DH-HAC-HDW1801TLM(-A)

4K HDCVI IR Eyeball Camera



- Max. 4K resolution
- 120 dB true WDR, 3D NR
- CVI/CVBS/AHD/TVI switchable
- 3.6 mm fixed lens (2.8 mm optional)
- Built-in mic (-A)
- Max. IR length 30 m, Smart IR
- IP67, DC12V



System Overview

Lite Series is suitable for users who requires high quality monitoring products at a reasonable price. It is cost effective and offers high performance, which makes it an ideal choice for residential and small-medium business applications. This series offers an option of a wide range of technologies such as Full-color and Starlight, providing various solutions for different scenarios.

Functions

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. Moreover, HDCVI technology supports PoC for construction flexibility.

* Audio input is available for some models of HDCVI cameras.

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.

* Audio input is available for some models of HDCVI cameras.

Long Distance Transmission

HDCVI technology guarantees real-time transmission at long distance without any loss. It supports up to 700m transmission for 2MP/5MP/8MP 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 high definition video surveillance without the hassle of configuring a network.

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.

Wide Dynamic Range

With advanced Wide Dynamic Range (WDR) technology, Dahua HDCVI camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

Smart Illumination

The camera is designed with IR 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.

Protection (IP67, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.
Wide voltage: The camera allows ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Image Sensor	4K CMOS
Max. Resolution	3840 (H) × 2160 (V)
Pixel	8MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/3 s–1/100,000 s NTSC: 1/4 s–1/100,000 s
S/N Ratio	> 65 dB
Min. Illumination	0.03Lux/F2.0, 30IRE, 0Lux IR on
Illumination Distance	30 m (98.4 ft)
Illuminator On/Off Control	Auto; manual
Illuminator Number	1 (IR light)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed lens
Mount Type	M12
Focal Length	2.8 mm; 3.6 mm;
Max. Aperture	F2.0
Field of View	2.8 mm:H:105° V:56° D:125° 3.6 mm: H:87° V:47° D:104°
Iris Type	Fixed
Close Focus Distance	2.8 mm: 1 m (3.3 ft) 3.6 mm: 1.8 m (5.9 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	75.0 m (246.1 ft)	30.0 m (98.4 ft)	15.0 m (49.2 ft)	8.0 m (26.2ft)
	3.6 mm	146.0 m (479.0 ft)	58.0 m (190.3 ft)	16.0 m (52.5 ft)	15.0 m (49.2 ft)

Video

Video Frame Rate	CVI: PAL: 4K@15fps; 5M@20fps; 4M@25fps; NTSC:4K@15fps; 5M@20fps; 4M@30fps; AHD: PAL: 4K@15fps; 5M@20fps; 4M@25fps; NTSC:4K@15fps; 5M@20fps; 4M@30fps; TVI: PAL: 4K@15fps; 5M@20fps; 4M@25fps; NTSC:4K@15fps; 5M@20fps; 4M@30fps; CVBS: PAL: 960H; NTSC: 960H
Resolution	4K (3840×2160); 5M (2592×1944); 4M (2560×1440); 960H (960× 576/960×480);
Day/Night	Auto switch by ICR
BLC	BLC/HLC/WDR
WDR	120dB
White Balance	Auto/Manual
Gain Control	Auto/Manual
Noise Reduction	3D NR
Smart Illumination	Yes
Defog	Electronic defog
Digital Zoom	4×
Mirror	Off/On
Privacy Masking	Off/On (8area,rectangle)

Certifications

Certifications	CE (EN55032, EN55024, EN50130-4, EN62368-1) 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 Input	One channel built-in mic (-A)

Power

Power Supply	12V ±30% DC
Power Consumption	Max 5.2W (12V DC, IR on)

Environment

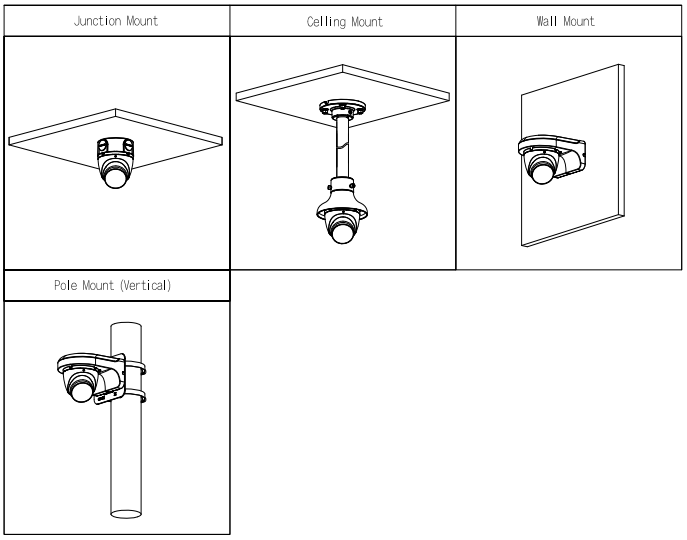
Operating Temperature	–40°C to +60°C (-40°F to 140°F); < 95% (non-condensation)
Storage Temperature	–40°C to +60°C (-40°F to 140°F); < 95% (non-condensation)
Protection Grade	IP67

Structure

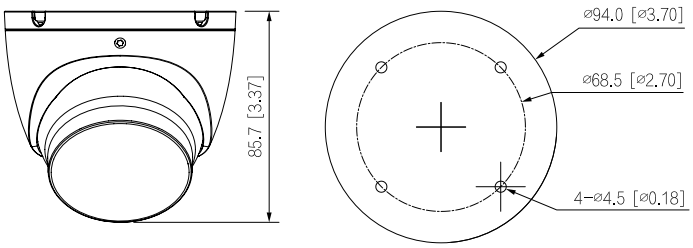
Casing	Metal throughout the whole casing
Camera Dimensions	ϕ94.0 mm × 85.7 mm (ϕ3.70" × 3.37")
Net Weight	0.33 kg (0.73 lb)
Gross Weight	0.47 kg (1.04 lb)

Ordering Information

Type	Part Number	Description
4K Camera	DH-HAC-HDW1801TLMP	4K HDCVI IR Eyeball Camera, PAL
	DH-HAC-HDW1801TLMN	4K HDCVI IR Eyeball Camera, NTSC
	DH-HAC-HDW1801TLMP-A	4K HDCVI IR Eyeball Camera, PAL
	DH-HAC-HDW1801TLMN-A	4K HDCVI IR Eyeball Camera, NTSC
Accessories	PFA13A-E	Junction box
	PFB205W	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFA106	Adapter plate
	PFB220C	Ceiling Mount Bracket
	PFM800-4K	Passive HDCVI Balun
	PFM321	12V 1A Power Adapter
	PFM904	Integrated Mount Tester



Dimensions (mm[inch])



Accessories

Optional:



PFA13A-E
Junction box

PFB205W
Wall Mount Bracket



PFA152-E
Pole Mount Bracket



PFA106
Mount Adapter



PFB220C
Ceiling Mount Bracket



PFM800-4K
Passive HDCVI Balun



PFM321
12V 1A Power Adapter



PFM904
Integrated Mount Tester

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