

IPFX-P4030X-IRW1

4MP 30x IR PTZ Network Camera



- 1/3" 4Megapixel CMOS
- Powerful 30x optical zoom
- H.265 Encoding
- Max. 25/30fps@4M/3M, 25/30/50/60fps@1080P
- Auto-tracking and IVS
- IR distance up to 100m
- Support PoE+, IP66

System Overview

The IPFX-P4030X-IRW1 is a 4 Megapixel camera with IR LEDs capable of 328' of illumination, 1/3" CMOS sensor, and the 4.5mm~135mm lens enable a 30x optical zoom.

The PTZ supports auto tracking with IVS support (Tripwire, Intrusion, Abandoned/Missing) and advanced Face Detection, Heat Map functions as well.

Other features include H.265+ encoding, allowing the recorder to save up to half off the storage space compared to traditional H.264. The camera Supports PoE+ and is IP66 rated.

Functions

Protection

The camera allows for $\pm 10\%$ input voltage tolerance, suitable for the unstable conditions for outdoor applications. Its 6KV lightning rating provides effective protection for both the camera and its structure against lightning.

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.

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.

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

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 $-40^{\circ}\text{C} \sim 70^{\circ}\text{C}$ ($-40^{\circ}\text{F} \sim +158^{\circ}\text{F}$) 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.

Interoperability

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

Technical Specification

Camera

Image Sensor	1/3" CMOS
Effective Pixels	2592(H) x 1520(V), 4 Megapixels
RAM/ROM	1024M/128M
Scanning System	Progressive
Electronic Shutter Speed	1/1s~1/30,000s
Minimum Illumination	Color: 0.005Lux@F1.6; B/W: 0.0005Lux@F1.6; 0Lux@F1.6 (IR on)
IR Distance	Distance up to 100m (328ft)
IR On/Off Control	Auto / Manual
IR LEDs	4
Wiper	N/A

Lens

Lens Type	4.5mm~135mm			
Max. Aperture	F1.6 ~ F4.4			
Angle of View	H: 60° ~ 2.2°			
Optical Zoom	30x			
Focus Control	Auto/Manual			
Close Focus Distance	100mm~ 1000mm			
DORI Distance	Detect	Observe	Recognize	Identify
	8858ft	3543ft	1772ft	886ft

PTZ

Pan/Tilt Range	Pan: 0° ~ 360° endless; Tilt: -15° ~ 90°, auto flip 180°
Manual Control Speed	Pan: 0.1° ~300° /s; Tilt: 0.1° ~200° /s
Preset Speed	Pan: 400° /s; Tilt: 300° /s
Presets	300
PTZ Mode	5 Pattern, 8 Tour, Auto Pan ,Auto Scan
Speed Setup	Human-oriented focal Length/ speed adaptation
Power up Action	Auto restore to previous PTZ and lens status after power failure
Idle Motion	Activate Preset/ Scan/ Tour/ Pattern if there is no command in the specified period
Protocol	ICR-SD

Intelligence

Event Trigger	Motion detection, Video tampering , Scene changing, Network disconnection, IP address conflict, Illegal Access, Storage anomaly
Auto Tracking	Support
IVS	Tripwire, Intrusion, Abandoned/Missing
Advanced Intelligent Functions	Face Detection, Heat Map

Video

Compression	H.265+/H.265/H.264+/H.264
Streaming Capability	3 Streams
Resolution	4M(2592x1520)/3M(2304x1296)/1080P(1920x1080)/720P(1280x720)/D1(704x576/704x480)/CIF(352x288/352x240)
Frame Rate	Main stream: 4M/3M(1~25/30fps), 1080P/1.3M/720P(1~50/60fps)
	Sub stream1: D1/CIF(1 ~ 25/30fps)
	Sub stream2: 4M/1080P/1.3M/720P/D1/CIF(1~25/30fps)
Bit Rate Control	CBR/VBR

Bit Rate	H.265/H.264: 448K ~ 8192Kbps
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	Ultra DNR (2D/3D)
Motion Detection	Support
Region of Interest	Support
Electronic Image Stabilization (EIS)	Support
Defog	Support
Digital Zoom	16x
Flip	180°
Privacy Masking	Up to 24 areas

Audio

Compression	G.711a/G.711Mu/AAC/G.722/G.726/G.729/ MPEG2-L2
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Network

Ethernet	RJ-45 (10Base-T/100Base-TX)
Protocol	IPv4/IPv6, HTTP, HTTPS, SSL, TCP/IP, UDP, UPnP, ICMP, IGMP, SNMP, RTSP, RTP, SMTP, NTP, DHCP, DNS, PPPoE, DDNS, FTP, IP Filter, QoS, Bonjour, 802.1x
Interoperability	ONVIF Profile S&G, CGI
Streaming Method	Unicast / Multicast
Max. User Access	20 users
Edge Storage	NAS (Network Attached Storage), Local PC for instant recording, Micro SD card 256GB
Web Viewer	IE, Chrome, Firefox, Safari
Management Software	SmartICRSS, DSS
Smart Phone	IOS, Android

Certifications

Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4- 2014 UL: UL60950-1+CAN/CSA C22.2.No.60950-1
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Interface

Video Interface	N/A
Audio Interface	1/1
RS485	N/A
Alarm I/O	2/1

Electrical

Power Supply	AC24V/3A(±10%), PoE+(802.3at)
Power Consumption	13W, 23W (IR on)

Environmental

Operating Conditions	-40° C ~ +70° C (-40° F ~ +158° F) / Less than 95% RH
Ingress Protection	IP66

Construction

Casing	Metal
Dimensions	186mm (7.2") x 309mm (12.1")
Net Weight	3.5kg(7.72lb)
Gross Weight	6.8kg(14.99lb)

Accessories

Dimensions (mm/in)

