IPFX-D80V-IRB1
8MP WDR IR Dome Network Camera

IC REALTIME

- 1/2.5" 8 Megapixel progressive scan STARVIS™ CMOS
- H.265 & H.264 triple-stream encoding
- 15fps@4K(3840×2160),25/30fps@3M(2304×1296)
- WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Micro SD card slot, up to 128GB
- 2.7mm ~12mm motorized lens
- Max IR LEDs Length 164ft
- IP67, IK10, ePOE Support

System Overview

The IPFX-D80V-IRB1 is a 8MP dome camera featuring our latest generation of 1/2.5" CMOS sensors. It features our black colored vandal proof dome style housing, and supports IR illumination up to ~164' and also supports extended PoE (ePOE).

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 40-110 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

Protection (IP67, IK10, wide voltage)
The camera allows for ±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 164ft (50m).

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	1/2.5" 8 Megapixel progressive scan STARVIS™ CMOS
Effective Pixels	3840(H)x2160(V)
RAM/ROM	512MB/32MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100000 s
Minimum Illumination	0.05Lux/F1.4 (Color,1/3s,30IRE) 0.2Lux/F1.4 (Color,1/30s,30IRE) 0Lux/F1.4(IR on)
IR Distance	Distance up to 164ft (50m)
IR On/Off Control	Auto / Manual
IR LEDs	2

Lens

Lens Type	Motorized/ Auto Iris(DC)
Mount Type	Board-in
Focal Length	2.7mm~12mm
Max. Aperture	F1.4
Angle of View	H:110°~40° , V:58°~23°
Optical Zoom	4x
Close Focus Distance	0.98 feet (0.3m)

DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	280 ft	112 ft	56 ft	28 ft
	T	748 ft	299 ft	151 ft	75 ft

Pan/Tilt/Rotation

Pan/Tilt/Rotation Range	Pan:0° ~355° ;Tilt:0° ~75° ;Rotation:0° ~355°

Smart Event

General IVS	Tripwire, Intrusion, Abandoned/Missing, Face Detection

Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	4K(3840×2160)/ 6M(3072×2048)/5M(3072x1728)/ 5M(2592×1944)/ 4M(2688×1520)/ 3M(2048x1536)/ 3M(2304×1296)/ 1080P(1920×1080)/1.3M(1280x960)/ 720P(1280×720)/ D1(704×576/704×480)/ VGA(640×480)/ CIF(352×288/352×240))
Frame Rate	Main Stream: 4K(1~15fps)/3M(1~25/30fps)
	Sub Stream: D1(1~25/30fps)
	Third Stream: 720P(1~25/30fps)
Bit Rate Control	CBR/VBR
Bit Rate	H.264: 24K ~ 10240Kbps H.265: 14K ~ 9984Kbps
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° only supported at 4MP or less)
Mirror	Off / On
Privacy Masking	Off / On (4 Area, Rectangle)

Audio

Compression	G.711a/ G.711Mu/ AAC/ G.726

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
Interoperability	ONVIF, PSIA, CGI
Streaming Method	Unicast / Multicast
Max. User Access	10 Users /20 Users
Edge Storage	NAS Local PC for instant recording Micro SD card 128GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

Certifications

Certifications	FCC: Part 15 Subpart B

Interface

Video Interface	N/A
Audio Interface	1/1 channel In/Out
RS485	N/A
Alarm	1 channel In: 5mA 5VDC 1 channel Out: 300mA 12VDC

Electrical

Power Supply	DC12V, PoE (802.3af)(Class 0)
ePOE	Support
Power Consumption	<8.5W

Environmental

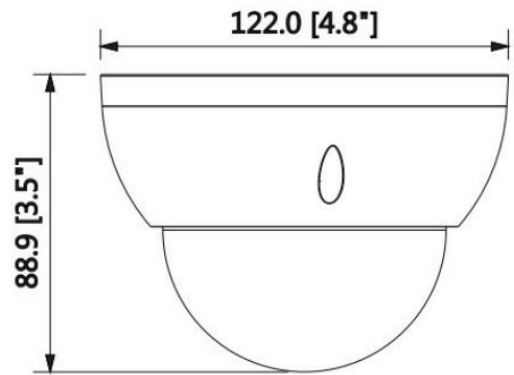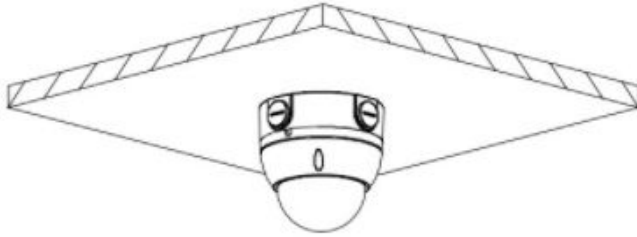|	
Operating Conditions	-22° F ~ +140° F (-30° C ~ +60° C) / Less than 95% RH
Storage Conditions	-22° F ~ +140° F (-30° C ~ +60° C) / Less than 95% RH
Ingress Protection	IP67
Vandal Resistance	IK10

Construction

Casing	Metal
Dimensions	4.80''x3.50" (122mm×88.9mm)
Net Weight	1.1lb (0.5kg)
Gross Weight	1.29lb (0.58kg)

Accessories

Dimensions (mm/in)

MNT-JUNCTION BOX 7-B

MNT-IPMINIDOME-WALL-B

122.0 [4.8"]

88.9 [3.5"]

⌀122.0 [⌀4.8"]

3-⌀4.5 [⌀0.18"]

⌀110.0 [⌀4.33"]