alhua
TECHNOLOGY

DH-HAC-HDW2501TLM-A-POC
5MP Starlight HDCVI POC IR Eyeball Camera

* The parameters and datasheets below can only be applied to2501-S2 series.
* In order to use the 5MP 16:9 HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000001.0.R.200908 or later version.

· Max 25 fps@5MP (16:9 video output)

· Starlight, 120 dB true WDR, 3D NR

· CVI/CVBS/AHD/TVI switchable

· 3.6 mm fixed lens (2.8 mm optional)

· Built-in mic

· Max. IR length 30 m, Smart IR

· IP67, POC (only CVI)/12V±30% DC

PoC Series	5Mp	Starlight	WDR	30mIR	Audio	IP67

System Overview

PoC Series features camera powered directly by the recorder over the same coaxial cable in which video is transmitted. Dahua PoC transmission distance can reach up to 400 meters for AF cameras and 200 meters for AT cameras, that can help decrease material and installation cost and simplify the system.

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.

*Actual results verified by real-scene testing in Dahua's test laboratory.

Starlight

With the adoption of large sized high performance sensor and large aperture lens, the camera is able to provide incomparable performance even under extreme lowlight environment. The starlight feature allows more details to be captured and accurate color to be recognized at night or in scenes with limited illumination.

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.

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	5MP CMOS
Max. Resolution	2880 (H) × 1620 (V)
Pixel	5MP
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	>65dB
Min. Illumination	0.001 Lux/F1.6, 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	F1.6
Field of View	2.8 mm:H:111° V:58° D:132° 3.6 mm: H:92° V:48° D:109°
Iris Type	Fixed
Close Focus Distance	2.8 mm: 0.9 m (3.0 ft) 3.6 mm: 1.6 m (5.2 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	63.6 m (208.7 ft)	25.4 m (83.3 ft)	12.7 m (41.7 ft)	6.4 m (21.0 ft)
	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

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); 960 H (960 × 576/960 × 480)
Day/Night	Auto switch by ICR
BLC	BLC/HLC/WDR/HLC-Pro
WDR	120dB
White Balance	Auto; Area WB

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)
Pick-up Distance	5 m (16.4 ft)

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

Power

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Power Supply	POC (only CVI)/12V±30% DC
Power Consumption	Max 4.3W (12V DC, IR on); PoC (AF)

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
5MP Camera	DH-HAC-HDW2501TLMP-A-POC	5MP Starlight HDCVI POC IR Eyeball Camera, PAL
	DH-HAC-HDW2501TLMN-A-POC	5MP Starlight HDCVI POC 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

Junction Mount   Ceiling Mount   Wall Mount   Pole Mount (Vertical)
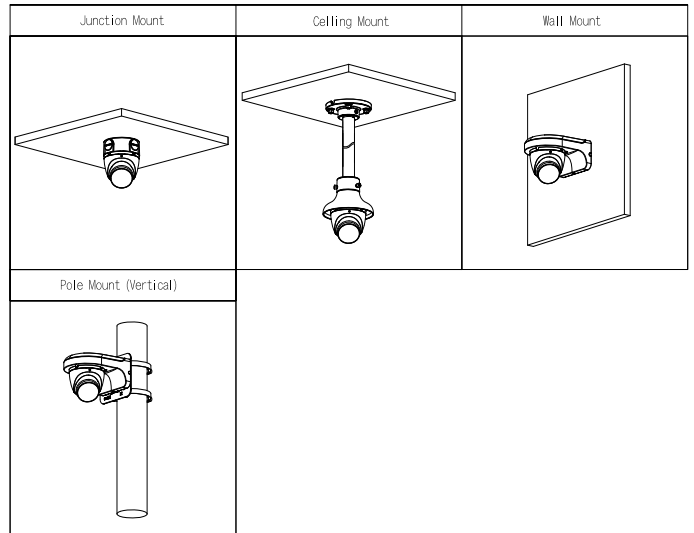
Dimensions (mm[inch])
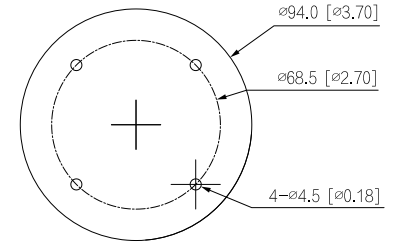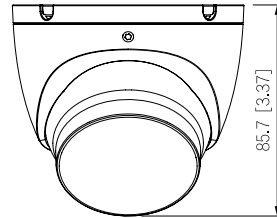

Accessories

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

PFM321D
12V 1A Power Adapter

PFM904
Integrated Mount Tester