

# IPFX-D80V-IRB2

8MP AI IR Varifocal Dome Network Camera



- 1/1.8" 8MP CMOS image sensor
- H.265 & H.264 triple-stream encoding
- 25/30fps@4K(3840×2160)
- 2.7mm ~12mm motorized lens
- WDR(120dB), 3DNR, HLC, BLC
- Perimeter Protection, Intelligent Motion Detect & IVS
- Max IR Length 131ft, IP67, IK10, ePOE Support
- Made In South Korea And Conforms To The Trade Agreements Act (TAA)

## System Overview

IC Realtime's IPFX-D80V-IRB2 is a 8MP dome camera featuring our latest generation of 1/1.8" CMOS sensors and Starlight support, it adopts our vandal proof dome style housing, and supports IR illumination up to ~131' and also supports extended PoE (ePOE). The camera also supports a suite of AI features including IVS, Perimeter Protection and Intelligent Motion Detect, enabling enhanced search functions when paired with an IC Realtime AI NVR.

Due to the larger image sensor, this camera supports a large dynamic range (120dB), and is a true WDR camera. On top of the image sensor sits a motorized, 2.7mm-12mm lens which offers up a 45-110 degree horizontal field of view. The zoom level is fully controllable directly from the camera interface, enabling you to obtain the perfect shot.

## 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

### Protection (IP67, IK10, wide voltage)

The camera allows for  $\pm 25\%$  input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 2KV lightning rating provides effective protection for both the camera and its structure against lightning. Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), The camera complies with an IK10 impact rating making it capable of withstanding the equivalent of 11.02 lbs (5 kg) of force dropped from a height of 15.75 in. (40 cm)

### Smart IR Technology

With IR illumination, detailed images can be captured in low light or total darkness. The camera's Smart IR technology adjusts the intensity of camera's infrared LEDs to compensate the distance of an object. Smart IR technology prevents IR LEDs from whitening out images as they come closer to the camera. The camera's integrated infrared illumination provides high performance in extreme low-light environments up to 131ft (40m).

### 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.

### ePOE Technology

ePOE technology adopts advanced 2D-PAM3 coding modulation from the physical layer and realizes full duplex transmission over 800 meters at the speed of 10Mbps, or 300 meters at the speed of 100Mbps via Cat 5 or coaxial cable media. It supports PoE and PoC power supply technology, which has greatly simplified construction and wiring. ePOE technology offer a new way to accomplish long distance transmission between IP cameras and network switches. It allows for a more flexible surveillance system design, improves reliability, and saves on construction and wiring costs.

### 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	1/1.8" CMOS
Effective Pixels	3840x 2160 (8MP/ 4K)
RAM/ROM	1GB/ 128MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s-1/100000 s
Minimum Illumination	0.004 Lux@F1.4 (Color, 30IRE) 0.0004 Lux@F1.4 (B/W, 30IRE) 0 lux (Illuminator on)
IR Distance	131.2 ft (40m)
IR On/Off Control	Auto / Manual
IR LEDs	3

### Lens

Lens Type	Motorized vari-focal				
Mount Type	φ14				
Focal Length	2.7mm~12mm				
Max. Aperture	F1.4				
Angle of View	Horizontal: 110.4° -45° Vertical: 57.8° -25.2°				
Iris Control	Auto				
Close Focus Distance	3.3 ft (1m)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	282 ft	112 ft	56 ft	28 ft
	T	643 ft	257 ft	128 ft	64 ft

### Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan: 0°-355°, Tilt: 0°-80°, Rotation: 0°-355°
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### Smart Event

General IVS	Tripwire, Intrusion, fast moving, loitering detection; people gathering; parking detection, Abandoned object; missing object
Advanced IVS	Face Detection, People Counting, Heat Map
Perimeter Protection	Tripwire; Intrusion, Fast Moving (supports vehicle and human detection)
Intelligent Motion Detect (iMD)	Motion detection alarm for human and vehicle. Filters misinformation such as leaves and light.
Intelligent Search	Works together with AI-enabled NVRs to perform refined intelligent search, event extraction and merging to event videos

### Video

Compression	H.265; H.264; H.264H; H.264B; MJPEG (Sub stream)
Streaming Capability	3 Streams
Resolution	3840 x 2160; 2592 x 1944; 2688 x 1520; 2560 x 1440; 2304 x 1296; 1080p (1920 x 1080); 1.3M (1280 x 960); 720p (1280 x 720); D1 (704 x 576/704 x 480); VGA(640 x 480); CIF (352 x 288/352 x 240)
Frame Rate	Main stream: 3840x 2160 (1 fps-25/30 fps)
	Sub Stream: D1 (1 fps-25/30 fps)
	Third Stream: 1080p (1 fps-25/30 fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 32 kbps-8192 kbps H.265: 32 kbps-8192 kbps
Day/Night	Auto(ICR) / Color / B/W
BLC Mode	BLC / HLC / WDR

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
Digital Zoom	16x
Flip	0°/90°/180°/270° (90°/270° at 4MP or less)
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

### Audio

Compression	PCM; G.711a; G.711Mu; G.726; G.723
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### 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; NTP; Multicast; ICMP; IGMP; NFS; PPPoE; 802.1x; Bonjour
Cyber Security	Video encryption; configuration encryption; Digest; WSSE; account lockout; security logs; generation and importing of X.509 certification; HTTPS; trusted boot; trusted execution; trusted upgrade
Interoperability	ONVIF (Profile S/Profile G/Profile T); CGI
Streaming Method	Unicast / Multicast
Max. User Access	20 (Total bandwidth: 80 M)
Edge Storage	NAS, Local PC, Micro SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

### Certifications

Certifications	FCC: FCC Part 15 Subpart B
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### Interface

Audio Interface	1/1 channel In/Out (terminal)
Alarm	1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC

### Electrical

Power Supply	12 VDC (±25%)/24 VAC (±30%)/PoE (802.3af)/ePoE
ePOE	Support
Power Consumption	Basic power consumption: 5.2 W (12 VDC); 5.0 W (24 VAC); 5.5 W (PoE) Max. power consumption (H.265 + max. stream + Intelligent functions + IR LED + focus): 9.6 W (12 VDC); 9.9W (24 VAC); 10.1W (PoE)

### Environmental

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

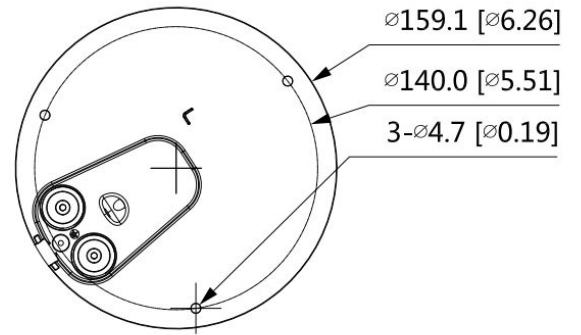
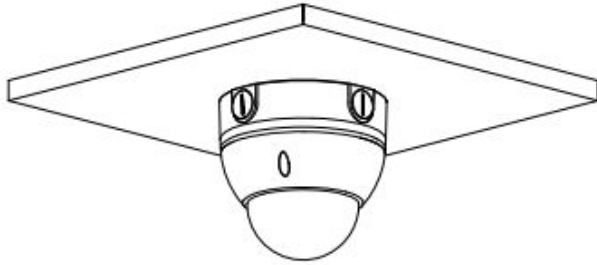
### Construction

Casing	Metal
Dimensions	6.26" x 4.65" (159.1 mm x 118.1 mm)
Net Weight	2.09 lb (0.95 kg)
Gross Weight	2.65 lb (1.20 kg)

Accessories

Dimensions (mm/in)

### MNT-JUNCTIONBOX-8



### MNT-IPMINIDOME-WALL-3

