

# DH-HAC-HFW1509TLM-LED

5MP Full-color HDCVI Bullet Camera



\* The parameters and datasheets below can only be applied to 1509-S2 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)
- 120 dB true WDR, 3D NR
- 24/7 color imaging
- 40 m illumination distance
- CVI/CVBS/AHD/TVI switchable
- 3.6 mm fixed lens (2.8 mm optional)
- IP67, 12 V DC



## System Overview

Lite Series is suitable for users who requires high quality monitoring products at a reasonable price. It is cost effective and offers high performance, which makes it an ideal choice for residential and small-medium business applications. This series offers an option of a wide range of technologies such as Full-color and Starlight, providing various solutions for different scenarios.

## Functions

### Full-color

Full-color camera adopts large aperture lens and high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera provides 24/7 color monitoring that collects clear and vivid information, significantly increasing probability of gathering valid human, vehicle, and event evidence that can be used for further intelligent analysis.

### Broadcast-quality Audio

Audio information is used as supplementary evidence in video surveillance applications. The HDCVI camera supports audio signal transmission over coaxial cable. In addition, it adopts unique audio processing and transmission technology that best restores source audio and eliminates noise, guaranteeing the quality and effectiveness of collected audio information.

\*This function is available for select models.

### Wide Dynamic Range

With advanced Wide Dynamic Range (WDR) technology, Dahua HDCVI camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

### Super Adapt

Embedded with intelligent algorithm, for changing external environment, camera can automatically adjust parameters to present the optimal image, and it solves the trouble of configuration.

### Advanced 3D NR

3D NR is noise reduction technology that detects and eliminates random noises by comparing two sequential frames. Dahua's advanced 3D NR technology allows remarkable noise reduction with little impact to sharpness, especially under limited lighting condition. Besides, the advanced 3D NR effectively decreases the band width and saves the storage space.

### Warm Supplemental Lights

With warm supplemental LED lights, the camera is able to provide a colorful and vivid image even in total darkness. By default, the camera is set to smart light mode, in which the camera can automatically adjust the exposure time and light sensitivity simultaneously to avoid overexposure of the objects in the image center.

### 4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio\*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the XVR, such as sending control signal or triggering alarm. Moreover, HDCVI technology supports PoC for construction flexibility.

\* Audio input is available for some models of HDCVI cameras.

### Long Distance Transmission

HDCVI technology guarantees real-time transmission at long distance without any loss. It supports up to 700 m transmission for 2MP/5MP/8MP HD video via coaxial cable, and up to 300 m via UTP cable.

\*Actual results verified by real-scene testing in Dahua's test laboratory.

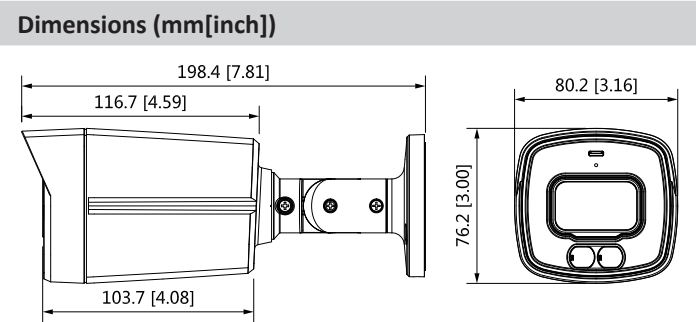
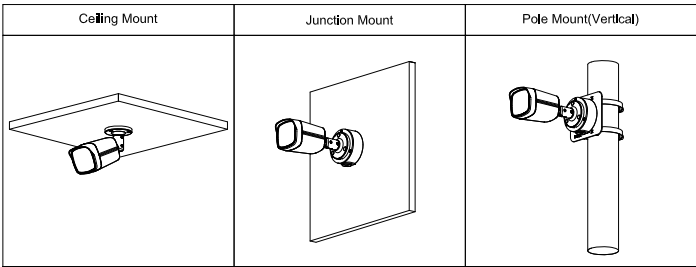
### Protection (IP67, Wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normal after soaking in 1 m deep water for 30 minutes.

Wide voltage: The camera allows  $\pm 30\%$  (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.


Technical Specification							Gain Control		Auto; manual	
Dahua Camera									Noise Reduction	3D NR
Image Sensor		5MP CMOS							Smart Light	Yes
Max. Resolution		2880 (H) × 1620 (V)							Mirror	Off/On
Pixel		5MP							Privacy Masking	Off/On (8 areas, rectangle)
Scanning System		Progressive							Certifications	
Electronic Shutter Speed		PAL:1/3 s–1/100,000 s NTSC:1/4 s–1/100,000 s							Certifications	CE (EN55032, EN55024, EN50130-4,EN60950-1) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)
S/N Ratio		> 65 dB							Port	
Min. Illumination		0.001 Lux/F1.0, 0 Lux warm light on							Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Illumination Distance		40 m (131.2 ft)							Audio Input	One channel built-in mic (-A)
Illuminator On/Off Control		Auto; manual							Power	
Illuminator Number		2							Power Supply	12 V ±30% DC
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°							Power Consumption	Max 6.4 W (12 V DC, warm light on)
Lens									Environment	
Lens Type		Fixed lens							Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F); < 95% (non-condensation)
Mount Type		M12							Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F); < 95% (non-condensation)
Focal Length		2.8 mm; 3.6 mm							Protection Grade	IP67
Max. Aperture		F1.0							Structure	
Field of View		2.8 mm: H: 112°; V: 57°; D: 132° 3.6 mm: H: 88; V: 46°; D: 104°							Casing	Metal front cover + plastic main body + metal bracket
Iris Type		Fixed iris							Camera Dimensions	198.4 mm × 80.2 mm × 76.2 mm (7.81" × 3.15" × 3")
Close Focus Distance		2.8 mm: 1.6 m (5.25 ft); 3.6 mm: 2.3 m (7.5 ft)							Net Weight	0.33 Kg (0.73 lb)
DORI Distance	Lens	Detect	Observe	Recognize	Identify			Gross Weight	0.52 Kg (1.15 lb)	
	2.8 mm	67.4 m (212.3 ft)	27.0 m (88.6 ft)	13.5 m (44.3 ft)	6.7 m (22.0 ft)					
	3.6 mm	80.0 m (262.5 ft)	32.0 m (105.0 ft)	16.0 m (52.5 ft)	8.0 m (26.2 ft)					
Video										
Frame Rate		CVI: PAL: 5M@25 fps; 4M@25 fps; 1080p@25 fps NTSC: 5M@25 fps; 4M@30 fps; 1080p@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); 1080p (1920 × 1080); 960H (960 × 576/960 × 480)								
BLC		BLC/HLC/WDR/HLC-Pro								
WDR		120 dB								
White Balance		Auto; Area WB								

Ordering Information		
Type	Model	Description
5MP Camera	DH-HAC-HFW1509TLMP-LED	5MP Full-color HDCVI Bullet Camera, PAL
	DH-HAC-HFW1509TLMN-LED	5MP Full-color HDCVI Bullet Camera, NTSC
	DH-HAC-HFW1509TLMP-A-LED	5MP Full-color HDCVI Bullet Camera, PAL
	DH-HAC-HFW1509TLMN-A-LED	5MP Full-color HDCVI Bullet Camera, NTSC
Accessories (Optional)	PFA134	nction box
	PFA130-E	Water-proof Junction Box
	PFA152-E	Pole Mount Bracket (For use with PFA130-E Water-proof Junction Box)
	PFM800-4K	Passive HDCVI Balun
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester




Accessories


Optional:




PFA134  
nction box




PFA130-E  
Water-proof Junction Box




PFA152-E  
Pole Mount Bracket  
(For use with PFA130-E Water-proof Junction Box)



PFM800-4K  
Passive HDCVI Balun



PFM321D  
12 V 1A Power Adapter



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