

PIX-NVX162S

16 Channel Penta-brid 4K 2U 8HDDs 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 32 channels IP camera inputs, each channel up to 12MP; Max 128 Mbps incoming bandwidth
- Up to 6 channels video stream (analog channel) perimeter protection
- Up to 16 channels video stream (analog channel) SMD plus
- Up to 6 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.

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		Record Interval	1 – 60 min (default: 60 min), Pre-record: 1 s–30 s, Post-record: 10 s–300 s
Main Processor	Embedded Processor	Audio Compression	G.711A, G.711U, PCM
Operating System	Embedded LINUX	Audio Sample Rate	8 KHz, 16 bit Per Channel
Perimeter Protection		Audio Bit Rate	64 Kbps Per Channel
Performance	6 channels, 10 IVS for each channel	Display	
Object classification	Human/Vehicle secondary recognition for tripwire and intrusion	Interface	2 HDMI, 1 VGA, 1 TV
AI Search	Search by target classification (Human, Vehicle)	Resolution	HDMI 1:3840×2160, 1920×1080, 1280×1024, 1280×720 HDMI2/VGA: 1920×1080, 1280×1024, 1280×720
Face Recognition		Multi-screen Display	When IP extension mode not enabled: 1/4/8/9/16 When IP extension mode enabled: 1/4/8/9/16/25/36
Performance	6 channels, max 12 face pictures/sec processing	OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording
Stranger Mode	Detect strangers' faces (not in device's face database). Similarity threshold can be set manually.	Network	
AI Search	Up to 8 target face images search at same time, similarity threshold can be set for each target face image.	Interface	2 RJ-45 Ports (1000 Mbps)
Database Management	Up to 10 face databases with 20,000 face images in total. Name, gender, birthday, address, certificate type, certificate No., countries®ions and state can be added to each face picture.	Network protocol	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.)
Database Application	Each database can be applied to video channels independently .	Max. User Access	128 users
Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.	Smart Phone	iPhone, iPad, Android
SMD Plus		Interoperability	ONVIF 16.12, CGI Conformant
Performance	16 channels	Video Detection and Alarm	
AI Search	Search by target classification (Human, Vehicle)	Trigger Events	Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Video and Audio		Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis
Analog Camera Input	16 channels, BNC	Alarm input	16
HDCVI Camera Input	4K, 6MP, 5MP, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps	Relay Output	6
AHD Camera Input	4K, 5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30fps	Playback and Backup	
TVI Camera Input	4K, 5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30fps	Playback	1/4/9/16
CVBS Camera Input	PAL/NTSC	Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)
IP Camera Input	16+16 channels, each channel up to 12MP	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
Audio In/Out	16/1, BNC	Backup Mode	USB Device/Network
Two-way Talk	1 Mic In, 1 Mic Out, BNC	Storage	
Recording		Internal HDD	8 SATA Ports, up to 10TB capacity for each disk
Compression	AI Coding/H.265+/H.265/H.264+/H.264	eSATA	1 Port
Resolution	4K, 6MP, 5MP, 4K-N, 4MP, 3MP, 1080P, 720P, 960H, D1, CIF	Auxiliary Interface	
Record Rate	Main stream: 4K (1fps–15fps); 6MP(1fps–20fps); 5MP(1fps–25fps); 4K-N/4MP/3MP/1080P/720P/960H/D1/CIF (1fps–25/30fps) Sub steram:960H(1fps–15fps); D1/CIF(1fps–25/30fps)	USB	4 USB Ports (2 USB 2.0 , 2 USB 3.0)
Bit Rate	32 Kbps–8192 Kbps Per Channel	RS485	1 Port, for PTZ Control
Record Mode	Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop	RS232	1 Port, For PC Communication & Keyboard
		Electrical	
		Power Supply	AC100V-240V, 50/60Hz
		Power Consumption (Without HDD)	<30W

Construction

Dimensions	2U, 440 mm × 456 mm × 95 mm (17.32" × 17.94" × 3.73")
Net Weight (without HDD)	6.9 kg (15.2 lb)
Gross Weight	9.5 kg (20.9 lb)
Installation	Desktop/racket mounted

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

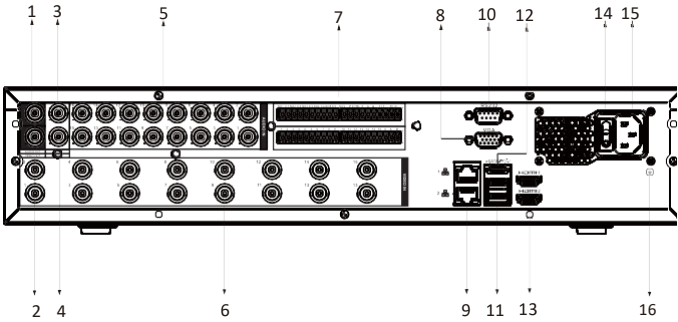
Third-party Support

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



- 1

Audio Out
- 3

Mic In
- 5

Audio In
- 7

Alarm Input/Output
- 9

Network Ports
- 11

USB Ports
- 13

HDMI Ports
- 15

Power Input

2

Video Out

4

Mic Out

6

Video In

8

VGA Port

10

RS-232 Port

12

eSATA Port

14

Power Switch

16

Ground

Dimensions (mm[inch])

