alhua TECHNOLOGY

DH-HAC-ME1509H-T-PV

5MP Smart Dual Light TiOC HDCVI Two-way Talk Fixed-focal Eyeball Camera

Series Overview

The Active Deterrence Series offers a multi-dimensional system that links surveillance videos to alarms, audio prompts and various types of information to assist with verifying potential risks. Cameras in this series actively warn off intruders with light and sound, while keeping you up to date of events in real-time through alarm-over-coax and its live view.

Functions

Smart Dual Light

With its smart dual light mechanism, the camera automatically turns on the white light when Perimeter Protection/SMD Plus function of AI XVR detects a target in the rule area to capture clear, vivid images. When the target leaves the rule area, the camera automatically switches over from the white light to the IR light to significantly reduce light pollution.

Protection Against Red-Blue Light Interference

Leveraging smart exposure technology, the camera uses the CMOS image sensor to exercise time-sharing control over image capture and the red and blue lights to eliminate interference by switching off the lights when pictures are being taken.

Active Deterrence (Red-Blue Light)

Designed with active deterrence technology, the camera turns on a siren and a red-blue light that flashes in intervals to deter and warn off intruders. The siren has customizable settings.

Wide Dynamic Range

With its advanced Wide Dynamic Range technology (WDR), the camera captures highly detailed images and produces high-definition recordings in high-contrast lighting conditions, and in scenes with backlighting or shadows.

Two-way Talk

With its built-in high-sensitivity microphone and high-power speaker, the camera realizes two-way talk through the mobile app.

*We recommend the coaxial cables be within 250 meters.

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* The parameters and datasheets below can only be applied to ME1509-S2 series. Intelligent Voice Alarm function which can be used with Scheduled AI of AI XVR is only available for TiOC 2.0 camera.

* In order to use the 5MP 16:9 and the Smart Dual Light HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000004.1.R.220323 or later version.

· Max 25 fps@5 MP (16:9 video output)

· 120 dB true WDR, 3D NR

· Smart Dual Light

· Protection Against Red-Blue Light Interference

· Active deterrence with red blue light, siren and alarm out interface.

· 40 m illumination distance

· Super Adapt

· Two-way Talk

· 3.6 mm fixed lens (2.8 mm optional)

· CVI/CVBS/AHD/TVI switchable

· IP67, 12 VDC

Broadcast-quality Audio

Audio signal transmission over coaxial cables is supported by the HDCVI camera. It adopts a unique audio processing and transmission technology that restores source audio and eliminates noise, ensuring the quality and reliability of the audio information that is collected. This becomes important for video surveillance applications that use audio information as a type of supplementary evidence.

Advanced 3DNR

Dahua's advanced 3DNR technology reduces image noise with little to no impact on image sharpness, especially in poor lighting conditions. It detects the noise, and compares the sequential frames to effectively reduce the noise. It also makes efficient use of bandwidth, saving on storage space.

Super Adapt

With its intelligent algorithm, the camera automatically adjusts its parameters to provide optimal performance and vivid images.

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.

Technical Specification

Camera

Image Sensor	5 MP CMOS
Max. Resolution	2880 (H) × 1620 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/3 s–1/100,000 s NTSC: 1/4 s–1/100,000 s
Min. Illumination	0.001 lux@F1.0 (Color, 30 IRE) 0.0001 lux@F1.0 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	>65 dB
Illumination Distance	IR: 40 m (131.23 ft) Warm Light: 40 m (131.23 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	2 (Multi-core light)
Angle Adjustment	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal
Auto Focus	No
Lens Mount	M12
Focal Length	2.8 mm;3.6 mm
Max. Aperture	F1.0
Field of View	2.8 mm: H: 111°; V: 58.5°; D: 136.3° 3.6 mm: H: 91.1°; V: 48.7°; D: 107.9°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 1.4 m (4.59 ft) 3.6 mm: 2.0 m (6.56 ft)

	Lens	Detect	Observe	Recognize	Identify
DORI Distance	2.8 mm	63.8 m (209.32 ft)	25.5 m (83.66 ft)	12.8 m (41.99 ft)	6.4 m (21.00 ft)
	3.6 mm	77.8 m (255.25 ft)	31.1 m (102.03 ft)	15.6 m (51.18 ft)	7.8 m (25.59 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: 5M@25 fps; 5M@12.5 fps; 4M@25 fps; 1080p@25 fps NTSC: 5M@25 fps; 5M@10 fps; 4M@30 fps; 1080p@30 fps AHD: PAL: 4M@25 fps NTSC: 4M@30 fps TVI: PAL: 4M@25 fps NTSC: 4M@30 fps CVBS: PAL: 960H NTSC: 960H

Resolution	5M (2880 × 1620); 4M (2560 × 1440); 1080p (1920 × 1080); 960H (960 × 576/960 × 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; HLC; WDR; HLC-Pro
WDR	120 dB
White Balance	Auto;Area white balance
Gain Control	Auto/Manual
Noise Reduction	3D NR
Illumination Mode	Smart IR&WL; WL Mode; IR Mode
Defog	Electronic defog
Digital Zoom	4×
Mirror	Yes
Privacy Masking	Off/On (8 areas, rectangle)

Active Deterrence

Sound Warning	Audio 1: alarm Audio2: No parking here Audio3: Private land no entry. Audio4: Warning zone keep off Audio5: Welcome Volume: high/medium/low; duration: 5 s–60 s; 110 dB
Red/Blue Light Warning	Flash: 5 s–60 s; frequency: high/medium/low

Certification

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

Audio

Built-in Mic	Yes
Two-way Talk	Yes (customize with the Two-way Talk Modem)
Speaker	Yes

Port

Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Alarm Output	1 channel

Power

Power Supply	12 VDC ± 30% (It is recommended to use a power adapter to supply the power for one camera)
Power Consumption	Max 10 W (12 VDC, LED 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	Φ122.0 mm × 110.9 mm (Φ4.80" × 4.37")
Net Weight	0.71 kg (1.56 lb)
Gross Weight	0.97 kg (2.14 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Model	Description
5MP Camera	DH-HAC-ME1509HP-T-PV	5MP Smart Dual Light TiOC HDCVI Two-way Talk Fixed-focal Eyeball Camera, PAL
	DH-HAC-ME1509HN-T-PV	5MP Smart Dual Light TiOC HDCVI Two-way Talk Fixed-focal Eyeball Camera, NTSC
Accessories (Optional)	PFA130-E	Junction Box
	PFB203W	Wall Mount (For use alone or with PFA152-E)
	PFA152-E	Pole Mount Bracket (For use with PFB203W)
	PFM320D	12V 2A Power Adapter
	PFM904	Integrated Mount Tester
	PFM800-4K	1-CH Passive Video Balun(We recommend the twisted pair cables be within 80 meters for this camera model)
	ARA11	Indoor Siren
	ARA16	Outdoor Siren
	PFA106	Mount Adapter
	PFB220C	Ceiling Mount Bracket
	DH-HAC-M1	1-channel Two-way Talk Modem
	DH-HAC-M4	4-channel Two-way Talk Modem

Accessories

Optional:

PFA130-E
Junction Box

PFB203W
Wall Mount (For use alone or with PFA152-E)

PFA152-E
Pole Mount Bracket (For use with PFB203W)

PFM320D
12V 2A Power Adapter

PFM904
Integrated Mount Tester

PFM800-4K
1-CH Passive Video Balun

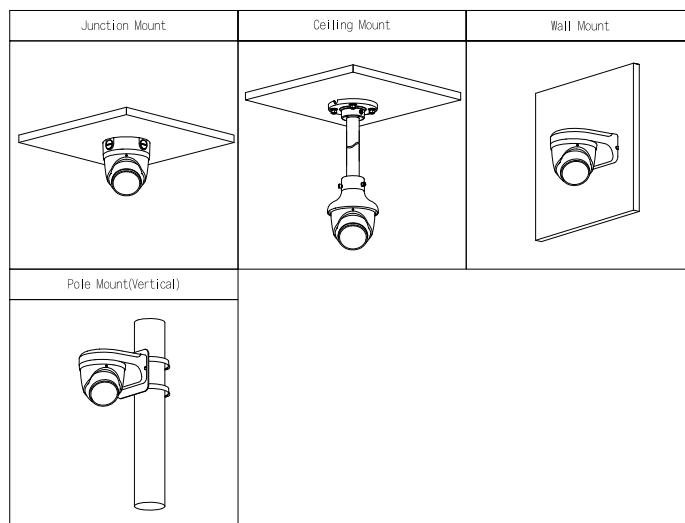ARA11
Indoor Siren

ARA16
Outdoor Siren

PFA106
Mount Adapter
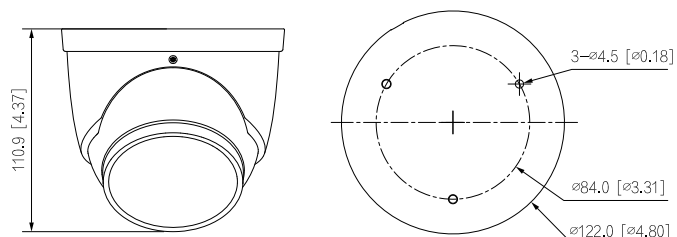
PFB220C
Ceiling Mount Bracket

DH-HAC-M1
1-channel Two-way Talk Modem

DH-HAC-M4
4-channel Two-way Talk Modem

Junction Mount | Ceiling Mount | Wall Mount

Pole Mount(Vertical)

Dimensions (mm[inch])

110.9 [4.37]

3–∅4.5 [∅0.18]

∅84.0 [∅3.31]

∅122.0 [∅4.80]

Quick Start Guide