

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.
* 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



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.

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

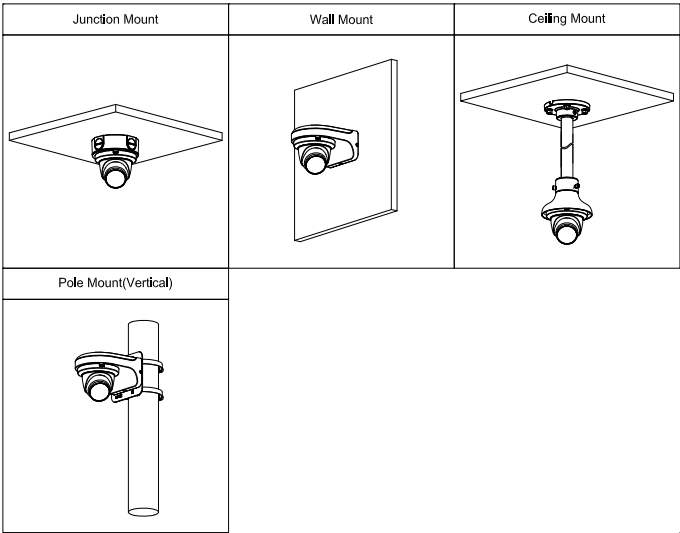
IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

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.

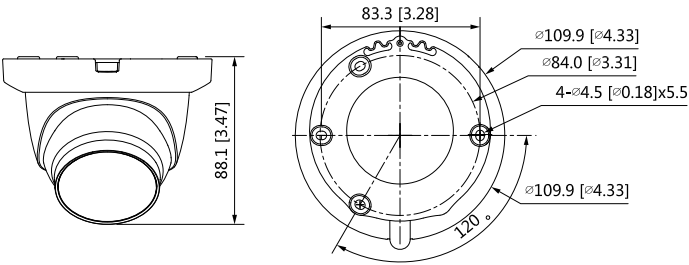
Technical Specification						WDR		120 dB			
Camera								White Balance		Auto/Manual	
Image Sensor		1/2.7" CMOS						Gain Control		Auto/Manual	
Max. Resolution		2880 (H) × 1620 (V)						Noise Reduction		3D NR	
Pixel		5 MP						Smart IR		Yes	
Scanning System		Progressive						Mirror		Yes	
Electronic Shutter Speed		PAL: 1/3 s–1/100,000 s NTSC: 1/4 s–1/100,000 s						Privacy Masking		Off/On (8 areas, rectangle)	
S/N Ratio		> 65 dB						Certifications			
Min. Illumination		0.001 Lux/F1.6, 30IRE, 0Lux IR on						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)	
Illumination Distance		30 m (98.4 ft)						Port			
Illuminator On/Off Control		Auto/Manual						Audio Interface		One channel built-in mic	
Illuminator Number		1 (IR light)						Video Output		Video output choices of CVI/TVI/AHD/CVBS by one BNC port	
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°						Power			
Lens								Power Supply		POC (only CVI)/12V±30% DC	
Lens Type		Fixed-focal						Power Consumption		Max 4.3 W (12 VDC, IR on); PoC (AF)	
Mount Type		M12						Environment			
Focal Length		2.8 mm; 3.6 mm						Operating Temperature		–40 °C to +60 °C (–40 °F to +140 °F); < 95% (non-condensation)	
Max. Aperture		F1.6						Storage Temperature		–40 °C to +60 °C (–40 °F to +140 °F); < 95% (non-condensation)	
Field of View		2.8 mm: H: 111°; V: 58°; D: 132° 3.6 mm: H: 92° ; V: 48°; D: 109°						Protection Grade		IP67	
Iris Type		Fixed						Structure			
Close Focus Distance		2.8 mm: 0.9 m (3.0 ft) 3.6 mm: 1.6 m (5.2 ft)						Casing		Metal dome+metal cover+plastic decorative ring	
DORI Distance	Lens	Detect	Observe	Recognize	Identify		Camera Dimensions		φ109.9 mm × 88.1 mm (φ4.33" × 3.47")		
	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)		Net Weight		0.34 kg (0.75 lb)		
	3.6 mm	80 m (262.5 ft)	32 m (105.0 ft)	16 m (52.5 ft)	8 m (26.2 ft)		Gross Weight		0.45 kg (0.99 lb)		
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									

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



Dimensions (mm[inch])



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