

PIX-NVX081K3

8 Channel Penta-brid 4K-N/5MP Mini 1U 1HDD WizSense Digital Video Recorder



Launched by Pixvideo Technology, WizSense 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

Pixvideo Technology, a world-leading video-centric smart IoT solution and service provider, debuted its new XVR series, featuring full-channel SMD Plus to benefit customers from AI upgrade. The series are designated to reduce false-alarm rates and human surveillance costs, thus bringing great value to customers in search of products with accurate human/vehicle alarm to raise the security level of various indoor and outdoor facilities.

Functions

Real Time Face Recognition

Video stream real time face recognition. Facial attributes analysis features including gender, age, expression, glasses, moustache, mouth mask. Identify people and also capture, record faces with metadata. Facial feature filtering while real time display, only show faces with target features.

*The Face Recognition is conflicted with SMD Plus and Perimeter Protection.

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.

SMD Plus

SMD Plus, referred to as Smart Motion Detection Plus, which is an upgrading version of SMD that greatly improves the alarm accuracy by loading deep-learning algorithm. It analyzes person and vehicle shapes based on motion detection and send alarms only when person and vehicle intrudes.

- H.265+/H.265 dual-stream video compression
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 16 channels IP camera inputs, each channel up to 8MP; Max 128 Mbps incoming bandwidth
- Up to 2 channels video stream (analog channel) Perimeter Protection
- Up to 8 channels video stream (analog channel) SMD Plus
- Up to 2 channels video stream (analog channel) human face recognition
- IoT & POS functionalities



AI Coding

Compared with H.265, AI codec can reduce up to 50% bit rate and storage requirements while have no loss of decoding compatibility, providing clear human and vehicle details.

Smart H.265+

Smart Codec, H.265+ can reduce up to 90% bit rate and storage requirements compared with H.264 without having to invest in new cameras.

HDCVI/AHD/TVI/CVBS Auto-detect

The XVR can auto recognize the signal of front-camera without any setting. It makes operation more friendly and convenient.

High Definition Camera Input

The XVR supports up to 4K HDCVI camera and 8MP IP camera input.

Coaxial Audio/Upgrade/Alarm

The integrated design can reduce wiring troubles which makes it much more cost-effective and convenient for installation.

Long Distance Transmission

The HDCVI system supports long distance transmission over coaxial cable and UTP, max. 700m for 4K/4MP, 800m for 1080P and 1200m for 720P.

AI Search

Extract and classify person and vehicles from massive video data, easy for end users to trace historical information and analyze. Person & Vehicle optional for playback to achieve quick target search, saving event retrieval time.

Technical Specification			
System			
Main Processor	Embedded Processor	Record Interval	1 – 60 min (default: 60 min), Pre-record: 1 s–30 s, Post-record: 10 s–300 s
Operating System	Embedded LINUX	Audio Compression	G.711A, G.711U, PCM
Perimeter Protection		Audio Sample Rate	8 KHz, 16 bit Per Channel
Performance	2 channels, 10 IVS for each channel	Audio Bit Rate	64 Kbps Per Channel
Object classification	Human/Vehicle secondary recognition for tripwire and intrusion	Display	
AI Search	Search by target classification (Human, Vehicle)	Interface	1 HDMI ,1 VGA
Face Recognition		Resolution	HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
Performance	Max 12 face pictures/sec processing 2 channels video stream face recognition, only support analog camera	Multi-screen Display	When IP extension mode not enabled: 1/4/8/9 When IP extension mode enabled: 1/4/8/9/16
Stranger Mode	Detect strangers' faces (not in device's face database). Similarity threshold can be set manually.	OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording
AI Search	Up to 8 target face images search at same time, similarity threshold can be set for each target face image.	Network	
Database Management	Up to 10 face databases with 20,000 face images in total. Name, gender, birthday, address, certificate type, cerificate No., countries®ions and state can be added to each face picture.	Interface	1 RJ-45 Port (1000 MB)
Database Application	Each database can be applied to video channels independently .	Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, Wi-Fi, 3G/4G, SNMP, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE,DDNS, FTP, Alarm Server, P2P,IP Search (Supports Dahua IP camera, DVR, NVS, etc.)
Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.	Max. User Access	128 users
SMD Plus		Smart Phone	iPhone, iPad, Android
Performance	8 channels	Interoperability	ONVIF 16.12, CGI Conformant
AI Search	Search by target classification (Human, Vehicle)	Video Detection and Alarm	
Video and Audio		Trigger Events	Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Analog Camera Input	8 channels, BNC	Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis
HDCVI Camera Input	4K, 6MP, 5MP, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps	Alarm input	8
AHD Camera Input	4K, 5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30fps	Relay Output	3
TVI Camera Input	4K, 5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30fps	Playback and Backup	
CVBS Camera Input	PAL/NTSC	Playback	1/4/9
IP Camera Input	8+8 channels, each channel up to 8MP	Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)
Audio In/Out	8/1, RCA	Playback Function	Play, Pause, Stop, Rewind, Fast play, Slow Play, Next File, Previous File, Next Camera, Previous Camera, Full Screen, Repeat, Shuffle, Backup Selection, Digital Zoom
Two-way Talk	Reuse audio in/out, RCA	Backup Mode	USB Device/Network
Recording		Storage	
Compression	AI Coding/H.265+/H.265/H.264+/H.264	Internal HDD	1 SATA Port, up to 10TB capacity
Resolution	4K, 6MP, 5MP, 4K-N, 4MP, 3MP, 4M-N, 1080P, 720P, 960H, D1, CIF	eSATA	N/A
Record Rate	Main stream: All channel 4K(1fps–7fps); 6MP(1fps–10fps); 5MP(1fps–12fps); 4K-N, 4MP/3MP(1fps–15fps); 4M-N/1080P/720P/960H/D1/CIF (1fps–25/30fps); Sub steram:960H(1fps–15fps); D1/CIF(1fps–25/30fps)	Auxiliary Interface	
Bit Rate	32 Kbps–6144 Kbps Per Channel	USB	2 USB Ports (1 USB 2.0 , 1 USB 3.0)
Record Mode	Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop	RS485	1 Port, for PTZ Control
		RS232	N/A
		Electrical	
		Power Supply	DC 12V/2A
		Power Consumption (Without HDD)	<10W

Construction

Dimensions	Mini 1U, 325 mm × 257 mm × 55 mm (12.80" × 10.11" × 2.17")
Net Weight (without HDD)	1.2 kg (2.6 lb)
Gross Weight	2.0 kg (4.4 lb)
Installation	Desktop installation

Environmental

Operating Conditions	-10°C to +55°C (+14°F to +131°F), 0–90% RH
Storage Conditions	-20°C to +70°C (-4°F to +158°F), 0–90% RH

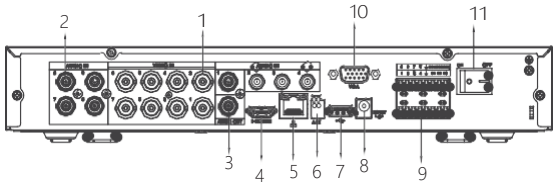
Third-party Support

Third-party Support	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more
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Certifications

Certifications	FCC: Part 15 Subpart B
	CE: CE-LVD: EN 60950-1/IEC 60950-1 CE-EMC: EN 61000-3-2, EN 61000-3-3, EN 55032, EN 50130, EN 55024

Panels



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|---|--------------------------|----|-------------------|
| 1 | VIDEO IN | 7 | USB port |
| 2 | AUDIO IN, RCA Connector | 8 | DC12V Power Input |
| 3 | AUDIO OUT, RCA Connector | 9 | ALARM IN / OUT |
| 4 | HDMI port | 10 | VGA port |
| 5 | Network port | 11 | Power Switch |
| 6 | RS485 port | | |

Dimensions (mm[inch])

