DH-HAC-T3A21-VF

2MP HDCVI IR Eyeball Camera



- Max. 30 fps@1080p.
- CVI/CVBS/AHD/TVI switchable.
- 2.7-12mm vari-focal lens.
- Max. IR length 40 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 ±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.

Technical Specification

Camera

Pixel	2 MP
Image Sensor	2MP 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–1/100,000 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
Illumination Distance	40 m (131.23 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (IR light)
Pan/Tilt/Rotation Range	Pan: 0°–355° Tilt: 0°–75° Rotation: 0°–355°

Lens

Lens Type	Manual Vari-focal				
Lens Mount	ϕ14				
Focal Length	2.7- 12 mm				
Max. Aperture	F1.7				
Field of View	H: 102°–32°; V: 54°–18°; D: 121°–37°				
Iris Control	Fixed				
Close Focus Distance	0.8 m (2.62 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	45.5 m (149.28 ft)	18.2 m (59.71 ft)	9.1 m (29.86 ft)	4.6 m (15.09 ft)
	T	137.9 m (452.43 ft)	55.2 m (181.10 ft)	27.6 m (99.55 ft)	13.8 m (45.28 ft)
	*DORI (Detect, Observe, Recognize, Identify) is a standard system (EN-62676-4) for defining the ability of a person viewing the video to distinguish persons or objects within a covered area. The numbers in this table do not reflect intelligent function distances. For intelligent function distances, refer to installation and commissioning manual/ project design tool.				

Video

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@30 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
Noise Reduction	2D NR
Smart Illumination	Yes
Mirror	Yes
Privacy Masking	Off/On (8 areas, rectangle)

Certification

Certifications	CE (EN55032: 2015, EN61000-3-2: 2014, EN61000-3-3: 2013, EN55024: 2010+A1: 2015, EN55035: 2017, EN50130-4: 2011+A1: 2014, EN62368-1: 2014+A11: 2017) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014)

Port

Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port

Power

Power Supply	12 VDC ± 30%
Power Consumption	Max. 4.6 W (12 VDC, IR on)

Environment

Operating Temperature	–30 °C to +60 °C (–22 °F to 140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	–30 °C to +60 °C (–22 °F to +140 °F)
Protection	IP67

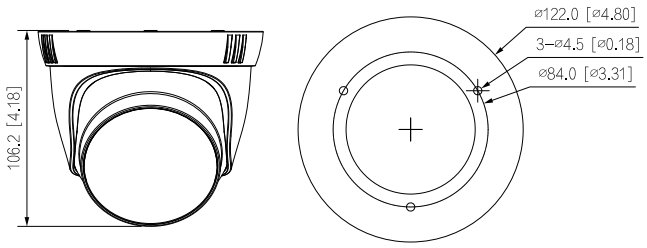
Structure

Casing	Metal dome top + plastic
Product Dimensions	Φ122 mm × 106.2 mm (Φ4.80" × 4.18")
Packaging Dimensions	155 mm × 155 mm × 135 mm (6.10" × 6.10" × 5.31")
Net Weight	0.39 kg (0.86 lb)
Gross Weight	0.51 kg (1.12 lb)
Installation	Wall mount; ceiling mount; horizontal pole mount

Ordering Information

Type	Part Number	Description
2MP Camera	DH-HAC-T3A21P-VF	2MP HDCVI IR Eyeball Camera, PAL
	DH-HAC-T3A21N-VF	2MP HDCVI IR Eyeball Camera, NTSC
Accessories (Optional)	PFA130-E	Junction Box
	PFB205W + PFA152-E	Pole Mount Bracket
	PFB205W	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:



PFA130-E
Junction
Box



PFB205W + PFA152-E
Pole Mount
Bracket

PFB205W
Wall Mount
Bracket



PFA106 + PFB220C
Ceiling Mount
Bracket



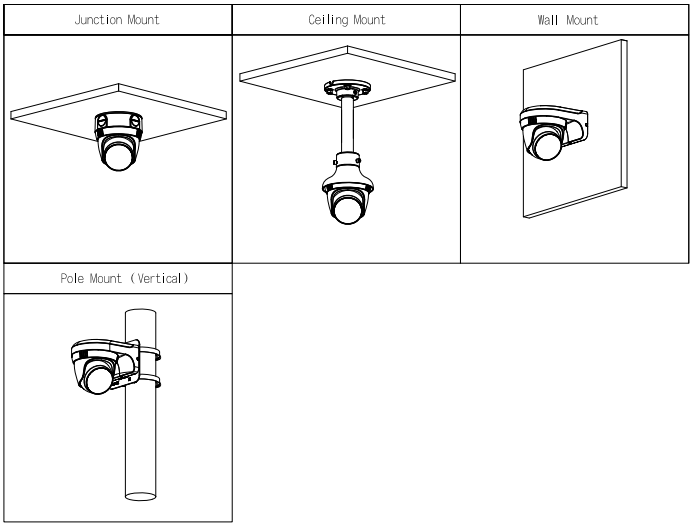
PFM800-E
Passive HDCVI
Balun



PFM321D
12V 1A Power
Adapter



PFM904
Integrated Mount
Tester



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