

DH-HAC-D3A21-VF

2MP HDCVI IR Dome Camera



- Max. 30 fps@1080p
- · CVI/CVBS/AHD/TVI switchable
- · 2.7-12 mm vari-focal lens
- · Max. IR length 30 m, Smart IR
- IP67,12 VDC













System Overview

The Cooper Series offers simple and highly cost-effective HDCVI solutions. It provides 24/7 reliable monitoring with high-quality image performance, saving cost on both material and labor force. It is also designed and built to the specific standards of Dahua.

Functions

Smart IR Illumination

With its IR illumination, the camera provides optimal performance in low light conditions, ensuring uniformity in the brightness of B/W images. Through its smart IR technology, the camera also compensates for the distance of targets by adjusting the intensity of its IR LEDs, preventing overexposure of images as targets move closer to the camera.

4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals (video, audio*, data and power) which are simultaneously transmitted over a coaxial cable. Dual-way data transmission allows the HDCVI camera to interact with the XVR to perform various actions such as sending control signals and triggering alarms. HDCVI technology also supports PoC, which makes the camera easy and quick to install.

* Audio input is available for select HDCVI camera models.

Long Distance Transmission

HDCVI technology provides long distance transmission in real-time without transmission loss. It supports transmission distances up to 700 m for 2-MP/5-MP/8-MP HD videos through coaxial cables, and up to 300 m through UTP cables. The results were obtained and verified through rigorous testing in Dahua's test laboratory.

Protection

IP67: The camera passed a series of rigorous dust and immersion tests. Its enclosure is both dust-proof and waterproof, and can function normally while being immersed in 1 m deep water for up to 30 minutes. Wide voltage: The camera has $\pm 30\%$ input voltage tolerance (for some power supplies) and a wide voltage range, making it suitable for a variety of outdoor scenarios.

Multi-language OSD

The OSD offers multiple functions to meet the many requirements of a monitoring scene, such as backlight mode, day/night mode, white balance, privacy mask, and motion detection. 11 languages are available for OSD: Chinese, English, French, German, Spanish, Portuguese, Italian, Japanese, Korean, Russian and Polish.

Simplicity

HDCVI technology inherits the simplicity of traditional analog surveillance systems, making it a great mechanism for protecting your valuables. HDCVI can be upgraded from the traditional analog system without replacing the existing coaxial cabling. Its plug and play design enables it to produce high-definition videos during surveillance without the hassle of configuring a network.

Cooper Series | DH-HAC-D3A21-VF

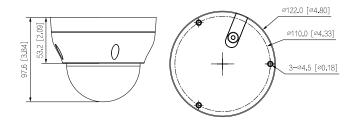
Technical Specification Camera Smart Illumination Mirror Image Sensor ZMP CMOS Max. Resolution 1920 (H) × 1080 (V) Scanning System Progressive Electronic Shutter Speed PAL: 1/25 s-1/100,000 s NTSC: 1/30 s-1/100	
Pixel 2 MP Mirror Image Sensor 2MP CMOS Privacy Masking Max. Resolution 1920 (H) × 1080 (V) Certification Scanning System Progressive Electronic Shutter Speed PAL: 1/25 s – 1/100,000 s Min. Illumination 0.04 lux@F1.7 (Color, 30 IRE) 0.004 lux@F1.7 (B/W, 30 IRE) 0.10x (Illuminator on) S/N Ratio >65 dB Illuminator On/Off Control Auto/Manual Illuminator Number 2 (IR light) Power Supply Pan/Tilt/Rotation Range Pan: 0"–355" Environment Tilt: 0"–75" Rotation: 0"–355" Operating Temperature Proceedings of Temperature Proceedin	Yes Off/On (8 areas, rectangle) CE (EN55032:2015, EN61000-3-2:2014, 3-3:2013, EN55024:2010+A1:2015, EN5 EN50130-4:2011+A1:2014, EN62368-1:
Image Sensor 2MP CMOS Privacy Masking Max. Resolution 1920 (H) × 1080 (V) Certification Scanning System Progressive Electronic Shutter Speed PAL: 1/25 s-1/100,000 s NTSC: 1/30 s-1/100,000 s Min. Illumination	Off/On (8 areas, rectangle) CE (EN55032:2015, EN61000-3-2:2014, 3-3:2013, EN55024:2010+A1:2015, EN5 EN50130-4:2011+A1:2014, EN62368-1:
Max. Resolution 1920 (H) × 1080 (V) Certification Scanning System Progressive Electronic Shutter Speed PAL: 1/25 s – 1/100,000 s NTSC: 1/30 s – 1/100,000 s Min. Illumination 0.04 lux@F1.7 (Color, 30 IRE) 0.004 lux@F1.7 (Ey/W, 30 IRE) 0 lux (Illuminator on) S/N Ratio >65 dB Illumination Distance 30 m (98.43 ft) Power Supply Power Supply Power Supply Pan: 0"–355" Environment Tilt: 0"–75" Rotation: 0"–355" Operating Temperature Pan/Tilt/Rotation Range Tilt: 0"–75" Rotation: 0"–355" Lens Lens Type Manual Vari-focal Storage Temperature Pans Type Manual Vari-focal Storage Temperature Pans Aperture F1.7 Field of View H: 102"–32"; V: 54"–18"; D: 121"–37" Product Dimension Packaging Dimension Packaging Dimension Net Weight Close Focus Distance 0.8 m (2.62 ft) Packaging Dimension Installation Installation Installation	CE (EN55032:2015, EN61000-3-2:2014, 3-3:2013, EN55024:2010+A1:2015, EN5
Scanning System Progressive Electronic Shutter Speed PAL: 1/25 s-1/100,000 s NTSC: 1/30 s-1/100,000 s Port Video Output Video Output Power Supply Power Supply Power Supply Power Consumptic Environment Operating Temperate Operating Temperate Operating Temperate Storage Temperate Protection Structure Nax. Aperture F1.7 Field of View H: 102*-32*; V: 54*-18*; D: 121*-37* Product Dimension Iris Control Fixed Observe Recognize Identify Pows Supply Power Supply Power Consumptic Environment Operating Temperate Operating Temperate Protection Structure Casing Product Dimension Net Weight Net Weight DORI W 45.5 m 18.2 m 9.1 m 4.6 m Installation	3-3:2013, EN55024:2010+A1:2015, EN5 EN50130-4:2011+A1:2014, EN62368-1::
Electronic Shutter Speed PAL: 1/25 s - 1/100,000 s NTSC: 1/30 s - 1/100,000 s Min. Illumination 0.04 lux@F1.7 (Color, 30 IRE) 0.004 lux@F1.7 (B/W, 30 IRE) 0 lux (Illuminator on) S/N Ratio >65 dB Power Illuminator On/Off Control Auto/Manual Illuminator Number 2 (IR light) Pan: 0*-355* Tilt: 0*-75* Rotation: 0*-355* Lens Lens Lens Mount 414 Focal Length Max. Aperture F1.7 Field of View H: 102*-32*; V: 54*-18*; D: 121*-37* Lens Close Focus Distance 0.8 m (2.62 ft) DORI W 45.5 m 18.2 m 9.1 m 4.6 m Installation	3-3:2013, EN55024:2010+A1:2015, EN5 EN50130-4:2011+A1:2014, EN62368-1::
Electronic Shutter Speed PAE: 1/25 s—1/100,000 s NTSC: 1/30 s—1/100,000 s NOISE	EN50130-4:2011+A1:2014, EN62368-1:
Min. Illumination 0.004 lux@F1.7 (B/W, 30 IRE) 0 lux (Illuminator on) >65 dB Power	
S/N Ratio >65 dB Comparison of the control of th	
Power	Video output choices of CVI/TVI/AHD/CV port
Illuminator On/Off Control Auto/Manual Power Supply	
Power Consumption	12 VDC ± 30%
Pan: 0°-355° Tilt: 0°-75° Rotation: 0°-355° Coperating Temperature Lens Type Manual Vari-focal Lens Mount Focal Length Max. Aperture F1.7 Field of View H: 102°-32°; V: 54°-18°; D: 121°-37° Fised Close Focus Distance Detect Dobserve Recognize DOPRI W Pan: 0°-355° Coperating Temperature Storage Temperature Structure Casing Product Dimension Product Dimension Net Weight Gross Weight Installation	tion Max. 3.5 W (12 VDC, IR on)
Rotation: 0°–355° Lens Lens Type Manual Vari-focal Storage Temperature Lens Mount \$\phi_{14}\$ Protection Focal Length 2.7- 12 mm Max. Aperture F1.7 Field of View H: 102°–32°; V: 54°–18°; D: 121°–37° Product Dimension Iris Control Fixed Packaging Dimension Close Focus Distance 0.8 m (2.62 ft) Possible View Recognize Identify Gross Weight DORI W 45.5 m 18.2 m 9.1 m 4.6 m Installation	C
Lens Type Manual Vari-focal Storage Temperature Lens Mount	-30 °C to +60 °C (−22 °F to 140 °F)
Lens Mount	dity <95% (RH), non-condensing
Focal Length 2.7- 12 mm Structure Max. Aperture F1.7 Casing Product Dimension Iris Control Fixed Packaging Dimensi Close Focus Distance 0.8 m (2.62 ft) Net Weight DORI W 45.5 m 18.2 m 9.1 m 4.6 m Installation	-30 °C to +60 °C (−22 °F to +140 °F)
Max. Aperture F1.7 Casing Field of View H: 102°-32°; V: 54°-18°; D: 121°-37° Product Dimension Iris Control Fixed Packaging Dimensi Net Weight Lens Detect Observe Recognize Identify Gross Weight DORI W 45.5 m 18.2 m 9.1 m 4.6 m Installation	IP67
Field of View H: 102°-32°; V: 54°-18°; D: 121°-37° Product Dimension Packaging Dimensi Close Focus Distance 0.8 m (2.62 ft) Lens Detect Observe Recognize Identify Gross Weight DORI W 45.5 m 18.2 m 9.1 m 4.6 m Installation	
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Close Focus Distance 0.8 m (2.62 ft) Lens Detect Observe Recognize Identify Gross Weight DORI W 45.5 m 18.2 m 9.1 m 4.6 m Installation	Ons Φ122 mm × 97.6 mm (Φ4.80" × 3.84")
Lens Detect Observe Recognize Identify Gross Weight DORI W 45.5 m 18.2 m 9.1 m 4.6 m Installation	147 mm × 138 mm × 135 mm (5.79" × 5
DORI W 45.5 m 18.2 m 9.1 m 4.6 m Installation	0.30 kg (0.66 lb)
W (0.42 kg (0.93 lb)
DISTANCE (143.20 it) (33.71 it) (23.00 it) (13.03 it)	Wall mount; ceiling mount; horizontal po
T 137.9 m 55.2 m 27.6 m 13.8 m (452.43 ft) (181.10 ft) (99.55 ft) (45.28 ft)	

Video Frame Rate	CVI: PAL: 1080p@25 fps; 720p@25 fps NTSC: 1080p@30 fps; 720p@30 fps TVI: PAL: 1080p@25 fps; 720p@25 fps NTSC: 1080p@30 fps; 720p@25 fps NTSC: 1080p@30 fps; 720p@25 fps AHD: PAL: 1080p@25 fps; 720p@25 fps NTSC: 1080p@30 fps; 720p@30 fps CVBS: PAL: 960H NTSC: 960H
Resolution	1080p (1920 × 1080); 720p (1280 × 720); 960H (960 × 576/960 × 480)
Day/Night	Auto (ICR)/Color/B/W
BLC	BLC; HLC; DWDR
WDR	DWDR
White Balance	Auto; Area white balance
Gain Control	Auto/Manual

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Ordering Information			
Туре	Part Number	Description	
2MP Camera	DH-HAC-D3A21P-VF	2MP HDCVI IR Dome Camera, PAL	
	DH-HAC-D3A21N-VF	2MP HDCVI IR Dome Camera, NTSC	
Accessories (Optional)	PFA137	Junction Box	
	PFB203W+PFA152-E	Pole Mount Bracket	
	PFB203W	Wall Mount Bracket	
	PFA106+PFB220C	Ceiling Mount Bracket	
	PFM800-E	Passive HDCVI Balun	
	PFM321D	12V 1A Power Adapter	
	PFM904	Integrated Mount Tester	

Dimensions (mm[inch])



Accessories

Optional:



PFA137 Junction Box



PFB203W+PFA152-E Pole Mount Bracket



PFB203W Wall Mount Bracket



PFA106+PFB220C Ceiling Mount Bracket



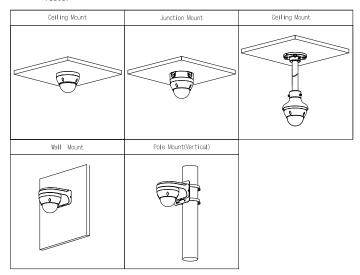
PFM800-E Passive HDCVI Balun



PFM321D 12V 1A Power Adapter



PFM904 Integrated Mount Tester



Rev 002.000

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