

PIX-NSP431SRI

4MP 32x Starlight IR WizSense Network PTZ Camera



Launched by Pixvideo Technology, this is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Pixvideo's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

System Overview

Featuring powerful optical zoom and accurate pan/tilt/zoom performance, this camera provides an all-in-one solution for capturing long distance video surveillance for outdoor applications. Together with infrared illumination and Starlight Technology, the camera is the perfect solution for dark, lowlight applications. The series combines a day/night mechanical IR cut filter for the highest image quality in variable lighting conditions during the day, and True WDR for applications with direct sunlight or glare.

Functions

Starlight Technology

For challenging low-light applications, Pixvideo's Starlight Ultra-low Light Technology offers best-in-class light sensitivity, capturing color details in low light down to 0.005 lux. The camera uses a set of optical features to balance light throughout the scene, resulting in clear images in dark environments.

Wide Dynamic Range

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.

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.

- 1/2.8" STARVIS™ CMOS
- Powerful 32x optical zoom
- Starlight technology
- Max. 25/30fps@4M
- Deep-learning-based auto tracking and perimeter protection
- Support PoE+
- IR distance up to 150 m
- SMD PLUS
- IP66



Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

Environmental

Pixvideo cameras operate in extreme temperature environments, rated for use in temperatures from -40 °C to +70 °C (-40 °F to +158 °F) with 95% humidity. The camera complies with the IK10 Vandal Resistance impact rating. Subjected to rigorous dust and water immersion tests and certified to the IP67 Ingress Protection rating makes it suitable for demanding outdoor applications.

Protection

The camera allows for ±25% input voltage tolerance, suitable for the most unstable conditions for outdoor applications. Its 8KV lightning rating provides effective protection for both the camera and its structure against lightning.

Interoperability

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

SMD PLUS

With Deep-Learning Algorithm, Dahua SMD PLUS filters the motion detection alarm triggered by non-concerned target and recognizes human and vehicle effectively sending alarms when human and vehicle intrude.

Technical Specification					IVS	Object abandoned/missing	
Camera						Artificial Intelligence	
Image Sensor	1/2.8" STARVIS™ CMOS					Smart Capture	Support human, motor vehicle and non-motor vehicle image capture.
Pixel	4MP					Perimeter Protection	Tripwire and intrusion. Support alarm triggering by target types (human and vehicle). Support filtering false alarms caused by animals, rustling leaves, bright lights, etc.
Max. Resolution	2560 (H) x 1440 (V)					Face Detection	Support
ROM	4GB					SMD Plus	Support
RAM	1GB					Auto Tracking	Support
Electronic Shutter Speed	1/3–1/30000 s					Video	
Scanning System	Progressive					Compression	H.265/H.265+/H.264+/H.264/MJPEG (sub stream)
Min. Illumination	Color: 0.005Lux@F1.3 B/W: 0.0005Lux@F1.3 0Lux (IR light on)					Streaming Capability	3 streams
Illumination Distance	150 m (492.13 ft)					Resolution	4M (2560 × 1440)/3M (2048 × 1536)/1080P (1920 × 1080)/720P (1280 × 960)/D1 (704 × 576/704 × 480)/CIF (352 × 288/352 × 240)
Illuminator On/Off Control	Zoom Prio/Manual/SmartIR					Frame Rate	Main stream: 4M/3M/1080P/1.3M/720P (1–25/30 fps) Sub stream 1: D1/CIF (1–25/30 fps) Sub stream 2: 720P (1–25/30 fps)
Illuminator Number	4					Bit Rate Control	Variable Bit Rate/Constant Bit Rate
Lens						Bit Rate	H.265/H.264: 3 kbps–20480 kbps
Focal Length	4.9 mm–156 mm					Day/Night	Auto (ICR)/Color/B/W
Max. Aperture	F1.35–F4.4					BLC	Support
Field of View	H: 68.3°–2.2°; V: 38.9°–1.3°; D: 68.3°–1.4°					WDR	120dB
Optical Zoom	32x					HLC	Support
Focus Control	Auto/Semi-Auto/Manual					White Balance	Auto/Indoor/Outdoor/Tracking/Manual/Sodium lamp/ Natural light/Street lamp
Close Focus Distance	0.1 m–1.5 m (0.33 ft–4.92 ft)					Gain Control	Auto/Manual
Iris Control	Auto/Manual					Noise Reduction	2D/3D
DORI Distance	Detect	Observe	Recognize	Identify	Motion Detection	Support	
	3034 m (9954.06 ft)	1213 m (3979.66 ft)	606 m (1988.19 ft)	303 m (994.09 ft)	Region of Interest (RoI)	Support	
PTZ						Image Stabilization	Electronic
Pan/Tilt Range	Pan: 0°–360°; Tilt: -10°–+90°					Defog	Support
Manual Control Speed	Pan: 0.1°/s–300°/s; Tilt: 0.1°/s–200°/s					Digital Zoom	16x
Preset Speed	Pan: 400°/s; Tilt: 300°/s					Flip	0°/180°
Presets	300					Privacy Masking	Up to 24 areas
Tour	8 (up to 32 presets per tour)					Certification	
Pattern	5					Certifications	CE: EN55032/EN55024/EN50130-4 FCC: Part15 subpartB, ANSI C63.4-2014
Scan	5					Audio	
Speed Adjustment	Support					Compression	G.711A; G.711Mu; G.726; AAC; G.722.1; G.723; G.729; PCM; MPEG2-Layer2
Power-off Memory	Support					Port	
Idle Motion	Preset/Tour/Pattern/Scanning					Audio Input	1
Protocol	DH-SIP Pelco-P/D (auto recognition)					Audio Output	1
General Intelligence							
Event Trigger	Motion detection, video tampering, scene changing, network disconnection, IP address conflict, illegal access, and storage anomaly						

Alarm I/O	2/1
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
Interoperability	ONVIF Profile S&G&T; CGI
Streaming Method	Unicast/Multicast
User/Host	19 (Total bandwidth 48M)
Storage	FTP; Micro SD card (256G); P2P
Browser	IE7 and newer versions Chrome 42 and older versions Firefox 52 and older versions Safari
Management Software	Smart Player Smart PSS DSS Easy4ip
Mobile Phone	IOS/Android

Power	
Power Supply	AC24V/3A±25% PoE+ (802.3at)
Power Consumption	11W 24W (IR on)

Environment	
Operating Temperature	-40°C to +70°C (-40°F to +158°F)
Operating Humidity	≤95%RH
Protection	IP66; TVS 6000V lightning protection; surge protection

Structure	
Dimensions	Φ186 mm x 309 mm (7.32" × 12.17")
Net Weight	3.9 kg (8.60 lb)
Gross Weight	7.01 kg (15.45 lb)
Casing	Metal

Accessories	ACM204	Junction Box
	ACM203	Pole Mount Bracket
	ACM202	Corner Mount Bracket

Accessories

Included:



ACM204
Junction Box



ACM203
Pole Mount Bracket



ACM202
Corner Mount Bracket

Dimensions (mm[inch])

