

DH-HAC-HDW1500T-Z(-A)

5MP Starlight HDCVI IR Eyeball Camera



* The parameters and datasheets below can only be applied to 1500-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)
- CVI/CVBS/AHD/TVI switchable
- 2.7 mm–12 mm motorized lens
- Built-in mic(-A)
- Max. IR length 60 m, Smart IR
- IP67, 12V DC



System Overview

Experience 5MP full HD video and the simplicity of using existing cabling infrastructure with HDCVI. The Lite 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 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.

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 through coaxial cable, and up to 300 m through 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 compatible with most end users' existing HD/SD DVRs.

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

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 -30 °C to +60 °C (-22 °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						Day/Night		Auto switch by ICR	
Camera						BLC		BLC/HLC/DWDR	
Image Sensor		1/2.7 inch CMOS				WDR		DWDR	
Max. Resolution		2880 (H) × 1620 (V)				White Balance		Auto; manual	
Pixel		5MP				Gain Control		Auto; manual	
Scanning System		Progressive				Noise Reduction		2D NR	
Electronic Shutter Speed		PAL: 1/25 s–1/100,000 s NTSC: 1/30 s–1/100,000 s				Smart IR		Yes	
S/N Ratio		> 65 dB				Mirror		Off/On	
Min. Illumination		0.005 Lux/F1.6, 30IRE, 0 Lux IR on				Privacy Masking		Off/On (8 areas, rectangle)	
Illumination Distance		60 m (196.9 ft)				Certifications			
Illuminator On/Off Control		Auto; manual				Certifications			
Illuminator Number		2				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)			
Pan/Tilt/Rotation Range		Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°				Port			
Lens						Audio Output		One channel built-in mic (-A)	
Lens Type		Motorized vari-focal				Video Output		Video output choices of CVI/TVI/AHD/CVBS by one BNC port	
Auto Focus		N/A				Power			
Mount Type		φ14				Power Supply		DC 12V ±30%	
Focal Length		2.7 mm–12 mm				Power Consumption		Max 6.6W (12V DC, IR on)	
Max. Aperture		F1.6				Environment			
Field of View		Diagonal: 39°–130° Horizontal: 34°–107° Vertical: 19°–55°				Operating Temperature		–30°C to +60°C (–22°F to +140°F); < 95% (non-condensation)	
Iris Type		Fixed iris				Storage Temperature		–30°C to +60°C (–22°F to +140°F); < 95% (non-condensation)	
Close Focus Distance		0.5 m (1.64 ft)				Protection Grade		IP67	
DORI Distance	Lens	Detect	Observe	Recognize	Identify	Structure			
	2.7 mm	69 m (226.37 ft)	27.6 m (90.55 ft)	13.8 m (45.27 ft)	6.9 m (22.63 ft)	Casing			
	12 mm	191.6 m (628.6 ft)	76.64 m (251.44 ft)	38.32 m (125.72 ft)	19.16 m (62.86 ft)	Camera Dimensions			
	*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.					Net Weight			
Video						Gross Weight		0.72 kg (1.59 lb)	
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); 960H (960 × 576/960 × 480)							

Ordering Information		
Type	Part Number	Description
5MP Starlight Camera	DH-HAC-HDW1500TP-Z 2.7 mm-12 mm	5MP Starlight HDCVI IR Eyeball Camera
	DH-HAC-HDW1500TN-Z 2.7 mm-12 mm	
	DH-HAC-HDW1500TP-Z-A 2.7 mm-12 mm	
	DH-HAC-HDW1500TN-Z-A 2.7 mm-12 mm	
Accessories	PFA137	Junction Box
	PFA130-E	IP66 Junction Box
	PFB205W	Wall Mount Bracket (Use alone or with PFA152-E)
	PFA152-E	Pole Mount Bracket (Use with PFB205W)
	PFA106	Mount Adapter (Use with PFB220C)
	PFB220C	Ceiling Mount Bracket (Use with PFA106)
	PFM800-4K	Passive HDCVI Balun
	PFM321D	12V 1A Power Adapter
	PFM320D-015	12V 1.5A Power Adapter
	PFM820 (Only 1080P and below are available)	UTC Controller
	PFM904	Integrated Mount Tester

Accessories

Optional:



PFA137
Junction Box



PFA130-E
IP66 Junction Box



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



PFA152-E
Pole Mount Bracket
(For use with PFB205W)



PFA106
Mount Adapter
(For use with PFB220C)



PFB220C
Ceiling Mount Bracket
(For use with PFA106)



PFM800-4K
Passive HDCVI Balun



PFM321D
12V 1A Power Adapter



PFM320D-015
12V 1.5A Power Adapter

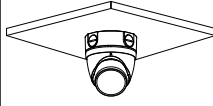
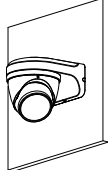
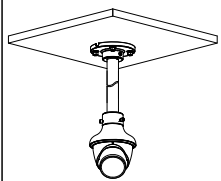
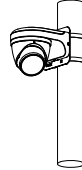


PFM820
(Only 1080P and below are available)
UTC Controller



PFM904
Integrated Mount Tester

Installation

Junction Mount	Wall Mount	Ceiling Mount
		
Pole Mount(Vertical)		
		

Dimensions (mm [inch])

