DH-HAC-HDW1509TLQ-A-LED

5MP Full-color HDCVI Fixed-focal Eyeball Camera



Full-color

* The parameters and datasheets below can only be applied to 1509-S3 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)
- Super Adapt, 120 dB true WDR, 3D NR
- 24/7 color imaging
- Smart Light+.
- Built-in Mic.
- 30 m illumination distance
- CVI/CVBS/AHD/TVI switchable
- 3.6 mm fixed lens (2.8 mm optional)
- IP67, 12 V DC
- Quick-to-install eyeball saves installation time



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.

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.

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.

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.

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 Sensor1	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 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	30 m (98.43 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (Warm light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Auto Focus	No
Lens Mount	M12
Focal Length	3.6 mm; 2.8 mm
Max. Aperture	F1.0
Field of View	2.8 mm: H: 112°; V: 57°; D: 132° 3.6 mm: H: 88°; V: 46°; D: 104°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.6 m (5.25 ft) 3.6 mm: 2.3 m (7.55 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	67.4 m (221.13 ft)	27.0 m (88.58 ft)	13.5 m (44.29 ft)	6.7 m (21.98 ft)
	3.6 mm	80.0 m (262.47 ft)	32.0 m (104.99 ft)	16.0 m (52.49 ft)	8.0 m (26.25 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@10 fps; 4M@30 fps; 1080p@30 fps AHD: PAL: 4M@25 fps NTSC: 4M@30 fps TVI: PAL: 5M 16:9@20 fps; 4M@25 fps NTSC: 5M 16:9@20 fps; 4M@30 fps CVBS: PAL: 960H NTSC: 960H
Resolution	5M (2880 × 1620); TVI 5M 16:9 (2960 × 1665); 4M (2560 × 1440); 1080p (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Color
BLC	BLC; HLC; WDR; HLC-Pro
WDR	120 dB
White Balance	Auto;Area white balance
Gain Control	Auto/Manual
Noise Reduction	3D NR
Illumination Mode	Smart Light
Defog	Electronic defog
Digital Zoom	4×
Mirror	Yes
Privacy Masking	Off/On (8 areas, rectangle)

Certification

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

Audio

Built-in Mic	Yes

Port

Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Alarm Output	1 channel

Power

Power Supply	12 VDC ± 30% (It is recommended to use a power adapter to supply the power for one camera)
Power Consumption	Max 5.5 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

Structure

Casing Material	Dome (metal + plastic) + plastic enclosure
Product Dimensions	Φ97.1 mm × 94.2 mm (Φ3.82" × 3.71")
Net Weight	0.24 kg (0.53 lb)
Gross Weight	0.37 kg (0.82 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Model	Description
HDCVI CAMERA	DH-HAC-HDW1509TLQP-A-LED	5MP Full-color HDCVI Fixed-focal Eyeball Camera, PAL
	DH-HAC-HDW1509TLQN-A-LED	5MP Full-color HDCVI Fixed-focal Eyeball Camera, NTSC
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-PFB205W-E	Wall Mount Bracket
	DH-PFA152-E	Pole Mount Bracket
	DH-PFA13G	Junction box
	DH-PFM800-4K	1 Channel Passive HDCVI Balun
	DH-PFM321-EN	DC12V1A power adapter
	DH-PFM321D-EN	DC12V 1A power adapter
	DH-PFM320D-EN	DC12V2A power adapter
	PFM904	Integrated Mount Tester

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-PFB205W-E
Wall Mount Bracket



DH-PFA152-E
Pole Mount Bracket



DH-PFA13G
Junction box



DH-PFM800-4K
1 Channel Passive HDCVI Balun



DH-PFM321-EN
DC12V1A power adapter



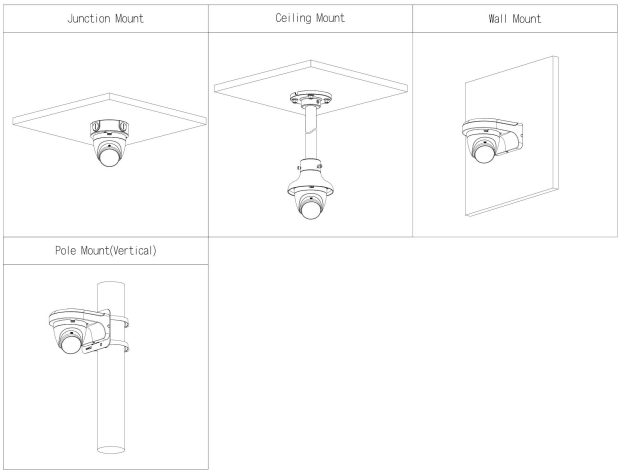
DH-PFM321D-EN
DC12V 1A power adapter



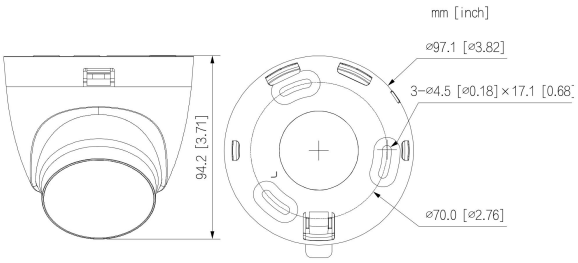
DH-PFM320D-EN
DC12V2A power adapter



PFM904
Integrated Mount Tester



Dimensions (mm[inch])



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