

DH-PTZ83440-HNR-GA-S

4MP 40X IR WizMind Network Positioning System



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

The Dahua PTZ WizMind network camera adopts advanced deep learning algorithms to support Perimeter Protection. It is highly accurate, featuring a wide monitoring range and the PFA algorithm, which enables it to present clear, focused images even while zooming. Additionally, it delivers highly detailed images even in low light conditions through the latest starlight technology. With its smooth control and high-grade protection, this network camera meets the requirements of video surveillance in a wide variety of scenes.

Functions

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.

- 1/1.8" 4Megapixel STARVIS™ CMOS
- 40x optical zoom
- Max. 25/30fps@4M
- IR distance up to 300 m
- Auto tracking 3.0
- Perimeter protection
- Face detection
- Video Metadata
- Wiper
- IP67



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.

Wide Dynamic Range

The camera produces vivid images, even in high-contrast lighting conditions, by using industry-leading wide dynamic range (WDR) technology. For scenes that quickly alternate between bright and low lighting, WDR adjusts to fully capture both the bright and dark areas of a scene, producing superior quality videos.

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%.

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.

Technical Specification

Camera

Image Sensor	1/1.8" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	4 GB
RAM	2 GB
Electronic Shutter Speed	1s–1/30000s
Scanning System	Progressive
Min. Illumination	0.001 lux@F1.5 (Color, 30 IRE) 0.0004 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on)
Illumination Distance	300 m (984.25 ft) (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Auto; Off
Illuminator Number	6 (IR light)
Wiper	Wiper

Lens

Focal Length	5.5 mm–220 mm
Max. Aperture	F1.5–F4.8
Field of View	H: 2.42°– 57.74°; V: 1.37°– 33.81°; D: 2.76°– 64.81°
Optical Zoom	40×
Focus Control	Auto; Semi-auto; Manual
Close Focus Distance	0.5 m–5 m (1.64 ft–16.4 ft)
Iris Control	Auto; Manual; Iris prio

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	98.8 m (324.14 ft)	39.5 m (129.59 ft)	19.8 m (64.96 ft)	9.9 m (32.48 ft)
	T	2364.1 m (7756.23 ft)	945.7 m (3102.69 ft)	472.8 m (1551.18 ft)	236.4 m (775.59 ft)
	*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: –45° to +90°
Manual Control Speed	Pan: 0.1°/s–140°/s; Tilt: 0.1°/s–50°/s
Preset Speed	Pan: 0.1°/s–140°/s; Tilt: 0.1°/s–50°/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

Video Metadata	Supports detection of motor vehicles, non-motor vehicles, faces and human bodies, optimization, capturing pictures, and uploading high-quality face snapshots. It extracts attributes from motor vehicles, detecting up to 10 attributes for motor vehicles
IVS (Perimeter Protection)	Tripwire; intrusion; crossing fence detection; loitering detection; abandoned/missing object; fast moving; parking detection; people gathering; human alarm classification; linkage tracking
Face Detection	Supports face detection, optimization, capturing pictures, uploading high-quality face snapshots and enhancing face images. Attribute extraction is also supported, where 6 attributes and 8 expressions can be detected. Face cutout is also offered, where you can cutout one face at a time and customize the size to be a one-inch photo. The supported methods for capturing snapshots are real-time capturing, quality first, and selecting a preferred image among a group of snapshots.
AcuPick	Uses deep learning algorithms and works with backend devices to accurately match targets, such as people and motor vehicles, and search through live and recorded videos to quickly locate targets

Video

Video Compression	Smart H.265+;H.265;Smart H.264+;H.264B;H.264M;H.264H;MJPEG
Resolution	4M (2560 × 1440); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Main stream: 4M/1080p/1.3M/720p@(1–25/30 fps) Sub stream 1: D1/CIF@(1–25/30 fps) Sub stream 2: 1080p/1.3M/720p/CIF@(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 64 kbps–10496 kbps H265: 25 kbps–6400 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	140 dB
HLC	Yes
White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp
Gain Control	Auto; manual; gain prio
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Gyroscope Image Stabilization (GIS)
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 Multiple colors and mosaic available
S/N Ratio	≥55 dB

Audio

Audio Compression	PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1; G729; G723
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Network

Network Port	RJ-45 (10/100 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;IGMP;ARP;RTCP;RTP;PPPoE;RTMP;Bonjour;NFS
Interoperability	ONVIF (Profile S & Profile G & Profile T);CGI;SDK
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (512 GB); FTP/SFTP; NAS
Browser	IE 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Mobile Client	iOS;Android

Certification

Certifications	CE:EN 55032,EN 61000-3-3,EN IEC 61000-3-2,EN 50130-4,EN 55035
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Port

RS-485	1 (Bit range: 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; recording; send email; preset; tour; pattern; alarm digital output; audio
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection
Optical Fiber	100 M single fiber port Specifications: 1310 nm TX/1550 nm RX Transmission distance: 20 km (12.43 mi)

Power

Power Supply	36 VDC, 2.23 A ± 25%
Power Consumption	Basic: 17 W Max. (Light on + PTZ operation): 33 W
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
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Structure

Product Dimensions	257.5 mm × 206 mm × 385.1 mm (10.14" × 8.11" × 15.16") (L × W × H)
Net Weight	6.9 kg (15.21 lb)
Gross Weight	9.9 kg (21.83 lb)

Ordering Information

Type	Model	Description
Positioning System	DH-PTZ83440-HNR-GA-S	4MP 40X IR WizMind Network Positioning System
Accessories	DC36V/5A	Power Adapter
	DH-PFB741W	CA0014-00-PFB741W

Accessories

Included:



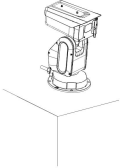

DC36V/5A
Power Adapter

Optional:



DH-PFB741W
CA0014-00-PFB741W

Dimensions (mm[inch])

Plane Mount	Plane Mount
	
Wall Mount	
DH-PFB741W	
