dahua TECHNOLOGY

5MP Night Color 2.0 HDCVI Bullet Camera
Fixed Lens True Wide Dynamic Range with 16:9 Aspect Ratio

HDCVI

ArcticPro

- 1/2.7-in. Progressive-scan 5MP CMOS Sensor
- 5MP (2880 x 1620) at 25 fps Maximum Resolution
- 16:9 Aspect Ratio for no Image Stretching[1]
- 2.8 mm Fixed Lens
- Night Color Technology with White-light LEDs for Color Images in Total Darkness
- True Wide Dynamic Range (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 | 5Mp | Full-color | Audio | WDR | IP67

System Overview

Experience the superior clarity of Dahua's 5MP HDCVI camera for vast coverage and superior image details. The 5MP 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 — 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

Night Color Technology
Dahua cameras with 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 Night Color camera incorporates white-light LEDs to offer full-color images in total darkness, as well as an effective visual deterrent. This technology automatically activates the white-light illuminators when a human enters a defined detection area within the scene to capture full-color details.

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 not 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

Camera

Image Sensor	1/2.7-in. CMOS Sensor
Effective Pixels	2880 (H) x 1620 (V), 5MP
Scanning System	Progressive
Electronic Shutter Speed	1/4 s to 1/100,000 s
Minimum Illumination	Color: 0.001 lux at F1.0
S/N Ratio	More than 65 dB
Illuminator Type	White-light
Illuminator Distance	20.0 m (65.61 ft)
Illuminator Control	Auto, Manual
Illuminator LED	One (1)

Lens

Lens Type	Fixed Lens
Mount Type	M12
Focal Length	2.8 mm
Maximum Aperture	F1.0
Angle of View	Horizontal: 112° Vertical: 57° Diagonal: 132°
Iris Type	Fixed
Close Focus Distance	1600.0 mm (63.0 in.)

Installation Angle

Range	Pan: 0° to 360° Tilt: 0° to 90° Rotation: 0° to 360°

DORI Distances[2]

Detect (8 ppf)	Observe (19 ppf)	Recognize (38 ppf)	Identify (76 ppf)
67.40 m (221.13 ft)	27.0 m (88.58 ft)	13.50 m (44.29 ft)	6.70 m (21.98 ft)

Video

Resolution	5MP (2880 x 1620), 4MP (2560 x 1440), 1080p (1920 x 1080), 960H (960 x 480)
Frame Rate	5 MP at 25 fps
Video Output	One (1) BNC, Transmits HDCVI High-definition signal or CVBS, AHD or TVI Channel, switchable

Video Transmission[3]	RG-59/U Coax	720p: 800 m (2624.67 ft) 1080p: 500 m (1640.42 ft) 4MP: 500 m (1640.42 ft)
	RG-6/U Coax	720p: 1200 m (3937.01 ft) 1080p: 800 m (2624.67 ft) 4MP: 700 m (2296.59 ft)
	CAT 6 UTP (balun required)	720p: 450 m (1476.38 ft) 1080p: 300 m (984.25 ft) 4MP: 300 m (984.25 ft)

Day/Night	Color
OSD Menu	Multi-language
BLC Mode	BLC, HLC, HLC-Pro, True WDR
WDR	120 dB
Noise Reduction	3D NR
White Balance	Auto, Manual
Gain Control	Auto, Manual
Mirror	On, Off
Privacy Masking	On, Off (8 areas, rectangular)

Interface

Audio	One (1) Built-in Microphone

Electrical

Power Supply	12 VDC ± 30%
Power Consumption	Maximum 4.4 W (12 VDC with Illuminator on)

Environmental

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

Certifications

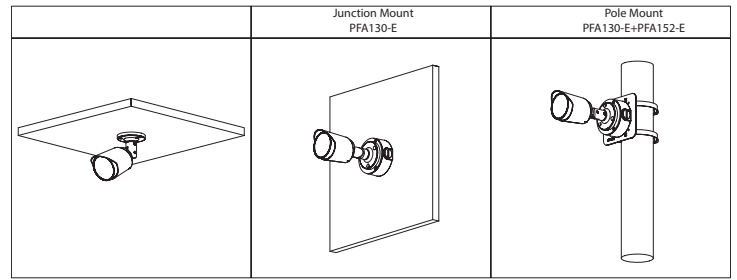|	
CE	EN55032, EN55024, EN50130-4, EN60950-1
Safety	UL60950-1 CAN/CSA C22.2 No.60950-1
Electromagnetic Compatibility (EMC)	CFR 47 FCC Part 15 subpart B, ANSI C63.4-2014

Construction

Casing	Metal
Dimensions	174.50 x 72.30 mm x mm x 70.60 mm (6.87 in. x 2.85 in. x 2.78 in.)
Net Weight	0.34 kg (0.75 lb)
Gross Weight	0.45 kg (0.99 lb)

1. A connected Dahua HDCVI DVR must be at firmware level V4.001.0000001.0.R.200908 or later to display the 16:9 aspect ratio.
2. 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.
3. Transmission distance results verified by real-scene testing in Dahua's test laboratory. Actual transmission distances may vary due to external influences, cable quality, and wiring structures.

Ordering Information

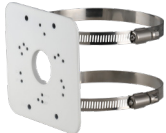| Type	Part Number	Description
5MP HDCVI Camera	A52CF62	5MP Night Color 2.0, 2.8 mm Fixed Lens Bullet Camera, True WDR, 16:9
Accessories, optional	PFA130-E	Waterproof Junction Box
	PFA134	Junction Box
	PFA151	Corner Mount
	PFA152-E	Pole Mount
	DH-PFM321D-US	12 VDC, 1 A Power Adapter
	PFM800-4K	4K Passive HDCVI Balun

Accessories

Optional:

PFA130-E
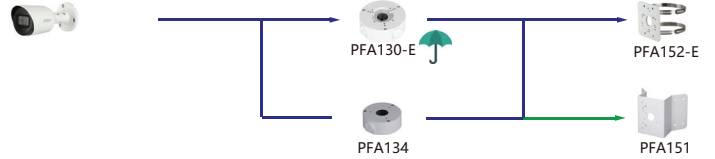Waterproof
Junction Box

PFA134
Junction Box

PFA151
Corner Mount

PFA152-E
Pole Mount

DH-PFM321D-US
12 VDC, 1 A
Power Adapter

PFM800-4K
4K Passive HDCVI
Balun

	Junction Mount PFA130-E	Pole Mount PFA130-E+PFA152-E

Mounting Diagram

Camera   Junction Box   Pole/Corner Mount

PFA130-E → PFA152-E

PFA134 → PFA151

Dimensions (mm/in.)

174.5 [6.87]
99 [3.9]
70.6 [2.78]
72.3 [2.85]
84 [3.31]

⌀70.1 [⌀2.76]
3-⌀4.5 [⌀0.18]
⌀56 [⌀2.2]