IPMX-E40F-W1-LED

4MP Full-Color LED AI Eyeball Network Camera





- 4MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- H.265 & H.264 triple-stream encoding
- 4MP (2688 × 1520) @ 30 fps
- IVS, Intelligent Motion Detect, Perimeter Protection
- 2.8mm fixed lens, Built-In Microphone
- Warm light LEDs, up to 98ft of full color Illumination
- 256GB Micro SD memory, 120dB WDR, IP67, PoE

System Overview

The IPMX-E40F-W1-LED is the newest camera in the Max line which features enhanced imaging and low light imaging due to 120dB WDR and Starlight support. The camera is equipped with a 2.8mm lens on top of an 1/2.7" low illuminance, high image definition I-Sniper+ CMOS image sensor paired with warm light LED technology, reaching more than 98ft max distance at night. This combination provides a crisp, vibrant, full color image under the most demanding lighting conditions.

The camera also comes with AI features such as Intelligent Motion Detect (iMD) and Perimeter Protection technology, which filters 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 when used with IC Realtime AI NVRs.

Functions

Smart (H.265+ & H.264+)

Deliver high quality video without straining the network, Smart H.265+ is the optimized implementation of H.265. The Smart H.265+ encoding technology includes a scene adaptive encoding strategy, dynamic GOP, dynamic ROI, flexible multi-frame reference structure and intelligent noise reduction, providing saving of up to 70% of bandwidth and storage when compared with standard H.265

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.

Full Color at Night

Utilizing a high-performance sensor and large aperture lens, IC Realtime's Full-color LED technology can display clear colorful image in the environment of ultra low illuminance. With this photosensitivity technology, the camera can capture more available light, and display more colorful image details.

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

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.





Technical Specification

Camera	
Image Sensor	1/1.8" 4 Megapixel progressive scan CMOS
Effective Pixels	2688(H) x1520(V)
RAM/ROM	512 MB/128 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual, 1/3 s–1/100000 s
Minimum Illumination	0.003 Lux@F1.0
Illumination Distance	98.4 ft (30 m)
Illumination Control	Auto / Manual
Full color LEDs	2

Lens					
Lens Type		Fixed-focal			
Mount Type		M12			
Focal Length		2.8mm			
Max. Aperture		F1.0			
Angle of View		Horizontal:10	3°; Vertical: 53°		
Close Focus Distance		3.9 ft (1.2 m)			
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	2.8mm	183 ft	73 ft	36 ft	18 ft

Pan/Tilt/Rotation	
Pan/Tilt/Rotation Range	Pan: 0°-360°; Tilt: 0°-78°; Rotation: 0°-360°

Smart Event	
IVS	Tripwire, Intrusion
Perimeter Protection	Supports human/ vehicle recognition for tripwire and intrusion
Intelligent Motion Detect (iMD)	Supports human/ vehicle recognition Filters misinformation such as leaves and light.
Intelligent Search	Works with supported IC Realtime AI recorders with Intelligent search

Perimeter Protection	intrusion
Intelligent Motion Detect (iMD)	Supports human/ vehicle recognition Filters misinformation such as leaves and light.
Intelligent Search	Works with supported IC Realtime AI recorders with Intelligent search
Video	
Compression	H.265,H.264,H.264B,H.264H, MJPEG (sub stream)
Smart Codec	Smart H.265+/ Smart H.264+
Streaming Capability	3 Streams
Resolution	4M (2688 \times 1520); 3M (2304 \times 1296); 1080p (1920 \times 1080); 1.3M (1280 \times 960); 720p (1280 \times 720); D1 (704 \times 576/704 \times 480); VGA (640 \times 480); CIF (352 \times 288/ 352 \times 240)
	Main Stream: 2688 × 1520(1–25/30 fps)
Frame Rate	Sub Stream: 704 × 480 (1-30 fps)
	Third Stream: 720P(1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 Kbps-8192 Kbps H.265: 19 Kbps-8192 Kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR(120dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual

Gain Control	Auto / Manual
Noise Reduction	3D DNR
Region of Interest	Off / On (4 Zone)
Smart IR	Support
Flip	$0\%90\%180\%270^{\circ}$ (Supports $90\%270^{\circ}$ with $1080p$ resolution and lower.)
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)
Audio	
Compression	G.711a; G.711Mu; G726
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
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI;P2P
Streaming Method	Unicast / Multicast
Max. User Access	20 (Total bandwidth: 64M)
Edge Storage	NAS; FTP; SFTP Micro SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android
Certifications Certifications	FCC Part 15, Subpart B
Interface	
Video Interface	N/A
Audio Interface	Built-In Microphone
RS485	N/A
Alarm	N/A
Electrical	
Power Supply	12V DC/PoE
Power Consumption	<8.5W
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	3.9" × 4.8" (99.1 mm × 121.9 mm)
Net Weight	1.05 lb (480 g)
Gross Weight	1.45 lb (660 g)

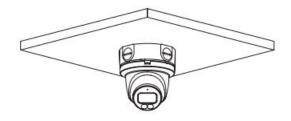


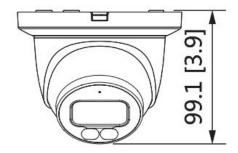


Accessories

Dimensions (mm/in)

MNT-JUNCTIONBOX-1





MNT-IPMINIDOME-WALL



