

PENDVR-ELE4ME4K-AI

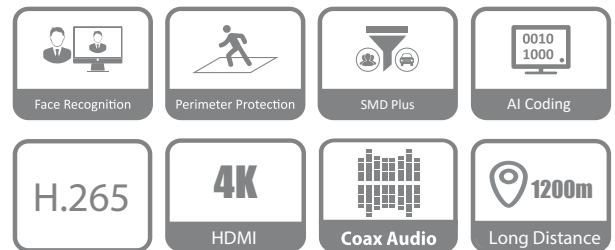
4 Channel AI DVR



- H.265+/H.265 dual-stream video compression
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 8 channels IP camera inputs, each channel up to 8MP
Max 64 Mbps incoming bandwidth
- Perimeter Protection and SMD Plus
- IoT & POS functionalities

System Overview

Do you have the need for 4K resolution, want the latest and greatest in analytics but don't really need many cameras? The PENDVR-ELE4ME4K-AI is here to the rescue. Supporting up to 4K resolutions on HD-over-coax, it's the perfect opportunity to upgrade without having to change existing wiring for users with analog systems. With 64 Mbps of incoming bandwidth, the PENDVR-ELE4ME4K-AI supports up to 8 channels of IP cameras at a maximum resolution of 8MP. Our new AI Coding reduces the needed bandwidth on cameras to up to 50% of the bandwidth used by H.265. Get twice as much storage for your money, free up network bandwidth and experience improved performance of high resolution IP cameras on the PENDVR-ELE4ME4K-AI.



Features

Perimeter Protection

Perimeter Protection functions significantly improve accuracy. Perimeter Protection reduces false alarms and decreases pixel count requirements for object detection. Perimeter Protection features custom tripwires based on object type for automation in limited access areas such as pedestrian or vehicle-only zones. This combination of advanced AI analytics and real-time alerts to a desktop or a mobile client reduces system requirements as well as resources, resulting in greater surveillance system efficiency.

Real Time Face Recognition

Real Time Face Recognition allows you to search for people in real time with your security system. You can use features such as gender, age, expression, glasses, moustache, mouth mask. This allows you to identify people and also capture and record faces with metadata. You can use facial feature filtering in real time to identify specific facial features.

SMD Plus

Smart Motion Detection Plus is an upgraded 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.

AI Coding

Compared to 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.

AI Search

Using stored information you can quickly identify people and vehicles from massive video data. This makes it easier to trace back to a certain person, vehicle, or point in time. Now you can search for targets with ease.

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

This unit can auto recognize the signal of the camera without having to change settings.

Coaxial Audio/Upgrade/Alarm

This integrated design can reduce wiring troubles and makes it easier to run audio, upgrade your camera, or trigger alarms all via the coax cable.

Long Distance Transmission

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

Technical Specification

System	
Main Processor	Embedded Processor
Operating System	Embedded LINUX

Perimeter Protection	
Performance	2 channels, 10 IVS 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 8 face pictures/sec processing 2 channels video stream face recognition, only support analog 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 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.
Database Application	Each database can be applied to video channels independently .
Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.

SMD Plus	
Performance	4 channels
AI Search	Search by target classification (Human, Vehicle)

Video and Audio	
Analog Camera Input	4 channels, BNC
HDCVI Camera Input	4K, 6MP, 5MP, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps
AHD Camera Input	4K, 5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30fps
TVI Camera Input	4K, 5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30fps
CVBS Camera Input	PAL/NTSC
IP Camera Input	4+4 channels, each channel up to 8MP
Audio In/Out	1/1, RCA
Two-way Talk	Reuse audio in/out, RCA

Recording	
Compression	AI Coding/H.265+/H.265/H.264+/H.264
Resolution	4K, 6MP, 5MP, 4K-N, 4MP, 3MP, 4M-N, 1080P, 720P, 960H, D1, CIF
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)
Bit Rate	32 Kbps~6144 Kbps Per Channel
Record Mode	Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop

Record Interval	1 – 60 min (default: 60 min), Pre-record: 1 s~30 s, Post-record: 10 s~300 s
Audio Compression	AAC (only for the 1st channel), G.711A, G.711U, PCM
Audio Sample Rate	8 KHz, 16 bit Per Channel
Audio Bit Rate	64 Kbps Per Channel

Display	
Interface	1 HDMI ,1 VGA
Resolution	HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720
Multi-screen Display	When IP extension mode not enabled: 1/4 When IP extension mode enabled: 1/4/8/9
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Network	
Interface	1 RJ-45 Port (100 MB)
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.)
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 16.12, CGI Conformant

Video Detection and Alarm	
Trigger Events	Recording, PTZ, Tour, Video Push, Email, FTP, Snapshot, Buzzer and Screen Tips
Video Detection	Motion Detection, MD Zones: 396 (22 × 18), Video Loss, Tampering and Diagnosis
Alarm input	N/A
Relay Output	N/A

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

Storage	
Internal HDD	1 SATA Port, up to 10TB capacity
eSATA	N/A

Auxiliary Interface	
USB	2 USB Ports (USB 2.0)
RS485	1 Port, for PTZ Control
RS232	N/A

Electrical	
Power Supply	DC 12V/2A
Power Consumption (Without HDD)	<7W

Technical Specifications

Construction

Dimensions	Mini 1U, 325 mm × 257 mm × 55 mm (12.80" × 10.11" × 2.17")
Net Weight (without HDD)	1.2 kg (2.7 lb)
Gross Weight	1.9 kg (4.2 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

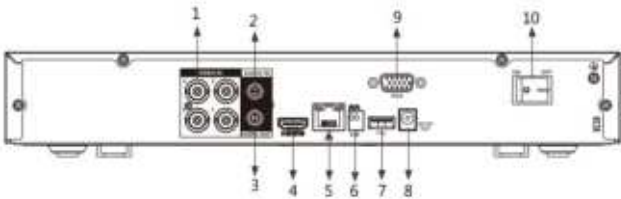
Third-party Support

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

	FCC: Part 15 Subpart B
Certifications	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

Rear Panel



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|---|--------------------------|----|--------------------|
| 1 | VIDEO IN | 6 | RS485 Interface |
| 2 | AUDIO IN, RCA Connector | 7 | USB Interface |
| 3 | AUDIO OUT, RCA Connector | 8 | DC 12V Power Input |
| 4 | HDMI Interface | 9 | VGA Interface |
| 5 | Network Interface | 10 | Power Switch |

Dimensions

