DH-IPC-PT2449C1-S-PV-PRO

4MP WizColor Active Deterrence WizSense Network PT Camera



- 1/1.8" 4Megapixel CMOS.
- WizColor Technology.
- Max. 25/30 fps@4MP.
- H.265 Encoding.
- SMD 3.0.
- Perimeter Protection.
- Two-way Talk.
- Auto Tracking Lite.
- Tour.
- IP66 Protection.



Launched by Dahua Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

Series Overview

WizColor series cameras utilize groundbreaking technology to capture full-color images at night, overcoming the limitations of darkness. With advanced AI noise reduction and smart recognition, these cameras deliver images with rich colors and clear targets even in low light conditions, and eliminate motion blur in dynamic scenes. Whether in urban or rural settings, this series provides uninterrupted 24-hour high-definition intelligent monitoring for diverse environments.

Functions

WizColor Technology

Dahua WizColor Technology seamlessly combines with the powerful AI-ISP, large pixel size sensor and large aperture in cameras. This unique integration enables cameras to effortlessly capture high-quality images with vibrant colors during nighttime scenarios, ensuring fine details are preserved and minimizing motion blur. Unlike traditional self-illuminating cameras, Dahua WizColor Technology maximizes the utilization of weak light sources, such as moonlight and city lights reflected in the sky, delivering captivating full-color images of the entire scene. It also ensures that monitoring distances are not compromised at night due to limited illumination ranges, facilitating full-color image capture even over long distances.

AI-ISP

With AI ISP technology, the camera is able to easily adapt to scenes, producing high quality images that reveal the fine details of targets.

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.

IVS

With advanced video algorithm, Dahua IVS technology supports intelligent functions, such as tripwire and intrusion.

Technical Specification

Camera

Image Sensor	1/1.8" CMOS
Pixel	4MP
Max. Resolution	2688 (H) × 1520 (V)
ROM	256 MB
RAM	256 MB
Electronic Shutter Speed	1–1/100,000 s
Scanning System	Progressive
Min. Illumination	0.0005 lux@F1.0 (Color, 30 IRE); 0 lux (Illuminator on);
Illumination Distance	3.6 mm: 30 m (98.43 ft) (Warm light)
Illuminator On/Off Control	Auto; Manual; Off
Illuminator Number	4 (Warm light)

Lens

Focal Length	3.6 mm
Max. Aperture	F1.0
Field of View	3.6 mm: H: 97°; V: 52°; D: 114°
Close Focus Distance	3.6 mm: 2.6 m (8.53 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	3.6 mm	49.7 m (162.91 ft)	19.6 m (64.35 ft)	9.9 m (32.58 ft)	5.0 m (16.29 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 345°; Tilt: 0° to 90°
Manual Control Speed	Pan: 0.1°–34.5°/s; Tilt: 0.1°–36.4°/s
Preset Speed	Pan: 0.1°–33.8°/s; Tilt: 0.1°–36.3°/s
Preset	80
Tour	8 (up to 6 presets per tour; the stay duration for each preset is 60 to 360 sec and tour interval is 900 to 3,600 sec)
Power-off Memory	Yes
Idle Motion	Preset;Tour;home position(only supports setting on DMSS)
PTZ Locked	YES

Smart Event

IVS	Tripwire; intrusion
Human Detection	Yes
Vehicle Detection	Yes

Intelligence

Smart Tracking	Auto Tracking Lite
SMD	SMD 3.0

Active Deterrence

Light Warning	Warm light warning Flash duration: 5 s–30 s; Flash frequency: high, medium, low
Sound Warning	Offers 3 sound alarm. Sound can be set from 0%–100%. Play times can be set from 1-10.

Video

Video Compression	Smart H.265+;H.265;Smart H.264+;H.264B;H.264M;H.264H;MJPEG(Sub Stream 1)
Streaming Capability	2 streams
Resolution	4M (2688 × 1520);4M (2560 × 1440);3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1(704×576);VGA(640 × 480); CIF(352 × 288)
Video Frame Rate	Main stream: 2560 × 1440@(1–25/30 fps) Sub stream: 704 × 576@(1–25 fps)/704 × 480@(1–30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 8 kbps–6,400 kbps H.265: 3 kbps–3,840 kbps
Day/Night	Color/B/W
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 Priority
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Defog	Electronic
Digital Zoom	16 ×
Image Rotation	180°
S/N Ratio	≥55 dB

Audio

Audio Compression	PCM, G.711A, G.711Mu
Built-in MIC	Yes
Built-in Speaker	Yes

Network

Network Port	RJ-45 (10/100 Base-T)

Network Protocol	HTTP;HTTPS;TCP/IP;IPv4;RTSP;UDP;NTP;DHCP;DNS;DDNS;IPv6;SSL;QoS;FTP;ICMP;IGMP;ARP;RTCP;RTP;RTMP
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 (Up to 512 GB); FTP
Browser	IE: IE 7 and later versions; Chrome; Firefox; Safari
Management Software	DMSS;NVR
Mobile Client	iOS;Android

Function

Abnormal Sound Alarm	Yes

Certification

Certifications	CE

Port

Audio Input	1 channel (built-in mic)
Audio Output	1 channel (built-in speaker)
Alarm Linkage	Capture; recording; audio; light
Alarm Event	Motion/Tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection

Power

Power Supply	12 VDC, 1A ± 10% PoE (802.3af)
Power Consumption	PoE: Basic: 3.6 W Max: 9.5 W (illuminator + PTZ)
Power Adapter	Optional

Environment

Operating Temperature	–30 °C to +55 °C (–22 °F to +131 °F)
Operating Humidity	≤95%
Protection	IP66;TVS 2000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	153.5 mm × Φ129.3 mm (6.04" × Φ5.09")
Net Weight	0.8kg (1.76 lb)
Gross Weight	1.2kg (2.64 lb)

Filter

Remarks	* The precision of the presets for PTZ cameras might vary depending on different series. For scenes with high requirements on the precision, contact your local sales representative for assistance with selecting the model

Ordering Information

Type	Model	Description
NETWORK PT CAMERA	DH-IPC-PT2449C1-S-PV-PRO	4MP WizColor Active Deterrence WizSense Network PT Camera
Accessories (Optional)	DH-PFM321-EN	DC12V1A power adapter
	DH-PFM320D-EN	DC12V2A power adapter
	PFM900-E	Integrated Mount Tester

Accessories

Optional:



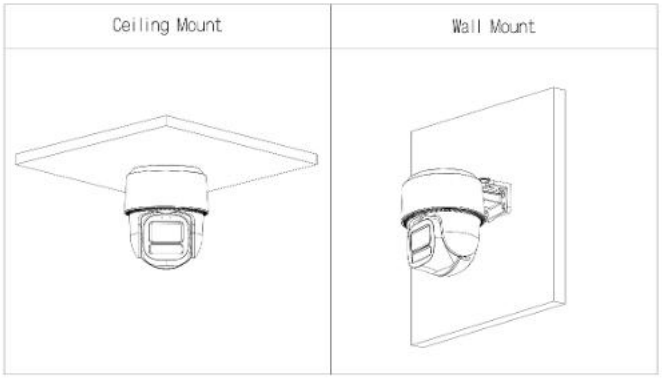
DH-PFM320D-EN
DC12V2A power adapter



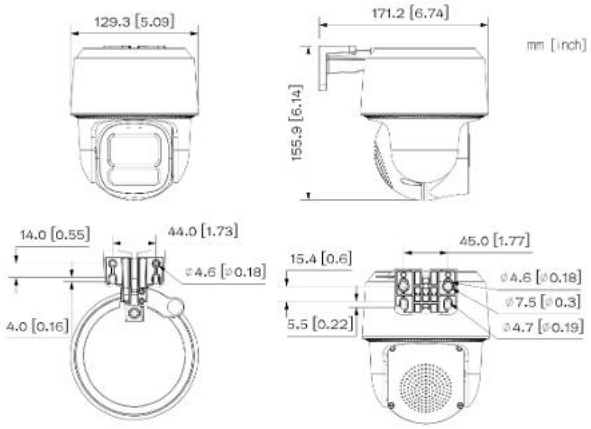
DH-PFM321-EN
DC12V1A power adapter



PFM900-E
Integrated Mount Tester



Dimensions (mm[inch])



Rev 002.000 © 2025 Dahua. All rights reserved. Design and specificatons are subject to change without notce. Pictures in the document are for reference only, and the actual product shall prevail.