

PIX-NBV805K

8MP IR Vari-focal Bullet WizSense Network Camera



Launched by Pixvideo Technology, this camera 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.

Series Overview

With advanced deep learning algorithm, Pixvideo Series network camera supports intelligent functions, such as perimeter protection and smart motion detection. With starlight technology, this series camera provides a better image effect in the condition of low illuminance.

Functions

SMD Plus

With intelligent algorithm, Pixvideo Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

Smart H.265+ & Smart H.264+

With advanced scene-adaptive rate control algorithm, Pixvideo smart encoding technology realizes the higher encoding efficiency than H.265 and H.264, provides high-quality video, and reduces the cost of storage and transmission.

Perimeter Protection

With deep learning algorithm, Pixvideo Perimeter Protection technology can recognize human and vehicle accurately. In restricted area (such as pedestrian area and vehicle area), the false alarms of intelligent detection based on target type (such as tripwire, intrusion, fast moving, parking detection, loitering detection and gathering detection) are largely reduced.

- 8MP, 1/2.8" CMOS image sensor, low illuminance, high image definition
- Outputs max. 8MP (3840 × 2160) @20 fps (AI function enabled by default) and supports 8MP (3840 × 2160) @25/30 fps (when AI function disabled)
- H.265 codec, high compression rate, low bit rate
- Built-in IR LED, max. IR distance: 60 m
- ROI, SMART H.264+/H.265+, flexible coding, applicable to various bandwidth and storage environments.
- Rotation mode, WDR, 3D DNR, HLC, BLC, digital watermarking, applicable to various monitoring scenes
- Intelligent detection: Intrusion, tripwire (support the classification and accurate detection of vehicle and human)
- Abnormality detection: Motion detection, video tampering, scene changing, audio detection (Only - ZAS support), no SD card, SD card full, SD card error, network disconnection, IP conflict, illegal access, and voltage detection
- Alarm: 1 in, 1 out (Only - ZAS supports); audio: 1 in, 1 out (Only - ZAS supports)
- Supports max. 256 G Micro SD card
- 12V DC/PoE power supply
- IP67 protection
- SMD Plus



Starlight

Pixvideo Starlight technology mainly applies to the environment of low illumination, and it can provide clear colorful video. Even in the environment of min. illumination, the technology can guarantee the good image effect.

WDR

With advanced Wide Dynamic Range (WDR) technology, Pixvideo network camera provides clear details in the environment of strong brightness contrast. The bright and dark area can get clear video even in high brightness environment or with backlight shadow.

Protection (IP67, wide voltage)

IP67: The camera passes a series of strict test on dust and soak. It has dust-proof function, and the enclosure can works normal after soaking in 1 m deep water for 30 minutes.

Wide voltage: The camera allows ±30% input voltage tolerance (wide voltage range), and it is widely applied to outdoor environment with instable voltage.

Technical Specification

Camera

Image Sensor	1/2.8"8Megapixel progressive CMOS
Max. Resolution	3840 (H) × 2160 (V)
ROM	128 MB
RAM	512 MB
Scanning System	Progressive
Electronic Shutter Speed	Auto/Manual 1/3 s–1/100,000 s
Min. Illumination	0.007 Lux @F1.5
S/N Ratio	>56 dB
Illumination Distance	60 m (197 ft)
Illuminator On/Off Control	Auto/Manual
Illuminator Number	4 (IR LED)
Pan/Tilt/Rotation Range	Pan: 0°–360° Tilt: 0°–90° Rotation: 0°–360°

Lens

Lens Type	Motorized vari-focal				
Mount Type	ϕ14				
Focal Length	2.7 mm–13.5 mm				
Max. Aperture	F1.5				
Field of View	Horizontal: 113°–31° Vertical: 58°–17° Diagonal:138°–36°				
Iris Type	Fixed				
Close Focus Distance	0.8 m (2.6 ft)				
DORI Distance	Lens	Detect	Observe	Recognize	Identify
	W	85.3 m (279.9 ft)	34.1 m (111.9 ft)	17.0 m (55.8 ft)	8.5 m (27.9 ft)
	T	280.0 m (918.6 ft)	112.0 m (367.5 ft)	56.0 m (183.7 ft)	28.0 m (91.9 ft)

Professional, intelligent

IVS (Perimeter Protection)	Tripwire; intrusion (support the classification and accurate detection of vehicle and human)
Intelligent Search	Work together with Smart NVR to perform refine intelligent search, event extraction and merging to event videos.

Video

Video Compression	H.265; H.264; H.264H; H.264B; MJPEG (only supported by the sub stream)
Smart Codec	Smart H.265+ / Smart H.264+

Video Frame Rate	Main stream: 3840 × 2160 @ (1–20 fps by default) 3840 × 2160 @ (1–25/30 fps when AI function disabled) sub stream: 704 × 576 @ (1–25 fps)/704 × 480 @ (1–30 fps) third stream: 1920 × 1080 @ (1–25/30 fps)
Stream Capability	3 streams
Resolution	8M (3840 × 2160); 6M (3072 × 2048); 5M (3072 × 1728/2592 × 1944); 4M (2688 × 1520); 3M (2048 × 1536/2304 × 1296); 1080p (1920 × 1080); 1.3M (1280 × 960); 720p (1280 × 720); D1(704 × 576/704 × 480); VGA (640 × 480); CIF (352 × 288/352 × 240)
Bit Rate Control	CBR/VBR
Video Bit Rate	H.264: 3 kbps–8192 kbps H.265: 3 kbps–8192 kbps
Day/Night	Auto (ICR)/Color/B/W
BLC	Yes
HLC	Yes
WDR	120 dB
Scene Self-adaptation	Yes
White Balance	Auto/natural/street lamp/outdoor/manual/regional custom
Gain Control	Auto/Manual
Noise Reduction	3D DNR
Motion Detection	OFF/ON (4 areas, rectangular)
Region of Interest (RoI)	Yes (4 areas)
Smart Illumination	Yes
Image Rotation	0°/90°/180°/270° (Support 90°/270° with 1080p resolution and lower.)
Mirror	Yes
Privacy Masking	4 areas

Audio

Audio Compression	G.711a; G.711Mu; G726; AAC (Only- ZAS supports)
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Alarm

Alarm Event	-ZAS : No SD card; SD card full; SD card error; service life warning network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; audio detection; voltage detection; defocus detection; external alarm;SMD; safety exception -ZS : No SD card; SD card full; SD card error; service life warning; network disconnection; IP conflict; illegal access; motion detection; video tampering; intrusion; tripwire; scene changing; voltage detection; defocus detection; SMD; safety exception
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Network

Ordering Information

Type	Model	Description
Network		RJ-45 (10/100 Base-T)
SDK and API		Yes
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; SAMBA; PPPoE; 802.1x; SNMP
Interoperability		ONVIF (Profile S/Profile G/Profile T); CGI; Milestone; Genetec
User/Host		20 (Total bandwidth: 72 M)
Storage		Cloud (only supported by Pixvideo version); FTP; SFTP; Micro SD card (support max. 256 G); NAS
Browser		IE: IE8; IE9; IE11 Chrome Firefox
Management Software		Smart PSS; DSS; DMSS
Mobile Phone		IOS; Android
Certifications		CE-LVD: EN62368-1 CE-EMC: Electromagnetic Compatibility Directive 2014/30/EU FCC: 47 CFR FCC Part 15, Subpart B UL/CUL: UL60950-1 CAN/CSA C22.2 No.60950-1-07
Audio Input		1 channel (RCA port) (Only- ZAS supports)
Audio Output		1 channel (RCA port) (Only- ZAS supports)
Alarm Input		1 channel in: 5mA 3V~5V DC (Only- ZAS supports)
Alarm Output		1 channel out: 300mA 12V DC (Only- ZAS supports)

Power

Power Supply	12V DC/PoE (802.3af)
Power Consumption	<10.3W

Environment

Operating Conditions	-30°C to +60°C (-22°F to +140°F)/Less than 95% RH
Storage Conditions	-40°C to +60°C (-40°F to +140°F)
Protection Grade	IP67

Structure

Casing	Metal
Dimensions	244.1 mm × 79.0 mm × 75.9 mm (9.6" × 3.1" × 3.0") (L × W × H)
Net Weight	820g (1.8 lb)
Gross Weight	1090g (2.4 lb)

Accessories

Optional:



ACM221
Junction Box



ACM262
Pole Mount

Dimensions (mm[inch])

