DH-HAC-HDW1500TL/TL-A

5MP HDCVI IR Eyeball Camera

- · Max. 20fps@5MP
- · Built-in mic (-A)
- · CVI/CVBS/AHD/TVI switchable
- · 3.6mm fixed lens (2.8mm optional)
- · Max. IR length 30m, Smart IR
- · IP67, DC12V

System Overview

Experience superior 5MP video and the simplicity of reusing existing coaxial infrastructure with HDCVI. The Lite series 5MP HDCVI camera features a compact design and offers a high quality image with rich details at a friendly price. It offers various vari-focal/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the camera an ideal choice for SMB solutions.

Functions

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.

* Broadcast-quality audio is available for some models of HDCVI cameras.

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 700m for 5MP HD video via coaxial cable, and up to 300m 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.

Smart IR

The camera is designed with IR LED illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity in B/W image under low illumination. Dahua's unique Smart IR adjusts to the intensity of camera's infrared LEDs to compensate for the distance of an object, and prevents IR LEDs from overexposing images as the object come closer to the camera.

Multi-formats

The camera supports multiple video formats including HDCVI, CVBS, and other two common HD analog formats in the market. This feature makes the camera compatible with not only XVRs, but also most existing HD/SD DVRs.

*Use OSD menu to switch HDCVI to other video formats. Use PFM820 UTC Controller to switch CVBS to HDCVI video format.

Multi-language OSD

OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. The OSD menu includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

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	1/2.7 inch CMOS
Effective Pixels	2592 (H)×1944 (V), 5MP
Electronic Shutter Speed	PAL: 1/25s–1/100000s NTSC: 1/30s–1/100000s
Minimum Illumination	0.02Lux/F1.85, 30IRE, 0Lux IR on
IR Distance	30m (98.42ft)
IR On/Off Control	Auto; manual
IR LEDs Number	1
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8mm; 3.6mm
Max. Aperture	F1.85/F2.0
Angle of View	2.8mm: 116°×93°×68° (diagonal×horizontal×vertical) 3.6mm: 101°×77.5°×56.5° (diagonal×horizontal×vertical)
Iris Type	Fixed iris
Close Focus Distance	0.8m (2.62ft)/1.4m (4.59ft)
DORI Distance	2.8mm: D: 56m (184ft); O: 22m (72ft); R: 11m (36ft), I: 6m (20ft); 3.6mm: D: 80m (262ft), O: 32m (105ft), R: 16m (52ft), I: 8m (26ft)

Video

Video Frame Rate	CVI: PAL: 5M@20fp; 4M@25fp; 1080P@25fp NTSC: 5M@20fp; 4M@30fp; 1080P@30fp AHD: PAL: 5M@20fp; 4M@25fp; 1080P@25fp NTSC: 5M@20fp; 4M@30fp; 1080P@30fp TVI: PAL: 5M@20fp; 4M@25fp; 1080P@25fp NTSC: 5M@20fp; 4M@30fp; 1080P@30fp CVBS: PAL: 960H NTSC: 960H
Resolution	5M (2592×1944); 4M (2560×1440); 1080P (1920×1080); 960H (960× 576/960×480)
Day/Night	Auto switch by ICR
BLC	BLC/HLC/DWDR
WDR	DWDR
White Balance	Auto; manual
Gain Control	Auto; manual
Noise Reduction	2D NR
Smart IR	Yes
Mirror	Off/On
Privacy Masking	Off/On (8 Area, Rectangle)

Certification

Certifications	CE (EN55032, EN55024, EN50130-4) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)

Port

Video Port	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Audio Port	Built-in mic (-A)

Power

Power Supply	12V±30% DC
Power Consumption	Max 3.7W (12V DC, IR on)

Environment

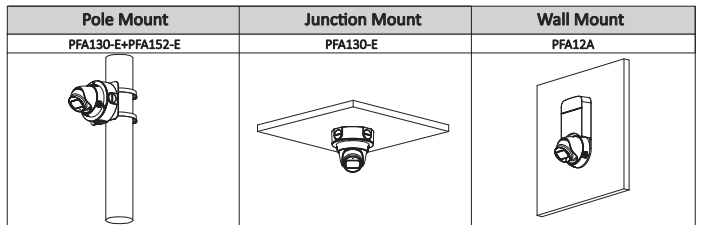|	
Operating Temperature	-40°C to +60°C (-40°F to +140°F); <95% (non-condensation)
Storage Temperature	-40°C to +60°C (-40°F to +140°F); <95% (non-condensation)
Protection Grade	IP67

Structure

Casing	Inner core: metal+plastic; cover: plastic
Dimensions	Φ97.0mm×85.8mm (Φ3.82"×3.38")
Net Weight	0.22kg (0.49lb)
Gross Weight	0.28kg (0.62lb)

Ordering Information

Type	Part Number	Description
5MP Camera	DH-HAC-HDW1500TLP-A 2.8mm	5MP HDCVI IR Eyeball Camera, PAL
	DH-HAC-HDW1500TLP-A 3.6mm	
	DH-HAC-HDW1500TLN-A 2.8mm	5MP HDCVI IR Eyeball Camera, NTSC
	DH-HAC-HDW1500TLN-A 3.6mm	
	DH-HAC-HDW1500TLP 2.8mm	5MP HDCVI IR Eyeball Camera, PAL
	DH-HAC-HDW1500TLP 3.6mm	
	DH-HAC-HDW1500TLN 2.8mm	5MP HDCVI IR Eyeball Camera, NTSC
	DH-HAC-HDW1500TLN 3.6mm	
Accessories	PFA130-E	Junction box (For use alone or with PFA152-E pole mount)
	PFA12A	Plastic Junction box (For use alone)
	PFA152-E	Pole box (For usewith PFA130-E junction mount)
	PFM820	UTC Controller
	PFM800-E	Passive HDCVI Balun
	PFM800-4K	Passive Video Balun
	PFM800B-4K	Passive Video Balun
	PFM320D-015	12V 1.5A Power Adapter
	PFM300	12V 2A Power Adapter

Accessories

Optional:

PFA130-E Junction box (For use alone or with PFA152-E pole mount)

PFA12A Plastic Junction box (For use alone)

PFA152-E Pole box (For usewith PFA130-E junction mount)

PFM820 UTC Controller

PFM800-E Passive HDCVI Balun

PFM800-4K Passive Video Balun

PFM800B-4K Passive Video Balun

PFM320D-015 12V 1.5A Power Adapter

PFM300 12V 2A Power Adapter

Pole Mount	Junction Mount	Wall Mount
PFA130-E+PFA152-E	PFA130-E	PFA12A

Dimensions (mm/inch)

85.8 [3.38] ⌀97 [3.82] 10° ⌀4.5 [0.18] ⌀70 [2.76]