

# DH-SD2A200-GN-AW-PV

## 2MP IR and White Light Full-color Network PT Camera



- 1/2.8" 2Megapixel STARVIS™ CMOS
- Max. 25/30 fps@2 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				
<b>Camera</b>				
Image Sensor	1/2.8" CMOS			
Pixel	2 MP			
Max. Resolution	1920 (H) × 1080 (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@F2.0 B/W: 0.005 lux@F2.0 0 lux (IR/white light 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	1 (IR light) 2 (white light)			
<b>Lens</b>				
Focal Length	4.0 mm			
Max. Aperture	F2.0			
Field of View	H: 86.8°; V: 47.1°; D: 102.2°			
Close Focus Distance	0.6 m (1.97 ft)			
Iris Control	Fixed			
DORI Distance	Detect	Observe	Recognize	Identify
	53.6 m (175.85 ft)	21.4 m (70.21 ft)	10.7 m (35.10 ft)	5.4 m (17.72 ft)
<b>PTZ</b>				
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			
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	Smart H.265+; H.265; Smart H.264+; H.264; H.264B; MJPEG (Sub Stream 1)			
Streaming Capability	2 Streams			
Resolution	1080p (1920 × 1080); 960p (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352 × 240)			
Video Frame Rate	Main stream: 1080p/1.3M/720p (1–25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps)			
Bit Rate Control	VBR; CBR			
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; street lamp			
Gain Control	Auto; Manual			
Noise Reduction	2D NR; 3D NR			
Motion Detection	Yes			
Image Rotation	180°			
S/N Ratio	≥ 55 dB			
<b>Audio</b>				
Audio Compression	G.711a; G.711Mu; G.726; G722.1; G.729; MPEG2-Layer2; G723			
<b>Network</b>				
Network Port	RJ-45 (10/100 Base-T)			
Wi-Fi	Yes			
Wi-Fi–Wireless Standard	802.11n; 802.11g; IEEE802.11b			
Wi-Fi–Wireless Transmission Rate	150 Mbps			
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&G&T; CGI			
Streaming Method	Unicast; Multicast			
User/Host	20			
Storage	FTP; Micro SD card (512 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			
<b>Certification</b>				
Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014			
<b>Port</b>				
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**

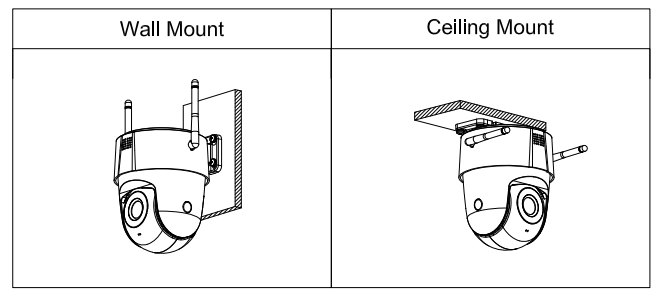
Power Supply	12 VDC, 1.5 A (± 10%)
Power Consumption	Basic: 3.5 W Max.: 11 W (illuminator)

**Environment**

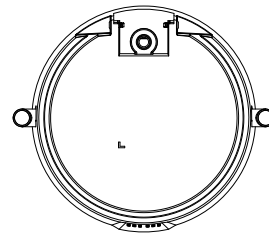
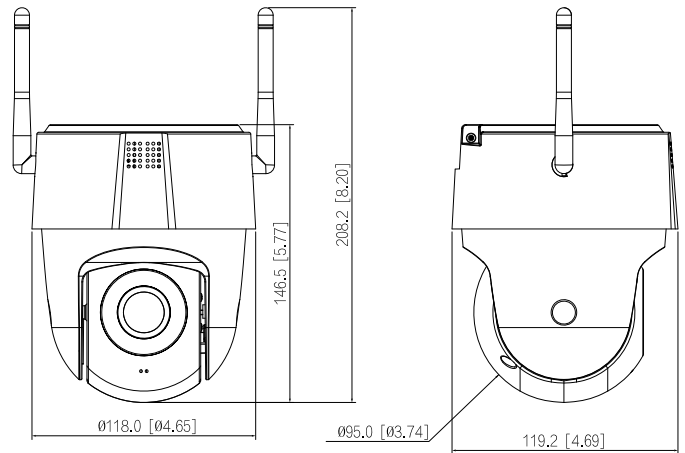
Operating Temperature	-30 °C to +55 °C (-22 °F to +131 °F)
Operating Humidity	≤ 95% RH
Protection	IP66; TVS 2000 V lightning proof; surge protection; voltage transient protection

**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)



**Dimensions (mm[inch])**



**Ordering Information**

Type	Model	Description
2M Camera	DH-SD2A200-GN-AW-PV	2MP IR and White Light Network PT Camera
	SD2A200-GN-AW-PV	2MP IR and White Light Network PT Camera
Accessories (Optional)	DC12V/1.5A	Power Adapter

**Accessories**

Included:



Mount Bracket

Optional:



DC12V/1.5A Power Adapter