CSP-TAD8-A

8 MP Smart Dual Light Active Deterrence Fixed-focal Eyeball Network Camera



Launched by AI Technology, SMD is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on advanced technologies, SMD provides intelligent, simple and inclusive products and solutions.

Series Overview

With advanced deep learning algorithm, Our 3 Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

Functions

Siren and Light Active Deterrence

Siren and light active deterrence network camera supports the light alarm and voice alarm when perimeter event occurs, to realize the deterrence and effective intervention. The camera is built in multiple voices for selection, and supports customized voice importing.

Smart Dual Light

Smart Dual Light technology adopts smart algorithm to detect targets. Usually, the IR illuminator is on at night; when the target appears in the monitoring area, the warm light is on, and the camera records the fullcolor video and information of key events. That is, the camera links snapshot and video with full-color image. When the target is out of the monitoring area, the warm light is off and the IR illuminator is on, which reduces light pollution efficiently.

SMD 4.0

Smart Motion Detection technology works with intelligent algorithms to classify targets that trigger motion detection alarms. It filters out objects that are not targets, such as small and large animals, to avoid triggering false alarms. With an AI NVR, Quick Pick technology becomes available, allowing you to easily search for and pick out human and vehicle targets from SMD event videos, prioritizing the highest matches.

- 8-MP 1/2.8" CMOS image sensor, low luminance, and high definition image.
- Outputs max. 8 MP (3840 × 2160)@25/30 fps.
- H.265 codec, high compression rate, ultra-low bit rate.
- Built-in warm light and IR LED; the max. IR illumination distance is 30 m and warm light distance is 30 m.
- ROI, SMART H.264+/H.265+, AI H.264/H.265, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D NR, HLC, BLC, digital watermarking, applicable to various monitoring scenes.
- Intelligent monitoring: Intrusion, tripwire (the two function support the classification and accurate detection of vehicle and human).
- Abnormality detection: Motion detection, privacy masking, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Alarm: 1 in, 1 out; audio: 1 in, 1 out; supports max. 256 G Micro SD card; built-in dual Mic; built-in speaker; 1-ch speaker; support two-way talk.
- 12 VDC/PoE power supply.
- IP67 protection.
- · Sound and light alarm (red and blue lights).
- SMD 4.0.
- · One-tap arming/disarming through alarm input.



One-tap Disarming

One-tap Disarming function, which is convenient and easy for operation, is the switch for event linkage. Customers can close and recover event linkage through mobile App, which meets multi-scenarios needs.

Cyber Security

Network cameras employ a series of security technologies, including security authentication and authorization, access control protocols, trusted protection, encrypted transmission and encrypted storage. These technologies improve the camera's defense against external cyber threats and prevent malicious programs from compromising the device.

Protection (IP67, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can work normally after soaking in 1 m deep water for 30 minutes.

Wide voltage: The camera allows $\pm 30\%$ input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Camera					
Image Sensor		1/2.8" CMOS			
Max. Resolution		3840 (H) × 2160 (V)			
ROM		128 MB			
RAM		512 MB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual 1/3 s-1/100,000 s			
Min. Illumination		0.004 lux@F1.0 (Color, 30 IRE) 0.0004 lux@F1.0 (B/W, 30 IRE) 0 lux (illuminator on)			
S/N Ratio		> 56 dB			
Illumination Distance		Up to 30 m (98.43 ft) (IR) Up to 30 m (98.43 ft) (warm light)			
Illuminator On/Off Control		Auto; manual			
Illuminator Number		1 (IR LED) 1 (warm light)			
Angle Adjustment		Pan: 0°–360° Tilt: 0°–78° Rotation: 0°–360°			
Lens					
Lens Type		Fixed-focal			
Mount Type		M12			
Focal Length		2.8 mm; 3.6 mm			
Field of View		2.8 mm: H: 106°; V: 55°; D: 125° 3.6 mm: H: 85°; V: 45°; D: 100°			
Iris Type		Fixed			
Close Focus Distance		2.8 mm: 2.0 m (6.56 ft) 3.6 mm: 2.8 m (6.23 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 (35.43 ft)
Intelligent					
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IVS (Perimeter Protection)	Tripwire; intrusion (Support the classification and accurate detection of vehicle and human)
SMD 4.0	Less false alarm, longer detection distance
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.

Quick Pick	With AI NVR, quickly pick up the human/vehicle targets that users are interested in from SMD events		
AI SSA	Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions.		
Video			
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by the sub stream)		
Smart Codec	Smart H.265+; Smart H.264+		
AI Coding	AI H.265; AI H.264		
Video Frame Rate	Main stream: 3840 × 2160@(1 fps–30 fps) Sub stream: 704 × 576@(1 fps–25 fps)/704 × 480@(1 fps–30 fps) Third stream: 1920 × 1080@(1 fps–30 fps) *The values above are the max. frame rates of each stream; for multiple streams, the values will be subjected to the total encoding capacity.		
Stream Capability	3 streams		
Resolution	8M (3840 × 2160); 6M (3072 × 2048); 5M (3072 × 1728/2592 × 1944); 4M (2688 × 1520/2560 × 1440); 3M (2048 × 1536/2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)		
Bit Rate Control	CBR/VBR		
Video Bit Rate	H.264: 32kbps–8192 kbps H.265:12kbps–8192 kbps		
Day/Night	Auto (ICR)/Color/B/W		
BLC	Yes		
HLC	Yes		
WDR	120 dB		
Scene Self-adaptation	Yes		
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom		
Gain Control	Auto; manual		
Noise Reduction	3D NR		
Motion Detection	OFF/ON (4 areas)		
Region of Interest (RoI)	Yes (4 areas)		
Smart Illumination	Yes		
Defog	Yes		
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)		
Mirror	Yes		
Privacy Masking	8 areas		
Audio			
Built-in Mic	Yes, built-in dual Mic		
Built-in speaker	Yes, built-in speaker		
Audio Compression	PCM; G.711a; G.711Mu; G.726; G.723		
Alarm			
Alarm Event	No SD card; SD card full; SD card error; network disconnection; IP conflict; illegal access; motion detection; video tampering; tripwire; intrusion; scene changing; audio detection; voltage detection; external alarm; SMD; security exception		

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Network

Network		
Network	RJ-45 (10/100 Base-T)	
SDK and API	Yes	
Cyber Security	Video encryption; firmware encryption; configuration encryption; Digest; WSSE; account lockout; security logs; IP/MAC filtering; generation and importing of X.509 certification; syslog; HTTPS; 802.1x; trusted boot; trusted execution; trusted upgrade	
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP ; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; SAMBA; PPPoE; SNMP; P2P	
Interoperability	ONVIF (Profile S;Profile G;Profile T); CGI	
User/Host	20 (Total bandwidth: 72 M)	
Storage	FTP; SFTP; Micro SD card (Support max. 256 G); NAS	
Browser	IE: IE8/9/11 Chrome Firefox	
Management Software	SmartPSS; SCS Pro; DMSS	
Mobile Phone	iOS; Android	
Certification		
Certification	CE-LVD: EN 62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU; FCC: 47 CFR FCC Part 15, Subpart B; UL/CUL:UL62368-1 & CAN/CSA C22.2 No. 62368-1-14	
Port		
Audio Input	1 channel (RCA port)	
Audio Output	1 channel (RCA port)	
Alarm Input	1 channel in: 5 mA 3V–5 VDC	
Alarm Output	1 channel out: 300 mA 12 VDC	
Power		
Power Supply	12 VDC/PoE (802.3af)	
Power Consumption	Basic: 5.2 W (12 VDC); 5.5 W (PoE) Max. (pulling stream+warning light+speaker+warm light on): 9.2W (DC12 V) 10.2 W (POE)	
Environment		
Operating Conditions	-40 °C to +60 °C (-40 °F to +140 °F)/Less than 95% RH	
Storage Conditions	-40 °C to +60 °C (-40 °F to +140 °F)	
Protection Grade	IP67	
Structure		
Casing	Metal	
Dimensions	110.9 mm × Φ122.0 mm (4.37" × Φ4.80")	
Net Weight	745 g (1.64 lb)	
Gross Weight	915 g (2.02 lb)	

Accessories

Optional:





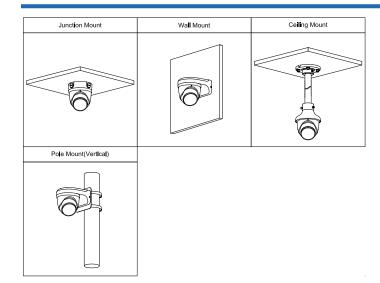


Junction Box

Wall Mount Bracket

Mount Adapter

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Dimensions (mm[inch])

