

NVR-EL32-4KAI

32Ch 2U 4K Elite AI H.265+ NVR



System Overview

This unit is an extremely advanced 32 channel Network Video Recorder (NVR) that supports up to 16Mp cameras. The Artificial Intelligence capabilities of this device allow for the implementation of technologies such as: Facial Detection, Perimeter Protection, and AI Searching. To help you search through footage, if you are looking for a specific person of interest, this unit has a database that can hold up to 100,000 faces and search up to 24 faces per second. It also has Automatic Number Plate Recognition, allowing you to keep track of vehicles entering or exiting your premise.

Features

AI Search

This unit can search by metadata of human and vehicles. It supports uploading pictures of faces to the NVR and compare them with recorded faces by similarity. You can quickly and easily search through multiple channels and long durations of time, efficiently finding out when and where a person of interest appeared.

Real Time Face Recognition

Video stream & picture stream real time face recognition. Facial attribute analysis features including gender, age, expression, glasses, facial hair and masks. Identify people and also capture/record faces with metadata. Can filter facial features while in real time display, only showing faces with target features.

Face Database Management

Configurable multiple face databases. Up to 20 facial databases with up to 100,000 facial images in total. Name, gender, birthday, nationality, address, ID information can be added to each face picture. Each facial database can be applied to video channels independently.

Common/Stranger Mode

In stranger mode, when the NVR detects a strange face (ie. a face not in the device's facial database), it can trigger an alarm, buzzer, snapshot, record, etc. The similarity threshold can be set manually. This function is developed for important infrastructure sites for which access control is critical.

- 32 Channel IP video access
- Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
- Up to 16 Channel perimeter protection
- Up to 4 Channel video stream face recognition
- Up to 24 face pictures /sec processing
- Up to 20 face databases with 100,000 face images in total



ANPR

Automatic Number Plate Recognition is available for convenient entrance and exit management. This feature allows for license plate recognition, black/white list import/export, add/delete B/W list number and search results from recorded video.

Perimeter Protection

Improves alarm accuracy by automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Alarm is set off once an access point has been breached rather than when movement is detected.

Point of Sale (POS)

Ideal for grocery and retail stores, the optional POS solution allows the NVR to receive a POS transaction via corresponding video. This feature allows merchants to analyze specific transactions via the Fuzzy search algorithm.

Technical Specification

System

Main Processor	Multi-core embedded processor
Operating System	Embedded LINUX

Perimeter Protection

Performance	16 channel, 10 IVS rules for each channel
Object classification	Human/Vehicle secondary recognition for tripwire and intrusion
AI Search	Search by target classification (Human, Vehicle)

Face Recognition

Performance	Max 24 face pictures /sec processing (modeling and comparing) 4 channel video stream face recognition / 16 channel picture stream face recognition (with FD camera)
Stranger Mode	Detect strangers' faces(not in device's face database). Similarity threshold can be set manually.
AI Search	Up to 8 target face images search at same time, similarity threshold can be set for each target face image.
Database Management	Up to 20 face databases with 100,000 face images in total. Name, gender, birthday, nationality, address, ID information can be added to each face picture.
Database Application	Each database can be applied to video channels independently.
Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.

Metadata

Face	Gender, age, glasses, beard, mask.
Vehicle	Vehicle color, vehicle model, vehicle logo, plate color, vehicle decorations, call, seatbelt.
Human Body	Tops style, tops color, bottom style, bottom color, hat, bag.
Non-motor Vehicle	Type, color, people number.
AI Search	Support search target video by metadata.

Audio and Video

IP Camera Input	32 Channel
Two-way Talk	1 Channel Input, 1 Channel Output, RCA

Display

Interface	2 HDMI, 1 VGA
Resolution	HDMI1/VGA: 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768 HDMI2: 3840 × 2160 , 1920 × 1080 , 1280 × 1024, 1280 × 720 , 1024 × 768
Decoding Capability	4-ch@8MP(30fps), 16-ch@1080P(30fps)
Multi-screen Display	1st Screen: 1/4/8/9/16/25/36 2nd Screen: 1/4/8/9/16

Recording

Bandwidth	320Mbps (160Mbps when AI function enabled)
Compression	Smart H.265+/H.265/Smart H.264+/H.264/MJPEG
Resolution	16MP, 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, 1.3MP, 720P, D1 etc.
Record Mode	Manual, Schedule (Continuous, MD(Motion Detection) , Alarm, IVS)
Record Interval	1 ~ 120 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec

Video Detection and Alarm

Trigger Events	Alarm Out, Video Push, Email, Recording, PTZ, Tour, Snapshot, Voice Prompt, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Scene Change
Alarm input	16 Channel
Relay Output	6 Channel

Playback and Backup

Sync Playback	1/4/9/16
Search Mode	Time /Date, Alarm, MD and Exact Search (accurate to second)
Backup Mode	USB Device/Network/eSATA Device

Third-party Support

Third-party Support	Arecont Vision, Airlive, AXIS, Canon, Dynacolor, JVC, LG, Panasonic, Pelco, PSIA, Samsung, Sanyo, Sony, Watchnet and more
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Network

Interface	2 RJ-45 Ports (10/100/1000Mbps)
PoE	N/A
Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, SNMP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, IP Search (Support Dahua IP camera, DVR, NVS, etc.), P2P
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 2.4, SDK, CGI

Storage

Internal HDD	8 SATA III Ports, Up to 8 TB capacity for each HDD
eSATA	1 eSATA

Auxiliary Interface

USB	4 USB Ports (2 Rear USB 3.0 , 2 Front USB 2.0)
RS232	1 Port, for PC Communication and Keyboard
RS485	1 Port, for PTZ Control

Electrical

Power Supply	Single, AC100V ~ 240V, 50 ~ 60 Hz
Power Consumption	NVR: <16.1W (Without HDD)
Fan	Smart fan, automatically adjust running speed

Environmental

Operating Conditions	-10°C ~ +55°C (+14°F ~ +131°F), 86 ~ 106kpa
Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F), 0 ~ 90% RH

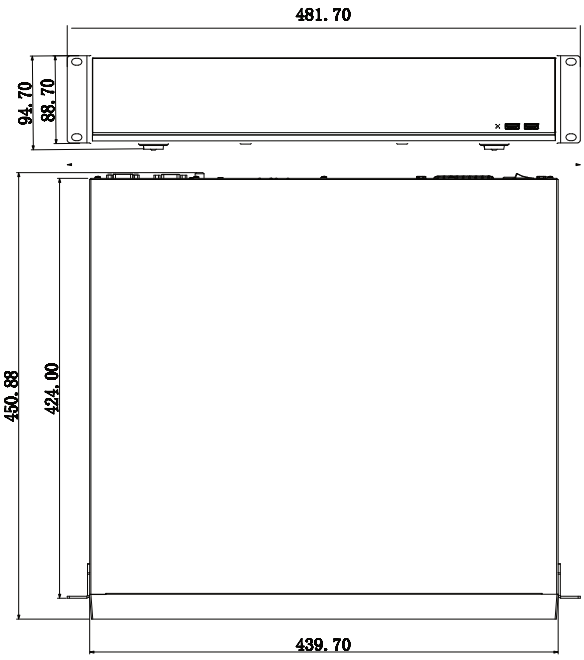
Construction

Dimensions	2U, 440mm x 450.13mm x 95mm ; (17.3" x 17.7" x 3.7")
Net Weight	6.70kg (14.8 lb) (without HDD)
Gross Weight	9.30kg (20.5 lb) (without HDD)

Certifications

CE	EN55032, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2014
UL	UL 60950-1

Rear Panel



Dimensions (mm)

