

# DH-SD2A200-GN-AW-PV

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



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.

- · 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













# 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.

	Tachnical Specification					Streaming Canability	2 Streams
Resolution	Technical Specification				Streaming Capability	2 Streams 1080p (1920 × 1080); 960p (1280 × 960); 720p (1280	
Video Frame Rate		1/2.8" CMOS				Resolution	× 720); D1 (704 × 576/704 × 480); CIF (352 × 288/352
No.	•					Video Frame Rate	
MAM   128 MB	Max. Resolution	1920 (H) × 10	080 (V)			Bit Rate Control	VBR; CBR
Description   Shutter Speed   2/3 × 1/100,000   Section   Sectio	ROM	128 MB				Video Bit Rate	·
Scanning System	RAM	128 MB				Day/Night	Auto (ICR); Color; B/W
Min.	Electronic Shutter Speed	1/3 s-1/100	,000 s			BLC	Yes
Min.	Scanning System	Progressive				WDR	DWDR
Illumination Distance   30 m (98.42 tr) (white light)	Min. Illumination	B/W: 0.005 I	ux@F2.0			HLC	
Illuminator On/Off Control   Manual; auto; off   Manual; auto; off   Motion Detection   2D R; 3D NR	Illumination Distance			·)			natural; street lamp
Illuminator Number   1 (Ri light)   2 (White light)   2 (White light)   2 (White light)   3 (White light)   4 (White light)   4 (White light)   4 (White light)   4 (White light)   5 (White light warning   18 (White light warning	Illuminator On/Off Control	Manual; auto	o; off	•		Gain Control	Auto; Manual
Lens	Illuminator Number					Noise Reduction	2D NR; 3D NR
Max. Aperture	mummator Number	2 (white ligh	t)			Motion Detection	Yes
Max. Aperture   F2.0	Lens	Lens				Image Rotation	180°
Audio Compression   G.711a; G.711Mu; G.726; G722.1; G.729; MPEG2-Layer2; G723	Focal Length	4.0 mm				S/N Ratio	≥ 55 dB
Close Focus Distance   Detect   Observe   Recognize   Identify	Max. Aperture	F2.0				Audio	
Network   Netw	Field of View	H: 86.8°; V: 47.1°; D: 102.2°				Audio Compression	
Detect   Observe   Recognize   Identify	Close Focus Distance	e Focus Distance 0.6 m (1.97 ft)				Network	
DORI Distance    S3.6 m	Iris Control	Fixed				Network Port	RJ-45 (10/100 Base-T)
PTZ  Pan/Tilt Range	DORI Dictance	Detect	Observe	Recognize	Identify	Wi-Fi	Yes
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 %  Preset 300  Power-off Memory Ves  Idle Motion Preset  Smart Event IVS Tripwire; intrusion  Active Deterrence  White light warning Elash frequency: high, medium, low Sound Warning Sound Warning Sound Warning Sound Warning Sound Warning Smart H.265+; H.265; Smart H.264+; H.264; H.264; H.2648;  Wetwork Protocol  HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP FIRTER; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP FIRTER; TMP, TCP HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP FIRTER; TMP, TCP HTCP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP FIRTER; TMP, TCP HTCP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP FIRTER; ATMP, TCP HTCP; HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP FIRTER; ATMP, TCP HTCP; HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP FIRTER; TMP, TCP HTCP; HTTP; HTTPS; TCP/IP; IPv4; RTP; IP HTCP; HTTP; HTTPS; TCP/IP; IPv4; RTP; IP HTCP; HTTP; IP HTCP; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP HTCP; HTCP; TCP/IP; IPv4; RTP; IP HTCP; HTCP; TCP/IP; IPv4; RTP; IP HTCP; TCP/IP; IPv4; RTCP; IPv6; SNTP; IPv6; SNTP	DONI DISTANCE					Wi-Fi–Wireless Standard	802.11n; 802.11g; IEEE802.11b
Pan/Tilt Range Pan: 0" to 345" Tilt: 0" to +80" Tilt: 0.1"-0.4"/5 Tilt: 0.1"-36.4"/5  Preset Speed Pan: 62"/s; Tilt: 36.3"/5  Preset 300  Power-off Memory Idle Motion Preset Smart Event IVS Tripwire; intrusion  Active Deterrence  White light warning Flash duration: 5 s-3 os Flash frequency: high, medium, low Sound Warning Sound Warning Sound warning alarm: Customizable Alarm duration: 10 s, 20 s, 30 s  Video  Metwork Protocol DHCP; DNS; DDNS; IPV6; SSL; FTP; ARP; RTCP; RTP; IP Filter; RTMP; TCP Filter; RTMP; TCP Interoperability ONVIF Profile S&G&T CGI Streaming Method Unicast; Multicast User/Host 20 Storage FTP; Micro SD card (512 GB)  IE 7 and later versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari  Management Software Smart PSS; DMSS; player; configitool; NVR; Smart Player Mobile Client IOS; Android; iPhone; iPad; Windows Phone Certification  Certification  Video  Video  Smart H.265+; H.265+; H.264+; H.264+; H.2648;  Additional Compression  Smart H.265+; H.265+; Smart H.264+; H.264+; H.2648;  Additional Compression  Active Determine The proving place of the place of the proving place of the proving place of the place of the proving place of the proving place of the pla	PTZ						150 Mbps
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  Smart Event IVS Tripwire; intrusion  Active Deterrence  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 Compression  Network Protocol DHCP; DNS; DNS; IPV6; SSL; FTP; ARP; RTCP; RTP; IP Filter, RTMP; I	Pan/Tilt Range					Rate	
Preset 300  Power-off Memory Yes  Idle Motion Preset  IVS Tripwire; intrusion  Active Deterrence  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  Streaming Method Unicast; Multicast  User/Host 20  Storage FTP; Micro SD card (512 GB)  IE 7 and later versions Chrome 42 and earlier 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  Certification  Certification  Video Compression  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;	Pan: 0.1°-74°/s			Network Protocol	DHCP; DNS; DDNS; IPv6; SSL; FTP; ARP; RTCP; RTP; IP		
Preset 300  Power-off Memory Yes  Idle Motion Preset  Storage FTP; Micro SD card (512 GB)  IE 7 and later versions Chrome 42 and earlier versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari  Active Deterrence  Management Software Smart PSS; DMSS; player; configtool; NVR; Smart Player  Mobile Client iOS; Android; iPhone; iPad; Windows Phone  Flash frequency: high, medium, low  Sound Warning Sound warning alarm: Customizable Alarm duration: 10 s, 20 s, 30 s  Video  Port  Video Compression Smart H.265+; H.265; Smart H.264+; H.264; H.2648;	Preset Speed					Interoperability	ONVIF Profile S&G&T CGI
Power-off Memory  Yes  Idle Motion  Preset  Storage  FTP; Micro SD card (512 GB)  IE 7 and later versions Chrome 42 and earlier versions Firefox 52 and earlier versions Safari  Active Deterrence  Management Software  Mobile Client  Smart PSS; DMSS; player; configtool; NVR; Smart Player  Mobile Client  Sound Warning  Sound warning alarm: Customizable Alarm duration: 10 s, 20 s, 30 s  Video  Port  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;  Active Deterrence  Smart PSS; DMSS; player; configtool; NVR; Smart Player  Mobile Client  iOS; Android; iPhone; iPad; Windows Phone  Certification  Certification  Certification  Certification  Video Compression  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;	Preset					Streaming Method	Unicast; Multicast
Idle Motion Preset  Smart Event  IVS Tripwire; intrusion  Active Deterrence  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  Video  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;  Messer  Browser  Browser  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  Certification  Certification  Certification  Sound Warning  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;  Active Determine Smart PSS; DMSS; player; configtool; NVR; Smart Player  Mobile Client iOS; Android; iPhone; iPad; Windows Phone Certification  Certification  Certification  Cet: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014  Video Compression  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;	Power-off Memory					User/Host	20
Smart Event  IVS  Tripwire; intrusion  Active Deterrence  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  Video  Smart H.265+; H.265; Smart H.264+; H.264; H.2648;  Browser  Chrome 42 and earlier versions Firefox 52 and earlier versions  Safari  Management Software  Smart PSS; DMSS; player; configtool; NVR; Smart Player  iOS; Android; iPhone; iPad; Windows Phone  Certification  Certification  Certifications  CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014  Video Compression  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;	Idle Motion					Storage	FTP; Micro SD card (512 GB)
Active Deterrence  Management Software  Smart PSS; DMSS; player; configtool; NVR; Smart Player  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  Video  Smart H.265+; H.265; Smart H.264+; H.264; H.2648;  Active Deterrence  Management Software  Smart PSS; DMSS; player; configtool; NVR; Smart Player  iOS; Android; iPhone; iPad; Windows Phone  Certification  Certification  CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014  Video Compression  Smart H.265+; H.265; Smart H.264+; H.264; H.2648;					Decumen		
White light warning 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  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;  Advis best of the client in OS; Android; iPhone; iPad; Windows Phone  Certification  Certification  Certifications  Certifications  Port	IVS					Browser	
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  Video  Port  Smart H.265+; H.265; Smart H.264+; H.264; H.2648;  Autis broad of the property of t						Management Software	Smart PSS; DMSS; player; configtool; NVR; Smart Player
Flash frequency: high, medium, low  Certification  Sound Warning  Sound warning alarm: Customizable Alarm duration: 10 s, 20 s, 30 s  Certifications  Certifications  CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014  Port  Video Compression  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;				Mobile Client	iOS; Android; iPhone; iPad; Windows Phone		
Alarm duration: 10 s, 20 s, 30 s  Certifications  Certifications  Certifications  Certifications  Port  Video Compression  Smart H.265+; H.265; Smart H.264+; H.264; H.264B;	Flash frequency: high, medium, low			Certification			
Video Compression Smart H.265+; H.265; Smart H.264+; H.264B;				Certifications			
	Video					Port	
					Audio Input	1 channel (bulit-in MIC)	

# Lite Series | DH-SD2A200-GN-AW-PV

Audio Output	1 channel (bulit-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

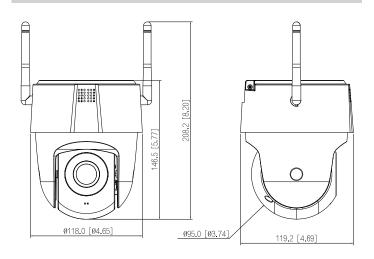
# Construction

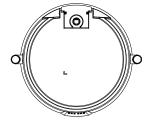
Product Dimensions	146.5 mm × Φ118.0 mm (5.77" × Φ4.65")	
Net Weight	0.5 kg (1.10 lb)	
Gross Weight	1 kg (2.20 lb)	

Ordering Information				
Туре	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		

# Wall Mount Ceiling Mount

# Dimensions (mm[inch])





# Accessories

# Included:



Mount Bracket

# Optional:



DC12V/1.5A Power Adapter