

# DH-SD49225-HC-LA

2MP 25x Starlight IR PTZ HDCVI Camera



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



Featuring with powerful optical zoom and accurate pan/tilt/zoom performance, the SD49 series PTZ camera can provide large monitoring range and great detail. The camera delivers 1080P resolution at 25/30 fps, with 25x optical zoom, and has very excellent low light performance due to the latest starlight technology. SD49 series PTZ camera is equipped with smooth control, high quality image and good protection, which makes it meet small and medium-sized video surveillance applications.

## Functions

### Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring network.

### Starlight Technology

For challenging low-light applications, Dahua's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 Lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

### PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

### Environmental

The camera is designed for extreme temperature environments. Subjected and certified to rigorous dust and water immersion tests, the IP66 rating makes it suitable for demanding outdoor applications.

### Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

### Protection

This camera suits even the harsh conditions for outdoor applications. Its 6KV lightning rating provides protection against the camera and its structure from the effects of lightning.

**Technical Specification**

**Camera**

Image Sensor	1/2.8" STARVIS™ CMOS
Pixel	2MP
Max. Resolution	1920 (H) x 1080 (V)
ROM	16 MB
RAM	256 MB
Electronic Shutter Speed	1/3 s–1/100000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005 Lux@F1.6 B/W: 0.0005 Lux@F1.6 0 Lux@F1.6 (IR on)
Illumination Distance	100 m (328.08 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	6

**Lens**

Focal Length	4.8 mm–120 mm			
Max. Aperture	F1.6–F3.5			
Field of View	H: 58.5°–2.8°; V: 33.2°–1.5°; D: 67.5°–3.2°			
Optical Zoom	25x			
Focus Control	Auto/Semi-Auto/Manual			
Close Focus Distance	0.1 m–1.5 m (0.33 ft–4.92 ft)			
Iris Control	Auto/Manual			
DORI Distance	Detect	Observe	Recognize	Identify
	1655.2 m (5430.45 ft)	656.8 m (2154.86 ft)	331.0 m (1085.96 ft)	165.5 m (542.98 ft)

**PTZ**

Pan/Tilt Range	Pan: 0°–360°Tilt: -15°–+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
Presets	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Speed Adjustment	Support
Power-off Memory	Support
Idle Motion	Preset/Tour/Pattern/Scanning
Protocol	DH-SD Pelco-P/D (auto recognition)

**Video**

Resolution	1080P (1920 × 1080); 720P (1280 × 720); D1 (704 × 576/704 × 480)
Frame Rate	1080P (25/30 fps), 720P (25/30/50/60 fps)
Day/Night	Support
BLC	Support
WDR	120 dB
HLC	Support
White Balance	Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/ Natural light/Street lamp
Gain Control	Auto/Manual
Noise Reduction	2D/3D
Defog	Electronic
Digital Zoom	16x
Flip	0°/180°
Privacy Masking	Up to 24 areas
CVI Product Output Mode	CVI; TVI; AHD; CVBS

**Audio**

Compression	G.711a; G.711Mu
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**Certification**

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014 UL: UL60950-1+CAN/CSA C22.2, No.60950-1
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**Port**

Analog Output	1 (CVBS/CVI output, BNC port)
RS-485	1 (baud rate range: 1200 bps–9600 bps)
Audio Input	1 (LINE IN; bare wire)
Alarm I/O	2/1

**Power**

Power Supply	DC 12V/3A ± 10%
Power Consumption	9.6 W 23.2 W (IR light on, PTZ)

**Environment**

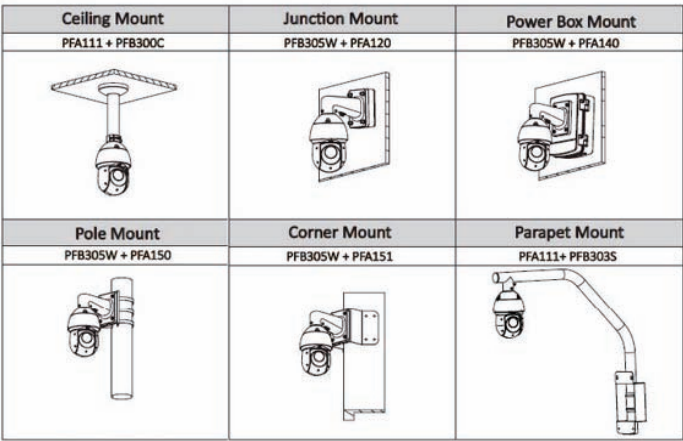
Operating Temperature	–40°C to +70°C (–40°F to +158°F)
Operating Humidity	≤ 95%RH
Protection	IP66; TVS 6000V lightning protection; surge protection

**Structure**

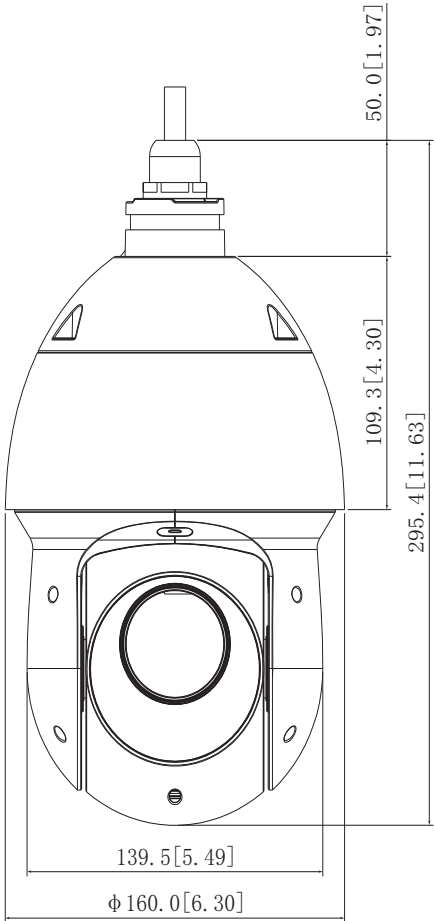
Dimensions	295.4 mm × Φ160.0 mm (11.63" × Φ6.30")
Net Weight	3 kg (6.61 lb)
Gross Weight	4.2 kg (9.26 lb)

**Ordering Information**

Type	Model	Description
2M Camera	DH-SD49225-HC-LA	2MP 25x Starlight IR PTZ HDCVI Camera, WDR, PAL
	DH-SD49225N-HC-LA	2MP 25x Starlight IR PTZ HDCVI Camera, WDR, NTSC
	SD49225-HC-LA	2MP 25x Starlight IR PTZ HDCVI Camera, WDR, PAL
	SD49225N-HC-LA	2MP 25x Starlight IR PTZ HDCVI Camera, WDR, NTSC
Accessories	PFB305W	Wall Mount Bracket
	PFA111	Mount Adapter
	DC12V/3A	Power Supply
	PFA140	Power Box
	PFB300C	Ceiling Mount Bracket
	PFA120	Junction Box
	PFA150	Pole Mount Bracket
	PFA151	Corner Mount Bracket
PFB303S	Parapet Mount Bracket	



**Dimensions (mm[inch])**



**Accessories**

**Included:**



PFB305W  
Wall Mount Bracket

**Optional:**



PFA111  
Mount Adapter



DC12V/3A  
Power Supply



PFA140  
Power Box



PFB300C  
Ceiling Mount Bracket



PFA120  
Junction Box



PFA150  
Pole Mount Bracket



PFA151  
Corner Mount Bracket



PFB303S  
Parapet Mount Bracket