

# DH-HAC-HFW1209C-LED

2MP Full-color HDCVI Bullet Camera



- 24/7 color imaging
- 20 m illumination distance
- Max. 30 fps@1080p
- CVI/CVBS/AHD/TVI switchable
- Fixed lens (2.8 mm; 3.6 mm optional)
- IP67, 12V±30% DC



## System Overview

Experience 2MP 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 dark conditions. It offers various fixed lens models with a multi-language OSD and HD/SD switchable output. It adopts one 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

The camera adopts F1.6 large aperture lens and 1/2.8" high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera can present 24/7 colored image that provides color details to accurately identify people or objects in low light conditions.

### 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.

## 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.

\*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 2MP 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						
Camera						
Image Sensor		1/2.8 inch CMOS				
Effective Pixels		1920 (H) × 1080 (V), 2MP				
Scanning System		Progressive				
Electronic Shutter Speed		PAL: 1/25 s–1/100000 s NTSC: 1/30 s–1/100000 s				
S/N Ratio		> 65 dB				
Minimum Illumination		0.01 Lux/F1.6, 0 Lux white light on				
Illumination Distance		Distance up to 20 m (65.61 ft)				
Illuminator On/Off Control		Auto; manual				
Illuminator Number		1				
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°				
Lens						
Lens Type		Fixed-focal				
Mount Type		M12				
Focal Length		2.8 mm; 3.6 mm				
Max. Aperture		F1.6				
Field of View		2.8 mm: 126.2° × 106° × 56.5° (diagonal × horizontal × vertical); 3.6 mm: 103.6° × 86.9° × 46.3° (diagonal × horizontal × vertical)				
Iris Type		Fixed iris				
Close Focus Distance		2.8 mm: 0.7 m (2.29 ft); 3.6 mm: 1.2 m (3.94 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify	
	2.8 mm	43.9 m (144.02 ft)	17.5 m (57.41 ft)	8.8 m (28.87 ft)	4.4 m (14.43 ft)	
	3.6 mm	55.2 m (181.1 ft)	22.1 m (72.5 ft)	11.0 m (36.1 ft)	5.5 m (18.0 ft)	
Video						
Frame Rate		CVI: PAL: 1080p@25 fps; 720p@25 fps; NTSC: 1080p@30 fps; 720p@30 fps; AHD: PAL: 1080p@25 fps; NTSC: 1080p@30 fps TVI: PAL: 1080p@25 fps; NTSC: 1080p@30 fps CVBS: PAL: 960H; NTSC: 960H				
Resolution		1080p (1920 × 1080); 720p (1280 × 720); 960H (960 × 576/960 × 480)				
BLC		BLC/DWDR				
WDR		DWDR				
White Balance		Auto; manual				
Gain Control		Auto; manual				

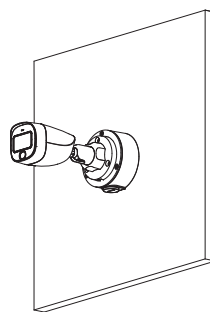
Noise Reduction	2D NR
Smart Light	Yes
Mirror	Off/On
Privacy Masking	Off/On (8 area, rectangle)
Certifications	
Certifications	CE (EN55032, EN55024, EN50130-4,EN60950-1) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014)
Port	
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Audio Interface	N/A
Power	
Power Supply	12V ±30% DC
Power Consumption	Max 3.1W (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 front cover + plastic main body + plastic bracket
Camera Dimensions	161.3 mm × 69.7 mm × 70.0 mm (6.35" × 2.75" × 2.75")
Net Weight	0.20 kg (0.44 lb)
Gross Weight	0.28 kg (0.62 lb)

## Ordering Information

Type	Part Number	Description
2MP Camera	DH-HAC-HFW1209CP-LED 2.8 mm	2MP Full-color HDCVI Bullet Camera
	DH-HAC-HFW1209CN-LED 2.8 mm	
	DH-HAC-HFW1209CP-LED 3.6 mm	
	DH-HAC-HFW1209CN-LED 3.6 mm	
Accessories	PFA134	Junction Box
	PFA130-E	IP66 Junction Box
	PFA152-E	Pole Mount Bracket
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester
	PFM820	UTC controller (Only 1080P and below are available)
	PFM800-E	Passive HDCVI Balun

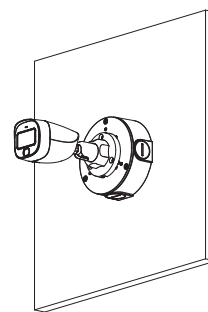
## Junction Mount

PFA134



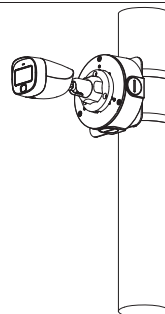
## Junction Mount

PFA130-E

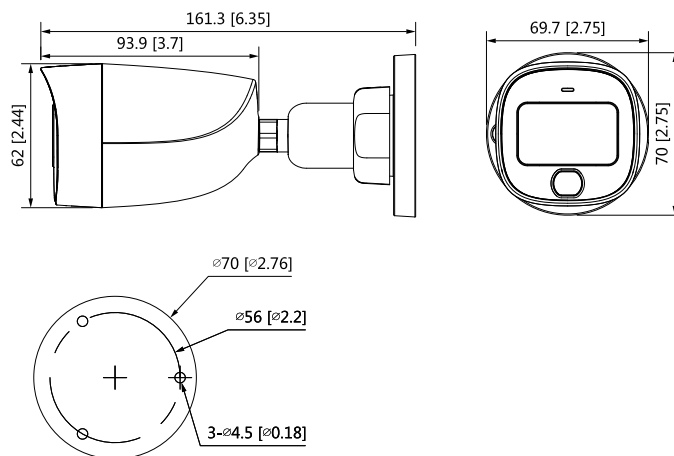


## Pole Mount(Vertical)

PFA130-E+PFA152-E



## Dimensions (mm[inch])



## Accessories

### Optional:



PFA134  
Junction Box



PFA130-E  
IP66 Junction Box



PFA152-E  
Pole Mount Bracket



PFM321D  
12V 1A Power Adapter



PFM904  
Integrated Mount Tester



PFM820  
UTC controller  
(Only 1080P and below  
are available)



PFM800-E  
Passive HDCVI Balun