

IPFX-E40V-IRW3

4MP Starlight Varifocal Dome Network Camera



- 1/2.9" 4 Megapixel progressive CMOS
- H.265 & H.264 triple-stream encoding
- Outputs max. 4MP (2688 × 1520)@30 fps
- WDR(120dB), Day/Night(ICR), 3DNR, AWB,
- Intelligent Motion Detect 2.0, Perimeter Protection
- 2.7~13.5mm varifocal lens
- Starlight Support, max IR distance: 131ft
- Micro SD up to 256GB, Built-in Mic, IP67, PoE

System Overview

IC Realtime's IPFX-E40V-IRW3 is a 4MP eyeball camera featuring our latest generation of 1/2.9" CMOS sensors and Starlight support with increased IR illumination up to ~131'. Housed in a weatherproof IP67 rated casing, the camera also includes H.265 encoding for optimized storage and AI functions such as Intelligent Motion Detect 2.0 and Perimeter Protection, which recognizes vehicle and human targets enabling a refined Intelligent search using IC Realtime AI enabled NVRs.

The camera also features a motorized, 2.7mm-13.5mm lens which offers up a 29-104 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.

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

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.

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.

iMD 2.0 (Intelligent Motion Detect)

The AI Machine Learning algorithms in our Intelligent Motion Detection (iMD) recorders & cameras means detection gets more accurate over time. Now, iMD 2.0 provides even better recognition, even fewer false alerts, and it encodes detection metadata in every video frame right from installation. This enables our new Object Search system to quickly locate recorded clips matching your search parameters.

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 $\pm 30\%$ input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with unstable voltage.

Technical Specification

Camera

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|--------------------------|---|
| Image Sensor | 1/2.9" 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 (Color, 30 IRE) 0.0005 lux@F1.5 (B/W, 30 IRE) 0 lux (Illuminator on) |
| IR Distance | Distance up to 131 ft (40 m) |
| IR On/Off Control | Auto / Manual |
| IR LEDs | 2 |

Lens

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|----------------------|--|--------|---------|-----------|----------|
| 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°-29°, Vertical: 54°-16° | | | | |
| Close Focus Distance | 2.6 ft (0.8 m) | | | | |
| DORI Distance | Lens | Detect | Observe | Recognize | Identify |
| | W | 209ft | 84 ft | 42 ft | 21 ft |
| | T | 688ft | 275 ft | 137 ft | 68 ft |

Pan/Tilt/Rotation

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

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| Compression | H.265; H.264; H.264H; H.264B; MJPEG |
| Smart Codec | Smart H.265+; Smart H.264+ |
| AI Coding | AI H.265; AI H.264 |
| 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 1: 704 × 576 @ (1-25 fps)/704 × 480 @ (1-30 fps) Third Stream 1920 × 1080 @ (1-25/30 fps) |
| Bit Rate Control | CBR/VBR |
| Bit Rate | H.264: 3 Kbps-8192 Kbps H.265: 3 Kbps-8192 Kbps |
| Day/Night | Auto(ICR) / Color / B/W |
| BLC Mode | BLC, HLC, WDR (120 dB) |
| White Balance | Auto/natural/street lamp/outdoor/manual/regional custom |
| Gain Control | Auto / Manual |
| Noise Reduction | 3D DNR |
| Image Stabilization | Electronic Image Stabilization (EIS) |
| Scene Self-adaptation (SSA) | Yes |

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|--------------------|--|
| Motion Detection | Off / On (4 Zone, Rectangle) |
| Region of Interest | Off / On (4 Zone) |
| Smart IR | Support |
| Starlight | Support |
| Flip | 0°/90°/180°/270° (Supported 90°/270° with 2688 × 1520 resolution.) |
| Mirror | Off / On |
| Privacy Masking | Off / On (4 Area, Rectangle) |

Audio

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|-------------|------------------------------------|
| Compression | G.711a; G.711Mu; PCM; G.726; G.723 |
|-------------|------------------------------------|

Network

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|---------------------|---|
| Ethernet | RJ-45 (10/100Base-T) |
| Protocol | IPv4; IPv6; HTTP;TCP; UDP; ARP; RTP; RTSP; RTPC; 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; P2P |
| Streaming Method | Unicast / Multicast |
| Max. User Access | 20 (Total bandwidth: 64 M) |
| Edge Storage | FTP; SFTP; Micro SD card (support max. 256 G); NAS |
| Web Viewer | IE, Chrome, Firefox, Safari |
| Management Software | SmartICRSS, DSS |
| Smart Phone | IOS, Android |

Certifications

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|----------------|------------------------------------|
| Certifications | FCC: 47 CFR FCC Part 15, Subpart B |
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Interface

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| Video Interface | N/A |
| Audio Interface | Built-in Mic |
| RS485 | N/A |
| Alarm | N/A |

Electrical

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|-------------------|---|
| Power Supply | DC12V, PoE (802.3af) |
| Power Consumption | Basic: 4.0 W (12 VDC); 5.2 W (PoE) Max. (WDR + IR intensity + Intelligence): 7.1 W (12 VDC); 8.5 W (PoE) |

Environmental

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

Construction

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|--------------|---------------------------------------|
| Casing | Metal |
| Dimensions | 4.26" × Φ4.8" (108.3 mm × Φ122 mm) |
| Net Weight | 1.58lb (715 g) |
| Gross Weight | 2.02lb (915 g) |

AI Functions

IVS

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| Basic IVS | Tripwire; Intrusion |
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Perimeter Protection

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| Capabilities | Tripwire; Intrusion (These functions support the classification and detection of vehicle and human objects) |
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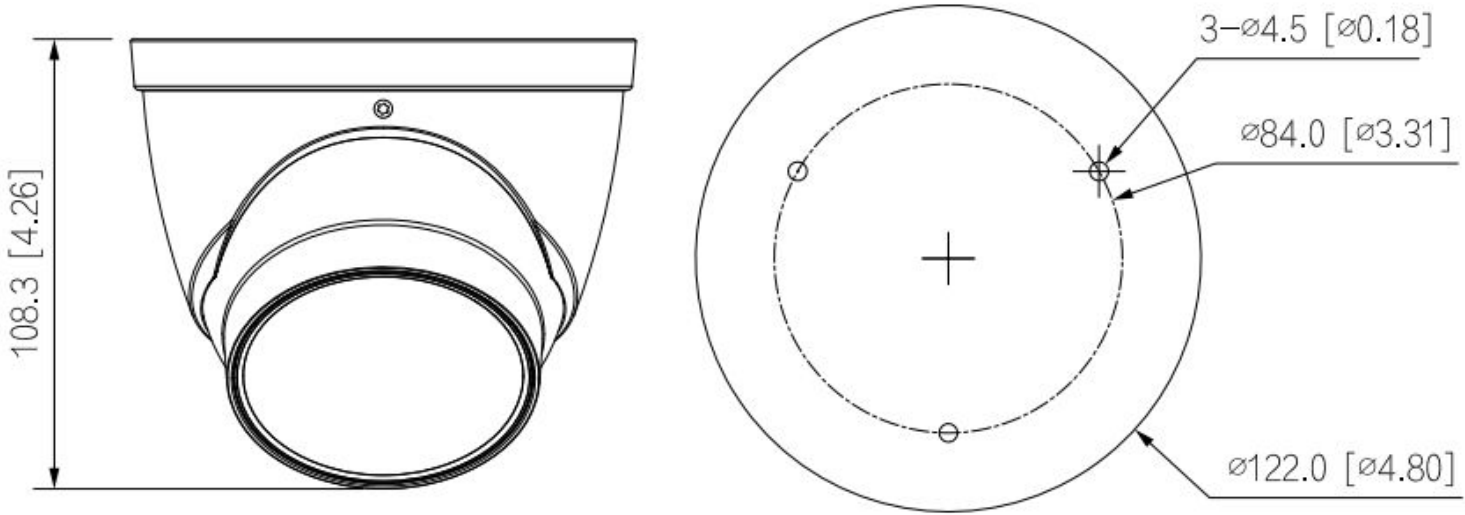
Intelligent Motion Detect 2.0

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| 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

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| Capabilities | Works together with AI enabled NVRs to perform refined intelligent search, event extraction and merging to event videos |
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Dimensions (mm/in)



Accessories

MNT-JUNCTIONBOX-7

