

IPFX-D80V-IRB3

8MP Starlight Vandal-Proof Dome Network Camera



- 8-MP 1/1.8" CMOS image sensor, low illuminance, high image definition
- H.265 & H.264 triple-stream encoding
- Outputs max. 8MP (3840 × 2160) @25/30 fps
- Intelligent Motion Detect and Perimeter Protection
- WDR(120dB), Day/Night(ICR), 3DNR,AWB,AGC,BLC,
- Starlight support, Max. IR LEDs Length 131 ft
- 512GB Micro SD memory, IP67, IK10, PoE

System Overview

Representing the 4K line in the Flex series of cameras, the IPFX-D80V-IRB3 boasts an impressive 8MP, 1/2.8" low illuminance, high image definition CMOS image sensor supporting up to 4K (3840 × 2160) @30 fps. This vandal-proof dome camera excels in low light environments with Starlight support and a max IR distance of 131 feet. It is also housed in a tough, vandal proof IK10- rated and weatherproofed with IP67 protection.

The camera supports a suite of AI features including Intelligent Motion Detect (iMD) and Perimeter Protection. This technology utilizes a deep learning algorithm that recognizes people and vehicles, which drastically reduces false positives, enabling a more optimized search function. Other supported functions include E-PTZ, Face Detection and People Counting.

Functions

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 (0.0008 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.

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 (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.

Smart H.265+

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.

Technical Specification

Camera

Image Sensor	1/2.8"8 Megapixel progressive CMOS
Effective Pixels	3840 (H) × 2160 (V)
RAM/ROM	2GB/4GB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Minimum Illumination	0.0008 lux@F1.8 (Color, 30 IRE) 0.0004 lux@F1.8 (B/W, 30 IRE) 0 lux (Illuminator on)
S/N Ratio	> 56 dB
IR Distance	131 ft (40 m)
IR On/Off Control	Auto; Zoomprio; Manual
IR LEDs	4

Lens

Lens Type	Motorized vari-focal				
Mount Type	φ14				
Focal Length	2.7 mm–12 mm				
Max. Aperture	F1.5				
Angle of View	H: 113°–47°; V: 60°–26°				
Iris Type	Fixed				
Close Focus Distance	2.6 ft (0.8 m)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	273 ft	109 ft	54 ft	27 ft
	T	622 ft	248 ft	124 ft	62 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Horizontal: 0°–360°; vertical: 0°–90°; rotation: 0°–360°
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Video

Compression	H.265; H.264; H.264H; H.264B; MJPEG (sub stream only)
Smart Codec	Smart H.265+; Smart H.264+
AI Coding	AI H.265; AI H.264
Streaming Capability	4 Streams
Resolution	8M (3840 × 2160); 6M (3072 × 2048); 5M (3072 × 1728/2592 × 1944); 4M (2688 × 1520); 3M (2048 × 1536/2304 × 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: 3840 × 2160@(1–25/30 fps)
	Sub stream: D1@(1–25/30 fps)
	Third stream: 1080p@(1–25/30 fps)
	Fourth stream: 720p@(1–10 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 kbps–16384 kbps H.265: 12 kbps–13568 kbps
AI Scene Self-adaptation	Supported
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

Motion Detection	Off / On (4 Zone, Rectangle)
Region of Interest	Off / On (4 Zone)
Smart IR	Support
Starlight	Support
Digital Zoom	16x
Flip	0°/90°/180°/270° (Supports 90°/270° with (2688 × 1520 resolution.)
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	G.711a; G.711Mu; PCM; G.726; G.723
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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; P2P
Cyber Security	Configuration encryption; trusted execution; Digest; security logs; WSSE; account lockout; syslog; video encryption; 802.1x; IP/MAC filtering; HTTPS; trusted upgrade; trusted boot; firmware encryption; generation and importing of X.509 certification
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI
Streaming Method	Unicast / Multicast
Max. User Access	20 (Total bandwidth: 80 M)
Edge Storage	FTP; SFTP; Micro SD card (support max. 512 GB); NAS
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

Video Interface	N/A
Audio Interface	1 Input/ 1 Output (RCA)
Alarm	Input: 1 channel in: 5mA 3V–5V DC Output: 1 channel out: 300mA 12V DC

Electrical

Power Supply	12 VDC/PoE (802.3af)
ePoE	Supported
Power Consumption	Basic: 4.1 W (12 VDC); 4.9 W (24 VAC); 5.9 W (PoE) Max. (H.265+ WDR+ Intelligence on+IR on): 10.0 W (12VDC); 11.7 W (24 VAC); 12.2 W (PoE)

Environmental

Operating Conditions	–22°F to +140°F (–30°C to +60°C)/Less than 95% RH
Storage Conditions	–40°F to +140°F (–40°C to +60°C)
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Metal + plastic
Dimensions	6.26" × Φ4.65" (273.2 mm × 95.0 mm × 95.0 mm)
Net Weight	2.01 lb (0.91kg)
Gross Weight	2.69 lb (1.22kg)

AI Functions

IVS

Basic IVS	Tripwire; Intrusion
Advanced IVS	Heat Map, Smart Sound Detection
Smart Object Detection	Smart abandoned object; smart missing object

Perimeter Protection

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

Capabilities	Advanced secondary filtering for human and motor vehicle , reducing false alarms caused by leaves, rain and lighting condition change.
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E-PTZ

Capabilities	Supports Electronic zoom and tracking
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AI Search

Capabilities	Works together with AI enabled NVRs to perform refined intelligent search, event extraction and merging to event videos
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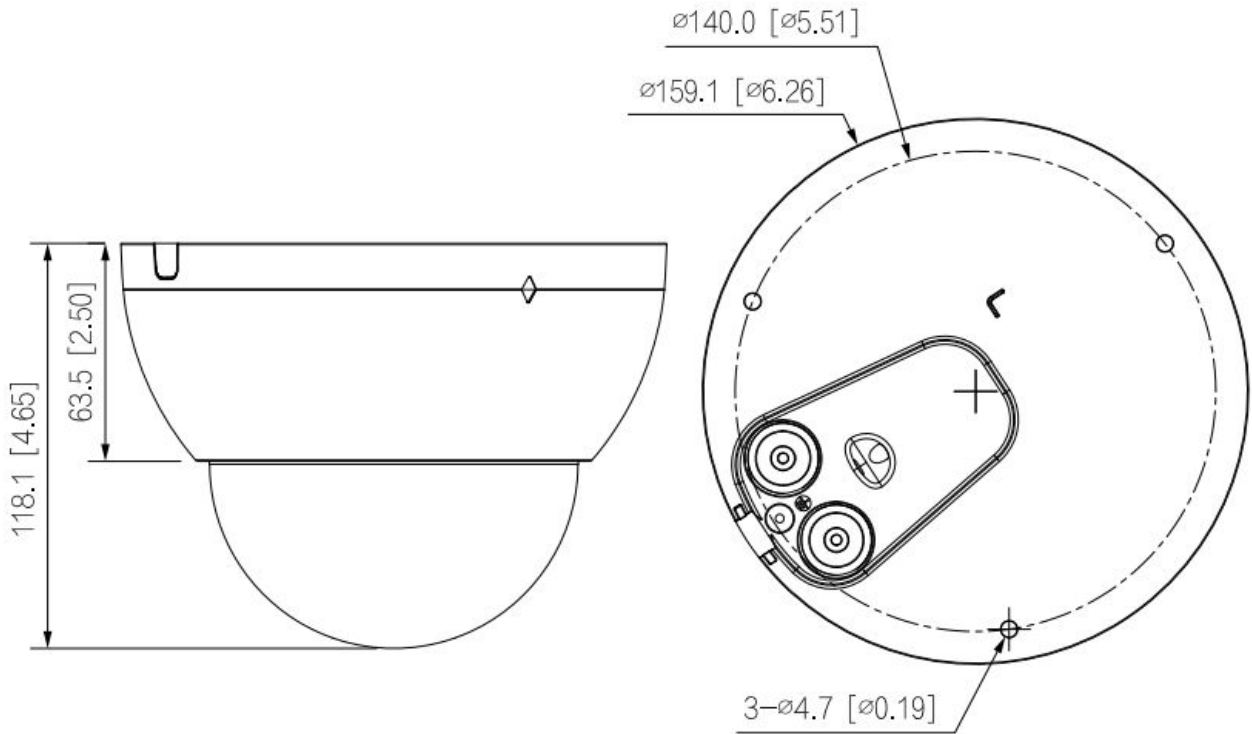
Face Detection

Capabilities	Face detection; track; snapshot; snapshot optimization; optimal face snapshot upload; face enhancement; face exposure; face attributes extraction including 6 attributes and 8 expressions; face snapshot set as face or one-inch photo; snapshot strategies (real-time snapshot, quality priority and optimization snapshot); face angle filter; optimization time setting
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People Counting

Capabilities	Tripwire: people counting and people counting in area, generating and exporting report (day/month/year); queue management, generating and exporting report (day/month); 4 rules can be set for tripwire, people counting in area and queue management
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Dimensions (mm/in)



Accessories

