

DH-SD2C400NA-B-PV-PRO

4MP WizColor WizSense Network PT Camera



WizSense

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.

- 1/1.8" 4Megapixel CMOS.
- WizColor Technology.
- Max. 25/30 fps@4MP.
- H.265 Encoding.
- SMD3.0.
- Perimeter Protection.
- Two-way Talk.
- Auto Tracking Lite.
- Tour.
- IP66 protection.



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.

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.

Technical Specification

Camera

| | |
|----------------------------|--|
| Image Sensor | 1/1.8" CMOS |
| Pixel | 4 MP |
| Max. Resolution | 2560 (H) × 1440 (V) |
| ROM | 256 MB |
| RAM | 256 MB |
| Electronic Shutter Speed | 1 s–1/30,000 s |
| Scanning System | Progressive |
| Min. Illumination | 0.0005 lux@F1.0 (Color, 30 IRE); 0 lux (Illuminator on) |
| Illumination Distance | 4 mm: 30 m (164.04 ft) (Warm light) |
| Illuminator On/Off Control | Manual; auto; off |
| Illuminator Number | 4 (warm light) |

Lens

| | | | | | |
|----------------------|---|-------------------------|------------------------|------------------------|----------------------|
| Focal Length | 4 mm | | | | |
| Max. Aperture | F1.0 | | | | |
| Field of View | 4 mm: H: 97°; V: 52°; D: 114° | | | | |
| Close Focus Distance | 4 mm: 2.6 m (8.53 ft) | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | 4 mm | 70.34 m (230.45 ft) | 28.14 m (92.24 ft) | 14.07 m (46.16 ft) | 7.03m (23.05 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 | 300 |
| Tour | 8 (up to 32 presets per tour) |
| Power-off Memory | Yes |
| Idle Motion | Preset;Tour |

Smart Event

| | |
|-------------------|------------------------|
| IVS | Tripwire and 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 | supports importing custom voice content;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 |
| Resolution | 4M (2560 × 1440); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240) |
| Video Frame Rate | Main stream: 4M/1080p/720p@(1–25/30 fps) Sub stream 1: D1/VGA/CIF@(1–25/30 fps) |
| Bit Rate Control | CBR/VBR |
| Video Bit Rate | H264: 3,072 kbps–15,104 kbps H265: 1,280 kbps–9,216 kbps |
| Day/Night | Color/B/W |
| BLC | Yes |
| WDR | DWDR |
| HLC | Yes |
| White Balance | Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp |
| Gain Control | Auto; manual |
| Noise Reduction | 2D NR; 3D NR |
| Motion Detection | Yes |
| Defog | Electronic |
| Digital Zoom | 16 x |
| 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;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 (Up to 256 GB); FTP |
| Browser | IE: IE 7 and later versions; Chrome; Firefox; Safari |
| Management Software | DMSS;5 Series NVR;DSS Pro |
| 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; preset; recording; audio; sending email |
| 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 \pm 10% PoE (802.3af) |
| Power Consumption | PoE: Basic: 3.6 W Max: 9.5 W (illuminator + PTZ) |
| Power Adapter | Optional |

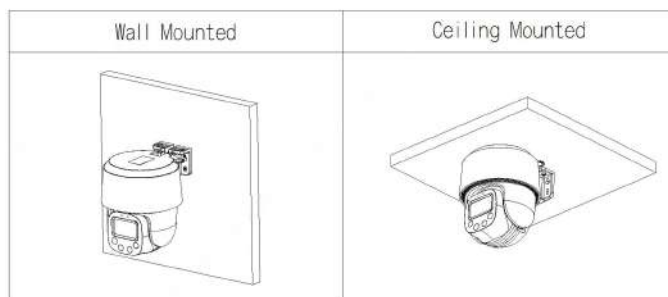
Environment

| | |
|-----------------------|---|
| Operating Temperature | -30 °C to +55 °C (-22 °F to +131 °F) |
| Operating Humidity | \leq 95% |
| Protection | TVS 2000 V lightning proof; surge protection; voltage transient protection;Waterproof and Dustproof |

Structure

| | |
|--------------------|---|
| Product Dimensions | 153.5 mm \times Φ 129.3 mm (6.04" \times Φ 5.09") |
| Net Weight | 0.66 kg (1.46 lb) |
| Gross Weight | 1 kg (2.20 lb) |

Installation



Ordering Information

| Type | Model | Description |
|-------------------|-----------------------|---|
| NETWORK PT CAMERA | DH-SD2C400NA-B-PV-PRO | 4MP WizColor WizSense Network PT Camera |