

DH-HAC-HDW1509T(-A)-LED

5MP Full-color Starlight HDCVI Eyeball Camera



- Full-color starlight
- 40 m LED distance
- Max. 20fps@5MP
- CVI/CVBS/AHD/TVI switchable
- Audio in interface, 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 40m (131.23 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 two 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

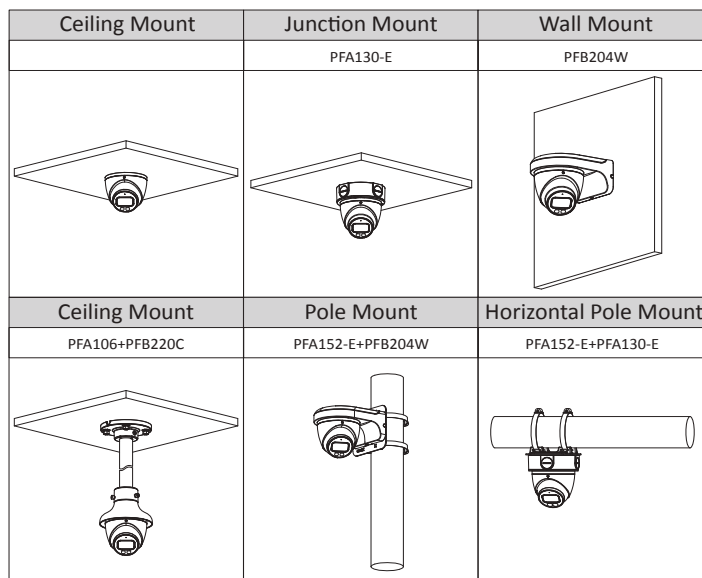
The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments. With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme 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						Privacy Masking		Off/On (8 area, rectangle)	
Camera						Certifications			
Image Sensor		1/2.7 inch CMOS				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)	
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 40 m (131.23 ft)							
Fill Light On/Off Control		Auto; manual							
Fill Light Number		2							
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–78° 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							

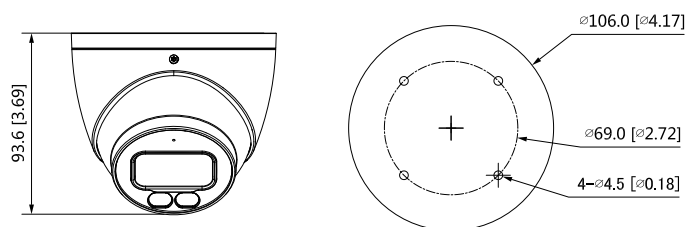
Privacy Masking		Off/On (8 area, rectangle)	
Certifications			
Certifications		CE (EN55032, EN55024, EN50130-4,EN60950-1) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)	
Port			
Video Output		Video output choices of CVI/TVI/AHD/CVBS by one BNC port	
Audio Interface			
Audio Input		One channel of built-in mic (only for audio model)	
Power			
Power Supply		12V ±30% DC	
Power Consumption		Max 5.0W (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		φ106.0 mm × 93.6 mm (φ4.17" × 3.69")	
Net Weight		0.46 Kg (1.01 lb)	
Gross Weight		0.61 Kg (1.34 lb)	

Ordering Information

Type	Part Number	Description
5MP Camera	DH-HAC-HDW1509TP-A-LED 0360B	5MP Full-color Starlight HDCVI Eyeball Camera
	DH-HAC-HDW1509TN-A-LED 0360B	
	DH-HAC-HDW1509TP-LED 0360B	
	DH-HAC-HDW1509TN-LED 0360B	
Accessories	PFA130-E	Water-proof Junction Box
	PFB204W	Water-proof Wall Mount Bracket
	PFA106 + PFB220C	Adapter Plate of Mini Dome & Eyeball Camera + Ceiling Mount Bracket of Mini Dome & Eyeball Camera
	PFA152-E + PFB204W	Pole Mount Bracket + Water-proof Wall Mount Bracket
	PFA152-E + PFA130-E	Pole Mount Bracket + 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:



PFA130-E
Water-proof Junction Box



PFB204W
Water-proof Wall Mount Bracket



PFA106 + PFB220C
Adapter Plate of Mini Dome & Eyeball Camera + Ceiling Mount Bracket of Mini Dome & Eyeball Camera



PFA152-E + PFB204W
Pole Mount Bracket + Water-proof Wall Mount Bracket



PFA152-E + PFA130-E
Pole Mount Bracket + 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