# IPMX-B40F-ADW1
## 4MP Active Deterrence Bullet Network Camera

IC REALTIME

- 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
- Starlight support, Warm White LEDs, Full color night illumination, max distance 130ft
- 256GB Micro SD Support, IP67, PoE

## System Overview

The IPMX-B40F-ADW1 is the first in IC Realtime's Active Deterrence IP Cameras. This 4MP bullet camera is capable of 4MP@ 25FPS, H.265 support and full color night vision with its built in Warm Light LEDs. The Active Deterrence line of cameras feature a triggerable, built-in Red and Blue warning lights and speaker to deter unwanted personnel from the area.

The IPMX-B40F-ADW1 also comes with a suite of AI features to compliment its Active Deterrence function. With Intelligent Motion Detect (iMD) 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

**Siren and Light Active Deterrence**
IC Realtime active deterrence network cameras feature built-in red and blue warning lights and multiple sounds and voices for audio deterrence and warning. When a configured event occurs, these features can be triggered to allow for an effective deterrence and intervention against unwanted intruders.

**Protection (IP67, wide voltage)**
The camera allows for ±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 ±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.

**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.

**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).

**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.

**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.

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## 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 | Up to 131.2 ft (40 m) |
| Illumination On/Off Control | Auto / Manual |
| Illumination LEDs | 2 (Warm white) |

### 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 | 221 ft | 88 ft | 44 ft | 22 ft |

### Pan/Tilt/Rotation

| | |
|---|---|
| Pan/Tilt/Rotation Range | Pan:0˚~360˚; Tilt:0˚~90˚; Rotation:0˚~360˚ |

### Intelligence

| | |
|---|---|
| Perimeter Protection | Tripwire; intrusion (Supports human and vehicle recognition) |
| Intelligent Motion Detect | Supports human and vehicle recognition |
| Intelligent Search | Works together with AI-enabled NVRs to perform refined intelligent search, event extraction and merging to event videos |

### Video

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|---|---|
| Compression | H.265; H.264; H.264H; H.264B; MJPEG (sub stream only) |
| 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: 1280 × 720@1–25/30 fps |
| Bit Rate Control | CBR/VBR |
| Bit Rate | H.264: 3 Kbps–8192 Kbps<br>H.265: 3 Kbps–8192 Kbps |
| Day/Night | 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) |
| Region of Interest | Off / On (4 areas) |
| Smart IR | Support |
| Flip | 0°/90°/180°/270° (Supports 90°/270° with 1920 × 1080 resolution and lower) |
| Mirror | Off / On |
| Privacy Masking | Off / On ((4 areas) |

### Audio

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|---|---|
| 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; SAMBA; PPPoE; SNMP |
| 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 |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 20 Users (Total bandwidth: 64 M) |
| Edge Storage | FTP; SFTP; Micro SD card max. 256 GG); NAS |
| Web Viewer | IE, Chrome, Firefox, Safari |
| Management Software | SmartICRSS, DSS |
| Smart Phone | IOS, Android |

### Certifications

| | |
|---|---|
| Certifications | FCC Part 15, Subpart B |

### Interface

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

### Electrical

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|---|---|
| Power Supply | 12V DC/PoE (802.3af) |
| Power Consumption | Basic power consumption: 2.8W (12V DC); 3.4W (PoE)<br>Max. power consumption (H.265 + warm LED + IVS + siren + red and blue lights flashing): 8.1W (12VDC); 9.7W (PoE) |

### Environmental

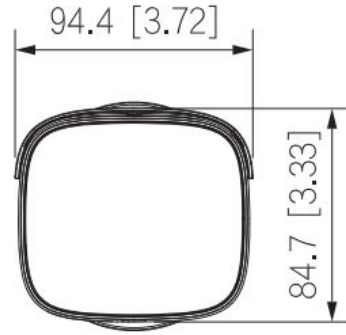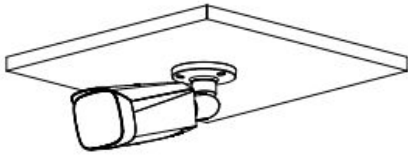| | |
|---|---|
| Operating Conditions | -40°F to +140°F (-40°C to +60°C)/less than 95% |
| Storage Conditions | -40°F to +140°F (-40°C to +60°C) |
| Ingress Protection | IP67 |

### Construction

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|---|---|
| Casing | Metal |
| Dimensions | 11.4" × 3.7" × 3.3"<br>(288.4 mm × 94.4 mm × 84.7 mm) |
| Net Weight | 2.2 lb (1.0 kg) |
| Gross Weight | 2.7 lb (1.23 kg) |

## Accessories

## Dimensions (mm/in)

**Included Mount**

94.4 [3.72]

84.7 [3.33]

**MNT-JUNCTIONBOX-1**

288.4 [11.35]

197.3 [7.77]

⌀90.4 [⌀3.56]

⌀70.0 [⌀2.76]

3-⌀4.7 [⌀0.19]