

# DH-HAC-HDBW3802E-ZH

8MP HDCVI WDR IR-Dome Camera

## HDCVI



- 1/2" 8MP progressive scan CMOS
- 3x optical motorized zoom lens
- Max. 15fps@3840×2160
- 120dB true WDR, 3DNR
- Intelligent functions
- Max. 50m IR distance, smart IR
- IP67 & IK10 ingress protection
- Dual voltage input(DC12V/AC24V±25%)
- DC12V voltage output
- Up to 500m transmission with RG59 coaxial cable



### System Overview

The 4K HDCVI camera adopts a high performance ISP and advanced 1/2" 8MP image sensor, ultra-long IR range, and motorized zoom lens, enabling a wider range of coverage and superior image details with 4K resolution. That makes it easy to collect evidence for effective playback and analysis. Its wide field of view and 4K resolution makes the camera an ideal choice for large-size businesses and places such as airports, stadiums, parking lots, and shopping malls.

### Functions

#### 4K Technology

4K technology as a revolutionary breakthrough in image, which enhances the expressive image of essence, allowing users to experience the best picture with more details and wider coverage brought about by the visual feast. For the purposes of 4K surveillance with four times the 1080P resolution, presented to the user with more details. Under the same scenario by raising the amount of pixels with the larger sensor it will reduce the total quantity of cameras and finally lower the whole project cost.

#### 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 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.

### Multi-outputs

The camera supports HDCVI and CVBS signal outputs simultaneously with two BNC connectors. Multi-outputs facilitates construction in such situations as debugging through a tester. It also offers the possibility for cooperating with multiple devices including analog matrix or monitor.

### Smart IR

The camera is designed with array LED IR illumination for best lowlight performance at maximum distance. 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 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 amazing 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.

### Protection & Power Output

The camera's outstanding reliability is unsurpassed due to its rugged design. IP67&IK10 ingress protection makes it suitable for most environment such as bank, manufacturing and commercial facilities.

Supporting dual voltage input (DC 12V±25%/AC 24V±25%) and DC12V max 4W voltage output. 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	1/1.8" CMOS
Effective Pixels	3840(H)×2160(V), 8MP
Scanning System	Progressive
Electronic Shutter Speed	1/1s~1/100,00s
Minimum Illumination	0.005Lux/F1.5(Color), 30IRE,0Lux/F1.5(B/W)
S/N Ratio	More than 65dB
IR Distance	Up to 50m (164feet)
IR On/Off Control	Auto / Manual
IR LEDs	3

### Lens

Lens Type	Motorized lens / Auto iris
Mount Type	Board-in
Focal Length	3.7-11mm
Max Aperture	F1.5
Angle of View	H: 112°~46°
Focus Control	Auto / Manual
Close Focus Distance	200mm(7.87")

### DORI Distance

Note: The DORI distance is a "general proximity" of distance which makes it easy to pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specification and lab test result according to EN 62676-4 which defines the criteria for Detect, Observe, Recognize and Identify respectively.

	DORI Definition	Distance	
		Wide	Tele
Detect	25px/m (8px/ft)	83m(273ft)	190m(624ft)
Observe	63px/m (19px/ft)	33m(109ft)	76m(250ft)
Recognize	125px/m (38px/ft)	17m(54ft)	38m(125ft)
Identify	250ppm (76px/ft)	8m(27ft)	19m(62ft)

### Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: 0° ~ 355° Tilt: 0° ~ 85° Rotation: 0° ~ 355°
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### Video

Resolution	8MP (3840×2160)
Frame Rate	PAL:3840×2160@12.5fps,2560x1440@25fps; NTSC:3840×2160@15fps,2560x1440@30fps;
Video Output	1-channel HDCVI 4K video output & 1-channel CVBS video output

Day/Night	Auto (ICR) / Manual
OSD Menu	Multi-language
BLC Mode	BLC / HLC / WDR
WDR	120dB
Gain Control	AGC
Noise Reduction	2D/3D
White Balance	Auto / Manual
Smart IR	Auto / Manual

### Certifications

Certifications	CE (EN55032, EN55024, EN50130-4) 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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### Interface

Audio Interface	1-channel audio in
Alarm I/O	2/1

### Electrical

Power Supply	12V DC ±25%/24V AC ±25%
Power Output	DC 12V/Max 4W
Power Consumption	Max 12.4W




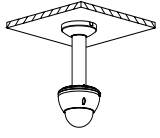
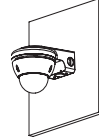
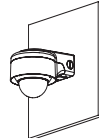
### Environmental

Operating Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH * Start up should be done at above-40°C (-40°F)
Storage Conditions	-40°C ~ +60°C (-40°F ~ +140°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	IP67 & IK10

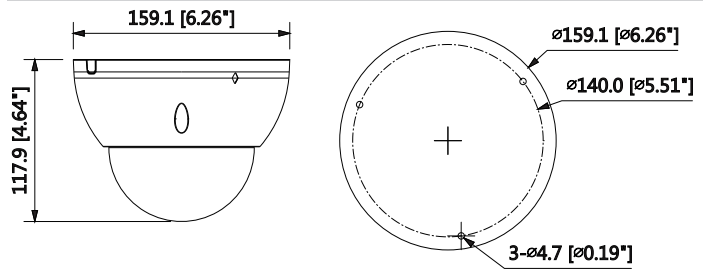
### Construction

Casing	Aluminium
Dimensions	Φ159.1mm×117.9mm (Φ6.26"×4.64")
Net Weight	0.90kg (1.98lb)
Gross Weight	1.20kg (2.65lb)

Ordering Information		
Type	Part Number	Description
8MP Camera	DH-HAC-HDBW3802EP-ZH-3711	8Megapixel 4K WDR IR-Bullet Camera with heater,PAL
	DH-HAC-HDBW3802EN-ZH-3711	8Megapixel 4K WDR IR-Bullet Camera with heater, NTSC
Accessories	PFA138	Junction box (For use alone)
	PFB210W	Wall mount (For use alone or with PFA152-E pole mount)
	PFA152-E	Pole mount (For use with PFB210W wall mount)
	PFA101	Mount adapter (For use with PFB300C ceiling mount)
	PFB300C	Ceiling mount (For use with PFA101 mount adapter)
	PFB201C	In-ceiling mount
	PFM800-E	1 Channel Passive HDCVI Balun
	PFM320	12V 2A Power Adapter
	PFM320D-015	12V 1.5A Power Adapter

In-ceiling Mount	Junction Mount	Pole Mount
PFB201C	PFA138	PFB210W+PFA152-E
		
Ceiling Mount	Wall Mount	
PFA101+PFB300C	PFB210W (Indoor)	PFB210W (Outdoor)
		

**Dimensions (mm/inch)**



**Dimensions (mm/inch)**

Optional:



PFA138  
Junction box



PFB210W  
Wall mount



PFA152-E  
Pole mount



PFA101  
Mount adapter



PFB300C  
Ceiling mount



PFB201C  
In-ceiling mount



PFM800-E  
Passive HDCVI Balun



PFM320  
12V 2A Power Adapter



PFM320D-015  
Power Adapter