DH-SD8A3833GA-HNV

2MP 33x Starlight+ IR 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.

System 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.

· 1/1.8" 2Megapixel STARVIS™ CMOS.

· 33x optical zoom.

· Starlight+ technology.

· IR distance up to 500 m.

· Auto tracking 3.0.

· Perimeter protection.

· Face detection.

· Video Metadata.

· SMD 4.0.

· IP67, IK10.

| 8Mp | Perimeter Protection | Face Detection | Vehicle Metadata | IP67&IK10 |

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.

Protection (IP67, TVS 8000 V)
IP67, TVS 8000 V lightning proof, surge protection, and voltage transient protection.

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.

Technical Specification

Camera

Image Sensor	1/1.8" CMOS
Pixel	2 MP
Max. Resolution	1920 (H) × 1080 (V)
ROM	4 GB
RAM	2 GB
Electronic Shutter Speed	1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	0.001 lux@F1.6 (Color, 30 IRE); 0.0001 lux@F1.6 (B/W, 30 IRE); 0 lux (illuminator on)
Illumination Distance	500 m (1640.42 ft) (IR)
Illuminator On/Off Control	Zoom Prio; Manual; Auto; Off
Illuminator Number	10 (IR light)

Lens

Focal Length	6.5 mm–214.5 mm
Max. Aperture	F1.6–F4.9
Field of View	H: 63.9°–2.1°; V: 37.3°–1.2°; D: 71.2°–2.4°
Optical Zoom	33 ×
Focus Control	Auto; semi-auto; manual
Close Focus Distance	1 m–8 m (3.28 ft–26.25 ft)
Iris Control	Auto; manual; iris prio

	Detect	Observe	Recognize	Identify
	3,808 m (12493.44 ft)	1504.2 m (4935.04 ft)	761.6 m (2498.69 ft)	380.8 m (1249.34 ft)
DORI Distance	*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°/s–300°/s; Tilt: 0°/s–100°/s
Preset Speed	Pan: 0°/s–300°/s; Tilt: 0°/s–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	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 and non-motors, 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.
Auto Tracking	Auto tracking 3.0
SMD	SMD4.0
Quick Pick	Yes

Active Deterrence

Sound Warning	Offers 11 sound alarms and supports importing 10 custom sound alarms. Play time can be set from 1 to 10.

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	1080p (1920 × 1080); 720p(1280 × 720); 1.3M (1280 × 960); D1 (704 × 576/704 ×480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Main stream: 1080p/960p/720p@(1–50/60fps) Sub stream 1: D1/VGA/CIF@(1-50/60 fps)Sub stream 2: 1080p/960p/720p@(1-50/60 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 128 Kbps–16,384 Kbps H265: 51 Kbps–11,776 Kbps
Day/Night	Auto; Color; B/W; Electronic
BLC	Yes
WDR	120 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	Electronic Image Stabilization (EIS)
Defog	Electronic

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 available
S/N Ratio	≥55 dB

Audio

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

Network

Network Port	RJ-45 (10/100 Base-T)
Network Protocol	FTP;RTMP;IPv6;Bonjour;IPv4;DNS;RTCP;PPPoE;NTP;RTP;802.1x;QoS;HTTPS;SNMP;TCP/IP;DDNS;UPnP;NFS;ICMP;UDP;IGMP;HTTP;SSL;DHCP;SMTP;RTSP;ARP
Interoperability	ONVIF (Profile G & M & S & 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 52 and later versions; Safari 10 and later versions
Management Software	DMSS; DSS Pro
Mobile Client	iOS; Android

Certification

Certifications	CE-EMC: EN 55032; EN 61000-3-3; EN 61000-3-2; EN 50130-4; EN 55035 CE-LVD: EN 62368-1 FCC: 47 CFR FCC Part15, Subpart B, NSI C63.4

Port

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; 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; power exception detection

Power

Power Supply	36 VDC, 2.23 A ± 25% (included); HI-PoE
Power Consumption	Basic: 17 W; Max: 33 W (illuminator +Heater+ PTZ)

Environment

Operating Temperature	−40 °C to +70 °C (−40 °F to +158 °F)
Operating Humidity	≤95%
Protection	TVS 8000 V lightning proof;IK10;IP67; surge protection; voltage transient protection

Structure

Product Dimensions	415.9 mm × Φ 262.0 mm (16.37" × Φ 10.31")
Net Weight	8.5 kg (18.74 lb)
Gross Weight	13.1 kg (28.88 lb)

Ordering Information

Type	Model	Description
2MP WizSense PTZ Camera	DH-SD8A3833GA-HNV	2MP 33x Starlight+ IR Network PTZ Camera
	SD8A3833GA-HNV	2MP 33x Starlight+ IR Network PTZ Camera
Accessories	DC36V/2.23A	Power Adapter
	PFA118	Mount Adapter
	PFB306W	Wall Mount Bracket
	PFA126	Junction Box
	PFA151	Corner Mount Bracket
	PFB301C	Ceiling Mount Bracket
	PFB710C	Ceiling Mount Bracket
	PFA150	Pole Mount Bracket
	PFB301S-E	Plane Mount Bracket

Accessories

Included:

DC36V/2.23A
Power Adapter

PFB306W
Wall Mount
Bracket

Optional:

PFA118
Mount Adapter

PFA126
Junction Box

PFA151
Corner Mount
Bracket

PFB301C
Ceiling Mount
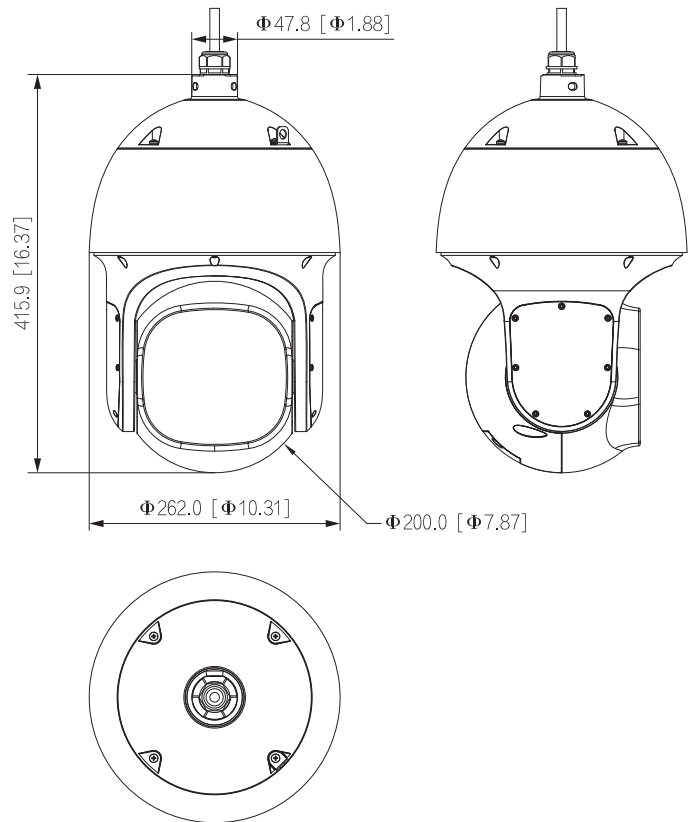Bracket

PFB710C
Ceiling Mount
Bracket

PFA150
Pole Mount
Bracket

PFB301S-E
Plane Mount Bracket

Dimensions (mm[inch])

Φ47.8 [Φ1.88]

415.9 [16.37]

Φ262.0 [Φ10.31]

Φ200.0 [Φ7.87]

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