

# DH-SD49225DB-HC

2MP 25x Starlight IR HDCVI PTZ Camera



#### System Overview

With its powerful optical zoom, and accurate pan and tilt capabilities, the HDCVI PTZ camera series provides an all-in-one solution for largescale monitoring. It harnesses the latest starlight technology, allowing it to produce highly detailed images even in low light conditions. These cameras offer smooth control and high-grade protection that enable them to meet the requirements of video surveillance in small and medium-sized scenes.

#### Functions

#### Starlight Technology

With advanced image processing technology and optical technology, Dahua Starlight technology can provide clear colorful video in the environment of low illuminance. It widely applies to various environments of low illuminance.

#### 3DNR

Dahua's 3DNR technology reduces image noise with little to no impact on image sharpness, especially in poor lighting conditions. It detects the noise, and compares the sequential frames to effectively reduce the noise. It also makes efficient use of bandwidth, saving on storage space.

#### Long Distance Transmission

HDCVI technology provides long distance transmission in real time without transmission loss. It supports transmission distances up to 300m for 2MP HD videos through coaxial cables, and up to 200m through UTP cables.

\*The results were obtained and verified through rigorous testing in Dahua's test laboratory.

- 1/2.8" 2Megapixel STARVIS™ CMOS.
- Powerful 25× optical zoom.
- Starlight technology.
- 120 dB true WDR, 3D NR.
- Max. 25/30 fps@1080p, 25/30/50/60 fps@720p.
- IR distance up to 100 m.
- IP66.



#### 3 Signals over 1 Coaxial Cable

HDCVI technology supports 3 signals (video, audio\* and data) which are simultaneously transmitted over a coaxial cable. Dual-way data transmission allows the HDCVI camera to interact with the XVR to perform various actions such as sending control signals and triggering alarms. \* Audio input is available for select HDCVI camera models.

#### 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.

#### **PFA Technology**

PFA technology has introduced new methods of judgment that ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms that ensure image clarity when zooming and that shorten focus time. This makes the camera highly advanced in its functions, substantially improving the quality of your experience.

#### Protection (IP66, TVS 6000 V)

IP66, TVS 6000 V lightning proof, surge protection, and voltage transient protection.

## HDCVI Series | DH-SD49225DB-HC

## **Technical Specification**

Camera				
Image Sensor	1/2.8" CMOS			
Pixel	2 MP			
Max. Resolution	1920 (H) × 1080 (V)			
ROM	128 MB			
RAM	256 MB			
Electronic Shutter Speed	1/3 s-1/30,000 s			
Scanning System	Progressive			
Min. Illumination	0.005 lux@F1.6 (Color, 30 IRE); 0.0005 lux@F1.6 (B/W, 30 IRE) 0 lux (IR light)			
Illumination Distance	100 m (328.08 ft) (IR)			
Illuminator On/Off Control	Zoom Prio; manual			
Illuminator Number	6 (IR)			
Lens				
Focal Length	4.8 mm–120 mm			
Max. Aperture	F1.6-F3.5			
Field of View	H: 60.6°-3.2°; V: 34.1°-1.8°; D: 69.4°-3.7°			
Optical Zoom	25×			
Focus Control	Auto; semi-auto; manual			
Close Focus Distance	0.1 m–2 m (0.33 ft–6.56 ft)			
Iris Control	Auto; manual			
DORI Distance	Detect	Observe	Recognize	Identify
	1655.2 m (5430.45 ft)	653.8 m (2145.01 ft)	331.0 m (1085.96 ft)	165.5 m (542.98 ft)

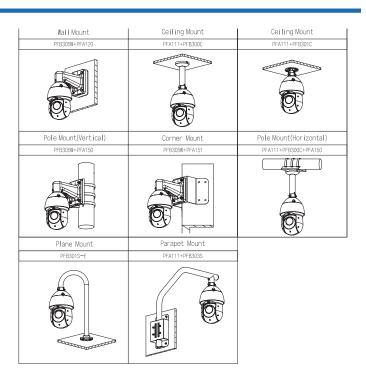
PTZ

Pan/Tilt Range	Pan: 0° to 360° endless; Tilt: -15° to +90°, auto flip 180°
Manual Control Speed	Pan: 0.1°–200°/s Tilt: 0.1°–120°/s
Preset Speed	Pan: 240°/s; Tilt: 200°/s
Preset	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Yes
Idle Motion	Pattern; Preset; Scan; Tour
PTZ Protocol	DH-SD Pelco-P/D (Auto recognition)
Video	
Resolution	1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480)

Video Frame Rate	1080p (25/30 fps); 720p (25/30/50/60 fps)	
Day/Night	Yes	
BLC	Yes	
WDR	120dB	
HLC	Yes	
White Balance	Auto; indoor; outdoor; tracking; manual; sodium lamp; natural light; street lamp	
Gain Control	Auto; manual	
Noise Reduction	2D NR; 3D NR	
Defog	Electronic	
Digital Zoom	16×	
Image Rotation	180°	
Privacy Masking	Yes	
S/N Ratio	≥50 dB	
Function		
CVI Product Output Mode	TVI;CVI;CVBS;AHD(CVBS is only used for debugging)	
Certification		
Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpart B, ANSI C63.4-2014 UL: UL60950-1+CAN/CSA C22.2, No.60950-1	
Port		
Analog Output	1 channel (CVBS/CVI output, BNC)	
RS-485	1 (baud rate range: 1200 bps-9600 bps)	
Audio Input	1 channel (LINE IN, bare wire)	
Alarm Input	2 (on-off value input: 0–5 VDC)	
Alarm Output	1	
Alarm Linkage	Scan; preset; tour; pattern; alarm digital output	
Alarm Event	Alarm input	
Power		
Power Supply	12 VDC, 3 A ± 10%	
Power Consumption	Basic: 10 W Max.: 22 W (PTZ + illuminator + heater)	
Environment		
Operating Temperature	-40 °C to +70 °C (-40 °F to +158 °F)	
Operating Humidity	≤95%	
Protection	IP66; TVS 6000V lightning proof; surge protection; voltage transient protection	
Structure		
Product Dimensions	269.9 mm × Φ160.0 mm (10.63" × Φ6.30")	
Net Weight	3.0 kg (6.61 lb)	
Gross Weight	4.2 kg (9.26 lb)	

## HDCVI Series | DH-SD49225DB-HC

Ordering Information				
Туре	Model	Description		
2MP HDCVI Camera	DH-SD49225DB-HC	2MP 25x Starlight IR PTZ HDCVI Camera, PAL		
	DH-SD49225DBN-HC	2MP 25x Starlight IR PTZ HDCVI Camera, NTSC		
	SD49225DB-HC	2MP 25x Starlight IR PTZ HDCVI Camera, PAL		
	SD49225DBN-HC	2MP 25x Starlight IR PTZ HDCVI Camera, NTSC		
Accessories	PFB305W	Wall Mount Bracket		
	PFA120	Junction Box		
	PFA111	Mount Adapter		
	PFB300C	Ceiling Mount Bracket		
	PFB301C	Ceiling Mount Bracket		
	PFA150	Pole Mount Bracket		
	PFA151	Corner Mount Bracket		
	PFB301S-E	Plane Mount Bracket		
	PFB303S	Parapet Mount Bracket		
	DC12V/3A	Power Supply		



### Dimensions (mm [inch])



#### Included:



PFB305W Wall Mount Bracket

#### Optional:



PFA120 Junction Box



PFB301C Ceiling Mount Bracket



Plane Mount Bracket



PFA111 Mount Adapter



PFA150 Pole Mount Bracket



PFB303S Parapet Mount Bracket



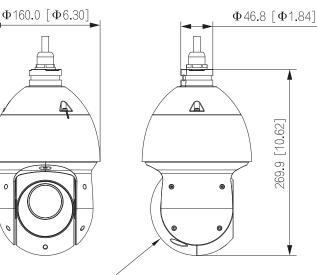
PFB300C Ceiling Mount Bracket



PFA151 Corner Mount Bracket



DC12V/3A Power Supply



Φ135.0 [Φ5.31]

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