

DH-HAC-HDW1809T-A-LED

4K Full-color HDCVI Fixed-focal Eyeball Camera



Series Overview

The Lite Series is a great choice for consumers looking for high quality monitoring products at a reasonable price. Its low cost and high performance make it ideal for residential areas and SMB solutions. This series is equipped with a wide range of technologies, such as full-color and starlight, providing various solutions for different scenarios.

Functions

Full-color

With its advanced image processing algorithm and capability to absorb large quantities of light, the camera provides 24/7 color monitoring that collects clear and highly detailed information, significantly increasing the reliability of the human and vehicle images that are collected as evidence for intelligent analysis.

Smart Light+

Equipped with advanced LEDs and beam processing technology, the camera effectively reduces interference of stray light, ensuring concentrated illumination within the lens's field of view. This allows the camera to easily produce clear images that reveal the fine details of targets even in low light conditions.

Smart Area Lighting

Automatically adjusts the intensity of the brightness and exposure for the left and right areas in the video based on the proportion and position of the targets to reveal more details in the image.

* The parameters and datasheets below can only be applied to 1809-S2 series.

- Max. 15 fps@4K.
- 3D NR.
- 24/7 color imaging.
- Smart Warm Light Illumination.
- 40 m illumination distance.
- Super Adapt.
- Built-in MIC.
- 3.6 mm fixed lens (2.8 mm optional).
- CVI/CVBS/AHD/TVI switchable.
- IP67, 12 VDC.



Built-in Mic

Audio signal transmission over coaxial cables is supported by the HDCVI camera. It adopts a unique audio processing and transmission technology that restores source audio and eliminates noise, ensuring the quality and reliability of the audio information that is collected. This becomes important for video surveillance applications that use audio information as a type of supplementary evidence.

Super Adapt

With its intelligent algorithm, the camera automatically adjusts its parameters to provide optimal performance and vivid images.

Advanced 3DNR

Dahua's advanced 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.

Protection (IP67, Wide Voltage)

IP67: The camera passed a series of rigorous dust and immersion tests. Its enclosure is both dust-proof and waterproof, and can function normally while being immersed in 1 m deep water for up to 30 minutes.

Wide voltage: The camera has $\pm 30\%$ input voltage tolerance (for some power supplies) and a wide voltage range, making it suitable for a variety of outdoor scenarios.

Technical Specification					
Camera					
Image Sensor		4K CMOS			
Max. Resolution		3840 (H) × 2160 (V)			
Electronic Shutter Speed		PAL: 1/25 s–1/100,000 s NTSC: 1/30 s–1/100,000 s			
Min. Illumination		0.0005 lux@F1.0 (Color, 30 IRE) 0.00005 lux@F1.0 (B/W, 30 IRE) 0 lux (Illuminator on)			
S/N Ratio		>65 dB			
Illumination Distance		Warm light: 40 m (131.23 ft)			
Illuminator On/Off Control		Auto/Manual			
Illuminator Number		4 (Warm light)			
Angle Adjustment		Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°			
Lens					
Lens Type		Fixed-focal			
Lens Mount		M12			
Focal Length		2.8 mm; 3.6 mm			
Max. Aperture		F1.0			
Field of View		2.8 mm: H: 109.6°; V: 57.5°; D: 131° 3.6 mm: H: 88.2°; V: 47.6°; D: 104.5°			
Close Focus Distance		2.8 mm: 2.0 m (6.56 ft) 3.6 mm: 2.7 m (8.86 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	88.0 m (288.71 ft)	35.2 m (115.49 ft)	17.6 m (57.74 ft)	8.8 m (28.87 ft)
	3.6 mm	104.0 m (341.21 ft)	41.6 m (136.48 ft)	20.8 m (68.24 ft)	10.4 m (34.12 ft)
	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.				
ABF		Yes			
Video					
Video Frame Rate		CVI: PAL: 4K@15 fps NTSC: 4K@15 fps AHD: PAL: 4K@15 fps NTSC: 4K@15 fps TVI: PAL: 4K@15 fps NTSC: 4K@15 fps CVBS: PAL: 960H NTSC: 960H			
Resolution		4K (3840 × 2160); 960H (960 × 576/960 × 480)			
Day/Night		Color			

BLC	BLC; HLC; WDR
WDR	WDR
White Balance	Auto
Gain Control	Auto/Manual
Noise Reduction	3D NR
Illumination Mode	Smart Light
Mirror	Yes

Certification

Certifications	CE-LVD: EN 62368-1 CE-EMC: EN 55032; EN 55035
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Audio

Built-in Mic	Yes
Camera Audio	CVI
Pick-up Distance	8 m (26.25 ft)

Port

Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port (DIP Switch)
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Power

Power Supply	12 VDC (±30%)
Power Consumption	Max 7.66 W (12 VDC, LED on)

Environment

Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Storage Humidity	<95% (RH), non-condensing
Protection	IP67
Anti-corrosion Level	Basic Protection *The products are designed for general use and are applicable even in areas with no specific requirements for anti-corrosion protection.

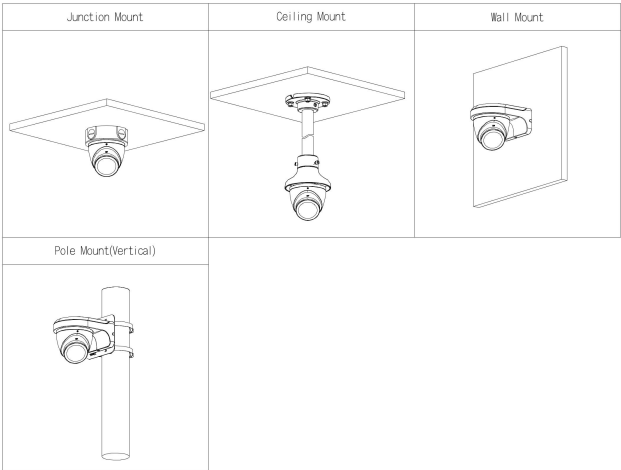
Structure

Casing Material	Metal
Product Dimensions	Φ106.0 mm × 96.9 mm (Φ4.17" × 3.81")
Net Weight	0.49 kg (1.08 lb)
Gross Weight	0.63 kg (1.39 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Model	Description
HDCVI CAMERA	DH-HAC-HDW1809TN-A-LED	4K Full-color HDCVI Fixed-focal Eyeball Camera,NTSC
	DH-HAC-HDW1809TP-A-LED	4K Full-color HDCVI Fixed-focal Eyeball Camera,PAL

Type	Model	Description
Accessories (Optional)	DH-PFA106	Mount Adapter
	DH-PFB220C	Ceiling Mount Bracket
	DH-PFA151	Corner Mount Bracket
	DH-PFB305W	Wall Mount Bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFA156	Pole Mount Bracket
	DH-PFB2204W	Wall Mount Bracket
	DH-PFA139	Junction Box
	DH-PFM800-4K	1 Channel Passive HDCVI Balun
	DH-PFM321-EN	DC12V1A power adapter
	DH-PFM320D-EN	DC12V2A power adapter
	PFM904	Integrated Mount Tester



Dimensions (mm[inch])

Accessories

Optional:



DH-PFA106
Mount Adapter



DH-PFA139
Junction Box



DH-PFA150
Pole Mount Bracket



DH-PFA151
Corner Mount Bracket



DH-PFA156
Pole Mount Bracket



DH-PFB2204W
Wall Mount Bracket



DH-PFB220C
Ceiling Mount Bracket



DH-PFB305W
Wall Mount Bracket



DH-PFM320D-EN
DC12V2A power adapter



DH-PFM321-EN
DC12V1A power adapter



DH-PFM800-4K
1 Channel Passive HDCVI
Balun



PFM904
Integrated Mount Tester

