

# DH-HAC-HFW1509T-LED

5MP Full-color Starlight HDCVI Bullet Camera



- Full-color starlight
- 20 m LED distance
- Max. 20fps@5MP
- CVI/CVBS/AHD/TVI switchable
- 3.6 mm fixed lens
- IP67, 12V±30% DC



## System Overview

Experience 5MP full HD color video and the simplicity of reusing existing coaxial infrastructure with HDCVI. The full-color starlight HDCVI camera presents a high quality color image with rich details even in total darkness conditions. It offers various fixed lens models with a multi-language OSD and HD/SD switchable output. It adopts two powerful warm white LED illuminators, covering an effective range up to 20 m (65.61 ft). The LEDs switch on automatically in darkness to capture detail-packed full-color images 24/7, ensuring authentic identification of objects. It is an ideal choice for applications such as schools, retail centers and parking lots.

## Functions

### Full-color Starlight

The camera adopts F1.2 large aperture lens and 1/2.7" high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera presents an impressive lowlight performance with an exceptional balance between noise reduction and the blur of moving object.

### Warm Supplemental lights

With one warm supplemental LED lights, the camera is able to provide a colorful and vivid image even in total dark. 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. Also, the sensitivity and intensity of the LED lights can be remotely controlled by OSD menu.

### 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.

### 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 HCVR, such as sending control signal or triggering alarm.

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

### Long Distance Transmission

HDCVI technology guarantees long-distance and real-time transmission without any loss. It supports up to 700 m for 5MP 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.

### Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

### Multiple-formats

The camera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be switched over through OSD menu or by PFM820(UTC controller). This feature makes the camera to be compatible with most end users' existing HD/SD DVRs.

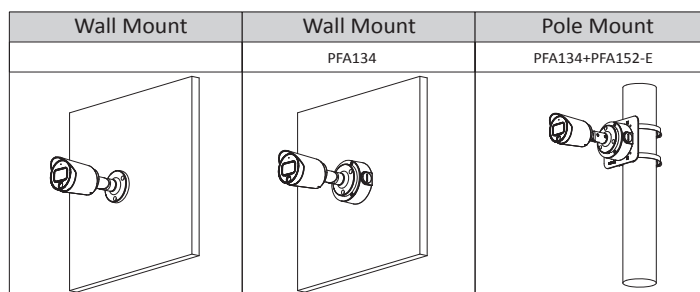
### Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments. With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. Supporting ±30% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

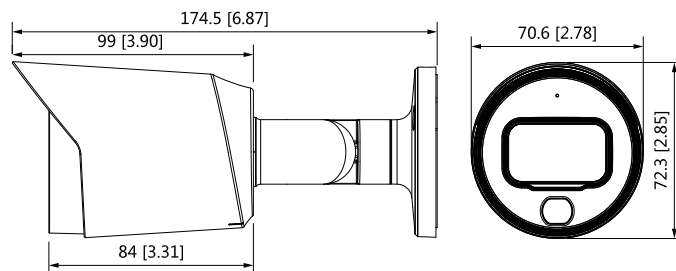
Technical Specification					
Dahua Camera					
Image Sensor		1/2.7 inch CMOS			
Effective Pixels		2592 (H) × 1944 (V), 5MP			
Scanning System		Progressive			
Electronic Shutter Speed		PAL: 1/25s–1/100000s NTSC: 1/30s–1/100000s			
S/N Ratio		>65dB			
Minimum Illumination		0.005Lux/F1.2, 0Lux White Light on			
Fill Light (White Light) Distance		Distance up to 20 m (65.61 ft)			
Fill Light On/Off Control		Auto; manual			
Fill Light Number		1			
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–180° Rotation: 0°–360°			
Lens					
Lens Type		Fixed-focal			
Mount Type		M12			
Focal Length		3.6 mm			
Max. Aperture		F1.2			
Field of View		3.6 mm: 111° × 83° × 56° (diagonal × horizontal × vertical)			
Iris Type		Fixed iris			
Close Focus Distance		3.6 mm: 2.1 m (6.89 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	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@20fps, 4M@25fps, 1080P@25fps; NTSC: 5M@20fps, 4M@30fps, 1080P@30fps AHD: PAL: 5M@20fps, 4M@25fps; NTSC: 5M@20fps, 4M@30fps TVI: PAL: 5M@20fps, 4M@25fps; NTSC: 5M@20fps, 4M@30fps CVBS: PAL: 960H; NTSC: 960H			
Resolution		5M (2592 × 1944); 4M (2560 × 1440); 1080P (1920 × 1080); 960H (704 × 576/704 × 480);			
BLC		BLC/HLC/WDR			
WDR		DWDR			
White Balance		Auto; manual			
Gain Control		Auto; manual			
Noise Reduction		2D NR			
Smart Light		Yes			
Mirror		Off/On			
Privacy Masking		Off/On (8 area, rectangle)			
Certifications					
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)			
Port					
Video Output		Video output choices of CVI/TVI/AHD/CVBS by one BNC port			
Audio Interface					
Audio Input		No			
Power					
Power Supply		12V ±30% DC			
Power Consumption		Max 3.0W (12V DC, White Light on)			
Environment					
Operating Temperature		-40°C to +60°C (-40°F to 140°F); <95% (non-condensation)			
Storage Temperature		-40°C to +60°C (-40°F to 140°F); <95% (non-condensation)			
Protection Grade		IP67			
Structure					
Casing		Metal throughout the whole casing			
Camera Dimensions		174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85")			
Net Weight		0.33 Kg (0.73 lb)			
Gross Weight		0.44 Kg (0.97 lb)			

## Ordering Information

Type	Part Number	Description
5MP Camera	DH-HAC-HFW1509TP-LED 0360B	5MP Full-color Starlight HDCVI Bullet Camera
	DH-HAC-HFW1509TN-LED 0360B	
Accessories	PFA134 + PFA152-E	Water-proof Junction Box + Pole Mount Bracket
	PFA134	Water-proof Junction Box
	PFM820 (Only 1080P and below are available)	UTC Controller
	PFM800-E	Passive HDCVI Balun
	PFM800-4K	Passive Video Balun
	PFM907	Integrated Mount Tester
	PFM320D	12V 2A DC power adapter



## Dimensions (mm[inch])



## Accessories

### Optional:



PFA134 + PFA152-E  
Water-proof Junction Box  
+ Pole Mount Bracket



PFA134  
Water-proof Junction Box



PFM820  
UTC Controller



PFM800-E  
Passive HDCVI Balun



PFM800-4K  
Passive Video Balun



PFM907  
Integrated Mount Tester



PFM320D  
12V 2A DC power adapter