IPFX-D40V-IRW2

4MP Starlight Dome Network Camera





System Overview

The IPFX-D40V-IRW2 is a 4MP dome camera featuring our latest generation of 1/2.7" CMOS sensors. It adopts our IK10 vandal proof dome style housing, and features Starlight supported IR illumination up to ~131'. The camera also includes H.265 encoding for optimized storage and enhanced IVS with Perimeter protection and Intelligent Motion Detect which helps filter human and vehicle target objects.

The camera also features a motorized, 2.7mm-13.5mm lens which offers up a 28-104 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.

- 1/ 2.7" 4Megapixel progressive CMOS
- H.265 & H.264 triple-stream encoding
- Outputs max. 4MP (2688 × 1520)@30 fps
- WDR(120dB), Day/Night(ICR), 3DNR, AWB, AGC, BLC
- Perimeter Protection, Intelligent Motion Detect
- 2.7~13.5mm varifocal lens
- Starlight Support, Max IR LEDs Length 131ft
- Micro SD support up to 256GB, IP67, IK10, PoE

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.

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.

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 5 kg (11.02 lbs) of force dropped from a height of 40 cm (15.75 in.)



Technical Specification

Camera

Camera					
Image Sensor		1/2.7"4 Megapixel progressive CMOS			
Effective Pixels		2688(H) ×1520(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, 30IRE) 0.0005 Lux@F1.5 (B/W, 30IRE) 0 Lux (Illuminator on)			
IR Distance		Distance up to 40 m (131.23 ft)			
IR On/Off Control		Auto / Manual			
IR LEDs		2			
Lens					
Lens Type		Motorized vari-focal			
Mount Type		φ14			
Focal Length		2.7mm~13.5mm			
		F1.5			
Max. Aperture Angle of View		Horizontal: 104°–27° Vertical: 55° –15° Diagonal: 124° –31°			
Ontirel Zeem		5x			
Optical Zoom		0.8 m–0.8 m (2.62 ft–2.62 ft)			
Close Focus Distance					
	Lens	Detect	Observe	Recognize	Identify
DORI Distance	W	210 ft	84 ft	42 ft	21 ft
	т	728f ft	291 ft	145 ft	72 ft
Pan/Tilt/Rotatio	n				
Pan/Tilt/Rotation Range		Pan:0° ~355° ;Tilt:0° ~75° ;Rotation:0° ~355°			
Intelligence					
General IVS		Tripwire; Intrusion			
Perimeter Protection		Tripwire, Intrusion (Recognition of vehicle and people), fast moving, loitering detection, parking detection and people gathering			
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)			
		Main Stream (2688 × 1520@1–25/30 fps)			
Frame Rate		Sub Stream (704 × 576@1–25/30 fps) Third Stream (1280 × 720@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 / 120dB WDR			
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			
Compression	G.711a; G.711Mu; G726; AAC		
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, Milestone		
Streaming Method	Unicast / Multicast		
Max. User Access	10 Users /20 Users		
Edge Storage	NAS Local PC for instant recording Micro SD card 256GB		
Web Viewer	IE, Chrome, Firefox, Safari		
Management Software	SmartICRSS, DSS		
Smart Phone	IOS, Android		
Interface			
Audio In	1 channel (RCA port)		
Audio Out	1 channel (RCA port)		
Alarm In	1 channel in: 5mA 3V–5V DC		
Alarm Out	1 channel out: 300mA 12V DC		
Electrical			
Power Supply	DC12V, PoE (802.3af)(Class 0)		
Power Consumption	<8.5W		
Environmental			
Operating Conditions	-30° C \sim +60° C (-22° F \sim +140° F) / Less than 95% RH		
Storage Conditions	-40° C \sim +60° C (-40° F \sim +140° F) / Less than 95% RH		
Ingress Protection	IP67		
Vandal Resistance	IK10		
Construction			
Casing	Metal		
Dimensions	122mm×88.9mm(4.80"x3.50")		
Net Weight	492 g (1.1 lb)		
Gross Weight	663 g (1.5 lb)		



