

DH-HAC-HDW1509CLQ(-A)-LED

5MP Full-color HDCVI Quick-to-install Eyeball Camera



* The parameters and datasheets below can only be applied to 1509-S2A series.
 * In order to use the 5MP 16:9 HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000001.0.R.200908 or later version.

- Max 25 fps@5MP (16:9 video output)
- 24/7 color imaging
- 20 m illumination distance
- CVI/CVBS/AHD/TVI switchable
- 3.6 mm fixed lens
- IP67, 12 VDC
- Built-in mic (-A)
- Quick-to-install eyeball saves installation time



System Overview

Lite Series is suitable for users who require high quality monitoring products with reasonable prices. Its low cost and high performance make it an ideal choice for residential and small-medium business applications. This series offers an option of a wide range of technologies such as Full-color and Starlight, providing various solutions for different scenarios.

Functions

Full-color

Full-color camera adopts large aperture lens and high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera provides 24/7 color monitoring that collects clear and vivid information, significantly increasing probability of gathering valid human, vehicle, and event evidence that can be used for further intelligent analysis.

Broadcast-quality Audio

Audio information is used as supplementary evidence in video surveillance applications. The HDCVI camera supports audio signal transmission over coaxial cable. In addition, it adopts unique audio processing and transmission technology that best restores source audio and eliminates noise, guaranteeing the quality and effectiveness of collected audio information.

*This function is available for select models.

Warm Supplemental lights

With warm supplemental LED lights, the camera is able to provide a colorful and vivid image even in total darkness. By default, the camera is set to smart light mode, in which the camera can automatically adjust the exposure time and light sensitivity simultaneously to avoid overexposure of the objects in the image center.

4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the XVR, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

* Audio input is available for some models of HDCVI cameras

Long Distance Transmission

HDCVI technology guarantees real-time transmission at long distance without any loss. It supports up to 700 m transmission for 2MP/5MP/8MP HD video via coaxial cable, and up to 300 m via UTP cable.

*Actual results verified by real-scene testing in Dahua's test laboratory.

Protection (IP67, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normal after soaking in 1 m deep water for 30 minutes.

Wide voltage: The camera allows $\pm 30\%$ (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Easy Installation

HDCVI quick-to-install eyeball adopts quick-to-install pedestal, which can achieve easier installation than conventional eyeball. Quick-to-install camera reduces time and labor costs.

Technical Specification

Camera

Image Sensor	5 MP CMOS
Max. Resolution	2880 (H) × 1620 (V)
Pixel	5 MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25 s–1/100,000 s NTSC: 1/30 s–1/100,000 s
S/N Ratio	> 65 dB
Min. Illumination	0.005 lux/F1.6, 0 lux white light on
Illumination Distance	20 m (65.61 ft)
Illuminator On/Off Control	Auto; manual
Illuminator Number	2
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal				
Lens Mount	M12				
Focal Length	3.6 mm				
Max. Aperture	F1.6				
Field of View	3.6 mm: Horizontal: 90°; Vertical: 48°; Diagonal: 104°				
Iris Control	Fixed				
Close Focus Distance	3.6 mm: 1.5 m (4.92 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	3.6 mm	77.8 m (255.25 ft)	31.1 m (102.03 ft)	15.6 m (51.18 ft)	7.8 m (25.59 ft)

Video

Frame Rate	CVI: PAL: 5M@25 fps; 4M@25 fps; 1080p@25 fps NTSC: 5M@25 fps; 4M@30 fps; 1080P@30 fps AHD: PAL: 4M@25 fps; NTSC: 4M@30 fps TVI: PAL: 4M@25 fps; NTSC: 4M@30 fps CVBS: PAL: 960H; NTSC: 960H
Resolution	5M (2880 × 1620); 4M (2560 × 1440); 1080P (1920 × 1080); 960H (960 × 576/960 × 480)
BLC	BLC/HLC/DWDR
WDR	DWDR
White Balance	Auto; Area white balance
Gain Control	Auto; manual
Noise Reduction	2D NR
Smart Light	Yes

Mirror	Off/On
Privacy Masking	Off/On (8 area, rectangle)

Certifications

Certifications	CE (EN55032, EN55024, EN50130-4, EN62368-1) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)
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Port

Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Audio Input	One channel built-in MIC (-A)

Power

Power Supply	12 VDC±30%
Power Consumption	Max 3.5 W (12 VDC, warm light on)

Environment

Operating Temperature	-40 °C to +60 °C (-40 °F to 140 °F); < 95% (non-condensation)
Storage Temperature	-40 °C to +60 °C (-40 °F to 140 °F); < 95% (non-condensation)
Protection Grade	IP67

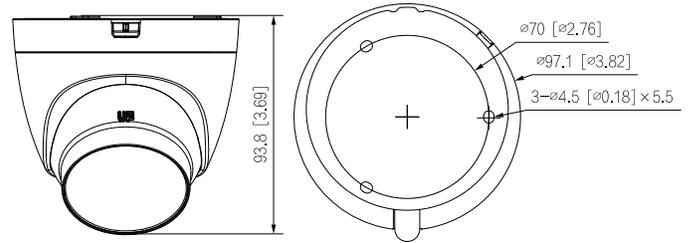
Structure

Casing	Plastic throughout the whole casing
Camera Dimensions	φ97.1mm × 93.8mm (φ3.82" × 3.69")
Net Weight	0.19 kg (0.42 lb)
Gross Weight	0.28 kg (0.62 lb)

Ordering Information

Type	Part Number	Description
5MP Camera	DH-HAC-HDW1509CLQP-LED	5MP Full-color HDCVI Eyeball Camera, PAL
	DH-HAC-HDW1509CLQN-LED	5MP Full-color HDCVI Eyeball Camera, NTSC
	DH-HAC-HDW1509CLQP-A-LED	5MP Full-color HDCVI Eyeball Camera, PAL
	DH-HAC-HDW1509CLQN-A-LED	5MP Full-color HDCVI Eyeball Camera, NTSC
Accessories	PFA13G	Junction Box
	PFB205W	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket (For use with PFB205W)
	PFM800-4K	Passive HDCVI Balun
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester

Dimensions (mm[inch])



Accessories

Optional:



PFA13G
Junction Box



PFB205W
Wall Mount Bracket



PFA152-E
Pole Mount Bracket



PFM800-4K
Passive HDCVI Balun



PFM321D
12V 1A Power Adapter



PFM904
Integrated Mount Tester

Junction Mount	Ceiling Mount	Wall Mount
Pole Mount (Vertical)		