

DH-HAC-HDW1800M 4K Real-time HDCVI IR Eyeball Camera



- · Max. 4K resolution, real-time video transmission
- · CVI/CVBS/AHD/TVI switchable
- · Fixed lens (2.8mm; 3.6mm; 6mm optional)
- · Max. IR length 30m, Smart IR
- · IP67, 12V±30%DC



System Overview

Experience 4K video surveillance with the simplicity of reusing existing coaxial infrastructure. The 4K HDCVI camera adopts a powerful Dahua ISP and advanced 1/2.7" CMOS sensor, which provides superior high quality images. In addition, the camera features broadcastquality audio to provide enhanced supplementary evidence collection. Ultra-high definition and a complete set of features makes the 4K HDCVI camera an ideal choice for mid to large-size businesses and projects where both highly reliable surveillance and construction flexibility are demanded.

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 technol-ogy 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 700m transmission for 4K and 4MP 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.

Multiple-formats

The camera supports multiple video formats including HDCVI, CVBS, and other two common HD analog formats in the market. This feature

makes the camera compatible with not only XVRs, but also most existing HD/ SD DVRs. \ast

*Use OSD menu to switch HDCVI to other video formats. Use PFM820 UTC Controller to switch CVBS to HDCVI video format.

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. Supporting $\pm 30\%$ input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protectionagainst the camera and its structure from the effects of lightning.

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.

4K Real-time Image Display

Used together with 4K Real-time XVR, the camera can output 4K real-time video stream with clear details and no lag or smear.

Lite Series | DH-HAC-HDW1800M

Technical Specification						
Camera						
Image Sensor		1/2.7 inch CMOS				
Effective Pixels		3840 (H)× 2160 (V), 4K				
Scanning System		Progressive				
Electronic Shutter Speed		PAL: 1/25s-1/100000s NTSC: 1/30s-1/100000s				
S/N Ratio		>65dB				
Minimum Illumination		0.03Lux/F2.0, 30IRE, 0Lux IR on				
Fill Light Working Distance		30 m (98.4 ft)				
IR On/Off Control		Auto; manual				
IR LED Number		12				
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; 6 mm				
Max. Aperture		F2.0				
Angle of View		2.8 mm: 125° x 105° x 56° (diagonal x horizontal x vertical) 3.6 mm: 104° x 87° x 47° (diagonal x horizontal x vertical) 6 mm: 62.4° x54.7° x31.3°(diagonal x horizontal x vertical)				
Iris Type		Fixed iris				
Close Focus Distance		2.8 mm: 1.0 m (3.3 ft) 3.6 mm: 1.9 m (6.2 ft) 6 mm: 3.6 m (11.8 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify	
	2.8mm	74.7 m (245.1 ft)	29.9 m (98.1 ft)	14.9 m (48.9ft)	7.5 m (24.6 ft)	
	3.6mm	106.7 m (350.1 ft)	42.7 m (140.1 ft)	21.3 m (69.9 ft)	10.7 m (35.1 ft)	
	6mm	160m (524.9 ft)	64 m (210.0ft)	32 m (105.0ft)	16 m (52.5ft)	
Video						

2D NR					
Yes					
Off/On					
Off/On (8 area, rectangle)					
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)					
Port					
Video output choices of CVI/TVI/AHD/CVBS by one BNC port					
Power					
12V ±30% DC					
Max 4.3W (12V DC, IR on)					
Environment					
-40°C to +60°C (-40°F to +140°F); <95% (non-condensation)					
-40°C to +60°C (-40°F to +140°F); <95% (non-condensation)					
IP67					
Structure					
Metal throughout the whole casing					
φ93.4mm×79.4mm (φ3.68"×3.13")					
0.27 Kg (0.60lb)					
0.35 Kg (0.77lb)					

Video

Frame Rate	CVI: 4K@25/30fps; 4K@15fps; 5M@20fps; 4M@25fps/30fps; AHD: 4K@15fps; TVI: 4K@15fps; CVBS: 960H
Resolution	4K (3840 × 2160); 5M (2592 × 1944); 4M (2560 × 1440); 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

Lite Series | DH-HAC-HDW1800M

Ordering Information					
Туре	Part Number	Description			
4K Camera	DH-HAC-HDW1800MP 2.8mm				
	DH-HAC-HDW1800MP 3.6mm				
	DH-HAC-HDW1800MP 6mm	4K HDCVI IR Eyeball Camera			
	DH-HAC-HDW1800MN 2.8mm				
	DH-HAC-HDW1800MN 3.6mm				
	DH-HAC-HDW1800MN 6mm				
	PFA13A-E	Water-proof Junction Box			
Accessories	PFB204W+PFA152-E	Water-proof Wall Mount Bracket+Pole Mount Bracket			
	PFB204W	Water-proof Wall Mount Bracket			
	PFA106+PFB220C	Adapter Plate + Ceiling Mount Bracket			
	PFM800-4K	Passive Video Balun			
	PFM800B-4K	Passive Video Balun			
	PFM320D Series	12V 2A Power Adapter			
	PFM321D Series	12V 1A Power Adapter			
	PFM320D-015	DC12V1.5A Power Adapter			



Dimensions (mm[inch])





Accessories

Optional:



PFA13A-E Water-proof Junction Box



PFB204W+PFA152-E Box Water-proof Wall Mount Bracket+Pole Mount Bracket



PFA152-E PFB204W Wall Mount Water-proof Wall Mount Iount Bracket Bracket



PFA106+PFB220C



Adapter Plate + Ceiling Mount

Bracket

PFM320D Series 12V 2A Power Adapter



PFM800-4K Passive Video Balun



PFM321D Series 12V 2A Power Adapter



PFM800B-4K Passive Video Balun



PFM320D-015 DC12V1.5A Power Adapter



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