# IPFX-B40V-IRB2
## 4MP Starlight Varifocal Bullet Network Camera

**IC REALTIME**

- 1/3" 4 Megapixel progressive CMOS
- H.265 & H.264 dual-stream encoding
- Outputs max. 4MP (2688 × 1520)@30 fps
- WDR(120dB), Day/Night(ICR), 3DNR, AWB,
- Intelligent Motion Detect, Perimeter Protection
- Micro SD card slot, up to 256GB
- 2.7~13.5mm varifocal lens
- Starlight Support, max IR distance: 197ft
- IP67, PoE, TAA Compliant

## System Overview

The IPFX-B40V-IRB2 is a 4MP bullet camera featuring our latest generation of 1/3'' CMOS sensors and Starlight support with increased IR illumination up to ~197'. Housed in a sleek, black weatherproof IP67 rated casing, the camera also includes H.265 encoding for optimized storage and AI functions such as Intelligent Motion Detect and Perimeter Protection support with Tripwire and Intrusion.

The camera also features a motorized, 2.7mm-13.5mm lens which offers up a 27-104 degree horizontal field of view. The zoom level is fully controllable directly from the camera interface, enabling you to obtain the perfect shot. This makes the camera well suited for exterior applications on commercial as well as residential installations.

Made in South Korea and conforms to the Trade Agreements Act (TAA).

## 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

**Wide dynamic range (WDR)**
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.

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

**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.

**Intelligent Video Analysis (IVS)**
With built-in intelligent video analytics, the camera has the ability to detect and analyze moving objects for improved video surveillance. The camera provides optional standard intelligence at the edge allowing detection of multiple object behaviors such as Tripwire analytics, allowing the camera to detect when a predetermined line has been crossed, ideal for business intelligence, workforce optimization, and actionable intelligence.

**Protection (IP67, wide voltage)**
Subjected and certified to rigorous dust and water immersion tests, the IP67 rating makes it suitable for demanding outdoor applications. For environments with rain, sleet, snow and fog, an integrated wiper provides users with clear visibility at all times.
Wide voltage: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with unstable voltage.

## Technical Specification

### Camera

| | |
|---|---|
| Image Sensor | 1/3" 4 Megapixel progressive CMOS |
| Effective Pixels | 2688(H) x1520(V) |
| RAM/ROM | 512MB/128MB |
| Scanning System | Progressive |
| Electronic Shutter Speed | Auto/Manual 1/3 s–1/100000 s |
| Minimum Illumination | 0.005@ Lux/F1.5 |
| IR Distance | Distance up to 60 m (197 ft) |
| IR On/Off Control | Auto / Manual |
| IR LEDs | 4 |

### Lens

| | | | | | |
|---|---|---|---|---|---|
| Lens Type | Motorized vari-focal | | | | |
| Mount Type | φ14 | | | | |
| Focal Length | 2.7mm~13.5mm | | | | |
| Max. Aperture | F1.5 | | | | |
| Iris Type | Fixed | | | | |
| Angle of View | Horizontal: 104°–27°,<br>Vertical: 55°–15°, | | | | |
| Close Focus Distance | 2.6 ft (0.8 m) | | | | |

| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
|---|---|---|---|---|---|
| | W | 210ft | 84 ft | 42 ft | 21 ft |
| | T | 728ft | 291 ft | 145 ft | 72 ft |

### Pan/Tilt/Rotation

| | |
|---|---|
| Pan/Tilt/Rotation Range | Horizontal: 0°–360° Vertical: 0°–90° Rotation: 0°–360° |

### Intelligence

| | |
|---|---|
| General IVS | Tripwire; Intrusion, fast moving, loitering detection, parking detection and people gathering |
| Perimeter Protection | Tripwire, Intrusion (Recognition of vehicle and people), |
| Intelligent Motion Detect (iMD) | Motion detection alarm for human and vehicle. Filters misinformation such as leaves and light. |

### Video

| | |
|---|---|
| Compression | H.265; H.264; H.264H; H.264B; MJPEG |
| 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)<br>Sub Stream (704 × 576@1–25 fps/704 × 480@1–30 fps)<br>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 | Auto(ICR) / Color / B/W |
| BLC Mode | BLC, HLC |
| White Balance | Auto/natural/street lamp/outdoor/manual/regional custom |
| 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 |
| Starlight | Support |
| Flip | 0°/90°/180°/270° (Support 90°/270° with 1920 × 1080 resolution.) |
| Mirror | Off / On |
| Privacy Masking | Off / On (4 Area, Rectangle) |

### Audio

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|---|---|
| Compression | G.711a; G.711Mu; G726 |

### Network

| | |
|---|---|
| Ethernet | RJ-45 (10/100Base-T) |
| Protocol | IPv4;IPv6;HTTP;HTTPS;TCP;UDP;ARP;RTP;RTSP;RTCP; RTMP;SMTP;FTP;SFTP;DHCP;DNS;DDNS;QoS;UPnP;N TP;Multicast;ICMP;IGMP;NFS;PPPoE;802.1x;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);CGI;P2P;Milestone; |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 20 (Total bandwidth: 64 M) |
| Edge Storage | NAS<br>Local PC for instant recording<br>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

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|---|---|
| Video Interface | N/A |
| Audio Interface | 1 (RCA port) each output/ input |
| RS485 | N/A |
| Alarm | 1 channel In: 5mA 5VDC,<br>1 channel Out: 300mA 12VDC |

### Electrical

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|---|---|
| Power Supply | DC12V, PoE (802.3af) |
| Power Consumption | <9.8W |

### Environmental

| | |
|---|---|
| Operating Conditions | -30° C ~ +60° C (-22° F ~ +140° F) / Less than 95% RH |
| Storage Conditions | -40° C ~ +60° C (-40° F ~ +140° F) |
| Ingress Protection | IP67 |

### Construction

| | |
|---|---|
| Casing | Metal |
| Dimensions | 9.61" × 3.26" (244.1 mm × 90.4 mm) |
| Net Weight | 1.8lb (820 g) |
| Gross Weight | 2.4lb (1090 g) |

## Accessories

## Dimensions (mm/in)

79.0 [3.11]

75.9 [2.99]

## MNT-JUNCTION BOX 3-B

244.1 [9.61]

153.1 [6.03]

⌀90.4 [⌀3.56]

⌀70.0 [⌀2.76]

3-⌀4.7 [⌀0.19]