

DH-SD2A500NB-GNY-A-PV

5MP Smart Dual Light 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

The Active Defense series of small PT cameras raises the bar on performance. After detecting an intrusion, it triggers sound and light alarms, and then instantly relays vital information on the intrusion to the mobile client, keeping you informed no matter where you are. It supports two-way talk, allowing you to communicate with people in front of the camera in real time. It also can record full-color videos and information of key events using Smart Dual Illuminators, effectively reducing light pollution.

Functions

IVS

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

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.

- 1/2.8" 5Megapixel STARVIS™ CMOS.
- Max. 25/30fps@5MP.
- Human/vehicle detecton.
- Tripwire, intrusion.
- H.265 encoding.
- PoE.
- Two-way talk.
- Sound and light alarm.
- IR and white light, three night view modes.
- IP66.



Two-way Talk



Human Detection



Smart Dual Light

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.

Human Detection

Dahua intelligent algorithms extract moving human targets from videos and filters out alarms that are triggered by non-human targets to increase the accuracy and effectiveness of alarms.

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.

Technical Specification

Camera

Image Sensor	1/2.8" CMOS
Pixel	5 MP
Max. Resolution	2560 (H) × 1920(V)
ROM	128 MB
RAM	128 MB
Electronic Shutter Speed	1 s–1/100,000 s
Scanning System	Progressive
Min. Illumination	0.05 lux@F1.6 (Color, 30 IRE); 0.005 lux@F1.6 (B/W, 30 IRE);
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	4.0 mm				
Max. Aperture	F1.6				
Field of View	H: 80.4°; V: 58.1°; D: 104.8°				
Close Focus Distance	0.3 m (0.98 ft)				
Iris Control	Fixed				
DORI Distance	Lens	Detect	Observe	Recogniz e	Identify
	4.0 mm	77.4 m (253.94 ft)	31.0 m (101.71 ft)	15.5 m (50.85 ft)	7.74 m (25.39 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 345°; Tilt: 0° to +80°
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; intrusion
Human Detection	Yes

Intelligence

SMD	SMD 3.0
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Active Deterrence

Light Warning	Warm light warning; Flash duration: 5 s–30 s; Flash frequency: high, medium, low
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Sound Warning

Offers 1 sound alarm and 10 custom sound alarms can be imported;
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	5M (2560 × 1920); 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Main stream: 5M/4M/3M/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: 104 kbps–8,192 kbps H265: 41 kbps–8,192 kbps
Day/Night	Auto (ICR); 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
Region of Interest (RoI)	Yes
Defog	Electronic
Image Rotation	180°
Privacy Masking	4 area
S/N Ratio	≥55 dB

Audio

Audio Compression	PCM ; G.711a ; G.711Mu ; G.726 ; AAC ;
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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	CGI;SDK;ONVIF (Profile S & Profile T);RTMP;P2P
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth: 64 M)
Storage	Micro SD card (256 GB); FTP
Browser	IE: IE 7 and later versions; Chrome; Firefox; Safari
Management Software	Smart PSS;DMSS;Player;ConfigTool;NVR;Smart Player
Mobile Client	iOS;Android

Certification

Certifications	CE: EN55032/EN50130-4/EN IEC61000-3-3/EN IEC61000-3-2/EN55024/EN55035/EN62368-1 FCC: 47 CFR FCC Part15, Subpart B, ANSI C63.4:2014
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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: 3.5 W; Max: 10 W (illuminator)
Power Adapter	Optional

Environment

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

Structure

Product Dimensions	140.5 mm × Φ111.0 mm (5.53" × Φ4.37")
Net Weight	0.5 kg (1.10 lb)
Gross Weight	1 kg (2.20 lb)

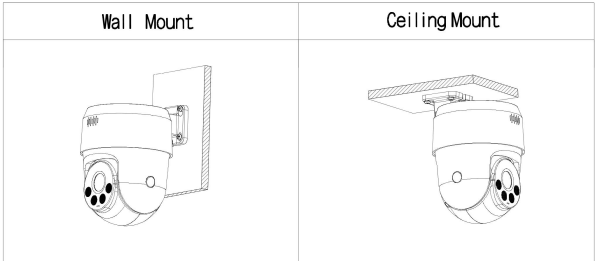
Filter

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
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Ordering Information

Type	Model	Description
NETWORK PT CAMERA	DH-SD2A500NB-GNY-A-PV	5MP Smart Dual Light Network PT Camera

Installation



Dimensions (mm[inch])

