dahua
TECHNOLOGY

DH-SD3A405-GN-PV1

4MP IR Light Network PTZ Camera

· 1/3" 4Megapixel STARVIS™ CMOS
· IR distance up to 30 m
· H.265 Encoding
· PoE
· Max. 25/30 fps@4M
· IVS

| Two-way Audio | Sound and Light Alarm | Human Detection | Tripwire | Intrusion |

System Overview

The Active Defense series of small PTZ 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 uses IR to present vivid images in black and white for nighttime monitoring.

Functions

IVS

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

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.

Red/Blue Light Warning

For the active deterrence of intrusions and their intervention, a sound alarm and a red and blue light alarm are triggered when a perimeter breech occurs. For the sound alarm, multiple audio files are available for selection, along with the option to import your own customized audios.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 codec that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, a flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality videos without straining the network. Smart H.265+ technology outranks standard H.265 video compression, reducing bit rate and storage requirements by up to 70%.
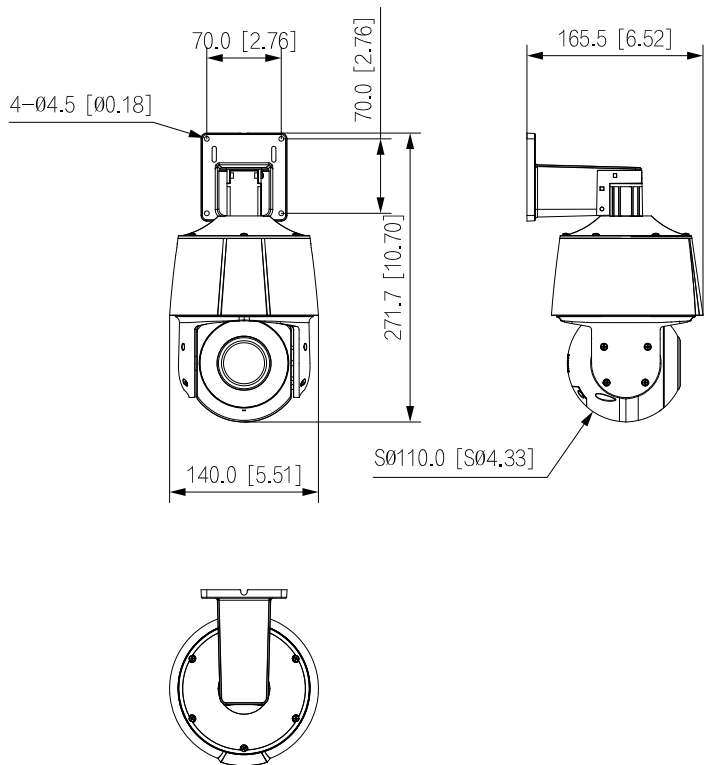
Scene

It is suitable for families, fish ponds, orchards, rural courtyards, small factories, supermarkets and other places.

Technical Specification

Camera

Image Sensor	1/3" CMOS
Pixel	4 MP
Max. Resolution	2560 (H) x 1440 (V)
ROM	128 MB
RAM	128 MB
Electronic Shutter Speed	1/3 s–1/100,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.05 lux@F1.7 B/W: 0.005 lux@F1.7 0 lux (IR light on)
Illumination Distance	30 m (98.42 ft) (IR)
Illumination On/Off Control	Auto; Manual; Off
Illumination Number	4 (IR)

Lens

Focal Length	2.7–13.5 mm
Max. Aperture	F1.7–F3.0
Field of View	H: 90.7°–27.9°; V: 48.2°–15.7°; D: 107.6°–32°
Focus Control	Auto; semi-auto; manual
Close Focus Distance	1 m (3.28 ft)
Iris Control	Fixed

DORI Distance	Detect	Observe	Recognize	Identify
	206.6 m (677.82 ft)	82.6 m (270.99 ft)	41.3 m (135.49 ft)	20.7 m (67.91 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 355° Tilt: −15° to +90°
Manual Control Speed	Pan: 0.1°/s–26°/s Tilt: 0.1°/s–17.5°/s
Preset Speed	Pan: 26°/s; Tilt: 17.5°/s
Preset	300
Power-off Memory	Yes

Smart Event

IVS	Tripwire; intrusion
Human Detection	Yes

Active Deterrence

Light Warning	Red and blue 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	Smart H.265+; H.265; Smart H.264; H.264; H.264B; MJPEG (Sub Stream 1)
Streaming Capability	2 Streams
Resolution	4M (2560 × 1440); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)
Video Frame Rate	Main stream: 4M/1080p/1.3M/720p (1–25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps)
Bit Rate Control	CBR; VBR
Video Bit Rate	H.264: 32 kbps–8192 kbps H.265: 32 kbps–8192 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
Image Rotation	180°
S/N Ratio	≥55 dB

Audio

Audio Compression	G.711a; G.711Mu; G.726; AAC; MPEG2-Layer2; G722.1; G729; G723

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; TCP
Interoperability	CGI
Streaming Method	Unicast; Multicast
User/Host	20
Storage	FTP; Micro SD card (256 GB)
Browser	IE 7 and later versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari
Management Software	Smart PSS; DMSS; player; configtool; NVR; Smart Player
Mobile Client	iOS; Android; iPhone; iPad; Windows Phone

Certification

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014

Port

Audio Input	1 channel (built-in Mic)
Audio Output	1 channel (built-in speaker)
Audio I/O	1/1
Two-way Audio	Yes
Alarm Linkage	Capture; preset; recording; send email; audio

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: 2.5 W Max.: 12.95 W (illuminator)

Environment

Operating Temperature	−30 °C to 60 °C (−22 °F to +140 °F)
Operating Humidity	≤95%
Protection	IP66; TVS 2000 V lightning proof; surge protection; voltage transient protection

Structure

Product Dimensions	271.7 mm × 165.5 mm × 140 mm (10.70" × 6.52" × 5.51")
Net Weight	1.07 kg (2.36 lb)
Gross Weight	1.46 kg (3.21 lb)

Ordering Information

Type	Model	Description
4M Camera	DH-SD3A405-GN-PV1	4MP IR Light Network PTZ Camera
	SD3A405-GN-PV1	4MP IR Light Network PTZ Camera
Accessories (Optional)	DC12V/1.5A	Power Adapter

Accessories

Optional:

DC12V/1.5A
Power Adapter

Wall Mount	Ceiling Mount	Pole Mount(Vertical)
/	/	/

Dimensions (mm[inch])