

# DH-HAC-EB2401

4MP HDCVI WDR Fisheye Camera

## HDCVI



- 120dB True WDR, 3DNR
- Max 4MP real-time
- HD and SD dual-output
- 1.18mm panoramic lens
- IK10, DC12V



### System Overview

Experience superior clarity of real-time 4Mega-pixel video with the simplicity of using existing coaxial infrastructure. The 4MP HDCVI camera presents high quality image with clear details and accurate color rendition, and supports 120dB true WDR for applications under complex dynamic range. It offers 360° panoramic view and several kinds of dewarping mode with multi-language OSD and HD&SD dual-output with our backend. The higher resolution and complete features make the 4MP HDCVI camera an ideal choice for mid to large-size business and common projects where both highly reliable surveillance and construction flexibility are concerned.

### 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 real-time transmission at long distance without any loss. It supports up to 700m transmission for 4MP HD video via coaxial cable, and up to 450m 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.

#### 360° panoramic view

Equipped with a fisheye lens for 360° surround view (ceiling/floor mount) or 180° panoramic view (wall mount) and high resolution with no blind spot. The cameras are able to provide coverage of wide, open areas, such as airports, shopping malls, retail stores, offices and more. So you will get a whole scene just with one fisheye camera.

#### Dewarping Mode

Fisheye dewarping is a function to solve the serious distortion problem of the circular panoramic view and you will use up to 10-modes dewarping mode for different installations with our XVR or on the web. Every dewarping area is adjustable and optional as you want.

#### 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.

#### Protection

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against vandalism with IK10-rated, making it suitable for most environment such as retail stores, manufacturing and commercial facilities.

Supporting  $\pm 25\%$  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             | 1/3" CMOS                                   |
| Effective Pixels         | 2688(H)×1520(V), 4.1MP                      |
| Scanning System          | Progressive                                 |
| Electronic Shutter Speed | PAL:1/4s~1/100,000s<br>NTSC:1/3s~1/100,000s |
| Minimum Illumination     | 0.01Lux/F2.0 (Color), 0.001lux/F2.0(B/W)    |
| S/N Ratio                | More than 65dB                              |
| IR Distance              | NA  |
| IR On/Off Control        | NA  |
| IR LEDs                  | NA  |

#### Lens

|                      |                         |
|----------------------|-------------------------|
| Lens Type            | Fixed lens / Fixed iris |
| Mount Type           | Board-in                |
| Focal Length         | 1.18mm                  |
| Max Aperture         | F2.0                    |
| Angle of View        | H: 180°                 |
| Focus Control        | N/A                     |
| Close Focus Distance | 100mm<br>3.94"          |

#### Pan / Tilt / Rotation

|                   |                                     |
|-------------------|-------------------------------------|
| Pan/Tilt/Rotation | Pan: NA<br>Tilt: NA<br>Rotation: NA |
|-------------------|-------------------------------------|

#### Video

|                 |   |
|-----------------|---|
| Resolution      | 4MP (2560×1440)   |
| Frame Rate      | 25fps@4MP   |
| Video Output    | 1-channel BNC HDCVI high definition video output<br>& 1-channel BNC CVBS video output |
| Day/Night       | Auto (Electronic) / 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        | NA  |

#### Certifications

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

#### Electrical

|                   |                   |
|-------------------|-------------------|
| Power Supply      | 12V DC ±25%       |
| Power Consumption | Max 2.2W (12V DC) |

#### Environmental

|  |   |
|--|---|
| Operating Conditions                   | -30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH<br>* Start up should be done at above -30°C (-22°F) |
| Storage Conditions                     | -30°C ~ +60°C (-22°F ~ +140°F) / Less than 90% RH   |
| Ingress Protection & Vandal Resistance | IK10  |

#### Construction

|              |                          |
|--------------|--------------------------|
| Casing       | Aluminium                |
| Dimensions   | φ110mm×56mm (φ4.3"×2.2") |
| Net Weight   | 0.41kg (0.9lb)           |
| Gross Weight | 0.45kg (0.99lb)          |

**Ordering Information**

| Type        | Part Number           | Description   |
|-------------|-----------------------|---|
| 4MP Camera  | DH-HAC-EB2401P 1.18mm | 4MP HDCVI WDR Fisheye Camera, PAL                   |
|             | DH-HAC-EB2401N 1.18mm | 4MP HDCVI WDR Fisheye Camera, NTSC                  |
| Accessories | PFB203W               | Wall mount(For use alone or with PFA152 pole mount) |
|             | PFA152                | Pole mount (For use with PFB203W wall mount)        |
|             | PFM800                | Passive HDCVI Balun                                 |
|             | PFM810                | POC Transceiver                                     |

**Dimensions (mm/inch)**

Optional:



PFB203W  
Wall mount



PFA152  
Pole mount

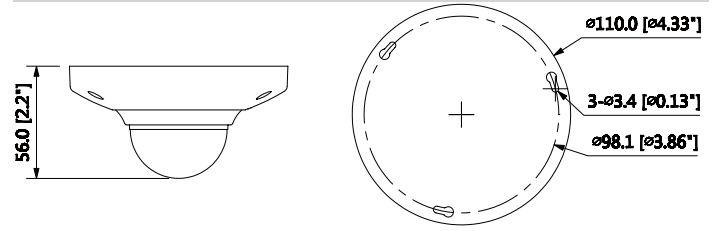


PFM800  
Passive HDCVI Balun



PFM810  
POC Transceiver

**Dimensions (mm/inch)**



| Junction Mount | Pole Mount       |
|----------------|------------------|
| PFB203W        | PFB203W + PFA152 |
|                |                  |