

DH-HAC-HDW1500T-IL-A

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 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.

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.

- * The parameters and datasheets below can only be applied to 1500-IL-S3 series.
- * In order to use the 5MP 16:9 and the Smart Dual Light HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000004.1.R.220323 or later version.
- Max. 25 fps@5MP (16:9 video output)
- Starlight, 3D NR
- Smart Dual Light.
- 40 m illumination distance.
- Built-in Mic.
- 3.6 mm fixed lens (2.8 mm optional).
- CVI/CVBS/AHD/TVI switchable.
- IP67, 12 VDC.



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.

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	5 MP CMOS
Max. Resolution	2880 (H) × 1620 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25 s–1/100,000 s NTSC: 1/30 s–1/100,000 s
Min. Illumination	0.05 lux@F1.6 (Color, 30 IRE) 0.005 lux@F1.6 (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
Illuminator Number	4 (Multi-core light)
Angle Adjustment	Pan: 0°–360° Tilt: 2°–74.8° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Auto Focus	No
Lens Mount	M12
Focal Length	3.6 mm; 2.8 mm
Max. Aperture	F1.6
Field of View	2.8 mm: H: 113.3°; V: 62.1°; D: 134.3° 3.6 mm: H: 90.1°; V: 47.8°; D: 109.3°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 0.8 m (2.62 ft) 3.6 mm: 1.3 m (4.27 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	59.8 m (196.19 ft)	23.9 m (78.41 ft)	12.0 m (39.37 ft)	6.0 m (19.69 ft)
	3.6 mm	77 m (252.62 ft)	30.8 m (101.05 ft)	15.4 m (50.52 ft)	7.7 m (25.26 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.				

Video

Video Frame Rate	CVI: PAL: 5M@25 fps; 5M@12.5 fps; 4M@25 fps; 1080p@25 fps NTSC: 5M@25 fps; 5M@20 fps; 5M@10 fps; 4M@30 fps; 1080p@30 fps AHD: PAL: 4M@25 fps NTSC: 4M@30 fps TVI: PAL: 5M 16:9@20 fps NTSC: 5M 16:9@20 fps
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	CVBS: PAL: 960H NTSC: 960H
Resolution	5M (2880 × 1620); 4M (2560 × 1440); 1080p (1920 × 1080); 960H (960 × 576/960 × 480); TVI 5M 16:9 (2960 × 1665)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; HLC; WDR
WDR	DWDR
White Balance	Auto;Area white balance
Gain Control	Auto
Noise Reduction	3D NR
Motion Detection	Yes
Illumination Mode	Smart IR&WL; WL Mode; IR Mode
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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Audio

Built-in Mic	Yes
Camera Audio	CVI; TVI

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 6.5 W (12 VDC, WLED on)

Environment

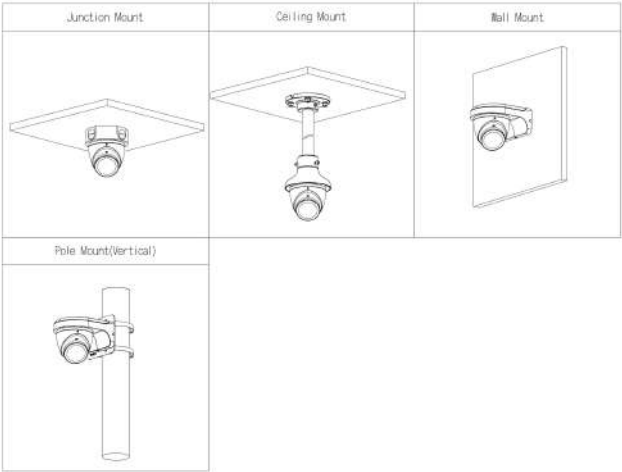
Operating Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Storage Humidity	<95% (RH), non-condensing
Protection	IP67
Anti-corrosion Level	Basic Protection

Structure

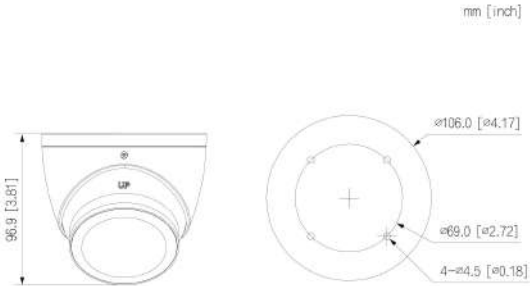
Casing Material	Metal
Product Dimensions	Φ106.0 mm × 96.9 mm (Φ4.17" × 3.81")
Net Weight	0.50 kg (1.10 lb)
Gross Weight	0.64 kg (1.41 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Model	Description
HDCVI CAMERA	DH-HAC-HDW1500TN-IL-A	SMP Smart Dual Light HDCVI Fixed-focal Eyeball Camera,NTSC
	DH-HAC-HDW1500TP-IL-A	SMP Smart Dual Light HDCVI Fixed-focal Eyeball Camera,PAL
Accessories (Optional)	DH-PFB220C	Ceiling Mount Bracket
	DH-PFA106	Mount Adapter
	DH-PFB305W	Wall Mount Bracket
	DH-PFA151	Corner Mount Bracket
	DH-PFA150	Pole Mount Bracket
	DH-PFB204W	Wall Mount Bracket
	DH-PFA152-E	Pole 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-PFA152-E Pole Mount Bracket	DH-PFB204W 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