DH-SD10A448WA-HNF

4M 48x Starlight+ IR WizMind Network PTZ Camera

- ·1/1.8" 4Megapixel CMOS
- · Powerful 48x optical zoom
- · Starlight+ technology
- · IR distance up to 450m
- · Deep-learning-based auto tracking and perimeter protection
- · Support metadata
- · Support Hi-PoE
- · Smart wiper
- · IP67

Metadata | False Alarm Filter | H.265 | WDR | ICR D/N | IP67 | Hi-PoE

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

Dahua PTZ WizMind network camera adopts advanced CNN deep learning algorithms to support face recogniton with high accuracy. This camera possess wide monitor range, PFA algorithm that can always present a clear, focused image while zooming, and smart wiper technology that supported by RainSensor.

Functions

Metadata

Metadata is feature attribute information extracted from a target object which can be used for data retrieval. There are four kinds of metadata supported by Dahua PTZ WizMind camera: human face, human body, motor vehicle and non-motor vehicle metadata. Facial information includes gender, age, glasses, masks, beards, etc. Human body information includes hat, top, top color, bottom, bottom color, bag, etc. Motor vehicle information includes plate color, type, vehicle color, sunshield, ornament, calling, seatbelt, smoking, annual inspection sticker, etc. Non-motor vehicle information includes type, color, top type, top color, people number, etc.

Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

Starlight+ Technology

For challenging low-light applications, Dahua's Starlight+ Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.001 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

Environmental

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from-40 °C to +70 °C (-40 °F to +158 °F) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection

The camera allows for-5%~+10% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 8KV lightning rating provides effective protection for both the camera and its structure against lightning.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

Technical Specification

Camera

Image Sensor	1/1.8" CMOS
Pixel	4MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	8GB
RAM	2GB
Electronic Shutter Speed	1/3 s–1/100000 s
Scanning System	Progressive Scanning
Min. Illumination	Color: 0.001Lux@F1.4 B/W: 0.0001Lux@F1.4 0Lux (IR light on)
Illumination Distance	450 m (1476.38 ft)
Illuminator On/Off Control	Zoom Prio/Manual/SmartIR
Illuminator Number	10
Wiper	Smart Wiper

Lens

Focal Length	5.7mm–275mm			
Max. Aperture	F1.4–F4.5			
Field of View	H: 62.4°–1.7°; V: 36.6°–1.0°; D: 69.8°–2.0°			
Optical Zoom	48x			
Focus Control	Auto/Semi-Auto/Manual			
Close Focus Distance	0.01 m–1.5m (0.03 ft–4.92 ft)			
Iris Control	Auto/Manual			
DORI Distance	Detect	Observe	Recognize	Identify
	3531.03m (11584.74 ft)	1412.41m (4633.89 ft)	706.21m (2316.96 ft)	353.10m (1158.46 ft)

PTZ

Pan/Tilt Range	Pan: 0°–360° (endless) Tilt: -30°–+90° (auto-flip 180°)
Manual Control Speed	Pan: 0.1°/s–200°/s Tilt: 0.1°/s–120°/s
Preset Speed	Pan: 240°/s Tilt: 200°/s
Presets	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Speed Adjustment	Support
Power-off Memory	Support
Idle Motion	Preset/Tour/Pattern/Scanning
Protocol	DH-SD Pelco-P/D (auto recognition)

General Intelligence

Event Trigger	Motion detection, Video tampering, Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly
IVS	Object Abandoned/Missing

Artificial Intelligence

Video Metadata	Support human body, human face, motor vehicle and non-motor vehicle image capture and attributes extraction.
Perimeter Protection	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
Auto Tracking	Support

Video

Compression	H.265+/H.265/H.264+/H.264/MJPEG (sub stream)
Streaming Capability	3 streams
Resolution	4M (2560 × 1440); 3M (2048 × 1536); 1080P (1920 × 1080); 1.3M (1280 x 960); 720P (1280 × 720); D1 (704 × 576); CIF (352 × 288)
Frame Rate	Main stream: 4M/3M/1080P/1.3M/720P (1–50/60fps) Sub stream 1: D1/CIF (1–25/30fps) Sub stream 2: 1080P/1.3M/720P (1–25/30fps)
Bit Rate Control	Variable Bit Rate/Constant Bit Rate
Bit Rate	H.264: 32 kbps–8192 kbps H.265: 32 kbps–8192 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Support
WDR	120 dB
HLC	Support
White Balance	Auto/Indoor/Outdoor/Track/Manual/Sodium lamp/Natural light/Street lamp
Gain Control	Auto/Manual
Noise Reduction	2D/3D
Motion Detection	Support
Region of Interest (RoI)	Support
Image Stabilization	Electronic
Defog	Optical
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas, and up to 8 areas in the same view

Audio

Compression	G.711a; G.711mu; G.726; AAC; G722.1; G.729; MPEG2-Layer2

Network

Ethernet	RJ-45 (10/100Base-T)

Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; Qos; FTP; SMTP; UPnP; SNMPv1/v2c/v3(MIB-2); DNS; DDNS; NTP; RTSP; RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPoE; ARP; RTCP
Interoperability	ONVIF Profile S&G&T; CGI
Streaming Method	Unicast/Multicast
User/Host	20
Storage	FTP; Micro SD card (256 G)
Browser	IE7 and newer versions Chrome 45 and newer versions Firefox 52ESR and earlier versions Safari (no version restrictions)
Management Software	Smart PSS, DSS, DMSS
Mobile Phone	IOS/Android

Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014"

Port

Video	1 port (BNC, 1.0V[p-p], 75Ω)
RS-485	1
Audio Input	1
Audio Output	1
Alarm I/O	7/2

Power

Power Supply	DC36V/2.23A Hi-PoE
Power Consumption	19W 42W (PTZ Pan/Tilt, IR light on, wiper on)

Environment

Operating Temperature	-40℃ to +70℃ (-40°F to +158°F)
Operating Humidity	≤95%
Protection	IP67; TVS 8000V lightning proof; Surge protection

Structure

Casing	Aluminium alloy ADC12
Dimensions	Φ300 mm × 527 mm (11.81" × 20.75")
Net Weight	13 kg (28.66 lb)
Gross Weight	18.2 kg (40.12 lb)

Ordering Information

Type	Model	Description
4MP WizMind PTZ Camera	DH-SD10A448WA-HNF	4M 48x Starlight+ IR WizMind Network PTZ Camera ,WDR,PAL
	DH-SD10A448WAN-HNF	4M 48x Starlight+ IR WizMind Network PTZ Camera ,WDR,NTSC
	SD10A448WA-HNF	4M 48x Starlight+ IR WizMind Network PTZ Camera ,WDR,PAL
	SD10A448WAN-HNF	4M 48x Starlight+ IR PTZ WizMind Network Camera,WDR,NTSC
Accessories	PFB710W	Wall Mount Bracket
	DC36V/2.23A	Power Adapter
		Mount Adapter

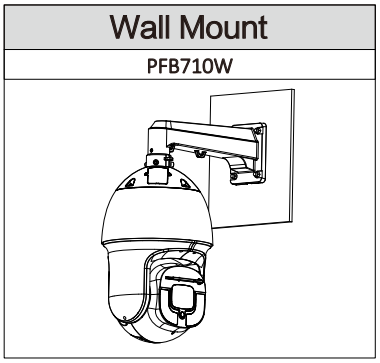
Accessories

Included:

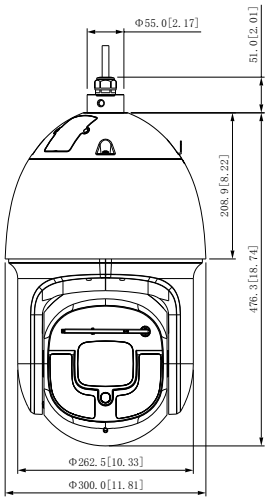
PFB710W
Wall Mount Bracket

DC36V/2.23A
Power Adapter

Mount Adapter



Dimensions (mm[inch])



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