

# DH-HAC-HDW1500T-Z

## 5MP HDCVI IR Eyeball Camera



- Max. 20fps@5MP
- HD and SD output switchable
- 2.7-12mm motorized lens
- Max. IR length 60m, Smart IR
- IP67, DC12V



### System Overview

Experience superior 5MP video and the simplicity of reusing existing coaxial infrastructure with HDCVI. The Lite series 5MP HDCVI camera features a compact design and offers a high quality image with rich details at a friendly price. It offers various vari-focal/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes 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 HCVR, 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 long-distance and real-time transmission without any loss. It supports up to 700m for 5MP HD video via coaxial cable, and up to 300m 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 microcrystalline LED 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.

#### HD/SD Switchable

The camera supports switchable HDCVI high definition video output and CVBS standard definition video output. The two formats can be switched over through OSD menu or by PFM820 (UTC controller). This feature makes the camera to be compatible with both HCVRs and existing analog DVRs and also facilitates debugging through analog testers.

#### 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 -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
Effective Pixels	2592 (H) × 1944 (V), 5MP
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25s–1/100000s NTSC: 1/30s–1/100000s
S/N Ratio	>65dB
Minimum Illumination	0.02Lux/F1.8, 30IRE, 0Lux IR on
Fill Light Working Distance	60 m (196.85 ft)
IR On/Off Control	Auto; manual
IR LED Number	2
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

#### Lens

Lens Type	Motorized-focal				
Mount Type	φ14				
Focal Length	2.7 mm–12 mm				
Max. Aperture	F1.8–F3.3				
Angle of View	2.7 mm: 123° × 93° × 68° (diagonal x horizontal x vertical) 12 mm: 37° × 30° × 22° (diagonal x horizontal x vertical)				
Iris Type	Fixed iris				
Auto Focus	N/A				
Close Focus Distance	0.8 m (2.62 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.7mm	67.0 m (219.81 ft)	27.0 m (88.58 ft)	13.0 m (42.65 ft)	6.7 m (21.98 ft)
	12mm	198.0 m (649.60 ft)	79.0 m (259.18 ft)	39 m (127.95 ft)	12.0 m (39.37 ft)

#### Video

Frame Rate	CVI: PAL: 5M@20fps; 4M@25fps; 1080P@25fps; NTSC: 5M@20fps; 4M@30fps; 1080P@30fps AHD: PAL: 5M@20fps; 4M@25fps; 1080P@25fps; NTSC: 5M@20fps; 4M@30fps; 1080P@30fps TVI: PAL: 5M@20fps; 4M@25fps; 1080P@25fps; NTSC: 5M@20fps; 4M@30fps; 1080P@30fps CVBS: PAL: 960H; NTSC: 960H"
Resolution	5M (2592 × 1944); 4M (2560 × 1440); 1080P (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Auto switch by ICR
BLC	BLC/HLC/WDR
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 area, rectangle)

#### Certifications

Certifications	CE (EN55032, EN55024, EN50130-4, EN60950-1) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)
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#### Port

Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
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#### Power

Power Supply	12V ±30% DC
Power Consumption	Max 8.2W (12V DC, IR on)

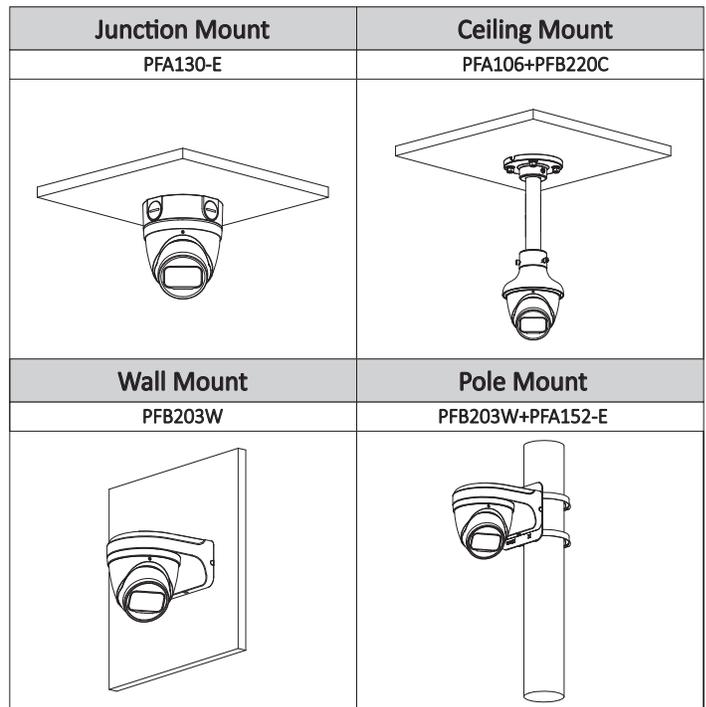
#### Environment

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 throughout the whole casing
Camera Dimensions	Φ122 mm × 104 mm (4.8" × 4.09")
Net Weight	570g (1.25lb)
Gross Weight	720g (1.58lb)

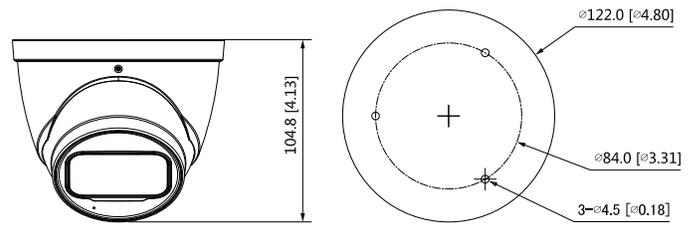
Ordering Information		
Type	Part Number	Description
SMP Camera	DH-HAC-HDW1500TP-Z	5MP HDCVI IR Eyeball Camera, PAL
	DH-HAC-HDW1500TN-Z	5MP HDCVI IR Eyeball Camera, NTSC
Accessories	PFA130-E	Junction box (For use alone)
	PFB203W	Wall mount (For use alone or with PFA152-E pole mount)
	PFA152-E	Pole mount (For use with PFB203W wall mount)
	PFM820	UTC Controller
	PFM800-E	Passive HDCVI Balun
	PFM800-4K	Passive Video Balun
	PFM800B-4K	Passive Video Balun
	PFM321	12V 1A Power Adapter
	PFM320D-015	12V 1.5A Power Adapter
PFM300	12V 2A Power Adapter	



**Accessories**

**Dimensions (mm[inch])**

**Optional:**



PFA130-E  
Junction box  
(For use alone)



PFB203W  
Wall mount  
(For use alone or with PFA152-E pole mount)



PFA152-E  
Pole mount  
(For use with PFB203W wall mount)



PFM820  
UTC controller



PFM800-E  
Passive HDCVI Balun



DH-PFM800-4K  
Passive video balun



PFM800B-4K  
Passive Video Balun



PFM321  
12V 1A Power Adapter



PFM320D-015  
12V 1.5A Power Adapter



PFM300  
12V 2A Power Adapter