

DH-HAC-HFW1509TM-IL-A

5MP Smart Dual Light Bullet Camera



System Overview

The Lite Series is a great choice for consumers looking for high quality monitoring products at a reasonable price. Its low cost and high performance make it ideal for residential areas and SMB solutions. This series is equipped with a wide range of technologies, such as full-color and starlight, providing various solutions for different scenarios.

Functions

Smart Dual Light

With its smart dual light mechanism, the camera automatically turns on the white light when Perimeter Protection/SMD Plus function of AI XVR detects a target in the rule area to capture clear, vivid images. When the target leaves the rule area, the camera automatically switches over from the white light to the IR light to significantly reduce light pollution.

Wide Dynamic Range

With its advanced Wide Dynamic Range technology (WDR), the camera captures highly detailed images and produces high-definition recordings in high-contrast lighting conditions, and in scenes with backlighting or shadows.

Broadcast-quality Audio

Audio signal transmission over coaxial cables is supported by the HDCVI camera. It adopts a unique audio processing and transmission technology that restores source audio and eliminates noise, ensuring the quality and reliability of the audio information that is collected. This becomes important for video surveillance applications that use audio information as a type of supplementary evidence.

Super Adapt

With its intelligent algorithm, the camera automatically adjusts its parameters to provide optimal performance and vivid images.

The parameters and datasheets below can only be applied to 1509-IL series.
In order to use the 5MP 16:9 and the Smart Dual Light HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000004.1.R.220323 or later version.

- Max 25 fps@5MP (16:9 video output).
- 120 dB true WDR, 3D NR.
- Smart Dual Light.
- 40 m illumination distance.
- Super Adapt.
- Built-in MIC.
- 3.6 mm fixed lens (2.8 mm optional).
- CVI/CVBS/AHD/TVI switchable.
- IP67, 12 VDC.



Advanced 3DNR

Dahua's advanced 3DNR technology reduces image noise with little to no impact on image sharpness, especially in poor lighting conditions. It detects the noise, and compares the sequential frames to effectively reduce the noise. It also makes efficient use of bandwidth, saving on storage space.

Protection (IP67, Wide Voltage)

IP67: The camera passed a series of rigorous dust and immersion tests. Its enclosure is both dust-proof and waterproof, and can function normally while being immersed in 1 m deep water for up to 30 minutes. Wide voltage: The camera has \pm 30% input voltage tolerance (for some power supplies) and a wide voltage range, making it suitable for a variety of outdoor scenarios.

4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals (video, audio*, data and power) which are simultaneously transmitted over a coaxial cable. Dual-way data transmission allows the HDCVI camera to interact with the XVR to perform various actions such as sending control signals and triggering alarms. HDCVI technology also supports PoC, which makes the camera easy and quick to install.

* Audio input is available for select HDCVI camera models.

Long Distance Transmission

HDCVI technology provides long distance transmission in real time without transmission loss. It supports transmission distances up to 700 m for 2-MP/5-MP/8-MP HD videos through coaxial cables, and up to 300 m through UTP cables. The results were obtained and verified through rigorous testing in Dahua's test laboratory.

Lite Series | DH-HAC-HFW1509TM-IL-A

Technical Specification

Camera

cumeru	Calificia					
Pixel		5MP				
Image Sensor		5MP CMOS				
Max. Resolution		2880 (H) × 1620 (V)				
Scanning System		Progressive				
Electronic Shutter Speed		PAL: 1/3 s-1/100000 s NTSC: 1/4 s-1/100000 s				
Min. Illumination		0.001 lux@F1.0 (Color, 30 IRE) 0.0001 lux@F1.0 (B/W, 30 IRE) 0 lux (Illuminator on)				
S/N Ratio		>65dB				
Illumination Distance		IR: 40 m (131.23 ft) Warm light: 40 m (131.23 ft)				
Illuminator On/Off Control		Auto; manual				
Illuminator Number		2 (IR light)				
		2 (Warm light)				
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		F1.0				
Field of View		2.8 mm: H: 111°; V: 57°; D: 131° 3.6 mm: H: 89°; V: 47°; D: 104°				
Iris Control		Fixed				
Close Focus Distance		2.8 mm: 1.5 m (4.92 ft) 3.6 mm: 2.2 m (7.22 ft)				
	Lens	Detect	Observe	Recognize	Identify	
DORI distance	2.8 mm	66.0 m (216.54 ft)	26.4 m (86.61 ft)	13.2 m (43.31 ft)	6.6 m (21.65 ft)	
	3.6 mm	78.0 m (255.91 ft)	31.2 m (102.36 ft)	15.6 m (51.18 ft)	7.8 m (25.59 ft)	

Video

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)
Day/Night	Auto (ICR)/Color/B/W

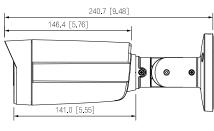
BLC	BLC; HLC; WDR; HLC-Pro			
WDR	120dB			
White Balance	Auto; Area white balance			
Gain Control	Auto; manual			
Noise Reduction	3D NR			
Defog	Electronic defog			
Digital Zoom	4x			
Mirror	Yes			
Privacy Masking	Off/On (8 areas, rectangle)			
Illumination Mode	Smart IR&WL WL Mode; IR Mode			
Certifications				
Certifications	CE (EN55032:2015, EN61000-3-2:2014, EN61000- 3-3:2013, EN55024:2010+A1:2015, EN55035:2017, EN50130-4:2011+A1:2014, EN62368- 1:2014+A11:2017) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014 UL (UL62368-1+CAN/CSA C22.2 No.62368-1-14)			
Port				
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port			
Audio Input	One channel built-in MIC			
Power				
Power Supply	12V ± 30% DC			
Power Consumption	Max 5.7 W (12 VDC, LED on)			
Environment				
Operating Temperature	-40 °C to +60 °C (-40 °F to 140 °F)			
Operating Humidity	<95% (RH), non-condensing			
Storage Temperature	-40 °C to +60 °C (-40 °F to 140 °F)			
Protection	IP67			
Structure				
Casing Material	Metal			
Product Dimensions	240.7 mm × 90.7 mm × 90.7 mm (9.48" × 3.57" × 3.57")			
Packaging Dimensions	299 mm × 119mm × 111 mm (11.77" × 4.69" × 4.37")			
Net Weight	0.7 kg (1.54 lb)			
Gross Weight	0.89 kg (1.96 lb)			
Installation	Wall mount; ceiling mount; vertical pole mount			

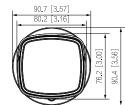
Lite Series | DH-HAC-HFW1509TM-IL-A

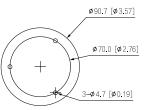
Ordering Information

Туре	Part Number	Description	
5MP Camera	DH-HAC-HFW1509TMP-IL-A	5MP Smart Dual Light Bullet Camera, PAL	
	DH-HAC-HFW1509TMN-IL-A	5MP Smart Dual Light Bullet Camera, NTSC	
Accessories (Optional)	PFA135	Junction box	
	PFA130-E	Water-proof Junction Box	
	PFA152-E	Pole Mount Bracket (For use with PFA130-E Water-proof Junction Box)	
	PFM800-E	Passive HDCVI Balun	
	PFM321D	12V 1A Power Adapter	
	PFM904	Integrated Mount Tester	

Dimensions (mm[inch])







Accessories

Optional:



PFA135 Junction box



PFM800-E Passive HDCVI Balun



PFA130-E Water-proof Junction Box



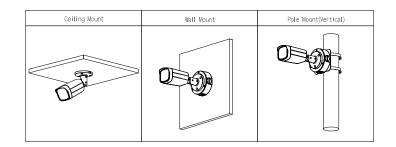
PFM321D 12V 1A Power Adapter



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



PFM904 Integrated Mount Tester



Rev 002.000 © 2023 Dahua. All rights reserved. Design and specifications are subject to change without notice. The images, specifications and information mentioned in the document are only for reference, and might differ from the actual product.