

DH-HAC-HDW1509T-IL-A-POC

5MP Smart Dual Light 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

Smart Dual Light

With its smart dual light mechanism, the camera automatically turns on the white light when Perimeter Protection/SMD Plus function of AI XVR detects a target in the rule area to capture clear, vivid images. When the target leaves the rule area, the camera automatically switches over from the white light to the IR light to significantly reduce light pollution.

Wide Dynamic Range

With its advanced Wide Dynamic Range technology (WDR), the camera captures highly detailed images and produces high-definition recordings in high-contrast lighting conditions, and in scenes with backlighting or shadows.

Broadcast-quality Audio

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.

- * The parameters and datasheets below can only be applied to 1509-IL-S2 series.
- * In order to use the 5MP 16:9 and the Smart Dual Light 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)
- 120 dB true WDR, 3D NR
- Smart Dual Illuminators
- 40 m illumination distance
- Super Adapt
- Built-in Mic
- 3.6 mm fixed lens (2.8 mm optional)
- CVI/CVBS/AHD/TVI switchable
- IP67, PoC (only CVI)/12 V±30% DC.



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 ±30% input voltage tolerance (for some power supplies) and a wide voltage range, making it suitable for a variety of outdoor scenarios.

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.

Technical Specification

Camera

Image Sensor	5 MP CMOS
Max. Resolution	2880 (H) × 1620 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/3 s–1/100,000 s; NTSC: 1/4 s–1/100,000 s
Min. Illumination	0.001 lux@F1.0 (Color, 30 IRE); 0.0001 lux@F1.0 (B/W, 30 IRE); 0 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	IR: 40 m (131.23 ft); Warm Light: 40 m (131.23 ft)
Illuminator On/Off Control	Auto;Manual
Illuminator Number	2 (Warm light);2 (IR 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	F1.2
Field of View	2.8 mm: H: 111°; V: 58.5°; D: 136.3° 3.6 mm: H: 91.1°; V: 48.7°; D: 107.9°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.4 m (4.59 ft) 3.6 mm: 2.0 m (6.56 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	64.0 m (209.97 ft)	25.6 m (83.99 ft)	12.8 m (41.99 ft)	6.4 m (21.00 ft)
	3.6 mm	78.0 m (255.91 ft)	31.2 m (102.36 ft)	15.6 m (51.18 ft)	7.8 m (25.59 ft)

Video

Video Frame Rate	CVI: PAL: 5M@25 fps; 4M@25 fps NTSC: 5M@25 fps; 4M@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); 960H (960 × 576/960 × 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; HLC; WDR; HLC-Pro
WDR	120 dB
White Balance	Auto;Area white balance

Gain Control	Manual;Auto
Noise Reduction	3D NR
Illumination Mode	Smart IR&WL; WL Mode; IR Mode
Defog	Electronic defog
Digital Zoom	4x
Mirror	Yes
Privacy Masking	Off/On (8 areas, rectangle)

Certification

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

Power

Power Supply	PoC (only CVI)/12 VDC ± 30%
Power Consumption	Max 5.1W (12 VDC, WLED on) PoC (AF)

Environment

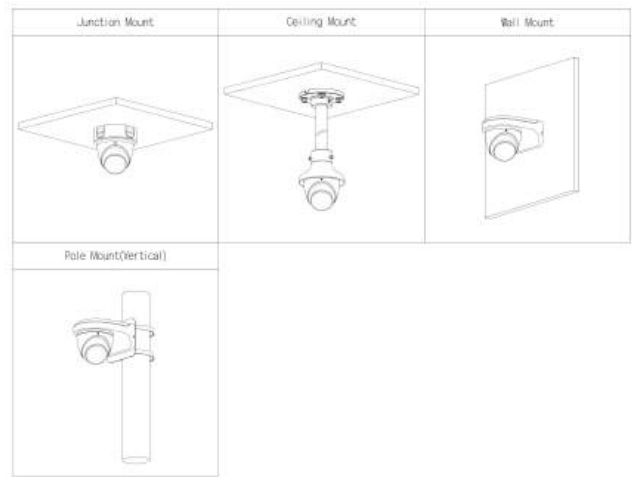
Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Storage Humidity	<95% (RH), non-condensing
Protection	IP67
Anti-corrosion Level	Basic Protection

Structure

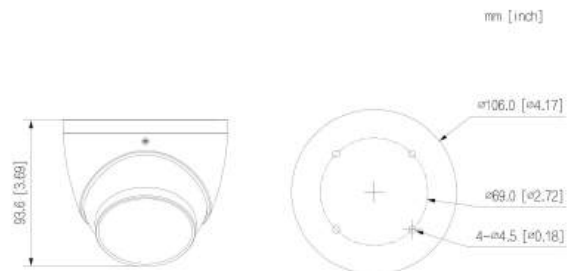
Casing Material	Metal
Product Dimensions	Φ106.0 mm × 93.6 mm (Φ4.17" × 3.69")
Net Weight	0.49 kg (1.08 lb)
Gross Weight	0.66 kg (1.46 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Part Number	Description
HDCVI CAMERA	DH-HAC-HDW1509TP-IL-A-POC	5MP Smart Dual Light HDCVI Fixed-focal Eyeball Camera, PAL
	DH-HAC-HDW1509TN-IL-A-POC	5MP Smart Dual Light HDCVI Fixed-focal Eyeball Camera, NTSC
Accessories (Optional)	DH-PFA106	DH-PFA106
	DH-PFB220C	DH-PFB220C
	DH-PFA151	Corner mount bracket
	DH-PFB305W	Wall mount bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFB204W	Wall mount bracket
	DH-PFA152-E	Pole Mount Bracket
	DH-PFA139	Junction box
	DH-PFM321-EN	DC12V1A power adapter
	DH-PFM321D-EN	DC12V 1A power adapter
	DH-PFM320D-EN	DC12V2A power adapter
	PFM904	Integrated Mount Tester



Dimensions (mm[inch])



Accessories

Optional:



DH-PFA106
DH-PFA106



DH-PFB220C
DH-PFB220C



DH-PFA151
Corner mount bracket



DH-PFB305W
Wall mount bracket



DH-PFA150
Pole Mount Bracket



DH-PFB204W
Wall mount bracket



DH-PFA152-E
Pole Mount Bracket



DH-PFA139
Junction box



DH-PFM321-EN
DC12V1A power adapter



DH-PFM321D-EN
DC12V 1A power adapter



DH-PFM320D-EN
DC12V2A power adapter



PFM904
Integrated Mount Tester