

DH-HAC-D1A51

5MP HDCVI Fixed IR Dome Camera

HDCVI



* The parameters and datasheets below can only be applied to A51-S2 series.

- Max. 25 fps@5MP (16:9 video output)
- CVI/CVBS/AHD/TVI switchable
- 3.6 mm fixed lens (2.8 mm optional)
- Max. IR length 20 m, Smart IR
- DC12V



System Overview

Experience 5MP video and the simplicity of using existing cabling infrastructure with HDCVI. The Cooper series 5MP camera features a compact design and offers a high quality image at a friendly price. It offers various vari-focal/fixed lens models with a multi-language OSD and HD/SD switchable output. Its structural flexibility and high cost-performance makes the camera an ideal choice for SMB solutions.

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 for 5MP HD 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 enables full HD video surveillance without the hassle of configuring a network.

Smart IR

The camera is designed with IR LED 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.

Multi-formats

The camera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be switched over through OSD menu. This feature makes the camera to be compatible with not only XVRs but also most end users' existing HD/SD DVRs.

Multi-language OSD

OSD menu provides multiple image adjustments and function settings to meet the requirements of different monitoring scenes. The OSD menu includes configurations such as backlight mode, day/night, white balance, privacy mask and motion detect. The camera supports 11 languages for OSD menu, namely, Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

Protection

Supporting $\pm 30\%$ 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 lightning.

Technical Specification					
Camera					
Image Sensor	1/2.7" CMOS				
Max. Resolution	2880 (H) × 1620 (V)				
Pixel	5MP				
Scanning System	Progressive				
Electronic Shutter Speed	PAL: 1/25–1/100000s NTSC: 1/30–1/100000s				
Min. Illumination	0.02 Lux/F2.0, 30IRE, 0 Lux IR on				
S/N Ratio	More than 65 dB				
Illumination Distance	20 m (66 feet)				
Illuminator On/Off Control	Auto;manual				
Lens					
Lens Type	Fixed lens / Fixed iris				
Mount Type	M12				
Focal Length	3.6mm (2.8mm Optional)				
Max Aperture	F2.0				
Angle of View	2.8 mm: 125° × 106° × 56° (diagonal × horizontal × vertical) 3.6 mm: 104° × 88° × 46° (diagonal × horizontal × vertical)				
Focus Control	N/A				
Close Focus Distance	2.8 mm: 0.8 m (2.6 ft) 3.6 mm: 1.2 m (3.9 ft)				
DORI distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	56.0 m (183.7 ft)	22.4 m (73.5 ft)	11.2 m (36.7 ft)	5.6 m (18.4 ft)
	3.6mm	80 m (262.5 ft)	32 m (105.0 ft)	16 m (52.5 ft)	8 m (26.2 ft)
Pan / Tilt / Rotation					
Pan/Tilt/Rotation	Pan: 0° – 355° Tilt: 0° – 75° Rotation: 0° – 355°				
Video					
Resolution	5M (2880 × 1620); 4M (2560 × 1440); 1080P (1920 × 1080); 960H (960 × 576/960 × 480)				
Frame Rate	CVI: PAL:5M@25 fps; 4M@25fps; 1080P@25fps NTSC:5M@25 fps; 4M@30fps; 1080P@30fps AHD: PAL:4M@25 fps; NTSC:4M@30 fps; TVI: PAL:4M@25 fps; NTSC:4M@30 fps; CVBS: 960H;				
Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port				
Day/Night	Auto (ICR) / Manual				
OSD Menu	Multi-language				

BLC Mode	BLC / HLC / DWDR
WDR	DWDR
Gain Control	AGC
Noise Reduction	2D
White Balance	Auto;manual
Smart IR	Yes
Mirror	Off/On
Privacy Masking	Off / On (8 area, rectangle)

Certifications

Certifications	CE (EN55032, EN55024, EN50130-4,EN60950-1, EN 62368-1:2014+A11:2017) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014)
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Interface

Audio Interface	N/A
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Electrical

Power Supply	12V DC ±30%
Power Consumption	Max. 3.2 W (12V DC, IR on)

Environmental

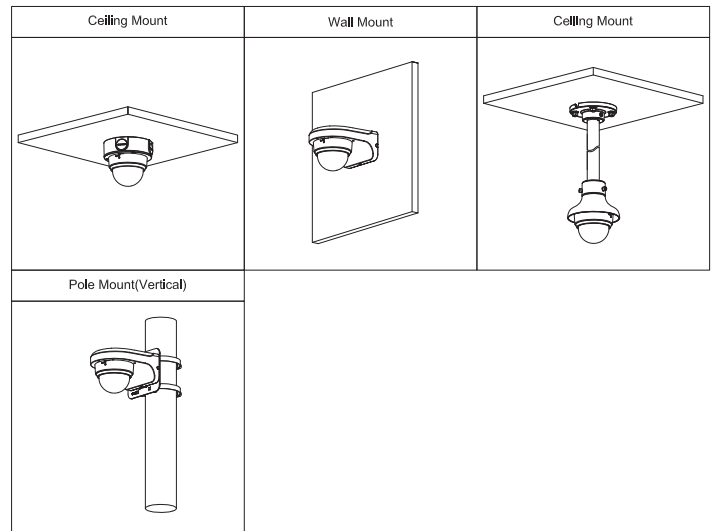
Operating Conditions	–40°C to +45°C (–40°F to +113°F) / Less than 95% RH * Start up should be done at above –40°C (–40°F)
Storage Conditions	–40°C to +45°C (–40°F to +113°F) / Less than 95% RH
Ingress Protection & Vandal Resistance	N/A

Construction

Casing	Plastic
Dimensions	Φ100 mm×74.1 mm(Φ3.9" × 2.92")
Net Weight	0.14 kg (0.31 lb)
Gross Weight	0.23 kg (0.51 lb)

Ordering Information

Type	Part Number	Description
5MP Camera	DH-HAC-D1A51P 2.8 mm	5MP HDCVI Fixed IR Dome Camera, PAL
	DH-HAC-D1A51P 3.6 mm	
	DH-HAC-D1A51N 2.8 mm	5MP HDCVI Fixed IR Dome Camera, NTSC
	DH-HAC-D1A51N 3.6 mm	
Accessories	PFA13G	Junction Box
	PFA152-E	Pole Mount Bracket
	PFB203W	Water-proof Wall Mount Bracket
	PFM800-4K	Passive Video Balun
	PFM321	12V 1A Power Adapter
	PFM904	Integrated Mount Tester



Accessories

Optional:



PFA13G
Junction box



PFA152-E
Pole mount



PFB203W
Wall mount



PFM800-4K
Passive Video Balun



PFM321
12V 1A Power Adapter



PFM904
Integrated Mount Tester

Dimensions (mm/inch)

