DH-HAC-HDW2501TLMQ-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.

· 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

System Overview

Pro Series is a perfect choice for SMB solutions and projects where both high reliability and flexibility are required. All cameras are equipped with Starlight feature, 120 dB true WDR and 3D NR, and are able to provide clear images and rich details even under tough lighting conditions.

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.

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.

Multi-formats

The camera supports multiple video formats including HDCVI, CVBS, and other two common HD analog formats in the market. A DIP switch located on the cable allows you to quickly toggle formats, further simplifying installation and debugging. This feature makes the camera compatible with not only XVRs, but also most existing HD/SD XVRs.

* DIP Switch is available for some models of HDCVI cameras.

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.
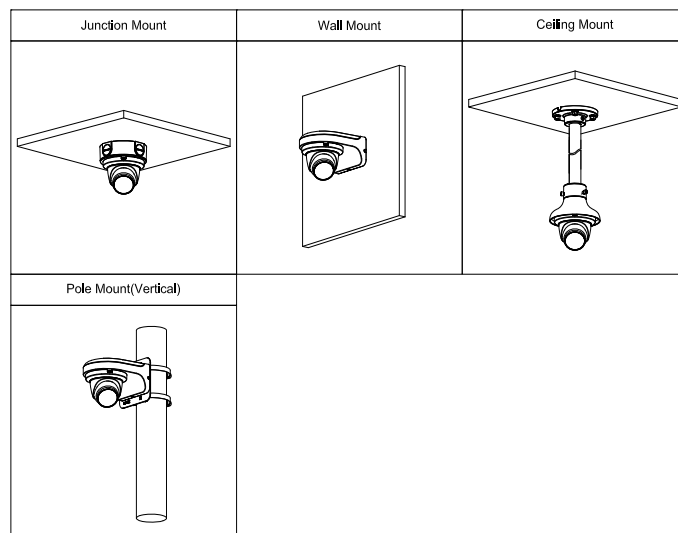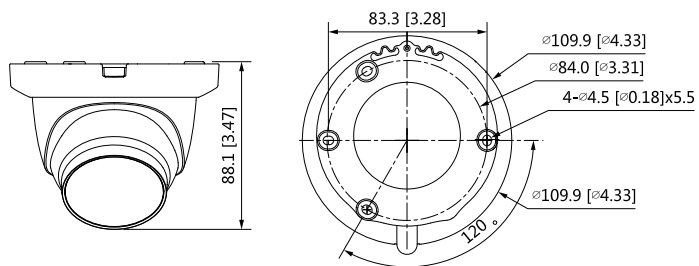
Protection

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	5 MP
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, 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-focal
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 m (262.5 ft)	32 m (105.0 ft)	16 m (52.5 ft)	8 m (26.2 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 IR	Yes
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 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 dome+metal cover+plastic decorative ring
Camera Dimensions	φ109.9 mm × 88.1 mm (φ4.33" × 3.47")
Net Weight	0.34 kg (0.75 lb)
Gross Weight	0.45 kg (0.99 lb)

Ordering Information

Type	Part Number	Description
5MP Camera	DH-HAC-HDW2501TLMQP-A-POC 2.8 mm	5MP Starlight HDCVI Quick-to-install IR Eyeball Camera
	DH-HAC-HDW2501TLMQN-A-POC 2.8 mm	
	DH-HAC-HDW2501TLMQP-A-POC 3.6 mm	
	DH-HAC-HDW2501TLMQN-A-POC 3.6 mm	
Accessories	PFA13G	Junction Box
	PFB205W	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFA130-E	IP66 Junction Box
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester

Accessories

Optional:

PFA13G
Junction Box

PFB205W
Wall Mount Bracket

PFA152-E
Pole Mount Bracket

PFA130-E
IP66 Junction Box

PFM321D
12V 1A Power Adapter

PFM904
Integrated Mount Tester

Junction Mount   Wall Mount   Ceiling Mount

Pole Mount(Vertical)

Dimensions (mm[inch])

83.3 [3.28]
88.1 [3.47]
⌀109.9 [⌀4.33]
⌀84.0 [⌀3.31]
4-⌀4.5 [⌀0.18]x5.5
⌀109.9 [⌀4.33]
120°