

# DH-HAC-HDW2501TQ-A

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



\* The parameters and datasheets below can only be applied to 2501-S2 series.  
 \* In order to use the 5MP 16:9 HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000001.O.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
- 3.6 mm fixed lens (2.8 mm, 6 mm optional)
- Built-in mic
- Max. IR length 40 m, Smart IR
- IP67, DC12V±30%



### System Overview

Experience 5MP full HD video and the simplicity of using existing cabling infrastructure with HDCVI. The Pro series 5MP HDCVI camera features a compact design and offers a high quality image at a friendly price. It offers various motorized/fixed lens models with 120 dB true WDR and a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance make the camera an ideal choice for SMB solutions.

### 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.

### Starlight

With the adoption of large sized high performance sensor, 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 LED illumination for best lowlight performance. Smart IR is a technology to ensure brightness uniformity in B/W image under low illumination. Dahua unique Smart IR adjusts 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 comes closer to the camera.

### Wide Dynamic Range

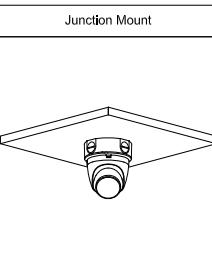
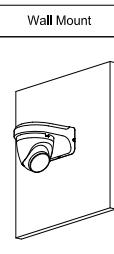
Embedded with industry leading wide dynamic range (WDR) technology, vivid pictures are achieved even in the most intense contrast lighting conditions. True WDR (120dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

### Advanced 3DNR

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

Technical Specification						Video
Camera						
Image Sensor						CVI: PAL: 5M@25 fps; 4M@25 fps; 1080P@25 fps NTSC: 5M@25 fps; 4M@30 fps; 1080P@30 fps
Max. Resolution						AHD: PAL: 4M@25 fps; NTSC: 4M@30 fps
Pixel						TVI: PAL: 4M@25 fps; NTSC: 4M@30 fps
Scanning System						CVBS: PAL: 960H; NTSC: 960H
Electronic Shutter Speed						
S/N Ratio						5M (2880 x 1620); 4M (2560 x 1440); 1080P (1920 x 1080); 960H (960 x 576/960 x 480)
Min. Illumination						Day/Night
Illumination Distance						Auto switch by ICR
Illuminator On/Off Control						BLC/HLC/WDR/HLC-Pro
Illuminator Number						WDR
Pan/Tilt/Rotation Range						120 dB
Lens						White Balance
Lens Type						Auto / Manual
Mount Type						Gain Control
Focal Length						Noise Reduction
Max. Aperture						2D NR/3D NR
Field of View						Smart IR
Iris Type						Yes
Close Focus Distance						Mirror
DORI Distance						Privacy Masking
						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 (DIP Switch)
						Power
						Power Supply
						DC 12V ±30%
						Power Consumption
						Max 4.3W (12V DC, IR on)
						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 inner core+plastic cover+plastic pedestal
						Camera Dimensions
						φ109.9 mm x 100.9 mm (φ4.33" x 3.97")
						Net Weight
						0.34 kg (0.75 lb)
						Gross Weight
						0.52 kg (1.15 lb)

\*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.

Ordering Information			Accessories			
Type	Part Number	Description	Optional:			
5MP Camera	DH-HAC-HDW2501TQP-A 2.8 mm	SMP Starlight HDCVI Quick-to-install IR Eyeball Camera		PFA130-E IP66 Junction Box		PFA13G Junction Box
	DH-HAC-HDW2501TQN-A 2.8 mm			PFB205W Wall Mount Bracket		
	DH-HAC-HDW2501TQP-A 3.6 mm			PFA152-E Pole Mount Bracket		PFM800-4K Passive HDCVI Balun
	DH-HAC-HDW2501TQN-A 3.6 mm					PFM321D 12V 1A Power Adapter
	DH-HAC-HDW2501TQP-A 6 mm			PFM904 Integrated Mount Tester		
	DH-HAC-HDW2501TQN-A 6 mm					
Accessories	PFA130-E	IP66 Junction Box		Junction Mount		Wall Mount
	PFA13G	Junction box				
	PFB205W	Wall Mount Bracket				
	PFA152-E	Pole Mount Bracket				
	PFM8000-4K	Passive HDCVI Balun				
	PFM321D	12V 1A Power Adapter				
	PFM904	Integrated Mount Tester				

## Dimensions (mm[inch])

