DH-SD2C405NB-GNY-A-PV-S2

4MP 5x Smart Dual Light WizSense Network PTZ 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

With its powerful optical zoom, and accurate pan and tilt capabilities, the SD2C series camera has a wide monitoring range and produces highly detailed visuals. It supports two-way talk, allowing you to communicate with people in front of the camera in real time. It also records videos in full color, and uses Smart Dual Light to help produce vivid images, making it easy to obtain information on events, and reduce light pollution.

Functions

IVS

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

Two-way Talk

With its built-in high-sensitivity microphone and high-power speaker, the camera realizes two-way talk through the mobile app.

Siren and Light Active Deterrence

Dahua siren and light active deterrence network camera supports the white light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in one voice, and supports customized voice importing.

- 1/2.8" 4Megapixel CMOS
- 5× optical zoom
- Max. 25/30 fps@4MP
- IP66
- IVS(Tripwire and Intrusion Detection)
- Built-in Mic and Speaker for Two-way Talk
- SMD 3.0
- Warm Light & Sound Warning
- Auto Tracking Lite

Two-way Talk	Smart Dual Light	WDR	IP66

Smart Dual Light

Dahua Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the white light is on, and the camera records the full-color video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the white light is off and the IR illuminator is on, which reduces light pollution efficiently.

Wide Dynamic Range

The camera produces vivid images, even in high-contrast lighting conditions, by using industry-leading wide dynamic range (WDR) technology. For scenes that quickly alternate between bright and low lighting, WDR adjusts to fully capture both the bright and dark areas of a scene, producing superior quality videos.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) × 1440 (V)
ROM	128 MB
RAM	128 MB
Electronic Shutter Speed	1 s–1/30,000 s
Scanning System	Progressive
Min. Illumination	0.05 lux@F1.6 (Color, 30 IRE); 0.005 lux@F1.6 (B/W, 30 IRE); 0 lux (Illuminator on)
Illumination Distance	30 m (98.43 ft) (warm light); 30 m (98.43 ft) (IR)
Illuminator On/Off Control	Manual; auto; off
Illuminator Number	2 (IR light); 2 (warm light)

Lens

Focal Length	2.7 mm–13.5 mm
Max. Aperture	F1.6–F3.0
Field of View	H: 96.73°–24.76°; V: 51.98°–13.91°; D: 110.58°–29.74°
Optical Zoom	5×
Focus Control	Auto; Semi-auto; Manual
Close Focus Distance	0.6 m (1.97 ft)
Iris Control	Fixed

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.7 mm–13.5 mm	250 m (820.21 ft)	98.7 m (323.82 ft)	50 m (164.04 ft)	25 m (82.02 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°–74°/s; Tilt: 0.1°–36.4°/s
Preset Speed	Pan: 0.1°–62°/s; Tilt: 0.1°–36.3°/s
Preset	300
Power-off Memory	Yes
Idle Motion	Preset

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	Offers 1 sound alarm and supports importing 10 custom sound alarms. Sound: 0–100 Play times can be set from 1 to 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 (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)
Video Frame Rate	Main stream: 4M/1080p/1.3M/720p@(1–25/30 fps) Sub stream 1: D1/VGA/CIF@(1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 96 kbps–8,192 kbps H265: 38 kbps–8,192 kbps
Day/Night	Auto (ICR); 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
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Region of Interest (RoI)	Yes
Image Stabilization	Electronic Image Stabilization (EIS)
Defog	Electronic
Digital Zoom	5.5x
Image Rotation	180°
S/N Ratio	≥55 dB

Audio

Audio Compression	PCM; G.711a; G.711Mu; G.726
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; SSL; FTP; ARP; RTCP; RTP; IP Filter; RTMP
Interoperability	ONVIF (Profile S & Profile G & Profile T);CGI;SDK;P2P
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;DSS Pro
Mobile Client	iOS;Android

Certification

Certifications	CE: EN55032/EN50130-4

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, 1.5 A ± 10% PoE (802.3af)
Power Consumption	Basic: 5 W; Max: 12.95 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	155.5 mm × Φ129.6 mm (6.12" × Φ5.10")
Net Weight	0.65 kg (1.43 lb)
Gross Weight	0.715 kg (1.58 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 PTZ Camera	DH-SD2C405NB-GNY-A-PV-S2	4MP 5x Smart Dual Light WizSense Network PTZ Camera

Installation

Wall Mounted   Ceiling Mounted

Dimensions (mm[inch])