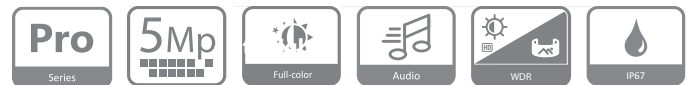# 5MP Night Color 2.0 HDCVI Bullet Camera

Vari-focal True Wide Dynamic Range with 16:9 Aspect Ratio

- 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]
- 2.7 mm to 13.5 mm Vari-focal Lens
- Night Color Technology with White-light LEDs for Color Images in Total Darkness
- True Wide Dynamic Range (120 dB) and 3D Noise Reduction
- 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 2.7 mm to 13.5 mm vari-focal 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 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 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.

*Warranty applies to products sold through an authorized Dahua Dealer.

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 F1.2
S/N Ratio	More than 65 dB
Illuminator Type	White-light
Illuminator Distance	60.0 m (131.23 ft)
Illuminator Control	Auto, Manual
Illuminator LED	Four (4)

Lens

Lens Type	Motorized Vari-focal
Mount Type	ø14
Focal Length	2.7 mm to 13.5 mm
Maximum Aperture	F1.2
Angle of View	Horizontal: 35° to 112° Vertical: 19° to 57° Diagonal: 40° to 137°
Iris Type	Fixed
Close Focus Distance	1500.0 mm (59.06 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)
2.7 mm	65.20 m (213.91 ft)	26.0 m (85.30 ft)	13.0 m (42.65 ft)	6.50 m (21.32 ft)
13.5 mm	186.60 m (612.20 ft)	74.60 m (244.75 ft)	37.30 m (122.37 ft)	18.60 m (61.02 ft)

Video

Resolution	5MP (2880 x 1620), 4MP (2560 x 1440), 1080p (1920 x 1080), 960H (960 x 480)
Frame Rate	5MP 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 ±10% or 24 VAC ±25%
Power Consumption	Maximum 14.92 W (12 VDC with Illuminator on)

Environmental

Operating Conditions	−30° C to +60° C (−22° F to +140° F) Less than 95% RH
Storage Conditions	−30° C to +60° C (−22° 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	244.10 mm x 90.40 mm x 90.40 (9.61 in. x 3.56 in. x 3.56 in.)
Net Weight	0.82 kg (1.81 lb)
Gross Weight	1.07 kg (2.36 lb)

1. To view the 16:9 video output on a Dahua HDCVI DVR you must update the DVR to the latest firmware. Obtain the latest firmware on the Dahua Wiki at https://dahuawiki.com/Recorders.
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.
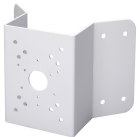
Ordering Information

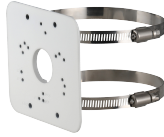| Type	Part Number	Description
5MP HDCVI Camera	A52CF6Z	5MP Night Color 2.0 HDCVI Vari-focal Lens Bullet Camera, 16:9 Aspect Ratio
Accessories, optional	PFA130-E	Waterproof Junction Box
	PFA151	Corner Mount
	PFA152-E	Pole Mount (use with PFA130-E)
	DH-PFM320D-US	12 VDC, 2 A Power Adapter
	DH-PFM800-4K	4K Passive HDCVI Balun

Accessories

Optional:

PFA130-E
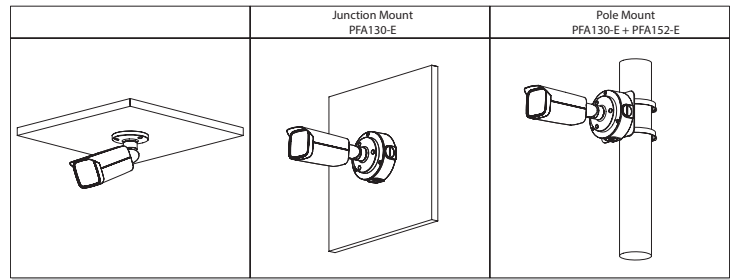Waterproof
Junction Box

PFA151
Corner Mount

PFA152-E
Pole Mount

DH-PFM320D-US
12 VDC, 2 A Power
Adapter

DH-PFM800-4K
Passive HDCVI Balun

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

Dimensions (mm/in.)

244.1 [9.61]

153.1 [6.03]

79.0 [3.11]

75.9 [2.99]

∅90.4 [∅3.56]

∅70.0 [∅2.76]

3−∅4.7 [∅0.19]

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