DH-HAC-ME1809TQ-A-PV

4K Smart Dual Light TiOC HDCVI Eyeball Camera

* The parameters and datasheets below can only be applied to ME1809-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 Smart Dual Light HDCVI camera, the firmware of XVR must be upgraded to V4.001.0000004.1.R.220323 or later version.

· Max 15 fps@4K.

· 120 dB true WDR, 3D NR.

· Smart Dual Light.

· Protection Against Red-Blue Light Interference (Only 4K).

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

· 40 m illumination distance.

· Super Adapt.

· Built-in mic.

· 3.6 mm fixed lens (2.8 mm optional).

· CVI/CVBS/AHD/TVI switchable.

· IP67, 12 VDC.

· Quick-to-install eyeball saves installation time.

System 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.

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.

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.

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.

Super Adapt

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

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.

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.

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.
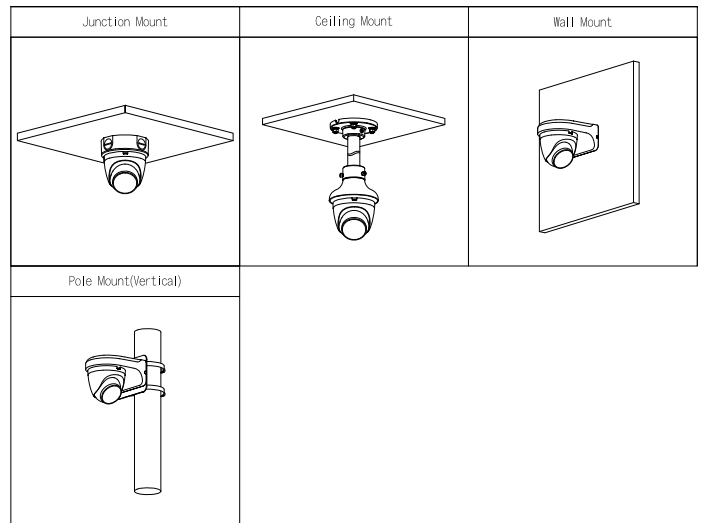
Easy Installation

The camera comes with an easy-to-install eyeball and pedestal, that cuts down on installation time and cost, outranking conventional eyeballs.
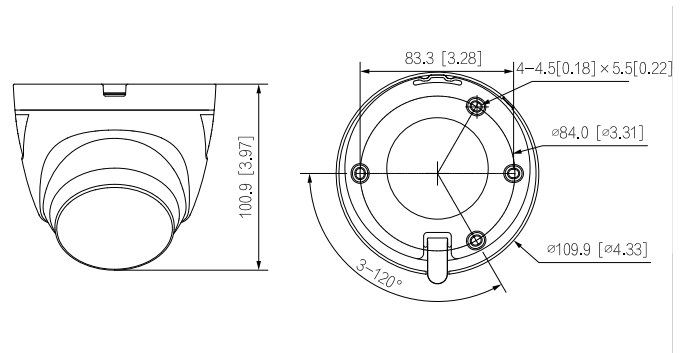
Technical Specification

Camera

Image Sensor	4K CMOS
Max. Resolution	3840 (H) × 2160 (V)
Scanning System	Progressive
Electronic Shutter Speed	PAL: 1/3 s–1/100000 s NTSC: 1/4 s–1/100000 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 (Warm light); 2 (IR light)
Pan/Tilt/Rotation Range	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: 106°; V: 55°; D: 125° 3.6 mm: H: 85°; V: 45°; D: 100°
Iris Control	Fixed
Close Focus Distance	2.8 mm: 2.0 m (6.56 ft) 3.6 mm: 2.8 m (9.19 ft)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	91.0 m (298.56 ft)	36.4 m (119.42 ft)	18.2 m (59.71 ft)	9.1 m (29.86 ft)
	3.6 mm	107.6 m (353.02 ft)	43.0 m (141.08 ft)	21.5 m (70.54 ft)	10.8 m (35.47 ft)

Video

Video Frame Rate	CVI: PAL: 4k@15 fps; 5M@25 fps; 4M@25 fps; NTSC: 4k@15 fps; 5M@25 fps; 4M@30 fps; AHD: PAL: 4K@15 fps; NTSC: 4K@15 fps; TVI: PAL: 4K@15 fps; NTSC: 4K@15 fps; CVBS: PAL: 960H; NTSC: 960H
Resolution	4K (3840 × 2160); 5M (2880 × 1620); 4M (2560 × 1440); 960H (960 × 576/960 × 480)
Day/Night	Auto(ICR)/Color/B/W
BLC	BLC; HLC; WDR; HLC-Pro
WDR	120 dB

White Balance

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 (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) UL (UL62368-1+CAN/CSA C22.2 No.62368-1-14)

Port

Video Output	Video output choices of CVI/TVI/AHD/CVBS by one BNC port
Audio Input	One channel built-in mic
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 10.45 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	Low

Structure

Casing Material	Dome (metal + plastic) + plastic enclosure
Product Dimensions	Φ109.9 mm × 100.9 mm (Φ4.33" × 3.97")
Net Weight	0.35 kg (0.77lb)
Gross Weight	0.53 kg (1.17 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

Ordering Information

Type	Model	Description
4K Camera	DH-HAC-ME1809TQP-A-PV	4K Smart Dual Light TiOC HDCVI Eyeball Camera
	DH-HAC-ME1809TQN-A-PV	4K Smart Dual Light TiOC HDCVI Eyeball Camera
Accessories (Optional)	PFA13G	Junction Box
	PFA152-E	Pole Mount Bracket
	PFB205W-E	Wall Mount Bracket
	PFA109	Mount Adapter
	PFB220C	Ceiling Mount Bracket
	PFM800-4K	1-CH Passive Video Balun
	PFM321D	12VDC Power Adapter
	PFM904	Integrated Mount Tester

Accessories

Optional:

PFA13G
Junction
Box

PFA152-E
Pole Mount
Bracket

PFB205W-E
Wall Mount
Bracket

PFA109
Mount
Adapter

PFB220C
Ceiling Mount
Bracket

PFM800-4K
1-CH Passive Video
Balun

PFM321D
12VDC Power
Adapter

PFM904
Integrated Mount
Tester

Dimensions (mm [inch])