

DH-HAC-HDW1500TLMQ-A-POC

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



* The parameters and datasheets below can only be applied to 1500-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)
- Quick-to-install eyeball saves installation time
- 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 for 5MP 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 full HD video surveillance without the hassle of configuring a network.

Smart IR

The camera is designed with IR LED 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. The four formats can be switched over through OSD menu. This feature makes the camera to be compatible with most end users' existing HD/SD DVRs.

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.

Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments. With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. Supporting ±30% input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

Technical Specification						
Camera						
Image Sensor		1/2.7 inch CMOS				
Max. Resolution		2880 (H) × 1620 (V)				
Pixel		5 MP				
Scanning System		Progressive				
Electronic Shutter Speed		PAL: 1/25 s–1/100,000 s NTSC: 1/30 s–1/100,000 s				
S/N Ratio		>65 dB				
Min. Illumination		0.005 Lux/F1.6, 30IRE, 0 Lux IR on				
Illumination Distance		30 m (98.4 ft)				
Illuminator On/Off Control		Auto; manual				
Illuminator Number		1				
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: 132° × 111° × 58° (diagonal × horizontal × vertical) 3.6 mm: 109° × 92° × 48° (diagonal × horizontal × vertical)				
Iris Type		Fixed iris				
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 (21.0ft)	
	3.6 mm	80 m (262.5 ft)	32 m (105.0 ft)	16 m (52.5 ft)	8 m (26.2 ft)	
	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/project design tool.					
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/DWDR
WDR		DWDR
White Balance		Auto; manual
Gain Control		Auto; manual
Noise Reduction		2D NR
Smart IR		Yes
Mirror		Off/On
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 3.2W (12 VDC, 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		0.33 kg (0.73 lb)
Gross Weight		0.44 kg (0.97 lb)

Ordering Information		
Type	Part Number	Description
5MP Camera	DH-HAC-HDW1500TLMQP-A-POC 2.8 mm	5MP Starlight HDCVI POC IR Quick-to-install Eyeball Camera
	DH-HAC-HDW1500TLMQN-A-POC 2.8 mm	
	DH-HAC-HDW1500TLMQP-A-POC 3.6 mm	
	DH-HAC-HDW1500TLMQN-A-POC 3.6 mm	
Accessories (Optional)	PFA13G	Junction Box
	PFB205W	Wall Mount Bracket (For use alone or with PFA152-E)
	PFA152-E	Pole Mount Bracket (For use with PFB205W)
	PFA130-E	IP66 Junction Box
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester



PFA13G
Junction Box



PFB205W
Wall Mount Bracket
(For use alone or with PFA152-E)



PFA152-E
Pole Mount Bracket
(For use with PFB204W)



PFA130-E
IP66 Junction Box



PFM321D
12V 1A Power Adapter



PFM904
Integrated Mount Tester

