alhua TECHNOLOGY

DH-HAC-EW2501

5MP HDCVI IR-Fisheye Camera

HDCVI

· 1/2.8" 5Megapixel progressive scan CMOS
· Panoramic fisheye lens
· Max. 20fps@5MP
· Built-in Mic
· 120db true WDR, Starlight, 2D&3D NR
· Max. IR length 10m, Smart IR
· DC12V

| 5Mp | WDR | 360° Fisheye | Starlight | 10m IR | DC 12V |

System Overview

The 5MP HDCVI fisheye camera adopts a panoramic fisheye lens and high performance image sensor, as well as a 10m IR range, enabling a full overview and superior image details with 5MP resolution. That makes it easy to collect evidence at any time for effective playback and analysis. With the use of advanced algorithms, more than 10+ dewarping modes are available on the XVR (select models) and mobile client. Its panoramic view and 5MP resolution makes the camera an ideal choice for large-size businesses and places such as airports, stadiums, parking lots, and shopping malls.

Functions

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 wil 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.

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.

Broadcast-quality Audio

Audio information is used as supplementary evidence in video surveillance applications. The HDCVI camera supports audio signal transmission over coaxial cable. In addition, it adopts unique audio processing and transmission technology that best restores source audio and eliminates noise, guaranteeing the quality and effectiveness of collected audio information.

Long Distance Transmission

HDCVI technology guarantees real-time transmission at long distance without any loss. It supports up to 700m transmission for 5MP 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 provides 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.

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

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 outdoor lightning.

Technical Specification

Camera

Image Sensor	1/2.8" 5MP CMOS
Effective Pixels	2592(H)×1944(V),5MP
Scanning System	Progressive
Electronic Shutter Speed	PAL:1/4s~1/100,000s NTSC:1/3s~1/100,000s
Minimum Illumination	0.005Lux/F2.0 (Color), 30IRE,0lux IR on
S/N Ratio	More than 65dB
IR Distance	10m
IR On/Off Control	Auto (ICR)/Color/B/W
IR LEDs	3

Lens

Lens Type	Fixed lens / Fixed iris
Mount Type	Board-in
Focal Length	1.4mm
Max Aperture	F2.0
Angle of View	H: 180°, V:180°
Focus Control	N/A
Close Focus Distance	0.2m(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
Detect	25px/m (8px/ft)	28m(92ft)
Observe	63px/m (19px/ft)	12m(37ft)
Recognize	125px/m (38px/ft)	6m(18ft)
Identify	250ppm (76px/ft)	3m(9ft)

Pan / Tilt / Rotation

Pan/Tilt/Rotation	Pan: NA Tilt: NA Rotation: NA

Video

Resolution	5MP (2592×1944)
Frame Rate	20fps@5MP,25/30fps@4MP
Video Output	1-channel BNC high definition 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	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)

Interface

Audio	Built-in mic

Eelectrical

Power Supply	DC12V ±30%
Power Consumption	7.3W (IR ON)

Environmental

Operating Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 95% RH * Start up should be done at above-30°C (-22°F)
Storage Conditions	-30°C ~ +60°C (-22°F ~ +140°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	N/A

Construction

Casing	Aluminium + Plastic
Dimensions	Φ126.2mm x 40.6mm(Φ4.97"x 1.6")
Net Weight	0.24kg (0.53lb)
Gross Weight	0.42kg (0.93lb)

Ordering Information

Type	Part Number	Description
5MP Camera	DH-HAC-EW2501P 1.4mm	5MP HDCVI IR-Fisheye Camera, PAL
	DH-HAC-EW2501N 1.4mm	5MP HDCVI IR-Fisheye Camera, NTSC
Accessories	PFB203W	Wall mount (For use alone or with PFA152-E pole mount)
	PFB110	Ceiling Mount
	PFA152-E	Pole mount (For use with PFB203W wall mount)
	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

Dimensions (mm/inch)

Optional:

PFB203W
Junction box

PFB110
Ceiling mount

PFA152-E
Pole mount

PFM800-4K
Passive Video Balun

PFM800B-4K
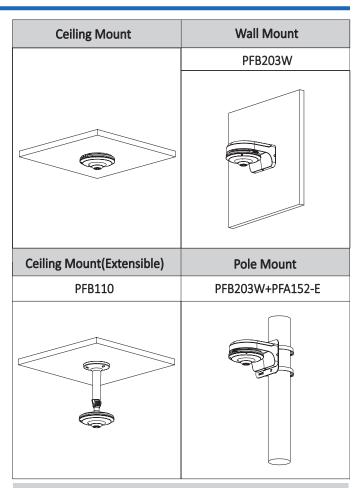Passive Video Balun

PFM321
12V 1A Power Adapter

PFM320D-015
12V 1.5A Power Adapter

PFM300
12V2A Power Adapter

Ceiling Mount	Wall Mount
	PFB203W

Ceiling Mount(Extensible)	Pole Mount
PFB110	PFB203W+PFA152-E

Dimensions (mm/inch)

∅126.2 [∅4.97"]

40.6 [1.6"]