

# TDOECS540L3A

# 5MP Full-color Starlight HDCVI Eyeball Camera



- · Full-color starlight
- · 40 m LED distance
- · Max. 20fps@5MP
- · CVI/CVBS/AHD/TVI switchable
- · Built-in mic (-A)
- · 3.6 mm fixed lens (2.8 mm optional)
- · IP67, 12V±30% DC











### **System Overview**

Experience 5MP full HD color video and the simplicity of reusing existing coaxial infrastructure with HDCVI. The full-color starlight HDCVI camera presents a high quality color image with rich details even in total darkness conditions. It offers various fixed lens models with a multi-language OSD and HD/SD switchable output. It adopts two powerful warm white LED illuminators, covering an effective range up to 40m (131.23 ft). The LEDs switch on automatically in darkness to capture detail-packed full-color images 24/7, ensuring anthentic identification of objects. It is an ideal choice for applications such as schools, retail centers and parking lots.

#### **Functions**

# **Full-color Starlight**

The camera adopts F1.2 large aperture lens and 1/2.7" high performance sensor. With higher amount of absorbed light and advanced image processing algorithm, the camera presents an impressive lowlight performance with an exceptional balance between noise reduction and the blur of moving object.

## Warm Supplemental lights

With two warm supplemental LED lights, the camera is able to provide a coloful and vivid image even in total dark. By default, the camera is set to smart light mode, in which the camera can automatically adjust the exposure time and light sensitivity simultaneously to avoid overexposureing of the objects in the image center. Also, the sensitivity and intensity of the LED lights can be remotely controlled by OSD menu.

#### **Broadcast-quality Audio\***

Audio information is used as supplementary evidence in video surveillance applications. The HDCVI camera supports audio signal transmission over coaxial cable. In addition, it adopts unique audio processing and transmission technology that best restores source audio and eliminates noise, guaranteeing the quality and effectiveness of collected audio information.

#### 4 Signals over 1 Coaxial Cable

HDCVI technology supports 4 signals to be transmitted over 1 coaxial cable simultaneously, i.e. video, audio\*, data and power. Dual-way data transmission allows the HDCVI camera to interact with the HCVR, such as sending control signal or triggering alarm.

\*Audio input is available for some models of HDCVI cameras.

## **Long Distance Transmission**

HDCVI technology guarantees long-distance and real-time transmission without any loss. It supports up to 2296 ft for 5MP HD video via coaxial cable, and up to 984 ft via UTP cable.\*

\*Actual results verified by real-scene testing in TOUGHDOG test laboratory.

#### Simplicity

HDCVI technology inherits the born feature of simplicity from traditional analog surveillance system, making itself a best choice for investment protection. HDCVI system can seamlessly upgrade the traditional analog system without replacing existing coaxial cabling. The plug and play approach enables full HD video surveillance without the hassle of configuring a network.

#### **Multiple-formats**

The camera supports multiple video formats including HDCVI, CVBS and other two common HD analog formats in the market. The four formats can be switched over through OSD menu or by PFM820(UTC controller). This feature makes the camera to be compatible with most end users' existing HD/SD DVRs.

#### **Protection**

The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 ranking, making it suitable for indoor or outdoor environments. With working temperature range of -40 °C to +60 °C (-40 °F to +140 °F), the camera is designed for extreme temperature environments. Supporting  $\pm 30\%$  input voltage tolerance, this camera suits even the most unstable power supply conditions. Its 4KV lightning rating provides protection against the camera and its structure from the effects of lightning.

<sup>\*</sup>This function is available for select models.

# TDOECS540L3A

Video

Frame Rate

Resolution

White Balance

Gain Control

BLC WDR

Technical Specification						Noise Red	Noise Reduction 2D NR		
Camera					Smart Lig	ght	Yes		
Image Sensor		1/2.7 inch CMOS				Mirror		Off/On	
Effective Pixel	s	2592 (H) × 1944 (V), 5MP				Privacy N	Masking	Off/On (8 area, rectangle)	
Scanning Syste	em	Progressive				Certific	Certifications		
Electronic Shu	ıtter Speed	PAL: 1/25s-1/100000s NTSC: 1/30s-1/100000s				Certificat	tions	CE (EN55032, EN55024, EN50130-4,EN60950-1) FCC (CFR 47 FCC Part 15 subpartB, ANSI C63.4-2014) UL (UL60950-1+CAN/CSA C22.2 No.60950-1)	
S/N Ratio		>65dB				Port		01 (0100330 11 CAN) C3A C22.2 NO.00330 1)	
Minimum Illur	mination	0.02Lux/F1.2, 0Lux White Light on						Video output choices of CVI/TVI/AHD/CVBS by one	
Fill Light (Whit	te Light) Distance	Distance up to 40 m (131.23 ft)				Video Ou	itput	BNC port	
Fill Light On/O	off Control	Auto; manual				Audio I	Audio Interface		
Fill Light Numl	ber	2				Audio Inp	out	Built-in mic (-A)	
D /Til+ /D . + . +	Nian Danier	Pan: 0°-360° Tilt: 0°-78° Rotation: 0°-360°				Power	Power		
Pan/Tilt/Rotat	tion Kange					Power Su	ipply	12V ±30% DC	
Lens						Power Co	onsumption	Max 5.0W (12V DC, white light on)	
Lens Type		Fixed-focal				Enviror	Environment		
Mount Type		M12				Operating	g Temperature	-40°C to +60°C (-40°F to 140°F); <95% (noncondensation)	
Focal Length  Max. Aperture		2.8 mm; 3.6 mm F1.2				Storage T	Temperature	-40°C to +60°C (-40°F to 140°F); <95% (noncondensation)	
Field of View		2.8 mm: 129° × 98° × 71° (diagonal × horizontal × vertical) 3.6 mm: 111° × 83° × 56° (diagonal × horizontal × vertical) Fixed iris				Protectio	Protection Grade IP67		
						Structu	Structure		
						Casing		Metal throughout the whole casing	
Iris Type						Camera [	Dimensions	φ106.0 mm × 93.6 mm (φ4.17" × 3.69")	
Close Focus D			nm: 1.6 m (5.25 ft); 3.6 mm: 2.1 m (6.89			Net Weig	tht	0.46 Kg (1.01 lb)	
DORI Distance	Lens	Detect	Observe	Recognize	Identify	Gross We	eight	0.61 Kg (1.34 lb)	
	2.8 mm	67.5 m (221.5 ft)	27.0 m (88.6 ft)	13.5 m (44.3 ft)	6.7 m (22.0 ft)				
	3.6 mm	80.0 m (262.5 ft)	32.0 m (105.0 ft)	16.0 m (52.5 ft)	8.0 m (26.2 ft)				

PAL: 5M@20fps, 4M@25fps, 1080P@25fps; NTSC: 5M@20fps, 4M@30fps, 1080P@30fps

5M (2592 × 1944); 4M (2560 × 1440); 1080P (1920 × 1080); 960H (704 × 576/704 × 480)

PAL: 5M@20fps, 4M@25fps; NTSC: 5M@20fps, 4M@30fps

PAL: 5M@20fps, 4M@25fps; NTSC: 5M@20fps, 4M@30fps

AHD:

CVBS: PAL: 960H; NTSC: 960H

DWDR

BLC/HLC/DWDR

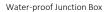
Auto; manual

Auto; manual

# Accessories

# Optional:







Water-proof Wall Mount Bracket



Adapter Plate of Mini Dome & Eyeball Camera + Ceiling Mount Bracket of Mini Dome & Eyeball Camera









Pole Mount Bracket + Water-proof Junction Box



UTC Controller



Pole Mount Bracket +

Water-proof Wall Mount

Bracket

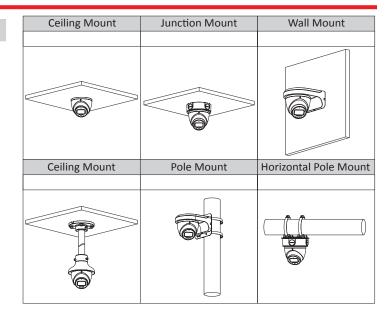
Passive HDCVI Balun



Passive Video Balun



12V 2A DC power adapter



# Dimensions (mm[inch])

