DH-HAC-HDW1801TLQ(-A)

4K Starlight HDCVI Fixed IR Quick-to-install Eyeball Camera



* The parameters and datasheets below can only be applied to 1801-S2 series.

- Max. 15 fps@4K.
- 120 dB true WDR, 3D NR.
- Smart IR Illumination.
- 30 m illumination distance.
- Super Adapt
- Built-in MIC (-A).
- Quick-to-install eyeball saves installation time
- 3.6 mm fixed lens (2.8 mm optional).
- CVI/CVBS/AHD/TVI switchable.
- IP67, 12 VDC.



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

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.

Super Adapt

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

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.

Smart IR Illumination

With its IR illumination, the camera provides optimal performance in low light conditions, ensuring uniformity in the brightness of B/W images. Through its smart IR technology, the camera also compensates for the distance of targets by adjusting the intensity of its IR LEDs, preventing overexposure of images as targets move closer to the camera.

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 ±30% input voltage tolerance (for some power supplies) and a wide voltage range, making it suitable for a variety of outdoor scenarios.

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.

Easy Installation

The camera comes with an easy-to-install eyeball and pedestal, that cuts down on installation time and cost, outranking conventional eyeballs.

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.

Technical Specification

Camera

Pixel	8 MP
Image Sensor	4K CMOS
Max. Resolution	3840 (H) × 2160 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25 s–1/100000 s NTSC: 1/30 s–1/100000 s
Min. Illumination	0.01 lux@F2.0 (Color, 30 IRE) 0.001 lux@F2.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	30 m (98.43 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-focal
Lens Mount	M12
Focal Length	2.8 mm; 3.6 mm
Max. Aperture	F2.0
Field of View	2.8 mm: H: 106°; V: 56°; D: 125° 3.6 mm: H: 88°; V: 46°; D: 105°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.3 m (4.27 ft) 3.6 mm: 1.9 m (6.23 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	88 m (288.71 ft)	35.2 m (115.49 ft)	17.6 m (57.74 ft)	8.8 m (28.87 ft)
	3.6 mm	106.7 m (350.07 ft)	42.7 m (140.09 ft)	21.3 m (69.88 ft)	10.7 m (35.10 ft)

Video

Video Frame Rate	CVI: PAL: 4K@15 fps; 5M@25 fps; 4M@25 fps; 1080p@25 fps NTSC: 4K@15 fps; 5M@25 fps; 4M@30 fps; 1080p@30 fps TVI: PAL: 4K@15 fps NTSC: 4K@15 fps AHD: PAL: 4K@15 fps NTSC: 4K@15 fps CVBS: PAL: 960H NTSC: 960H
Resolution	4K (3840 x 2160); 5M (2880 x 1620); 4M (2560 x 1440); 1080p (1920 x 1080); 960H (960 x 576/960 x 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; HLC; WDR; HLC-Pro
WDR	120 dB
White Balance	Auto;Area white balance
Gain Control	Auto/Manual
Noise Reduction	3D NR
Smart Illumination	Smart IR
Defog	Electronic defog
Mirror	Yes
Privacy Masking	Off/On (8 areas, rectangle)

Certification

Certifications	CE-LVD: EN 62368-1; CE-EMC: EN 55032; EN 55035 FCC: 47 CFR FCC Part 15, Subpart B; 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 (-A)

Power

Power Supply	12 VDC ± 30%
Power Consumption	Max 4.7 W (12 VDC, IR on)

Environment

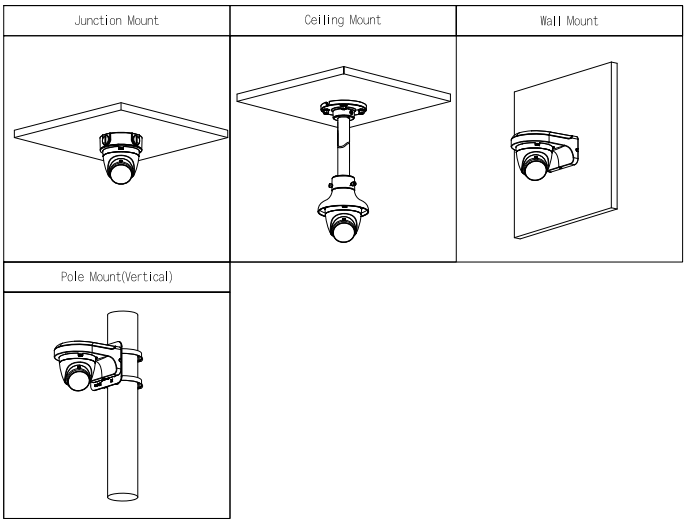
Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Protection	IP67

Structure

Casing Material	Metal dome + plastic enclosure
Product Dimensions	ϕ97.1 mm × 92.9 mm (ϕ3.82" × 3.66")
Packaging Dimensions	121 mm × 118 mm × 109 mm (4.76" × 4.65" × 4.29")
Net Weight	0.21 kg (0.46 lb)
Gross Weight	0.28 kg (0.62 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Part Number	Description
4K Camera	DH-HAC-HDW1801TLQP(-A)	4K HDCVI Fixed IR Quick-to-install Eyeball Camera, PAL
	DH-HAC-HDW1801TLQN(-A)	4K HDCVI Fixed IR Quick-to-install Eyeball Camera, NTSC
Accessories (Optional)	PFA13G	Junction Box
	PFB205W-E	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFA109	Mount Adapter
	PFB220C	Ceiling Mount Bracket
	PFM800-4K	Passive HDCVI Balun
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester



Accessories

Optional:



PFA13G
Junction
Box

PFB205W-E
Wall Mount
Bracket



PFA152-E
Pole Mount
Bracket



PFA109
Mount
Adapter

PFB220C
Ceiling Mount

Bracket



PFM800-4K
Passive HDCVI
Balun

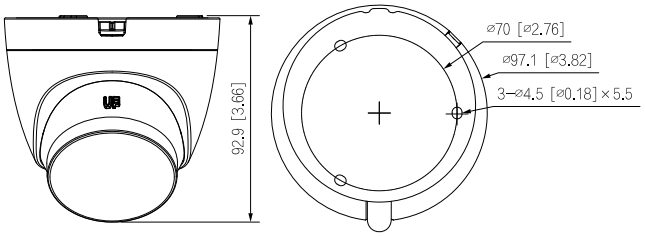


PFM321D
12V 1A Power
Adapter



PFM904
Integrated Mount
Tester

Dimensions (mm[inch])



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