DH-SD8C845FG-HNF

8MP 45x WizMind 1/1.2'' CMOS Network PTZ Camera

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.

Scene

For challenging low-light conditions, Dahua's Starlight Ultra-low Light Technology makes the camera highly sensitive, 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.

Funtions

Face Recognition
Once facial attributes are extracted from captured faces, they are stored in a database where they can be easily searched 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 facial images, helping the camera achieve real-time face capturing and comparison.

- 1/1.2" 8Megapixel STARVIS CMOS.
- 45x optical zoom.
- Ultra light sensitivity.
- Max. 25/30 fps@4K.
- Auto-tracking.
- Perimeter protection.
- Face detection.
- Face recognition.
- Metadata.
- SMD Plus.
- IP67.
- Dual light fusion.
- Electronic defog.
- Wiper.

IP67	4K	Face Detection	Perimeter Protection	Vehicle Metadata	Auto Tracking

Perimeter Protection
Automatically filters false alarms caused by animals, rustling leaves, bright lights, etc, and enables system to act secondary recognition for the targets, which improve alarm accuracy.

Auto-tracking
This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action 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.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.

Technical Specification

Camera

Image Sensor	1/1.2" CMOS
Pixel	8 MP
Max. Resolution	3840 (H) × 2160 (V)
ROM	8 GB
RAM	4 GB
Electronic Shutter Speed	1/1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.0005 lux@F1.5 B/W: 0.0001 lux@F1.5 0 lux (Illuminator On)
Illumination Distance	80 m (262.47 ft) (Only White Light) 250 m (820.21 ft) (Only IR)
Illuminator On/Off Control	Zoom Prio; Manual; Smart IR; Off
Illuminator Number	10 (Dual light fusion)
Wiper	Yes

Lens

Focal Length	8 mm–360 mm			
Max. Aperture	F1.5–F5.7			
Field of View	H: 61.5°–2.1°; V: 36.7°–1.3°; D: 67.9°–2.7°			
Optical Zoom	45×			
Focus Control	Auto; semi-auto; manual			
Close Focus Distance	0.5 m–5 m (1.64 ft–16.40 ft)			
Iris Control	Auto; manual; fixed			
DORI Distance	Detect	Observe	Recognize	Identify
	4115.9 m (13503.61 ft)	1646.3 m (5401.25 ft)	823.2 m (2700.79 ft)	411.6 m (1350.39 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 360° endless Tilt: −20° to +90° auto flip
Manual Control Speed	Pan: 0.1°/s–240°/s Tilt: 0.1°/s–100°/s
Preset Speed	Pan: 240°/s; Tilt: 100°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Pattern; Preset; Scan; Tour
PTZ Protocol	DH-SD Pelco-P/D (Auto recognition)

Intelligence

Video Metadata	Motor vehicle, non-motor vehicle, face, and human body detection; tracking; optimization; capturing pictures; uploading high-quality face snapshots. Motor vehicle attributes: License plate, plate color, vehicle type, vehicle color, vehicle logo, vehicle model/year, sun visor, seatbelt., smoking, calling, ornament, and annual inspection sticker. Non-motor vehicle attributes: Type, vehicle color, number of people, top type and color, and hat. Human body attributes: Top and bottom type and color, bag, hat, gender, and umbrella. Face attributes: Gender, age, facial expressions, glasses, face mask, and mustache.
IVS (Perimeter Protection)	Tripwire; intrusion; climbing fences; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; vehicle/human alarm classification; linkage tracking
Auto Tracking	Yes
SMD	SMD Plus

Video

Video Compression	H.264H; H.264B; Smart H.265+; H.264; H.265; MJPEG(Sub Stream); Smart H.264+
Streaming Capability	3 streams
Resolution	4K (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)
Video Frame Rate	Main stream : 4K/4M/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: 768 kbps–16384 kbps H.265: 256 kbps–10240 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	Yes
HLC	Yes
White Balance	Auto; indoor; outdoor; ATW; manual; sodium lamp; natural light; street lamp
Gain Control	Auto; manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Electronic (EIS)
Defog	Electronic
Digital Zoom	16×
Image Rotation	180°
Privacy Masking	Up to 24 areas can be set with 8 areas in the same view; supports various colors for privacy masking
S/N Ratio	≥ 55 dB

Audio

Audio Compression	G.711A; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; PCM

Network

Network Port	RJ-45 (10/100 Base-T)
Carrier Network System	Yes
Network Protocol	FTP; RTMP; IPv6; Bonjour; IPv4; DNS; RTCP; PPPoE; NTP; RTP; 802.1x; HTTPS; SNMP; TCP/IP; DDNS; UPnP; NFS; ICMP; UDP; IGMP; HTTP; SSL; DHCP; SMTP; Qos; RTSP; ARP
Interoperability	CGI; 35114A; ONVIF (Profile S&G&T)
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	NAS; 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	DSS; Smart Player; ConfigTool; NVR; Smart PSS; IVSS
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)
Alarm Linkage	Capture; record; send email; preset; tour; pattern; alarm digital input
Alarm Event	Motion/Tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; power exception detection
Alarm I/O	7/2
Audio I/O	1/1

Power

Power Supply	36 VDC/2.23 A ± 25% PoE (802.3bt) Only supports standard 802.3bt PoE Switch
Power Consumption	Basic: 18 W Max.: 33 W (Illuminator On, 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" × Φ10.32")
Net Weight	9.6 kg (21.64 lb)
Gross Weight	12.5 kg (27.56 lb)

Ordering Information

Type	Model	Description
8MP WizMind PTZ Camera	DH-SD8C845FG-HNF	8MP 45x WizMind 1/1.2'' CMOS Network PTZ Camera
	SD8C845FG-HNF	8MP 45x WizMind 1/1.2'' CMOS Network PTZ Camera
Accessories	DC36V/2.23A	Power Adapter
	PFB306W-S	Bracket
	PFA150	Pole Mount Bracket
	PFB300C-S	Bracket

Accessories

Included:

DC36V/2.23A
Power Adapter

PFB306W-S
Wall Mount Bracket

Optional:

PFB300C-S
Bracket

PFA150
Bracket

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

Dimensions (mm[inch])

G1 1/2 B

442.0 [17.40]

Φ262.0 [Φ10.31]