DAHUA
TECHNOLOGY

4K Enhanced Night Color HDCVI Eyeball Camera
Fixed Lens True Wide Dynamic Range with White-light LEDs

HDCVI

ArcticPro

- 1/2.8-in. Progressive-scan 8MP CMOS Sensor
- 8MP (3840 x 2160) at 15 fps Maximum Resolution
- 2.8 mm Fixed Lens
- Enhanced Night Color Technology with White-light LEDs for Color Images in Total Darkness
- Super Adapt, True WDR (120 dB) and 3D Noise Reduction
- ArcticPro Series Camera — Operational down to –40° C (–40° F)
- Supports Multiple Video Formats: HDCVI, CVBS, AHD and TVI
- Built-in Microphone
- IP67 Ingress Protection
- Five-year Warranty*

| Pro Series | 4K | Full Color | Audio | WDR | IP67 |

System Overview

Experience the superior clarity of Dahua's 4K HDCVI camera for vast coverage and superior image details. The 4K HDCVI series leverages existing coax infrastructures to deliver forensic-level images seamlessly and over long distances. The camera offers a 2.8 mm fixed lens, a multi-language On-screen Display, and HD/SD switchable output. The camera is ideal for hosting diverse applications — Enhanced Night Color and True Wide Dynamic Range allow the camera to operate in any lighting condition and the IP67 rating makes the camera suitable for the harshest environments.

Functions

Enhanced Night Color Technology
Dahua cameras with Enhanced Night Color Technology incorporate a high-performance sensor and a large aperture lens to produce crisp, clear color images in low light environments. This light-sensitive technology allows the camera to capture more available light and reproduce color images with superior detail and contrast. The Enhanced Night Color camera incorporates white-light LEDs to offer full-color images in total darkness, as well as an effective visual deterrent. This technology provides smart illumination where the camera automatically activates the white-light illuminators when ambient light levels fall and adjusts exposure time and LED intensity to prevent overexposing the image.

Three Signals over One Coaxial Cable
HDCVI technology simultaneously transmits video, audio, and data over a single coaxial cable. Dual-way data transmission allows the HDCVI camera to communicate with an HCVR to send control signals or to trigger alarms.

Super Adapt
Super Adapt technology monitors external lighting conditions and automatically adjusts the camera settings to provide optimal video images, whether indoors or outdoors. Plus, with this technology installers no longer have to take time to set the optical parameters manually, the camera automatically adjusts to the optimal settings, saving time and money.

Simplicity
HDCVI technology seamlessly integrates traditional analog security systems with upgraded, high-quality HD video, making it the best choice to protect security investments. The plug and play approach enables full HD video security without the hassles of configuring a network.

Broadcast-quality Audio
Audio information is used as supplementary evidence in video security applications. This HDCVI camera transmits audio signals over the coaxial cable, eliminating the need for separate audio wiring. In addition, the camera uses unique audio processing and transmission technology that eliminates noise to best duplicate source audio, guaranteeing high-quality and highly effective audio information

Multiple-format Support
The camera supports multiple video formats including, HDCVI, CVBS, AHD, and TVI. The camera can switch between these four formats via the switch located on the video output cable, making the camera compatible with note only HDCVI DVRs but also most existing HD/SD DVRs.

True Wide Dynamic Range
The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Protection
The camera is subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating making it suitable for demanding outdoor applications. The camera allows for ±30% input voltage tolerance, suitable for the most unstable conditions for outdoor applications, and its 4KV lightning rating provides effective protection for both the camera and its structure against lightning.

Technical Specification

Image Sensor

Image Sensor	1/2.8-in. 8MP CMOS Sensor
Max. Resolution	3840(H) × 2160(V), 8MP
Scanning System	Progressive
Electronic Shutter Speed	1/4 s to 1/100,000 s
S/N Ratio	> 65 dB
Min. Illumination	Color: 0.001 Lux at F1.0 0 lux with White Light on
Illumination Distance	Up to 40 m (131.23 ft)
Illuminator On/Off Control	Auto, Manual
Illuminator Number	Two (2)

Lens

Lens Type	Fixed-focal
Mount Type	M12
Focal Length	2.8 mm
Max. Aperture	F1.0
Angle of View	Horizontal: 106° Vertical: 55° Diagonal: 125°
Iris Type	Fixed
Close Focus Distance	2.0 m (6.56 ft)

DORI Distances[1]

DORI Distances[1]	Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
	91.0 m (298.6 ft)	36.4 m (119.4 ft)	18.2 m (59.7 ft)	9.1 m (29.9 ft)

Pan / Tilt / Rotation

Pan/Tilt/Rotation Range	Pan: 0° to 360° Tilt: 0° to 78° Rotation: 0° to 360°

Video

Resolution Output	4K (3840 × 2160); 5MP (2592 × 1944); 4MP (2560 × 1440); 960 H (960 × 480)
Frame Rate	CVI: 4K (3840 × 2160) at 15 fps; 5MP(2880 × 1620) at 25 fps; 4MP (2560 × 1440) at 30 fps AHD: 4K at 15 fps TVI: 4K at 15 fps CVBS: 960H
BLC Mode	BLC, HLC, WDR, HLC-Pro

WDR	120 dB
White Balance	Auto, Area White Balance
Gain Control	Auto, Manual
Noise Reduction	3D NR
Smart Light	Yes
Mirror	On, Off
Privacy Masking	On, Off (8 area, rectangle)

Interface

Video Output	One (1) BNC, Transmits HDCVI High-definition signal or CVBS, AHD or TVI Channel, DIP Switch
Audio Input	One (1) Built-in Microphone

Certifications

CE	EN55032, EN61000, EN55024, EN55035, EN50130, EN62368
Safety	UL62368-1 CAN/CSA C22.2 No.62368-1-14
Electromagnetic Compatibility (EMC)	CFR 47 FCC Part 15 Subpart B ANSI C63.4-2014

Electrical

Power Supply	12VDC ±30%
Power Consumption	Maximum 6.9 W (12V DC, with white light on)

Environmental

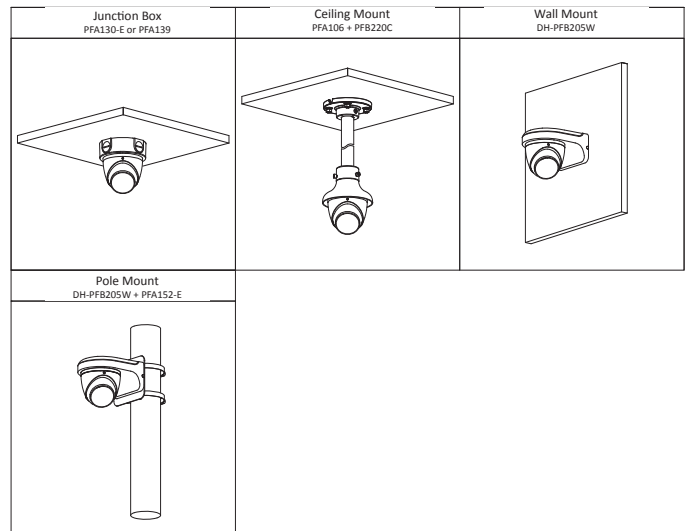|	
Operating Conditions	−40° C to +60° C (−40° F to +140° F) Less than 95% RH (non-condensation)
Storage Conditions	−40° C to +60° C (−40° F to +140° F) Less than 95% RH
Ingress Protection	IP67

Construction

Casing	Metal
Camera Dimensions	φ106.0 mm × 93.6 mm (φ4.17" × 3.69")
Net Weight	0.50 kg (1.1 lb)
Gross Weight	0.67 kg (1.48 lb)

1. The DORI distance is a measure of the general proximity for a specific classification to help pinpoint the right camera for your needs. The DORI distance is calculated based on sensor specifications and lab test results according to EN 62676-4 , the standard that defines the criteria for the Detect, Observe, Recognize and Identify classifications.

Ordering Information

Type	Part Number	Description
8MP HDCVI Camera	A82CJN2	8MP Enhanced Night Color HDCVI 2.8mm Fixed Lens Eyeball Camera
Accessories (optional)	PFA106	Mount Adapter
	PFA117	Extension Pole for PFB220C
	PFA130-E	Waterproof Junction Box
	PFA139	Junction Box
	PFA150	Pole Mount (use with PFA106 and PFB305W)
	PFA151	Corner Mount (use with PFA106 and PFB305W)
	PFA152-E	Pole Mount (use with PFA130-E, PFA139, or DH-PFB205W)
	DH-PFA200G	Gang Box Adapter
	DH-PFB205W	Wall Mount (use alone or with PFA152-E pole mount)
	PFB220C	Pole Mount (use with PFA106 mount adapter)
	PFB305W	Wall Mount (use PFA106 mount adapter)
	DH-PFM321D-US	12 VDC, 1 A Power Adapter
	DH-PFM800-4K	4K Passive HDCVI Balun

Junction Box PFA130-E or PFA139

Ceiling Mount PFA106 + PFB220C

Wall Mount DH-PFB205W

Pole Mount DH-PFB205W + PFA152-E

Accessories

Optional:

PFA106 Mount Adapter

PFA139 Junction box

PFA130-E Water-proof Junction Box

DH-PFB205W Wall Mount Bracket

PFB220C Ceiling Mount

PFA152-E Pole Mount Bracket

PFA150 Pole Mount Bracket

PFM800-4K Passive HDCVI Balun

PFA151 Corner Mount Bracket

DH-PFA200G Gang Box Adapter

PFB305W Wall Mount Bracket

DH- PFM321D 12 V 1A Power Adapter

PFA117 Extension Pole for PFB220C

Dimensions (mm[inch])

93.6 [3.69]

⌀106.0 [⌀4.17]

⌀69.0 [⌀2.72]

4-⌀4.5 [⌀0.18]