

TDOECS5LIR2-A

5MP Smart Dual Illuminators Eyeball Camera



- Max 25 fps@5MP (16:9 video output).
- 120 dB true WDR, 3DNR.
- Smart Dual Illuminators.
- 40 m illumination distance.
- Built-in MIC.
- 2.8mm fixed lens
- CVI/CVBS/AHD/TVI switchable.
- IP67, 12 VDC.



Functions

Smart Dual Illuminators

With its smart dual illumination mechanism, the camera automatically turns on the white light when Perimeter Protection/SMD Plus function of AI 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 illuminator 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.

Super Adapt

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

Advanced 3DNR

ToughDog'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 $\pm 30\%$ 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.

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.

TDOECS5LIR2-A

Technical Specification

Camera

Pixel	5MP
Image Sensor	5MP CMOS
Max. Resolution	2880 (H) × 1620 (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	>65dB
Illumination Distance	IR: 40 m (131.23 ft) Warm light: 40 m (131.23 ft)
Illuminator On/Off Control	Auto; manual
Illuminator Number	2 (IR light)
	2 (Warm light)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°

Lens

Lens Type	Fixed-focal				
Mount Type	M12				
Focal Length	2.8 mm				
Max. Aperture	F1.0				
Field of View	2.8 mm: H: 111°; V: 57°; D: 131°				
Iris Control	Fixed				
Close Focus Distance	2.8 mm: 1.5 m (4.92 ft)				
DORI distance	Lens	Detect	Observe	Recognize	Identify
	2.8 mm	66.0 m (216.54 ft)	26.4 m (86.61 ft)	13.2 m (43.31 ft)	6.6 m (21.65 ft)

Video

Video Frame Rate	CVI: PAL: 5M@25 fps; 4M@25 fps; 1080p@25 fps NTSC: 5M@25 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
Defog	Electronic defog
Digital Zoom	4×
Mirror	Yes
Privacy Masking	Off/On (8 areas, rectangle)
Illumination Mode	Smart IR&WL; WL Mode; IR Mode

Certifications

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 subpart B, ANSI C63.4-2014) UL (UL62368-1+CAN/C SA 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

Power

Power Supply	12 VDC ± 30%
Power Consumption	Max 5.7 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)
Protection	IP67

Structure

Casing Material	Metal
Product Dimensions	Φ106.0 mm × 93.6 mm (Φ4.17" × 3.69")
Packaging Dimensions	148 mm × 139 mm × 137 mm (5.83" × 5.47" × 5.39")
Net Weight	0.49 kg (1.08 lb)
Gross Weight	0.66 kg (1.46 lb)
Installation	Wall mount; ceiling mount; vertical pole mount

TDOECS5LIR2-A

Accessories

Optional:



PFA130-E
Water-proof
Junction Box



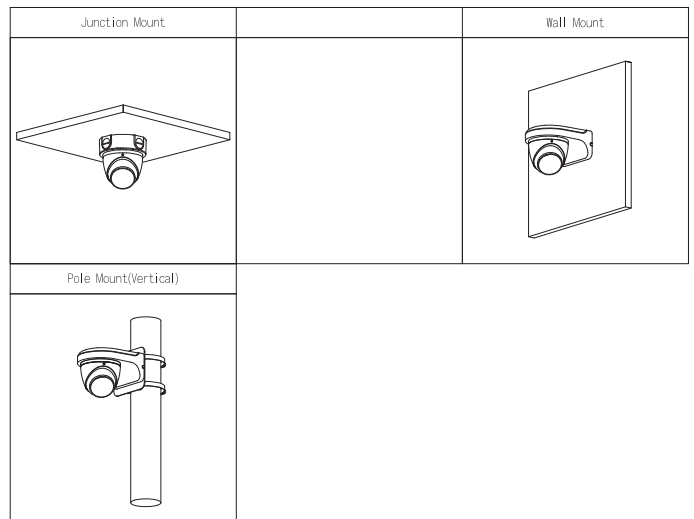
PFB204W
Wall Mount
Bracket



PFA106
Adapter Plate of
Mini Dome & Eyeball
Camera



PFA152-E + PFB204W
Passive HDCVI
Balun



Dimensions (mm[inch])

