

OS-13-EENSW8F-MST-0280 | 8MP Smart Dual Light Fixed-focal Eyeball Network Camera



AI

This camera adopts an independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets.

Series Overview

With advanced deep learning algorithm, Osiris WizSense 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.

- 8-MP 1/2.7" 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 multi-core light, the max. IR distance is 30 m and the max. 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, video tampering, scene changing, audio detection, no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection.
- Max. 512 G Micro SD card; built-in Mic.
- 12 VDC/PoE power supply.
- IP67 protection.
- SMD 4.0.
- Supports AI SSA.
- SMD area can be set in warm light areas that support triggering alarms



Functions

AI SSA

Osiris' AI Scene Self-adaptation (AI SSA) adopts deep learning algorithms to detect environmental conditions, such as rain, fog, backlight, low light and flicker, to adjust the parameters of the image to suit the conditions, ensuring that clear images are always produced.

SMD 4.0

Osiris 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.

Perimeter Protection

With deep learning algorithm, Osiris Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

Smart Dual Light

Osiris 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 white light is on, and the camera records the full-color 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 white light is off and the IR illuminator is on, which reduces light pollution efficiently.

Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Osiris smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

Cyber Security

Osiris 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 ±30% (for some power supplies) input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage

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Technical Specifications

Camera					
Image Sensor		1/2.8" CMOS			
Max. Resolution		3840 (H) × 2160 (V)			
ROM		256 MB			
RAM		1 GB			
Scanning System		Progressive			
Electronic Shutter Speed		Auto/Manual 1/3 s–1/100,000 s			
Min. Illumination		0.007 lux@F1.4 (Color, 30 IRE) 0.0007 lux@F1.4 (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		2 (Multi-core (IR + warm) light)			
Angle Adjustment		Pan: 0°–360° Tilt: 0°–80° Rotation: 0°–360°			
Lens					
Lens Type		Fixed-focal			
Lens Mount		M12			
Focal Length		2.8 mm; 3.6 mm			
Max. Aperture		F1.4			
Field of View		2.8 mm: H: 110°; V: 58°; D: 132° 3.6 mm: H: 86°; V: 49°; D: 100°			
Iris Control		Fixed			
Close Focus Distance		2.8 mm: 1.4 m (4.59 ft) 3.6 mm: 1.9 m (6.23 ft)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	84.8 m (278.22 ft)	33.9 m (111.22 ft)	17.0 m (55.77 ft)	8.5 m (27.89 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.					
Intelligence					
IVS (Perimeter Protection)		Intrusion, tripwire (the two functions support the classification and accurate detection of vehicle and human)			
SMD		SMD 4.0			
AcuPick		Uses deep learning algorithms and works with back-end devices to accurately match targets, such as people and motor vehicles, and search through live and recorded videos to quickly locate targets.			

AI SSA	Adopt deep learning algorithms to adjust the parameters of the image to suit the conditions.
Smart Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos
Video	
Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (Only supported by 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@(1–25/30 fps) Sub stream: 1920 × 1080@(1–25/30 fps) Third stream: 1920 × 1080@(1–25/30 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 (3200 × 1800); 5M (3072 × 1728); 4M (2688 × 1520/2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	VBR;CBR;ABR
Video Bit Rate	H.264: 3 kbps–16384 kbps; H.265: 3 kbps–16384 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation (SSA)	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, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Smart Dual Light	Yes
Defog	Yes
Image Rotation	0 °/90°/180°/270° (Support 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Yes
Privacy Masking	8 areas
LCD	Yes



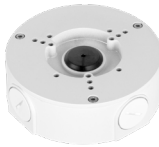

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Technical Specifications

Audio	
Built-in MIC	Yes, built-in Mic
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 hanging; audio detection; voltage detection SMD; security exception
Network	
Network Port	RJ-45 (10/100 Base-T)
SDK and API	Yes
Network 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 & Profile M); CGI
User/Host	20 (Total bandwidth: 64 M)
Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS
Browser	IE: IE11 Chrome Firefox
Management Software	Smart PSS Lite; DSS; DMSS; Dolyink Care
Mobile Client	iOS; Android
Cyber Security	Video encryption; Firmware encryption; Configuration encryption; Digest; WSSE; Account lock-out; Security logs; IP/MAC filtering; Generation and importing of X.509 certification; syslog; HT-TPS; 802.1x; Trusted boot; Trusted execution; Trusted upgrade; Session security; Security warning
Certification	
Certifications	CE-LVD: EN62368-1; CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU
Power	
Power Supply	12 VDC/PoE (802.3af)
Dual Power Backup	When the power adapter and PoE provide power at the same time, disconnect one of them. The device will continue to work, but will not restart.
Power Consumption	Basic: 3.7 W (12 VDC); 5.3 W (PoE); Max.: 7.4 W (12 VDC); 9.5 W (PoE) (H.265 + WDR + warm light + intelligence on)

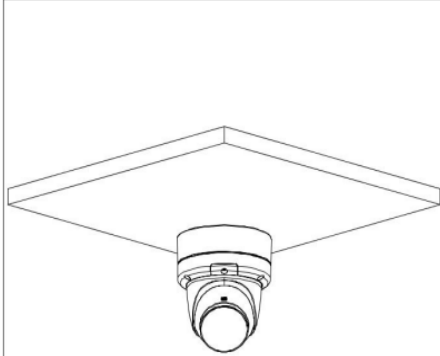
Environment	
Operating Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Operating Humidity	≤95% (RH), non-condensing
Storage Temperature	−40 °C to +60 °C (−40 °F to +140 °F)
Storage Humidity	≤95% (RH), non-condensing
Protection	IP67
Structure	
Casing Material	Metal
Product Dimensions	105.5 mm × 122.0 mm (4.16" × 4.80")
Net Weight	0.53 kg (1.17 lb)
Gross Weight	0.71 kg (1.57 lb)

Accessories (optional)

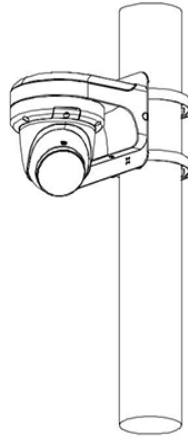
DH-PFB205W-E Angled wall bracket	DH-PFA139 Junction box
	
DH-PFA130-E Junction box	DH-PFA152-E Pole Mount Bracket
	

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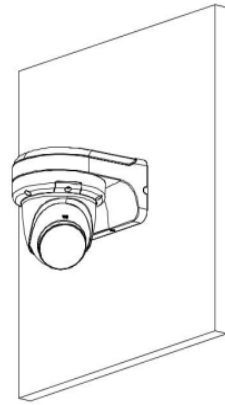
Junction Mount



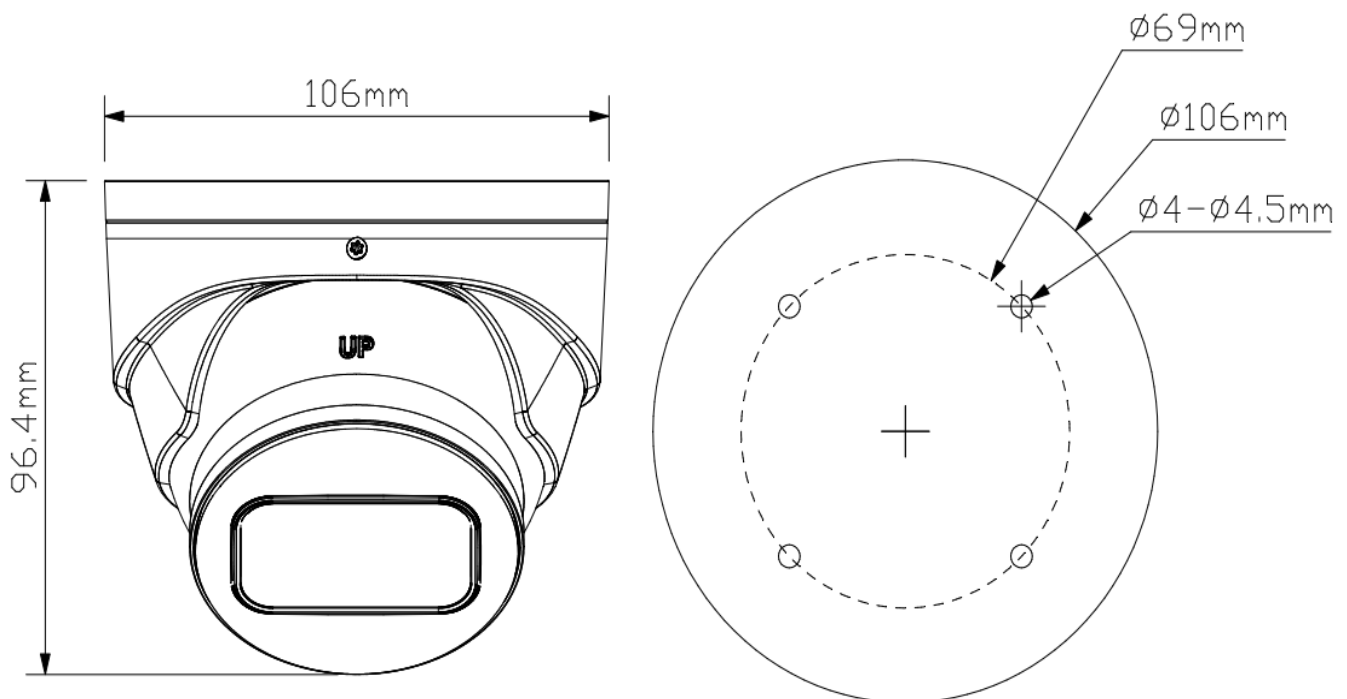
Pole Mount(Vertical)



Wall Mount



Dimensions (mm)



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