DH-IPC-PTS2449C-4E3Z-S-PV-PRO

4MP+2MP WizColor Vari-focal Network PT Camera



- Displays videos in two channels at the same time
- 1/1.8" 4Megapixel CMOS and 1/2.8" 2Megapixel CMOS
- WizColor Technology
- Max. 25/30 fps@4MP and Max. 25/30 fps@2MP
- 6x Hybrid Zoom
- H.265 Encoding
- SMD 3.0
- Perimeter Protection
- Two-way Talk
- Auto Tracking Lite
- Tour



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

With advanced deep learning algorithm, Dahua WizSense 2 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

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.

Tap and View

Easy to use, you can tap on any spot in the live video feed from the fixed lens, allowing the PT lens to instantly rotate and focus on your selected area, delivering a clear close-up view of the target.

SMD 3.0

Empowered by deep-learning algorithms, Dahua SMD filters out motion detection alarms triggered by targets that are not a concern. It quickly recognizes humans and vehicles, triggering alarms when an intrusion occurs.

Smart Hybrid Zoom

By integrating multiple sensors with various fixed lenses, this camera delivers exceptional zoom performance. When the built-in AI algorithm detects a human, the lens automatically zooms in, tracks the target's movement, and effortlessly captures both close-up and distant scenes for precise monitoring.

Technical Specification

Camera

Image Sensor	Fixed Lens: 1/1.8" CMOS PT Lens: 1/2.8" CMOS
Pixel	Fixed Lens: 4 MP PT Lens: 2 MP
Max. Resolution	Fixed Lens: 2688 (H) × 1520 (V) PT Lens: 1920 (H) × 1080 (V)
ROM	256 MB
RAM	512 MB
Electronic Shutter Speed	1 s–1/100,000 s
Scanning System	Progressive
Min. Illumination	Fixed Lens: 0.0005 lux@F1.0 (Color, 30 IRE) 0 lux (Illuminator on) PT Lens: 0.0005 lux@F1.0(Color, 30 IRE) 0 lux (Illuminator on)
Illumination Distance	Fixed Lens: 30 m (98.43 ft)(Warm light) PT Lens: 50 m (164.04 ft) (Warm light)
Illuminator On/Off Control	Fixed Lens: Manual; Auto; Off PT Lens: Manual; Auto; Off
Illuminator Number	Fixed Lens: 4 (Warm light) PT Lens: 4 (Warm light)

Lens

Focal Length	Fixed Lens: 2.8 mm PT Lens: 3.6 mm; 8.4 mm
Max. Aperture	Fixed Lens: F1.0 PT Lens: 3.6 mm: F1.0; 8.4 mm: F1.0
Field of View	Fixed Lens: H:112 °; V: 60°; D: 134° PT Lens: H: 81.5° – 15.1°; V: 44.3° – 8.4°; D: 96.3° – 17.88°
Hybrid Zoom	6×
Close Focus Distance	Fixed Lens: 2.8 mm PT Lens: 3.6 mm; 8.4 mm: Fixed Lens: 1.8 m (5.91 ft) PT Lens: 3.6 mm: 1.7 m (5.58 ft); 8.4 mm: 6 m (19.69 ft)
Iris Control	Fixed Lens: Fixed Iris PT Lens: Fixed Iris

DORI Distance

Lens	Detect	Observe	Recognize	Identify
Fixed Lens: 2.8 mm PT Lens: 3.6 mm; 8.4 mm	120 m (126.71 ft)	47.4 m (50.07 ft)	24 m (25.33 ft)	12 m (12.66 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	Fixed Lens: Pan: 0° to 285°; Tilt: -7° to +20° (manual) PT Lens: Pan: 0° to 350°; Tilt: 0° to +90° (Electric)
Manual Control Speed	Pan: 40°/s; Tilt: 40°/s
Preset Speed	Pan: 40°/s; Tilt: 40°/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; Linkage 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	Fixed Lens: 4M (2688 × 1520); 4M (2560× 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M(1280 ×960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) PT Lens: 1080p (1920 × 1080); 1.3M (1280 ×960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Fixed Lens: Main stream: 4M/3M/1080p/1.3M/720p@(1–25/30 fps) Sub stream: D1/VGA/CIF@(1–25/30 fps) PT Lens: Main stream: 1080p/1.3M/720p@(1–25/30 fps) Sub stream: D1/VGA/CIF@(1–25/30 fps)
Bit Rate Control	CBR/VBR

Video Bit Rate	Fixed Lens: H264: 96 kbps–8192 kbps H265: 38 kbps–8192 kbps PT Lens: H264: 64 kbps–8192 kbps H265: 25 kbps–7424 kbps
Day/Night	Fixed Lens: Color PT Lens: Color
BLC	YES
WDR	Fixed Lens: 120dB PT Lens: DWDR
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	Fixed Lens: Electronic PT Lens: Electronic
Image Rotation	180°
S/N Ratio	≥55 dB

Audio

Audio Compression	PCM; G711A; G711Mu
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 9 and later versions Chrome 41 and later versions Firefox 50 and later versions Safari 10 and later versions
Management Software	DMSS
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, 1.5A ± 25% PoE（802.3af）
Power Consumption	Basic: 3.9 W Max. (Basic power consumption + WDR + intelligence on + Warm light on + PTZ operation + Speaker): 12W
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	191 mm × 130 mm × 216.6 mm (7.52" × 5.12" × 8.53") (L × W × H)
Net Weight	1.1 kg (2.43 lb)
Gross Weight	1.7 kg (3.75 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

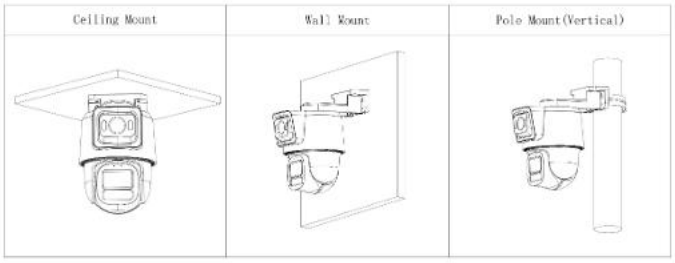
Type	Model	Description
IP CAMERA	DH-IPC-PTS2449C-4E3Z-S-PV-PRO	4MP+2MP WizColor Vari-focal Network PT Camera
Accessories (Optional)	DH-PFA2590	Pole Mount Bracket

Accessories

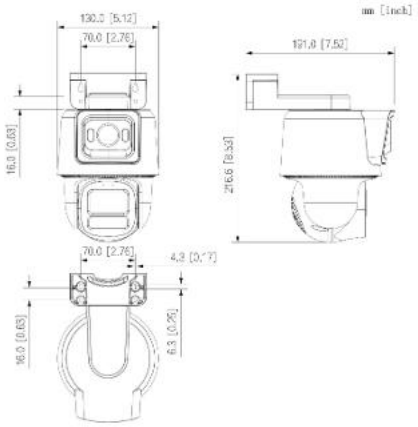
Optional:



DH-PFA2590
Pole Mount Bracket



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.