IPFX-P4032X-IRW1

4MP 32x IR AI PTZ Network Camera





- 1/2.8" 4 Megapixel STARVIS™ CMOS
- Powerful 32x optical zoom
- Max. 25/30fps@4M/3M, H.265 Encoding
- Perimeter Protection and Auto-tracking
- IR distance up to 492 feet
- IP67, IK10 and Lightning Protection
- 256GB mSD support, DC 24V or PoE+

System Overview

IC Realtime's IPFX-P4032X-IRW1 combines Pan, Tilt and 32x zoom with AI Analytics technology. This 4 Megapixel Starlight camera is equipped IR LEDs capable of 492 feet of Illumination. The PTZ supports auto tracking with Perimeter Protection (Tripwire, Intrusion) and features Intelligent Motion Detect, which allows human and vehicle recognition.

Other features include H.265+ encoding, allowing the recorder to save up to half off the storage space compared to traditional H.264. The PTZ also supports 24V DC or PoE+ and is IP67 and IK10 rated, making suitable for rugged outdoor environments.

Functions

Environmental

Cameras operate in extreme temperature environments, rated for use in temperatures from -40° F \sim +158° F (-40° C \sim +70° C) with 95% humidity.

Intelligent Video System (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 abandoned or missing objects. IVS also supports Tripwire analytics, allowing the camera to detect when a predetermined line has been crossed, ideal for business intelligence, and Facial Detection, for searching or identification of individuals.

Interoperability

The camera conforms to the ONVIF (Open Network Video Interface Forum) specifications, ensuring interoperability between network video products regardless of manufacturer.

Auto-tracking

Imagine a PTZ that controlled itself - one that moved when objects came within the image, and Panned, Tilted and Zoomed on the target automatically. IVS cameras that support Auto Tracking can have a defined 'home' position (called a scene) where the camera will await an object to enter a specified quadrant.

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 Al analytics and real-time alerts maximizes efficiency & balance of the total systems capacity and resources resulting in greater surveillance system efficiency.

PFA Technology

PFA technology has innovatively introduced new methods of judgment to ensure the accuracy and predictability of the direction of subject distance adjustment. The result is a set of advanced focusing algorithms. PFA ensures clarity of the image throughout the process of zooming and shortens focus time. The realization of PFA technology substantially improves user experience and increases product value.

Environmental

The cameras operate in extreme temperature environments, rated for use in temperatures from -40°F $\sim +158^{\circ}\text{F}$ (-40°C $\sim 70^{\circ}\text{C})$ with 95% humidity. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection (IP67, IK10)

Subjected and certified to rigorous dust and immersion tests (IP67) and impact tests (IK10), the camera is the choice for installation in even the most unforgiving environments.





Technical Specification

Camera	
Image Sensor	1/2.8" STARVIS™ CMOS
Effective Pixels	2560 (H) × 1440 (V), 4 Megapixels
RAM/ROM	4GB/ 1GB
Scanning System	Progressive
Electronic Shutter Speed	1/1 s-1/30,000 s
Minimum Illumination	Color: 0.005 Lux@F1.35 B/W: 0.0005 Lux@F1.35 0 Lux (IR on)
IR Distance	492.13 ft (150 m)
IR On/Off Control	Auto / Manual
IR LEDs	4
Illuminator On/Off Control	Zoom Prio/Manual/SmartIR

Lens				
Focal Length	4.9 mm-156 i	mm		
Max. Aperture	F1.35-F4.4			
Angle of View	H: 61.6°-2.1°;	V: 35.1°-1.3°		
Optical Zoom	32x			
Focus Control	Auto/Semi-Au	uto/Manual		
Iris Control	Auto/Manual/	Fixed		
Close Focus Distance	3.28 ft-4.92 f	t (1 m-1.5 m)		
DORI Distance	Detect	Observe	Recognize	Identify
	10,236ft	4041ft	2047ft	1023ft

PTZ	
Pan/Tilt Range	Pan: 0°–360° endless Tilt: -15° to $+90^{\circ}$, auto flip 180
Manual Control Speed	Pan: 0.1%-300%, Tilt: 0.1%-200%
Preset Speed	Pan: 400° /s; Tilt: 300° /s
Presets	300
PTZ Mode	5 Patterns, Tour (up to 8 presets), scan
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Preset/Tour/Pattern/Scanning
Protocol	ICR-SD, Pelco-P/D (auto recognition)
Intelligence	

Intelligence	
Perimeter Protection	Tripwire; intrusion (Supports classification and accurate vehicle and human detection)
Intelligent Motion Detect	Motion detection alarm for human and vehicle. Filters misinformation such as leaves and light.
Auto Tracking	Support (Perimeter Protection)
IVS	Tripwire, Intrusion, Abandoned/Missing
Advanced Intelligent Functions	Face Detection

Video	
Compression	H.265; H.264B; H.264M; H.264H; MJPEG (Sub Stream); H.265+; H.264+
Streaming Capability	3 Streams
Resolution	4M (2560 \times 1440); 3M (2048 \times 1536); 1080P (1920 \times 1080); 720P (1280 \times 720); D1 (704 \times 576/704 \times 480); CIF (352 \times 288/352 \times 240)
	Main stream: 4M/3M/1080p/1.3M/720p (1–25/30 fps)
Frame Rate	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream 2: 720p (1–25/30 fps)

CBR/VBR

Bit Rate	H.264: 3 Kbps-20480 Kbps H.265: 3 Kbps-20480 Kbps
Day/Night	Auto(ICR) / Color / B/W
Backlight Compensation	BLC / HLC / WDR(120dB)
White Balance	Auto, ATW, Indoor, Outdoor, Manual
Gain Control	Auto / Manual
Noise Reduction	2D/3D
Region of Interest	Support
Electronic Image Stabilization (E	Support
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

Audio		A	lι	10	li	0
-------	--	---	----	----	----	---

	G.711a; G.711Mu; G.726; AAC; MPEG2-Layer2;
Compression	G722.1;G729; G723

Network

Ethernet	RJ-45 (10/100Base-T)
Protocol	IPv4; IPv6; HTTP; HTTPS; 802.1x; Qos; FTP; SMTP; UPnP; SNMPv1/v2c/v3 (MIB-2); DNS; DDNS; NTP; RTSP; RTP; TCP; UDP; IGMP; ICMP; DHCP; PPPoE; ARP; RTCP;RTMP
Interoperability	ONVIF Profile S&G, CGI
Streaming Method	Unicast / Multicast
Max. User Access	20 (total bandwidth 64M)
Edge Storage	FTP; Micro SD card (256G); NAS
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
RS485	N/A
Alarm I/O	2/1

Electrical

Environmental	
Power Consumption	Normal: 12W Max (AI, IR on): 20W
Power Supply	DC 24 V/2.5 A ± 25% of POE+ (802.3at)

Operating Conditions	-40° F \sim +158° F (-40° C \sim +70° C) / Less than 95% RH
Ingress Protection	IP67
Impact Protection	IK10
Lightning Protection	6000V lightning proof; surge protection; voltage transient protection

Construction

Casing	Metal
Dimensions	7.48" × 13.07" (190 mm × 332 mm)
Net Weight	10.36 lb (4.7 kg)
Gross Weight	17 64 lh /8 kg)



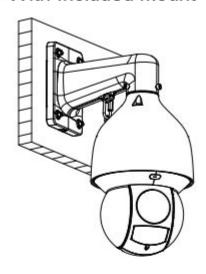
Bit Rate Control



Accessories

Dimensions (mm/in)

With Included mount



With MNT-CEILING-MPA

