

# DH-SD3A400-GN-A-PV

4MP IR and White Light Full-color Network PT Camera



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



## System Overview

Dahua Smart Dual Light Camera adopts advanced smart H.265 encoding technology with high encoding efficiency, provides high-quality video, and reduces the cost of transmission and storage. This series integrates infrared and warm light smart illumination, realizes human shape detection, siren and light active deterrence and other functions, achieves the application of retrospect, intervention and precaution.

## Functions

### IVS

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

### 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.

## Siren and Light Active Deterrence

The 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 the alarm voice, and supports customized voice importing.

### 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				
<b>Camera</b>				
Image Sensor	1/3" CMOS			
Max. Resolution	2560 (H) x 1440 (V)			
Pixel	4 MP			
ROM	128 MB			
RAM	128 MB			
Electronic Shutter Speed	1/3 s–1/100,000 s			
Scanning System	Progressive			
Min. Illumination	Color: 0.002 lux@F1.6 B/W: 0.0002 lux@F1.6 0 lux (illuminator on)			
Illumination Distance	30 m (98.42 ft) (IR) 30 m (98.42 ft) (white light)			
Illumination On/Off Control	Auto; Manual; Off			
Illumination Number	2 (IR light) 2 (white light)			
<b>Lens</b>				
Focal Length	4.0 mm			
Max. Aperture	F1.6			
Field of View	H:80.2°, V:43.1°, D:94.3°			
Close Focus Distance	0.3 m (0.98 ft)			
Iris Control	Fixed			
DORI Distance	Detect	Observe	Recognize	Identify
	55.1 m (180.77 ft)	21.9 m (71.85 ft)	10.6 m (34.78 ft)	4.6 m (15.09 ft)
<b>PTZ</b>				
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			
Idle Motion	Preset			
<b>Smart Event</b>				
IVS	Tripwire; intrusion			
<b>Active Deterrence</b>				
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			
<b>Video</b>				
Video Compression	H.265; H.264B; H.264; MJPEG(Sub Stream 1); smart H.265+; smart H.264+			

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	H264: 2304~8192Kbps H265: 768~6912Kbps
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; 3D
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

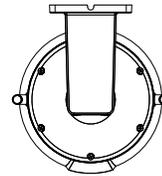
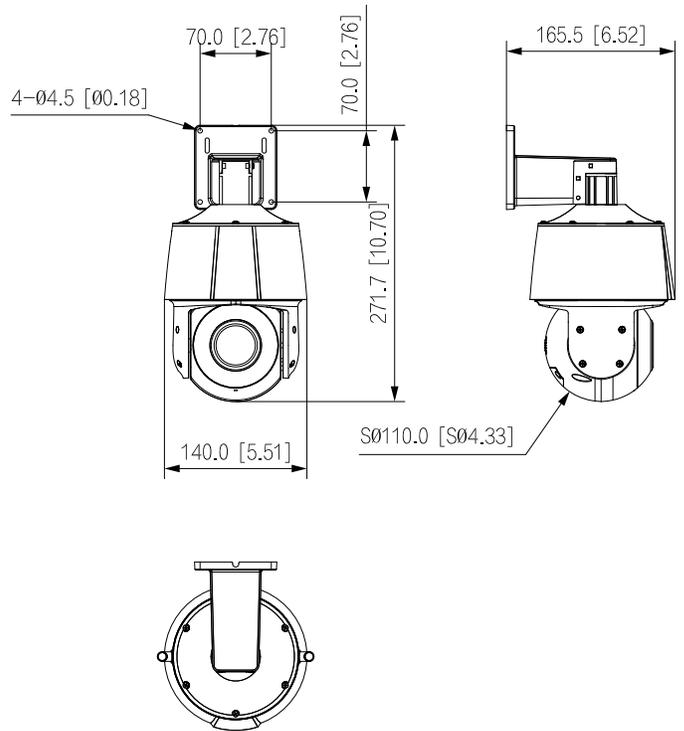
Network	
Network Port	RJ-45 (10/100 Base-T)
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP Filter; RTMP; TCP
Interoperability	ONVIF (Profile S&T); CGI
Streaming Method	Unicast; Multicast
User/Host	20
Storage	FTP; Micro SD card (256 G)
Browser	IE 7 and later versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari
Management Software	DMSS
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: 4 W Max: 12.95 W (illuminator)
Environment	
Operating Conditions	-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	
Product Dimensions	271.7 mm × 165.5 mm × 140 mm (107" × 6.52" × 5.51")
Net Weight	1.07 kg (2.36 lb)
Gross Weight	1.46 kg (3.21 lb)
*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.	

**Dimensions (mm[inch])**



**Ordering Information**

Type	Model	Description
4M Camera	DH-SD3A400-GN-A-PV	4MP IR and White Light Full-color Network PT Camera
	SD3A400-GN-A-PV	4MP IR and White Light Full-color Network PT Camera
Accessories (optional)	DC12V/1.5A	Power Adapter

**Accessories**

Optional:



DC12V/1.5A  
Power Adapter

Wall Mount	Ceiling Mount	Pole Mount (Vertical)