

DH-HAC-HFW1509T(-A)-LED

5MP Full-color Starlight HDCVI Bullet Camera



- · Full-color starlight
- · 20 m LED distance
- · Max. 20fps@5MP
- · CVI/CVBS/AHD/TVI switchable
- · Built-in mic (-A)
- · 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 anthentic 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 coloful 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 overexposureing 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 $\pm 30\%$ input voltage tolerance, this camera suits even the mostunstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Lite Plus Series | DH-HAC-HFW1509T(-A)-LED

Camera Certifications Image Sensor 1/2.7 inch CMOS Certifications CE (ENS5032, ENS5024, ENS0130-4, EM60950-1) (PCC (CER 47 ECC part 15 subparitg, ANSI C63.4-2014) (U (U160950-1+CAN/CSA C22.2 No.60950-1) Effective Pixels 2592 (H) × 1944 (V), SMP POrt Scanning System Progressive POrt Electronic Shutter Speed PAL: 1/25s-1/1000005 NTSC: 1/30s-1/1000005 NTSC: 1/30s-1/10000005 NTSC: 1/30s-1/1000005 NTSC: 1/30s-1/1000005 NTSC: 1/30s-1/10000005 NTSC: 1/30s-1/1000005 NTSC: 1/30s-1/10000005 NTSC: 1/30s-1/10000005 NTSC: 1/30s-1/1000005 NTSC: 1/30s-1/1000005 NTSC: 1								
Image Sensor	Technical Specification					Privacy Masking	Off/On (8 area, rectangle)	
Effective Pixels 2592 (H) × 1944 (V), SMP 2592 (H) × 1944 (V), SMP Port	Camera						Certifications	
Port	Image Sensor		1/2.7 inch CMOS				Certifications	
Projection Pro	Effective Pixels		2592 (H) × 1944 (V), 5MP					
Electronic Shutter Speed NTSC: 1/30s-1/1000000s S/N Ratio 5/N Ratio 6/N R	Scanning System		Progressive				Port	
Minimum illumination 0.005Lux/F1.2, 0Lux White Light on Power Fill Light (White Light) Distance Distance up to 20 m (65.61 ft) Power Fill Light (White Light) Distance Distance up to 20 m (65.61 ft) Power Supply 12V ±30% DC Power Supply 12V ±30% DC Power Consumption Max 3.0W (12V DC, White Light on) Environment Pan: 0"-360" Tilt: 0"-180" Rotation: 0"-360" Rotation: 0"-360" Tilt: 0"-360" Rotation: 0"-360" To 40" to 140" Ft): <95% (non-condensation) Lens Lens Lens Type Fixed-focal Mount Type M12 Focal Length 3.6 mm Max. Aperture F1.2 Field of View 3.6 mm: 111" x 83" x 56" (diagonal x horizontal x vertical) Liris Type Fixed iris Close Focus Distance 3.6 mm: 2.1 m (6.89 ft) DORI Lens Detect Observe Recognize Identify Distance 3.6 mm 8.0 m 8.0 m 8.0 m Audio Input Built-in mic (-A) Addio Input Built-in mic (-A) Fower Power Power Power Consumption Max 3.0W (12V DC, White Light on) Environment Operating Temperature -40"C to 460"C (-40"F to 140"F); <95% (non-condensation) Frotection Grade Protection Grade Protec	Electronic Shutter Speed						Video Output	
Fill Light (White Light) Distance Distance up to 20 m (65.61 ft) Power Supply Power Supply 12V ±30% DC Power Supply 12V ±30% DC Power Supply 12V ±30% DC Power Supply Power Supply 12V ±30% DC Power Supply Power Supply Power Supply 12V ±30% DC Power Supply 12V ±30% DC Power Supply Power Supple Power Supple	S/N Ratio		>65dB				Audio Interface	
Fill Light On/Off Control Auto; manual Pan: 0°-360° Fill Light Number 1 Pan: 10°-360° Rotation: 0°-360° Rotation: 0°-360	Minimum Illumination		0.005Lux/F1.2, 0Lux White Light on				Audio Input	Built-in mic (-A)
Fill Light Number 1 Pan/Tilt/Rotation Range Pan: 0"-360" Tilt: 0"-180" Rotation: 0"-360" Todation: 0"-360" Rotation: 0"-360" Todation: 0"-360" Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +60"C (-40"F to 140"F); <95% (non-condensation) Rotation: 0"-40"C to +	Fill Light (White Light) Distance		Distance up to 20 m (65.61 ft)				Power	
Pan/Tilt/Rotation Range	Fill Light On/Off Control		Auto; manual				Power Supply	12V ±30% DC
Pan/Tilt/Rotation Range Tilt: 0°-180° Rotation: 0°-360° Coperating Temperature Condensation Operating Temperature Condensation Operating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) A0°C to +60°C (-40°F to 140°F); <95% (noncondensation) Fixed-focal Mount Type M12 Focal Length Max. Aperture F1.2 Field of View Fixed iris Close Focus Distance Jeff of Metal throughout the whole casing Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 or Net Weight Ogerating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Protection Grade Protection Grade Structure Casing Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 or Net Weight Ogerating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Protection Grade Structure Casing Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 or Net Weight Ogerating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Protection Grade Structure Casing Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 or Net Weight Ogerating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Protection Grade Structure Casing Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 or Net Weight Ogerating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Protection Grade Structure Casing Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 or Net Weight Ogerating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Protection Grade Structure Casing Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 or Net Weight Ogerating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Casing Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 or Net Weight Ogerating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) -40°C to +60°C (-40°F to 140°F); <95% (noncondensati	Fill Light Number		1				Power Consumption	Max 3.0W (12V DC, White Light on)
Rotation: 0°-360° Operating Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Storage Temperature -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) -40°C to +60°C (-40°F to 140°F); <95% (noncondensation) Protection Grade Protection Grade Structure Casing Metal throughout the whole casing Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 (diagonal × horizontal × vertical) Net Weight 0.33 Kg (0.73 lb) Gross Weight 0.44 Kg (0.97 lb) DORI Distance 3.6 mm 8.0 m A0°C to +60°C (-40°F to 140°F); <95% (noncondensation) -40°C to +60°C (-40°F to 140°F); <95% (nonconden	Pan/Tilt/Rotation Range						Environment	
Storage Temperature Condensation) Mount Type							Operating Temperature	
Mount Type M12 Focal Length 3.6 mm Max. Aperture F1.2 Field of View Sas × 56° (diagonal × horizontal × vertical) Close Focus Distance Samm 2.1 m (6.89 ft) DORI Distance 3.6 mm 80.0 m 32.0 m 16.0 m 8.0 m Protection Grade Structure 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)							Storage Temperature	
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 DORI Distance 3.6 mm 80.0 m 3.6 mm 80.0 m 32.0 m 16.0 m 8.0 m							Protection Grade	IP67
Max. Aperture F1.2 Sign Metal throughout the whole casing Metal throughout the whole casing T4.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 (diagonal × horizontal × vertical) Iris Type Fixed iris Casing Metal throughout the whole casing T4.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 Net Weight T4.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85 Net Weight T5.85 Net Weight T6.85 Weight T6.85 Net Weight T6.85 Weight T6.85 Net Weight T6.85 N							Structure	
Camera Dimensions 174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85							Casing	Metal throughout the whole casing
Field of View (diagonal × horizontal × vertical) Net Weight 0.33 Kg (0.73 lb) Iris Type Fixed iris Gross Weight 0.44 Kg (0.97 lb) Close Focus Distance 3.6 mm: 2.1 m (6.89 ft) DORI Distance 3.6 mm 80.0 m 32.0 m 16.0 m 8.0 m	Max. Aperture						Camera Dimensions	174.5 mm × 70.6 mm × 72.3 mm (6.87" × 2.78" × 2.85"
Gross Weight 0.44 kg (0.97 lb) Close Focus Distance 3.6 mm: 2.1 m (6.89 ft) Lens Detect Observe Recognize Identify DORI Distance 3.6 mm 80.0 m 32.0 m 16.0 m 8.0 m	Field of View						Net Weight	0.33 Kg (0.73 lb)
DORI Distance 3.6 mm 80.0 m 32.0 m 16.0 m 8.0 m	Iris Type		Fixed iris				Gross Weight	0.44 Kg (0.97 lb)
DORI Distance 3.6 mm 80.0 m 32.0 m 16.0 m 8.0 m	Close Focus Distance		3.6 mm: 2.1 m (6.89 ft)					
Distance 3.6 mm 80.0 m 32.0 m 16.0 m 8.0 m		Lens	Detect	Observe	Recognize	Identify		
		3.6 mm						

2D NR

Off/On

CVI:

AHD:

TVI:

CVBS: PAL: 960H; NTSC: 960H

PAL: 5M@20fps, 4M@25fps, 1080P@25fps; NTSC: 5M@20fps, 4M@30fps, 1080P@30fps

PAL: 5M@20fps, 4M@25fps; NTSC: 5M@20fps, 4M@30fps

PAL: 5M@20fps, 4M@25fps; NTSC: 5M@20fps, 4M@30fps

Video

Frame Rate

Noise Reduction

Smart Light

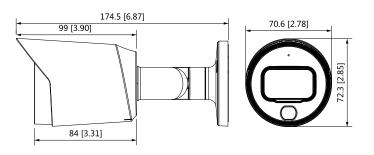
Mirror

Lite Plus Series | DH-HAC-HFW1509T(-A)-LED

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

Wall Mount	Wall Mount	Pole Mount
	PFA134	PFA134+PFA152-E

Dimensions (mm[inch])



Accessories

Optional:









PFM820 UTC Controller



Passive HDCVI Balun



PFM800-4K Passive Video Balun



PFM907 Integrated Mount Tester



PFM320D 12V 2A DC power adapter

