DH-HAC-HFW1809TLM-A-LED

4K Full-Color HDCVI Bullet Camera

Full-Color

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

| Lite Series | 4K | Full Color | Smart Illumination | Audio | WDR | IP67 |

System 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.

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.

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.

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.

Smart Warm Light Illumination

In dark environments, the camera produces vivid images in rich color through its warm LED lights. With its smart light mode setting, it automatically adjusts its exposure time and light sensitivity to avoid the overexposure of objects in the center of the image.

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.

Technical Specification

Camera

Pixel	8 MP
Image Sensor	8MP CMOS
Max. Resolution	3840 (H) × 2160 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/3 s–1/100000 s NTSC: 1/4 s–1/100000 s
Min. Illumination	0.001 lux@F1.0 (Color) 0 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	40 m (131.23 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (Warm light)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° 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: 106°; V: 55°; D: 125° 3.6 mm: H: 85°; V: 45°; D: 100°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 3.5 m (11.48 ft) 3.6 mm: 4.5 m (14.76 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	91.0 m (298.56 ft)	36.4 m (119.42 ft)	18.2 m (59.71 ft)	9.1 m (29.86 ft)
	3.6 mm	107.6 m (353.02 ft)	43.0 m (141.08 ft)	21.5 m (70.54 ft)	10.8 m (35.47 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: 4K@15 fps; 5M@25 fps; 4M@25 fps; NTSC: 4K@15 fps; 5M@25 fps; 4M@30 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); 5M (2880 × 1620); 4M (2560 × 1440); 960 H (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
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 (EN55032:2015, EN61000-3-2:2014, EN61000-3-3:2013, EN55024:2010+A1:2015, EN55035:2017, EN50130-4:2011+A1:2014, EN62368-1:2014+A11:2017) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL62368-1+CAN/CSA C22.2 No.62368-1-14)

Port

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

Power

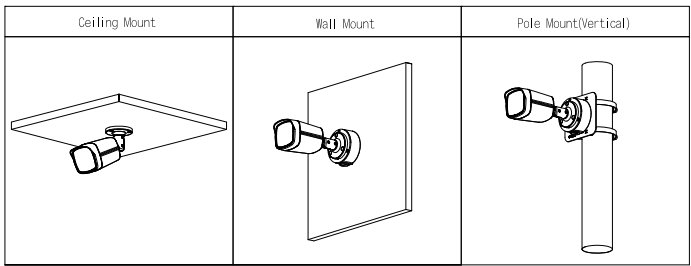|	
Power Supply	12 VDC ± 30% (It is recommended to use a power adapter to supply the power for one camera)
Power Consumption	Max 6.9 W (12 VDC, LED on)

Environment

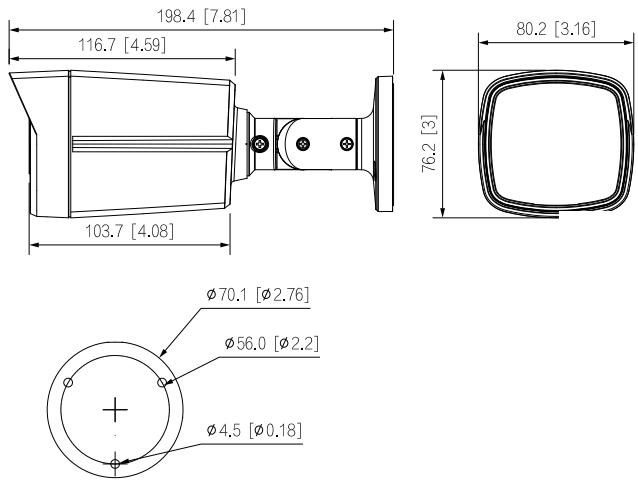|	
Operating Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Protection	IP67

Structure

Casing Material	Metal front cover + plastic rear barrel + metal bracket
Product Dimensions	198.4 mm × 80.2 mm × 76.2 mm (7.81" × 3.16" × 3.00")
Packaging Dimensions	240 mm × 115 mm × 111 mm (9.45" × 4.53" × 4.37")
Net Weight	0.33 kg (0.73 lb)
Gross Weight	0.49 kg (1.08 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Part Number	Description
4K Camera	DH-HAC-HF-W1809TLMP-A-LED	4K Full-Color HDCVI Eyeball Camera, PAL
	DH-HAC-HF-W1809TLMN-A-LED	4K Full-Color HDCVI Eyeball Camera, NTSC
Accessories (Optional)	PFA130-E	Junction box
	PFA134	Junction box
	PFA152-E	Pole Mount Bracket
	PFM800-4K	Passive HDCVI Balun
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester

Accessories

Optional:

PFA130-E
Junction
box

PFA134
Junction
box

PFA152-E
Pole Mount
Bracket

PFM800-4K
Passive HDCVI
Balun

PFM321D
12V 1A Power
Adapter

PFM904
Integrated
Mount Tester

Ceiling Mount   Wall Mount   Pole Mount(Vertical)

Dimensions (mm[inch])

198.4 [7.81]
116.7 [4.59]
80.2 [3.16]
76.2 [3]
103.7 [4.08]

Ø70.1 [Ø2.76]
Ø56.0 [Ø2.2]
Ø4.5 [Ø0.18]