dahua TECHNOLOGY

DH-SD2A500HB-GN-AW-PV-S2

5MP Full-color Network PT Camera

- 1/2.8" 5Megapixel STARVIS™ CMOS.
- Max. 20 fps@5MP.
- Human detection.
- Tripwire, intrusion.
- H.265 encoding.
- Wi-Fi.
- Two-way audio.
- Sound and light alarm.
- IR and white light, three night view modes.
- IP66.

Two-way Talk | Smart Dual Illuminators | IVS | Active Deterrence | Human Detection

System 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 records videos in full color, and uses Smart Dual Illuminators to help produce vivid images, making it easy to obtain information on events, and reduce light pollution.

Functions

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.

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

Smart Dual Illuminators
Dahua Smart Dual Illuminators 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.

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

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.

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	1/3 s–1/100,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (illuminator on)
Illumination Distance	30 m (98.42 ft) (IR) 30 m (98.42 ft) (white light)
Illuminator On/Off Control	Manual; auto; off
Illuminator Number	2 (IR light) 2 (White 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	Detect	Observe	Recognize	Identify
	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: 62°/s Tilt: 36.3°/s
Preset	300.0
Power-off Memory	Yes
Idle Motion	Preset

Smart Event

IVS	Tripwire; intrusion
Human Detection	Yes

Active Deterrence

Light Warning	White light warning Flash duration: 5 s–30 s Flash frequency: high, medium, low
Sound Warning	Sound warning alarm: Customizable Alarm duration: 10 s, 20 s, 30 s

Video

Video Compression	H.264B;Smart H.265+;H.264;H.265;MJPEG(Sub Stream);Smart H.264+
Streaming Capability	2 streams
Resolution	5M (2560 × 1920); 4M (2560 × 1440); 1080P (1920 × 1080); 960P(1280x960); 720P (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Main stream: 5M(1–20 fps),4M/1080p/1.3M/720p (1–25/30 fps) Sub stream: D1/CIF (1–25/30 fps)
Bit Rate Control	CBR/VBR
Video Bit Rate	H264: 512–8192 kbps H265: 233–7680 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
WDR	DWDR
HLC	Yes
White Balance	Auto; manual; tracking; indoor; outdoor; sodium lamp; street lamp; natural light
Gain Control	Auto; manual
Noise Reduction	2D NR; 3D NR
Motion Detection	Yes
Image Rotation	180°
S/N Ratio	≥ 55 dB

Audio

Audio Compression	PCM; G.711a; G.711Mu; G.726; MPEG2-Layer2; G722.1

Network

Network Port	RJ-45 (10/100 Base-T)
Wi-Fi	Yes
Wi-Fi–Wireless Standard	802.11n;IEEE802.11b;802.11g
Wi-Fi–Wireless Frequency Range	2.4GHz
Wi-Fi–Wireless Transmission Rate	150Mbps
Network Protocol	UDP;FTP;RTMP;IPv6;IPv4;IP Filter;DNS;RTCP;HTTP;NTP;SSL;DHCP;RTP;SMTP;HTTPS;TCP/IP;RTSP;DDNS;ARP
Interoperability	RTMP;CGI;SDK;ONVIF (Profile S&T);P2P
Streaming Method	Unicast/Multicast
User/Host	20
Storage	Micro SD card (support max. 512 GB); FTP
Browser	IE: IE 7 and later versions; Chrome; Firefox; Safari
Management Software	Player;Smart Player ;Imou;DMSS;ConfigTool;NVR;Smart PSS
Mobile Client	iOS; Android

Certification

Certification	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

Port

Audio Input	1 channel (built-in mic)
Audio Output	1 channel (built-in speaker)
Two-way Audio	Yes
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
Audio I/O	1/1

Power

Power Supply	12 VDC/1.5 A±10%
Power Consumption	Basic: 3.5 W Max.: 11 W (illuminator)

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	140.5 mm × Φ111.0 mm (5.53" × Φ4.45")
Net Weight	0.5 kg (1.10 lb)
Gross Weight	1 kg (2.20 lb)

Ordering Information

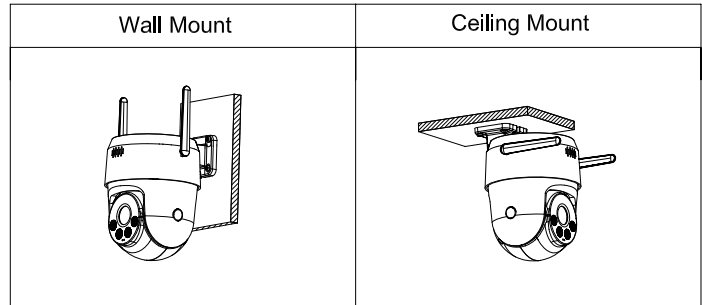| Type	Model	Description
5MP PT Camera	DH-SD2A500HB-GN-AW-PV-S2	5MP Full-color Network PT Camera
	SD2A500HB-GN-AW-PV-S2	5MP Full-color Network PT Camera
Accessories (Optional)	DC 12 V/1.5 A	Power Adapter
	PFM900-E	Integrated Mount Tester
	TF-P100	Memory Card

Accessories

Optional:

DC 12 V/1.5 A Power Adapter

PFM900-E Integrated Mount Tester

TF-P100 MicroSD Memory Card

Wall Mount	Ceiling Mount

Dimensions (mm[inch])