SD8A845QA-HNF	8MP 45x OIS IR Network PTZ Camera			
	DC36V/2.23A	Power Adapter			
	PFA118	Mount Adapter			
	PFB306W	Wall Mount Bracket			
Accessories	PFB710C	Ceiling Mount Bracket			
	PFA150	Pole Mount Bracket			
	PFB301C	Ceiling Mount Bracket			
	PFA151	Corner Mount Bracket			

Accessories

Included:



DC36V/2.23A Power Adapter



PFA118 Mount Adapter



PFB306W Wall Mount Bracket

Optional:



PFB710C Ceiling Mount Bracket



PFA150 Pole Mount Bracket



PFB301C Ceiling Mount Bracket



PFA151 Corner Mount Bracket

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Wall Mount	Ceiling Mount 1	Ceiling Mount 2
PFB306W	PFA118+PFB710C	PFA118+PFB301C
		Ö
Pole Mount(Vertical)	Corner Mount	Pole Mount(Horizontal)
PFB306W+PFA150	PFB308#+PFA151	PFA118+PFB301C+PFA150

Dimensions (mm[inch])

