

IPMX-E40F-ADW3

4MP Active Deterrence Eyeball Network Camera



- 4MP, 1/2.7" CMOS image sensor, low illuminance, high definition image, 2.8mm fixed lens
- H.265 & H.264 triple-stream encoding
- 4MP (2688 × 1520) @25/30 fps
- Active Deterrence: Built-in Siren, Red and Blue LEDs
- Built-in Mic and 2-Way Talk
- Intelligent Motion Detect and Perimeter Protection
- Smart Dual Illumination: Warm White LED Full color and IR night illumination, max distance 98ft
- 256GB Micro SD Support, IP67, PoE

System Overview

The IPMX-E40F-ADW3 advances upon IC Realtime's Active Deterrence line. This 4MP eyeball camera is capable of 4MP@25FPS, H.265 support and features Smart Dual Illumination distance of 98 ft with either White Light and IR LEDs. Active Deterrence cameras feature built-in Red and Blue warning lights and speaker to deter unwanted personnel from the area.

The camera is also equipped with a suite of AI features to compliment its Active Deterrence function. With Intelligent Motion Detect (iMD) 2.0 and Perimeter Protection technology, you can filter moving objects as vehicle or person on motion detect or when setting up virtual tripwire and intrusion zones. This helps reduce false alarms and streamline the playback search functionality as well as link with the Active Deterrence features to warn and potentially deter intruders.

Functions

ADW 2.0

IC Realtime's 24/7 Color cameras With Active deterrence use 2 LED sets, a warm white illuminator to stream in color, then upon iMD detection, Active Deterrence stepping in with flashing red & blue LED light and audio warnings. ADW 2.0 cameras add a 3rd invisible & silent IR in standby mode to replace the 24/7 Color camera's always on warm white illuminator. With ADW 2.0, a human or vehicle detection lights the white floodlight, and full Active Deterrence triggers only when the camera's tripline or defined iMD trigger zone is violated.

Starlight Technology

Featuring Starlight Technology, this camera is ideal for applications with challenging lighting conditions. Its low-light performance delivers usable video with minimal ambient light. Even in extreme low-light conditions, Starlight Technology is capable of delivering color images in near complete darkness (0.003 lux).

Perimeter Protection

IC Realtime's Perimeter Protection features significantly improve detection accuracy. The benefits of Perimeter Protection include up to a 90% reduction in false alarms. Other advantages include a decrease in pixel count requirement for object detection, which translates into more efficiency with less strain on the system. Perimeter Protection options let you customize tripwires based on the object type and allow intelligent automation within a limited area of access such as pedestrian or vehicle-only zones. The combination of advanced AI analytics and real-time alerts maximizes efficiency & balance of the total systems capacity and resources resulting in greater surveillance system efficiency.

Interoperability

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

iMD (Intelligent Motion Detect)

This is an upgraded version of motion detection currently known as Intelligent Motion Detection (iMD). The upgraded Plus version greatly improves alarm accuracy by pre-loading a deep learning algorithm that recognizes people and vehicles. Motion detection alerts containing a human and/or vehicle intrusion event are now possible with up to 95% accuracy. Eliminate false alarms, save time and keep stress levels low knowing you're protected.

Protection (IP67, wide voltage)

The camera allows for $\pm 30\%$ input voltage tolerance. The camera's outstanding reliability is unsurpassed due to its rugged design. The camera is protected against water and dust with IP67 rating, making it suitable for indoor or outdoor environments. It also features $\pm 30\%$ input voltage tolerance, allowing it to operate under unstable power supply conditions. Its 4KV lightning rating provides protection from the effects of a lightning strike.

Technical Specification

Camera

Image Sensor	1/2.7" 4 Megapixel progressive CMOS
Effective Pixels	2688 (H) × 1520 (V)
RAM/ROM	1 GB / 256 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Minimum Illumination	0.003 lux@F1.0 (Color, 30 IRE) 0.0003 lux@F1.0 (B/W, 30 IRE) 0 lux (illuminator on)
S/N Ratio	> 56 dB
Illumination Distance	IR and Warm Light- Up to 98.43 ft (30 m)
Illumination On/Off Control	Auto / Manual/ Smart Dual Illumination
Illumination LEDs	1x (Warm white), 1x (IR)

Lens

Lens Type		Fixed-focal			
Mount Type		M12			
Focal Length		2.8mm			
Max. Aperture		F1.0			
Angle of View		Horizontal:101°; Vertical: 53°;			
Close Focus Distance		4.9 ft (1.5 m)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	216 ft	86 ft	43 ft	21 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan: 0°–360°, Tilt: 0°–78°, Rotation: 0°–360°
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Video

Compression	Smart H.265+; Smart H.264+, H.265; H.264; H.264H; H.264B; MJPEG (sub stream only)
AI Coding	AI H.265; AI H.264; (Compression rate ≥25%)
AI SSA	Supported; Automatically adjusts image conditions based on the scene.
Streaming Capability	3 Streams
Resolution	4M (2688 × 1520); 4M (2560 × 1440); 3M (2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1 (704 × 576/704 × 480); VGA (640 × 480); CIF (354 × 288/354 × 240)
Frame Rate	Main stream: 2688 × 1520@ (1–25/30 fps) Sub stream: 704 × 576@ (1–25 fps) / 704 × 480@ (1–30 fps) Third stream: 1920 × 1080@ (1 fps–30 fps)
Bit Rate Control	VBR; CBR; ABR
Bit Rate	H.264: 3 kbps–16384 kbps; H.265: 3 kbps–16384 kbps
Day/Night	Auto(ICR)/Color/B/W
BLC Mode	BLC / HLC / WDR (120dB)
White Balance	Auto; natural; street lamp; outdoor; manual; regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	Off / On (4 areas)
LDC	Supported

Region of Interest	Off / On (4 areas)
Smart IR	Support
Flip	0°/90°/180°/270° (Supports 90°/270° with 2688 × 1520 resolution and lower)
Mirror	Off / On
Privacy Masking	Off / On (8 areas)

Audio

Compression	PCM; G.711a; G.711Mu; G.726; G.723
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Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; TCP; UDP; ARP; RTP; RTSP; RTCP; RTMP; SMTP; FTP; SFTP; DHCP; DNS; DDNS; QoS; UPnP; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; SNMP; P2P
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
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI;P2P; RTMP
Streaming Method	Unicast / Multicast
Max. User Access	20 Users (Total bandwidth: 64 M)
Edge Storage	FTP; SFTP; Micro SD card (max. 512 GB); NAS
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	IC Now, IC Now Pro
Smart Phone	IOS, Android

Certifications

Certifications	FCC Part 15, Subpart B
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Interface

Audio Interface	Built-in Dual Microphone and Speakers; 1/1 Audio In/ Out (RCA ports)
RS485	N/A
Alarm	1 channel in: 5mA 3V–5V DC 1 channel out: 300mA 12V DC

Electrical

Power Supply	12V DC/PoE (802.3af)
Power Consumption	Basic: 3.7 W (12 VDC); 4.8 W (PoE) Max. (H.265+WDR+ white LED, light+siren and light active deterrence + intelligence enabled): 8.3 W (12 VDC); 8.8 W (PoE)

Environmental

Operating Conditions	-40°F to +140°F (-40°C to +60°C)/less than 95%
Storage Conditions	-40°F to +140°F (-40°C to +60°C)
Ingress Protection	IP67

Construction

Casing	Metal
Dimensions	4.37" × Φ4.80" (110.9 mm × Φ122.0 mm)
Net Weight	1.65 lb (75 g)
Gross Weight	2.03 lb (92 g)

Intelligence

IVS

Basic IVS	Tripwire; Intrusion
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Perimeter Protection

Capabilities	Tripwire; Intrusion (Supports the classification and detection of vehicle and human objects)
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Intelligent Motion Detect 2.0

Capabilities	Advanced secondary filtering for human and motor vehicle , reducing false alarms caused by leaves, rain and lighting condition change. Supports Object Search with compatible NVRs.
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AI Search

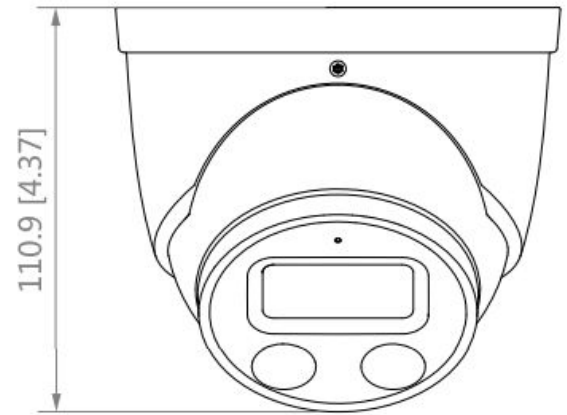
Capabilities	Works together with AI enabled NVRs to perform refined intelligent search, event extraction and merging to event videos
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Active Deterrence

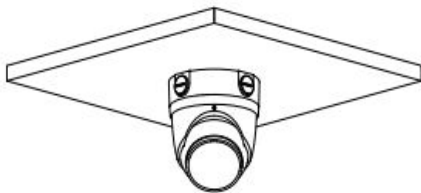
Visual	Red & Blue Flashing LED lights
Audible	Sound Prompt using the built-in speakers. Has optional pre-programmed prompts and additional prompts can be uploaded
Disarming	One-click disarm via web, app or via supported NVR

Accessories

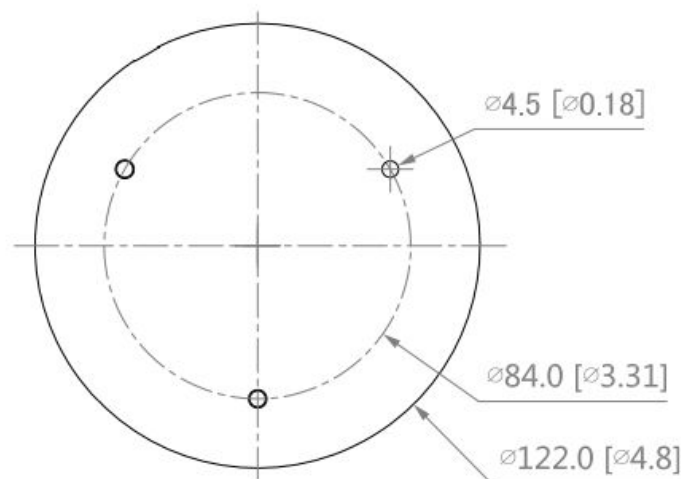
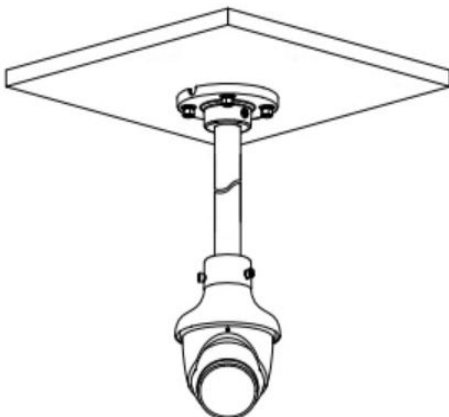
Dimensions (mm/in)



MNT-JUNCTIONBOX-7



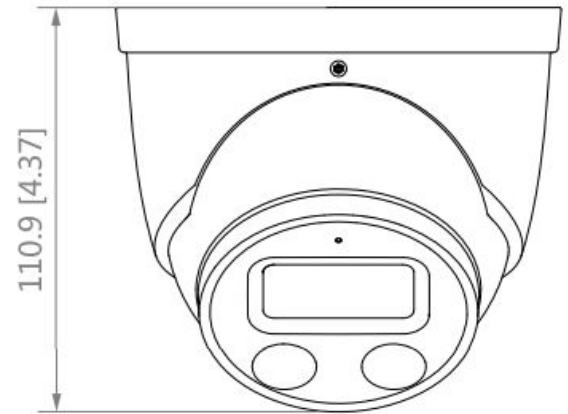
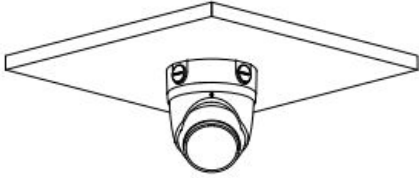
MNT-POLEXT-30



Accessories

Dimensions (mm/in)

MNT-JUNCTIONBOX-7



MNT-POLEXT-30

