DH-HAC-T2A21P-U

2MP IR HDCVI Fixed-focal Eyeball Camera



- Max. 30 fps@1080p.
- Smart IR Illumination.
- 30 m illumination distance.
- 3.6 mm fixed lens (2.8 mm, 6 mm optional).
- CVI/CVBS/AHD/TVI switchable.
- IP67, 12 VDC.



Series 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.

Protection (IP67, Wide Voltage)

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.

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.

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

Image Sensor	2 MP CMOS
Max. Resolution	1920 (H) × 1080 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/25 s–1/100000 s; NTSC: 1/30 s–1/100000 s
Min. Illumination	0.02 lux@F2.0 (Color, 30 IRE) 0.002 lux@F2.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	30 m (98.43 ft)
Illuminator On/Off Control	Auto;Manual
Illuminator Number	2 (IR light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Lens Mount	M12
Focal Length	2.8 mm; 3.6 mm; 6 mm
Max. Aperture	F2.0
Field of View	2.8 mm: H: 100°; V: 54°; D: 117° 3.6 mm: H: 80°; V: 43°; D: 94° 6 mm: H: 43°; V: 24°; D: 50°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 0.5 m (1.64 ft) 3.6 mm: 0.8 m (2.62 ft) 6 mm: 2.4 m (7.87 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	44.7 m (146.65 ft)	17.9 m (58.73 ft)	8.9 m (29.20 ft)	4.5 m (14.76 ft)
	3.6 mm	55.0 m (180.45 ft)	22.0 m (72.18 ft)	11.0 m (36.09 ft)	5.5 m (18.04 ft)
	6 mm	102.9 m (337.6 ft)	41.1 m (134.84 ft)	20.6 m (67.59 ft)	10.3 m (33.79 ft)

Video

Video Frame Rate	CVI: PAL: 1080p@25 fps NTSC: 1080p@30 fps AHD: PAL: 1080p@25 fps NTSC: 1080p@30 fps TVI: PAL: 1080p@25 fps NTSC: 1080p@30 fps CVBS: PAL: 960H NTSC: 960H
Resolution	1080p (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; DWDR
WDR	DWDR
White Balance	Auto
Gain Control	Auto
Noise Reduction	2D NR
Illumination Mode	Smart IR

Certification

Certifications	CE-LVD: EN 62368-1; CE-EMC: EN 55032; EN 55035

Port

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

Power

Power Supply	12 VDC ± 30%
Power Consumption	Max 2.8 W (12 VDC, IR on)

Environment

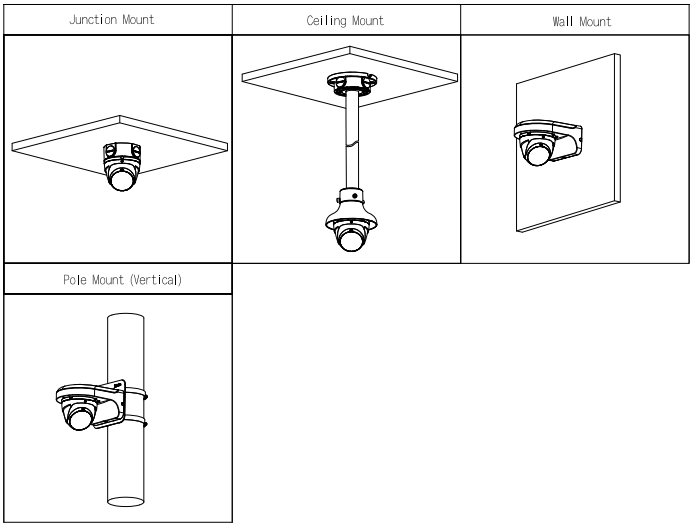
Operating Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Operating Humidity	<95% (RH), non-condensing
Storage Temperature	–40 °C to +60 °C (–40 °F to +140 °F)
Storage Humidity	<95% (RH), non-condensing
Protection	IP67
Anti-corrosion Level	Basic Protection

Structure

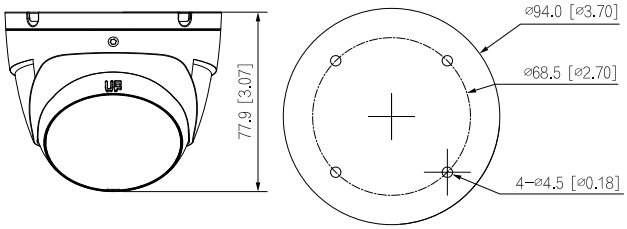
Casing Material	Metal
Product Dimensions	Φ94.0 mm × 77.9 mm (Φ3.70" × 3.07")
Net Weight	0.27 kg (0.60 lb)
Gross Weight	0.33 kg (0.73 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Model	Description
2MP Camera	DH-HAC-T2A21P-U	2MP IR HDCVI Fixed-focal Eyeball Camera, PAL
	DH-HAC-T2A21N-U	2MP IR HDCVI Fixed-focal Eyeball Camera, NTSC
Accessories (Optional)	PFA13A-E	Junction Box
	PFB205W-E	Wall Mount Bracket
	PFA152-E	Pole Mount Bracket
	PFA106	Adapter Plate of Mini Dome & Eyeball Camera
	PFB220C	Ceiling Mount Bracket
	PFM800-E	Passive HDCVI Balun
	PFM321D	12V 1A Power Adapter
	PFM904	Integrated Mount Tester



Dimensions (mm[inch])



Accessories

Optional:



PFA13A-E
Junction Box



PFB205W-E
Wall Mount Bracket



PFA152-E
Pole Mount Bracket



PFA106
Adapter Plate of Mini Dome & Eyeball Camera



PFB220C
Ceiling Mount Bracket



PFM800-E
Passive HDCVI Balun



PFM321D
12V 1A Power Adapter



PFM904
Integrated Mount Tester

Rev 002.000 © 2023 Dahua. All rights reserved. Design and specifications are subject to change without notice.
The images, specifications and information mentioned in the document are only for reference, and might differ from the actual product.