

IPMX-B40F-W1-LED

4MP Full-Color LED AI Mini Bullet Network Camera



- 4MP, 1/2.7" CMOS image sensor, low illuminance, high image definition
- H.265 & H.264 triple-stream encoding
- 2.8mm fixed lens, 4MP (2688 × 1520)@30 fps
- IVS, Intelligent Motion Detect, Perimeter Protection
- WDR(120dB), 3D DNR, HLC, BLC
- Built-in Mic, 1 input/1 output Alarm and Audio
- Warm light LEDs, up to 98ft of full color Illumination
- 256GB Micro SD Support, IP67, PoE

System Overview

Experience full color video from day to night! IC Realtime's IPMX-B40F-W1-LED is the newest camera from the Full color LED Max line of IP cameras now equipped with a high-performance sensor and large aperture lens enabling clear colorful image in the ultra low illuminance environments. This mini bullet camera provides 30FPS@ 4MP (2688 × 1520) with H.265 support and equipped with a 1/2.7" low illuminance, high image definition CMOS image sensor on top of 2.8mm lens. Combined with Full color LEDs providing up to 98 feet of illumination and 120dB WDR, the camera provides a crisp, vibrant image under the most demanding lighting conditions.

The camera also comes with 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.

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	1/2.7"4 Megapixel progressive CMOS
Effective Pixels	2688 (H) ×1520 (V)
RAM/ROM	512MB / 128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Minimum Illumination	0.003 Lux@F1.0
S/N Ratio	> 56 dB
Illumination Distance	Distance up to 98.4 ft (30 m)
LED On/Off Control	Auto / Manual
Full color LEDs	1

Lens

Lens Type	Fixed-focal				
Mount Type	M12				
Focal Length	2.8mm				
Max. Aperture	F1.0				
Angle of View	Horizontal:103°; 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°~90°; Rotation:0°~360°
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Intelligence

Perimeter Protection	Tripwire; intrusion (Recognition of human and vehicle) Works together with Smart NVRs to perform refined intelligent search, event extraction and merging to event videos
Intelligent Motion Detect	Support

Video

Compression	H.265; H.264; H.264H; H.264B; MJPEG(sub stream only)
Streaming Capability	3 Streams
Resolution	4M (2688 × 1520); 3M (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)
Frame Rate	Main Stream: 2688 × 1520(1–25/30 fps)
	Sub Stream: 704 × 480 (1-30 fps)
	Third Stream: 720P(1–25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 3 Kbps–8192 Kbps H.265: 3 Kbps–8192 Kbps
Day/Night	ICR auto switch
BLC Mode	BLC / HLC / WDR (120dB)
White Balance	Auto/Natural/Street Lamp/Outdoor/Manual
Gain Control	Auto / Manual
Noise Reduction	3D DNR

Motion Detection	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Smart IR	Support
Flip	0°/90°/180°/270° (Supports 90°/270° with 1080p resolution and lower)
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	G.711a; G.711Mu; G726
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Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	Pv4;IPv6;HTTP;HTTPS;TCP;UDP;ARP;RTP;RTSP;RTCP; RTMP;SMTP;FTP;SFTP;DHCP;DNS;DDNS;QoS;UPnP;NTP;Multicast;ICMP;IGMP;NFS;PPPoE;802.1x;SNMP
Interoperability	ONVIF(Profile S/Profile G/Profile T);CGI;P2P
Streaming Method	Unicast / Multicast
Max. User Access	20 Users (Total bandwidth: 64 M)
Edge Storage	NAS, 256GB SD Card, FTP, SFTP
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

Certifications

Certifications	FCC Part 15, Subpart B
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Interface

Audio Interface	Built-In Mic, 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	DC12V, PoE
Power Consumption	<8.4W

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	7.6"×2.8"×2.6" (192.7 mm × 70.5 mm × 66.4 mm)
Net Weight	1.3lb (590 g)
Gross Weight	1.7lb (780 g)

Accessories

Dimensions (mm/in)

MNT-JUNCTIONBOX-1

