

DH-SD3A400-GNP-B-PV

4MP Full-color Active Deterrence WizSense Network PT Camera



Wiz Sense

- 1/2.8" 4Megapixel STARVIS™ CMOS
- Starlight technology
- 120 dB true WDR, 3D DNR
- Max. 25/30 fps@4M, 25/30 fps@1080p
- IP66
- PoE



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.

System Overview

The camera delivers 4MP resolution at 25/30 fps, and has very excellent low light performance due to the latest starlight technology. SD3A series is equipped with smooth control, high-quality image and good protection, which makes it meet small and medium-sized video surveillance applications.

Functions

Perimeter Protection

Automatically filters out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improves alarm accuracy.

Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 Lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Environment

Dahua cameras operate in extreme temperature environments, rated for use in temperatures from -30°C to $+60^{\circ}\text{C}$ (-22°F to $+140^{\circ}\text{F}$) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP66 Ingress Protection rating makes it suitable for demanding outdoor applications.

Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

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, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

Technical Specification

Camera

Image Sensor	1/2.8" STARVIS™ CMOS
Pixel	2560 (H) x 1440 (V)
Max. Resolution	4MP
ROM	256 MB
RAM	512 MB
Electronic Shutter Speed	1/3 s–1/100,000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005 Lux@F1.0 B/W: 0.0005 Lux@F1.0 0 Lux (illuminator on)
Illumination Distance	30 m (98.43 ft)
Illuminator On/Off Control	Auto; Manual; Off
Illuminator Number	2 white lights

Lens

Focal Length	4 mm			
Max. Aperture	F1.0			
Field of View	H: 76.9°; V: 41.8°; D: 92°			
Close Focus Distance	2 m (6.56 ft)			
Iris Control	Fixed			
DORI Distance	Detect	Observe	Recognize	Identify
	79.9 m (262.14 ft)	31.9 m (104.66 ft)	15.7 m (51.51 ft)	7.4 m (24.28 ft)

PTZ

Pan/Tilt Range	Pan: 0° to 355° Tilt: –15° to +90°
Manual Control Speed	Pan: 0.1°/s–80°/s Tilt: 0.1°/s–56°/s
Preset Speed	Pan: 81°/s; Tilt: 43°/s
Preset	300
Power-off Memory	Yes
Idle Motion	Preset

General Intelligence

Event Trigger	Motion detection, video tampering, network disconnection, IP address conflict, illegal access, and storage anomaly
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Artificial Intelligence

Perimeter Protection	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
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Video

Compression	H.265; H.264B; H.264H; MJPEG (Sub Stream); H.265+; H.264+
Streaming Capability	3 streams

Resolution	4M (2560 × 1440); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576); CIF (352 × 288)
Frame Rate	Main stream: 4M (1–25/30 fps) 1080P/1.3M/720P (1–25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 1080P/1.3M/720p (1–25/30 fps) D1/CIF (1–25/30 fps)
Bit Rate Control	Variable; Constant
Bit Rate	H.264: 32 Kbps–8192 Kbps H.265: 32 Kbps–8192 Kbps
Day/Night	Yes
BLC	Yes
WDR	120 dB
HLC	Yes
White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural; street lamp
Gain Control	Auto; Manual
Noise Reduction	2D/3D
Motion Detection	Yes
Region of Interest (RoI)	Yes
Defog	Electronic
Flip	0°; 180°
S/N Ratio	≥ 55 dB

Audio

Compression	G.711a; G.711Mu; G.726; AAC; MPEG2-Layer2; G722.1
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Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; QoS; FTP; SMTP; UPnP; SNMP v1/v2c/v3 (MIB-2); DNS; DDNS; NTP; RTSP; RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPoE; ARP; RTCP
Interoperability	ONVIF Profile S&G&T; CGI
Streaming Method	Unicast; multicast
User/Host	20 (total bandwidth: 48 MB)
Storage	FTP; Micro SD card (512 GB); NAS
Browser	IE7 and later versions Chrome 42 and later versions Firefox 52 and later versions Safari
Management Software	DMSS; DSS
Mobile Phone	iOS; Android

Certification

Certifications	CE: EN55032/EN55024/EN50130-4/EN55035/EN61000-3-2/EN61000-3-3/EN62368-1 FCC: Part15 subpartB
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Port

Audio Input	1 (built-in Mic)
Audio Output	1 (built-in speaker)

Two-way Audio	Yes
Alarm Linkage	Capture; preset; SD card record; send email
Alarm Event	Motion/tampering detection; audio detection; network disconnection detection; IP conflict detection; encoder state detection; memory card state detection; memory space detection

Power

Power Supply	12V DC/1.5A ± 10% PoE (802.3af)
Power Consumption	Basic: 4.6W Max: 9.2W (illuminator on)

Environment

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

Structure

Casing	Plastic
Dimensions	271.7 mm × 124.1 mm × 142.5 mm (10.70" × 4.89" × 5.61")
Net Weight	1 kg (2.20 lb)
Gross Weight	1.46 kg (3.22 lb)

Ordering Information

Type	Part Number	Description
4MP Camera	DH-SD3A400-GNP-B-PV	4MP Full-color Active Deterrence WizSense Network PT Camera, PAL
	DH-SD3A400N-GNP-B-PV	4MP Full-color Active Deterrence WizSense Network PT Camera, NTSC
	SD3A400-GNP-B-PV	4MP Full-color Active Deterrence WizSense Network PT Camera, PAL
	SD3A400N-GNP-B-PV	4MP Full-color Active Deterrence WizSense Network PT Camera, NTSC
Accessories	12V DC/1.5A	Power Adapter

Accessories

Included:



12V DC/1.5A Power Adapter

Wall Mount	Ceiling Mount	Pole Mount (Vertical)

Dimensions (mm[inch])

