Eyemax IR-E8125 | 8MP(4K) Starlight Outdoor PTZ Camera, 25× Optical Zoom, 490ft IR Range, True WDR, WizSense, AI Series, Auto Tracking and IVS, PoE+



1/1.8" 8 Megapixel CMOS • Powerful 25x optical zoom • Starlight Technology • Max. 25/30 fps@8MP • IR distance up to 492.13 ft (150m) • Deep-learning-based perimeter protection • Auto-tracking and IVS • PoE+ • IP67, IK10

Mount Accessories

PTZ Junction Box	**PTJB-E120**
Pole Mount Bracket	**CPM-E150**
PTZ Ceiling Mount	**PTMC-E300C**

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 Eyemax's advanced technologies, it provides intelligent, simple and inclusive products and solutions.

System Overview

With CNN algorithm, Eyemax WizSense speed dome supports intelligent functions like tripwire and intrusion, and supports smart capture function that recognizes motor vehicle, non-motor vehicle, and human to analyze their detailed information (plate number, vehicle brand, and human age and gender, etc.). With PFA algorithm, the speed dome can get clear images all the time during zooming. In addition, silent motor driver integrated circuits enable the speed dome to make faint sounds during rotation.

Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

Starlight Technology

For challenging low-light applications, Eyemax’s Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 Lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms.PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

Environmental

Eyemax cameras operate in extreme temperature environments, rated for use in temperatures from -40°C to +70°C (−40°F to +158°F) with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection

The camera allows for ±25% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

Wide Dynamic Range

The camera achieves vivid images, even in the most intense contrast lighting conditions, using industry-leading wide dynamic range (WDR) technology. For applications with both bright and low lighting conditions that change quickly, True WDR (120 dB) optimizes both the bright and dark areas of a scene at the same time to provide usable video.

Auto-tracking

This feature controls the pan/tilt/zoom actions of the camera to automatically track an object in motion and to keep it in the scene. The tracking action can be triggered manually or automatically by defined rules. Once a rule is triggered, the camera can zoom in and track the defined target automatically.

Smart H.265+

Smart H.265+ is the optimized implementation of the H.265 CODEC that uses a scene-adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction to deliver high-quality video without straining the network. Smart H.265+ technology reduces bit rate and storage requirements by up to 70% when compared to standard H.265 video compression.

FEATURES

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SPECIFICATIONS

Camera	
Image Sensor	1/1.8" STARVIS™ CMOS
Pixel	8MP
Max. Resolution	3840 (H) × 2160 (V)
ROM	8 GB
RAM	2 GB
Electronic Shutter Speed	1/1 s–1/30000 s
Scanning System	Progressive
Min. Illumination	Color: 0.005 Lux@F1.6 B/W: 0.0005 Lux@F1.6 0 Lux (IR on)
Illumination Distance	150 m (492.13 ft)

Illuminator On/Off Control	Zoom Prio/Manual/SmartIR
Illuminator Number	4 (IR Light)
Lens	
Focal Length	5.4mm ~ 135 mm
Max. Aperture	F1.6 ~ F4.0
Field of View	H: 61.6° ~ 3.6°; V: 35.7° ~ 2°; D: 66.6° ~ 4°
Optical Zoom	25x
Focus Control	Auto / Semi-Auto / Manual
Close Focus Distance	0.5 m ~ 7 m (1.64 ft ~ 22.97 ft)
Iris Control	Auto / Manual
DORI Distance	Detect: 2700 m (8858.27 ft) Observe: 1066 m (3497.38 ft) Recognize: 540 m (1771.65 ft) Identify: 270 m (885.83 ft)
PTZ	
Pan/Tilt Range	Pan: 0° ~ 360° endless Tilt: -15° ~ +90°, auto flip 180°
Manual Control Speed	Pan: 0.1° ~ 300°/s Tilt: 0.1° ~ 200°/s
Preset Speed	Pan: 400°/s; Tilt: 300°/s
Presets	300
Tour	8 (up to 32 presets per tour)
Pattern	5
Scan	5
Power-off Memory	Support
Idle Motion	Preset/Tour/Pattern/Scanning
Protocol	DH-SD Pelco-P/D (auto recognition)
General Intelligence	
IVS	Object Abandoned / Missing
Event Trigger	Motion detection, video tampering, scene changing, Network disconnection, IP address conflict, illegal access, and storage anomaly.

Artificial Intelligence	
Perimeter Protection	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
Auto tracking	Support
Video	
Compression	H.265+; H.265; H.264+; H.264; MJPEG (sub stream)
Streaming Capability	3 streams
Resolution	4K (3840 × 2160); 1080P (1920 × 1080); 1.3M (1280 × 960); 720P (1280 × 720); D1 (704 × 576); CIF (352 × 288)
Frame Rate	Main stream: 8M/1080P/1.3M/720P (1–25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 1080P/1.3M/720P (1–25/30 fps), D1/CIF (1–25/30 fps)
Bit Rate Control	Variable/Constant
Bit Rate	H.264/H.265: 32 kbps–8192 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Support
WDR	120dB
HLC	Support
White Balance	Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/ Natural light/Street lamp
Gain Control	Auto/Manual
Noise Reduction	2D/3D
Motion Detection	Support
Region of Interest (RoI)	Support
Image Stabilization	Electronic
Defog	Support
Digital Zoom	16x
Flip	0° / 180°
Privacy Masking	Up to 24 areas, and up to 8 areas in the same view
S/N Ratio	≥56 dB
Audio	

Compression	G.711A; G.711Mu; G.726; AAC; G.722.1; G.723; G.729; PCM; MPEG2-Layer2
Network	
Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; Qos; FTP; SMTP; UPnP; SNMPv1/v2c/v3 (MIB-2); DNS; DDNS; NTP; RTSP; RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPoE; ARP; RTCP
Interoperability	ONVIF; CGI;
Streaming Method	Unicast/Multicast
User/Host	20 (total bandwidth 64M)
Storage	FTP; Micro SD card (256 G)
Browser	IE7 and later versions Chrome 42 and later versions Firefox 52ESR and earlier versions Safari
Management Software	Smart PSS; DSS; Easy4ip
Mobile Phone	iPhone / iPad / Android / Windows Phone
Certifications	
Certifications	CE: EN55032/EN55024/EN50130 ~ 4 FCC: Part15 subpartB, ANSI C63.4 ~ 2014 UL:UL60950 ~ 1+CAN/CSA C22.2,No.60950 ~ 1
Port	
Audio Input	1 (LINE IN; bare wire)
Audio Output	1 (LINE OUT; bare wire)
Alarm I/O	2/1
Power	
Power Supply	AC24V/3A ± 25% PoE+ (802.3at)
Power Consumption	11W 20W (PTZ pan/tilt, IR on)
Environment	
Operating Temperature	−40°C to +70°C (−40°F to +158°F)
Operating Humidity	≤95%
Structure	

Casing	Metal
Dimensions	Φ190 mm × 332 mm (7.48" × 13.07")
Net Weight	4.7 kg (10.36 lb)
Gross Weight	8 kg (17.64 lb)