DH-HAC-HDW2501TMQP-Z-A-POC

5MP Starlight HDCVI Quick-to-install IR Eyeball Camera

* The parameters and datasheets below can only be applied to 2501-POC-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

· Quick-to-install eyeball saves installation time

· Built-in mic

· 2.7 mm–13.5 mm motorized lens

· Max. IR length 60 m, Smart IR

· IP67, PoC (only CVI)/12V±30% DC

System Overview

Built for convenience, the PoC Series features highly reliable cameras that are powered directly by recorders on the same coaxial cable* that its videos are transmitted over. HDCVI PoC technology greatly reduces material and installation cost, making it an ideal choice for customers who are on a tight budget and are working with scenes that require complex deployment.

*We recommend choosing RG59 or RG6 cable for PoC transmission.

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.

Easy Installation

HDCVI quick-to-install eyeball adopts quick-to-install pedestal, which can achieve easier installation than conventional eyeball. Quick-to-install camera reduces time and labor costs.

Long Distance Transmission

HDCVI technology guarantees real-time transmission at long distance without any loss. It supports up to 700 m transmission for 2MP/5MP/8MP HD video via coaxial cable, and up to 300 m 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.

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.

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.

Smart IR

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.

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.

Advanced 3D NR

3D NR is noise reduction technology that detects and eliminates random noises by comparing two sequential frames. Dahua's advanced 3D NR technology allows remarkable noise reduction with little impact to sharpness, especially under limited lighting condition. Besides, the advanced 3D NR effectively decreases the band width and saves the storage space.

Protection

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	1/2.7" 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	> 65 dB
Min. Illumination	0.001 Lux/F1.6; 30 IRE; 0 Lux IR on
Illumination Distance	60 m (196.9 ft)
Illuminator On/Off Control	Auto/manual
Illuminator Number	2 (IR light)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Motorized vari-focal
Auto Focus	Yes
Mount Type	ϕ14
Focal Length	2.7 mm–13.5 mm
Max. Aperture	F1.6
Field of View	H: 31.4°–113° V: 17.6°–58° D: 36°–138°
Iris Type	Fixed
Close Focus Distance	0.8 m (2.6 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI distance	2.7mm	64.0 m (210.0 ft)	25.6 m (84.0 ft)	12.8 m (42.0 ft)	6.4 m (21.0 ft)
	13.5mm	210.0 m (689.0 ft)	84.0 m (275.6 ft)	42.0 m (137.8 ft)	21.0 m (68.9 ft)

Video

Frame Rate	CVI: PAL: 5M@25 fps; 4M@25 fps NTSC: 5M@25 fps; 4M@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); 960H (960 × 576/960 × 480)
Day/Night	Auto (ICR)
BLC	BLC/HLC/WDR/HLC-Pro
WDR	120 dB
White Balance	Auto/manual
Gain Control	Auto/manual
Noise Reduction	3D NR
Smart Illumination	Yes
Digital Zoom	4x
Defog	Electronic defog
Mirror	Yes
Privacy Masking	Off/On (8 areas, rectangle)

Certifications

Certifications	CE (EN55032:2015, EN 61000-3-2:2014, EN 61000-3-3:2013, EN55024:2010+A1:2015, EN 55035:2017, EN50130-4:2011+A1:2014, EN 62368-1:2014+A11:2017) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)

Port

Audio Interface	One channel built-in mic
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port

Power

Power Supply	POC (only CVI)/12V±30% DC
Power Consumption	Max 8.0W (12 VDC, IR on); PoC (AT)

Environmental

Operating Temperature	–30 °C to +60 °C (–22 °F to +140 °F); < 95% (non-condensation)
Storage Temperature	–30 °C to +60 °C (–22 °F to +140 °F); < 95% (non-condensation)
Protection Grade	IP67

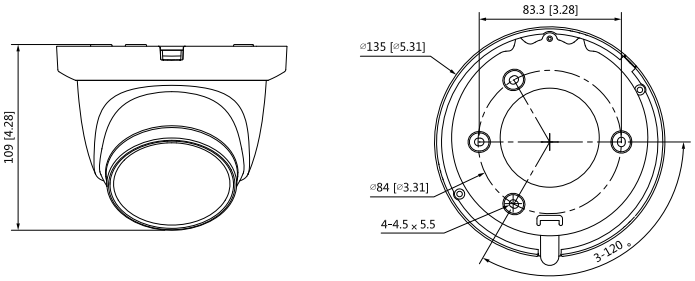
Structure

Casing	Metal dome+metal cover+plastic decorative ring
Camera Dimensions	ϕ135 mm × 109 mm (ϕ5.31" × 4.28")
Net Weight	0.54 kg (1.19 lb)
Gross Weight	0.73 kg (1.61 lb)

Ordering Information

Type	Part Number	Description
5MP Camera	DH-HAC-HDW2501TMQP-Z-A-POC 2.7 mm–13.5 mm	5MP Starlight HDCVI Quick-to-install IR Eyeball Camera
	DH-HAC-HDW2501TMQN-Z-A-POC 2.7 mm–13.5 mm	
Accessories	PFA13F	Junction Box
	PFB211W	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFM321D	12V 1A Power Adapter
	PFM320D-015	12V 1.5A Power Adapter
	PFM904	Integrated Mount Tester

Dimensions (mm[inch])



Accessories

Optional:

PFA13F
Junction Box

PFB211W
Wall Mount Bracket

PFA152-E
Pole Mount Bracket

PFM321D
12V 1A Power Adapter

PFM320D-015
12V 1.5A Power Adapter

PFM904
Integrated Mount Tester

Junction Mount	Wall Mount	Pole Mount(Vertical)