

DH-SD2A500-GN-AW-PV

5MP IR and White Light Full-color Network PT Camera



- 1/2.8" 5Megapixel STARVIS™ CMOS
- Max. 20 fps@5 MP
- 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



System Overview

Driven by advanced smart H.265 encoding technology, Dahua Smart Dual Illuminators Camera combines precision and reliability into one powerful camera, achieving high encoding efficiency, producing seamless videos and reducing cost on transmission and storage. To meet a wide range of shooting situations, this series of high-performant cameras features functions such as infrared and warm light smart illumination, human shape detection, and siren and light active deterrence. It also achieves the application of retrospect, intervention and precaution, delivering the convenience needed in a modern camera.

Functions

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.

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.

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.

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 use by families and in fish ponds, orchards, rural courtyards, small factories, supermarkets and other similar locations.

Technical Specification					Streaming Capability	
Camera					2 Streams	
Image Sensor	1/2.8" CMOS				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)
Pixel	5 MP				Video Frame Rate	Main stream: 5M (1–20 fps); 4M/1080p/1.3M/720p (1–25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps)
Max. Resolution	2560 (H) × 1920 (V)				Bit Rate Control	VBR; CBR
ROM	128 MB				Video Bit Rate	H.264: 32 kbps–8192 kbps H.265: 32 kbps–8192 kbps
RAM	128 MB				Day/Night	Auto (ICR); Color; B/W
Electronic Shutter Speed	1/3 s–1/100,000 s				BLC	Yes
Scanning System	Progressive				WDR	DWDR
Min. Illumination	Color: 0.005 lux@F1.6 B/W: 0.0005 lux@F1.6 0 lux (illuminator on)				HLC	Yes
Illumination Distance	30 m (98.42 ft) (IR) 30 m (98.42 ft) (white light)				White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural; street lamp
Illuminator On/Off Control	Manual; auto; off				Gain Control	Auto; Manual
Illuminator Number	1 (IR light) 2 (white light)				Noise Reduction	2D NR; 3D NR
Lens					Motion Detection	Yes
Focal Length	4.0 mm				Image Rotation	180°
Max. Aperture	F1.6				S/N Ratio	≥ 55 dB
Field of View	H: 80.4°; V: 58.1°; D: 104.8°				Audio	
Close Focus Distance	0.3 m (0.98 ft)				Audio Compression	G.711a; G.711Mu; G.726; G722.1; G.729; MPEG2-Layer2; G723
Iris Control	Fixed				Network	
DORI Distance	Detect	Observe	Recognize	Identify	Network Port	RJ-45 (10/100 Base-T)
	77.4 m (253.94 ft)	31.0 m (101.71 ft)	15.5 m (50.85 ft)	7.74 m (25.39 ft)	Wi-Fi	Yes
PTZ					Wi-Fi–Wireless Standard	802.11n; 802.11g; IEEE802.11b
Pan/Tilt Range	Pan: 0° to 345° Tilt: 0° to +80°				Wi-Fi–Wireless Transmission Rate	150 Mbps
Manual Control Speed	Pan: 0.1°–74°/s Tilt: 0.1°–36.4°/s				Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP Filter; RTMP; TCP
Preset Speed	Pan: 62°/s; Tilt: 36.3°/s				Interoperability	ONVIF Profile S&G&T; CGI
Preset	300				Streaming Method	Unicast; Multicast
Power-off Memory	Yes				User/Host	20
Idle Motion	Preset				Storage	FTP; Micro SD card (512 GB)
Smart Event					Browser	IE 7 and later versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari
IVS	Tripwire; intrusion				Management Software	Smart PSS; DMSS; player; configtool; NVR; Smart Player
Active Deterrence					Mobile Client	iOS; Android; iPhone; iPad; Windows Phone
Light Warning	White light warning Flash duration: 5 s–30 s Flash frequency: high, medium, low				Certification	
Sound Warning	Sound warning alarm: Customizable Alarm duration: 10 s, 20 s, 30 s				Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014
Video					Port	
Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; H.264B; MJPEG (Sub Stream 1)				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; audio; sending email
Alarm Event	Motion/Tampering detection; audio detection; network disconnection detection; IP conflict detection; memory card state detection; memory space detection; power exception detection

Power

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

Environment

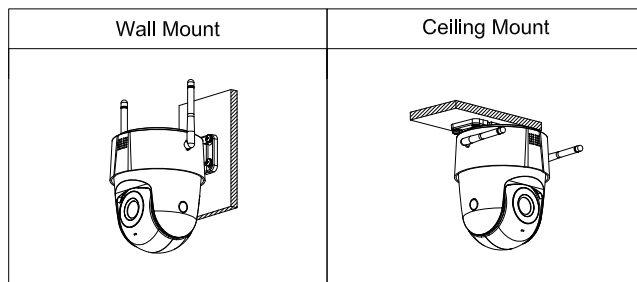
Operating Temperature	-30 °C to +55 °C (-22 °F to +131 °F)
Operating Humidity	≤ 95% RH
Protection	IP66; TVS 2000 V lightning proof; surge protection; voltage transient protection

Construction

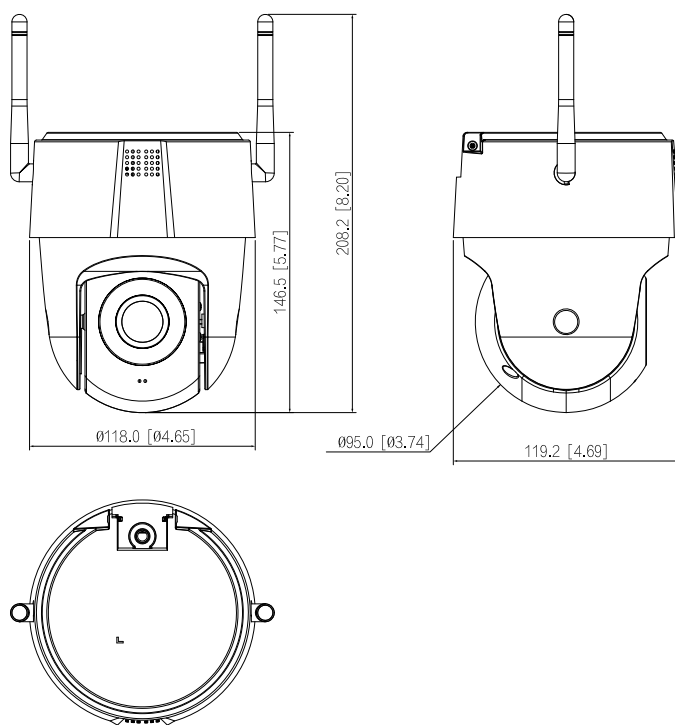
Product Dimensions	146.5 mm × Φ118.0 mm (5.77" × Φ4.65")
Net Weight	0.5 kg (1.10 lb)
Gross Weight	1 kg (2.20 lb)

Ordering Information

Type	Model	Description
5M Camera	DH-SD2A500-GN-AW-PV	5MP IR and White Light Network PT Camera
	SD2A500-GN-AW-PV	5MP IR and White Light Network PT Camera
Accessories (Optional)	DC12V/1.5A	Power Adapter



Dimensions (mm[inch])



Accessories

Included:



Mount Bracket

Optional:



DC12V/1.5A
Power Adapter