

PENDVR-EL16M4K

16 Channel Pentabrid 4K 1U DVR



- Embedded processor
- H.264+/H.264 dual-stream video compression
- Support HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 24 channels IP camera inputs, each channel up to 8MP
- Max 96Mbps Incoming Bandwidth
- Smart Search and Intelligent Video System



System Overview

This is the perfect solution to upgrade existing video surveillance systems, this DVR supports penta-brid access technology such as HDCVI, AHD, TVI, CVBS and IP to effortlessly integrate with popular industry formats, offering an affordable solution loaded with flexible options.

Functions

Smart H.264+

Smart H.264+ technology is a collection of intelligent encoding algorithms based on H.264. To meet the characteristics of video surveillance, Smart H.264+ adopts some key video encoding techniques and can be flexibly added/deleted or combined according to different applications and products. Smart H.264+ codec can effectively enhance video encoding efficiency according to the characteristics of different surveillance environments; furthermore, it can greatly reduce bit rate transmission and storage capacity to improve the overall system.

Intelligent Fan Design

The intelligent fan can automatically turn on or turn off according to the CPU temperature. This function can effectively reduce the fan noise to provide a better user experience while extending the life of the fan at the same time.

Spot Output

The spot monitor outputs are separate and in addition to the VGA and HDMI video outputs that these DVRs support. The VGA and HDMI monitor outputs display the menu system and controls of the DVR. Spot outputs always display the live security camera views that you configure.

Intelligent Video System (IVS)

IVS system provides advanced, accurate video analytics for both IP and analog cameras. The IVS engine can track, classify and analyze the behavior of individuals or a group of objects over a long distance to greatly improve parameter security and monitoring efficiency.

Face Detection

Whether you wish to recognize, identify or verify a person, a camera with facial recognition software is an efficient solution. It can help you improve customer service and protect your assets by identifying important customers or potential perpetrators. Facial recognition is a perfect complement to your existing surveillance system, enhancing security and/or customer experience in real time.

Smart Search

The smart search feature on a security recorder will allow you to skip over video that has motionless areas to get to the footage that you want to review. This is a great feature especially if you record in real time and have multiple cameras.

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Technical Specification

System

Main Processor	Embedded Processor
Operating System	Embedded LINUX

Video and Audio

Analog Camera Input	16 Channel, BNC
HDCVI Camera	4K, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps
AHD Camera	5MP, 4MP, 3MP, 1080P@25/30, 720P@25/30fps
TVI Camera	5MP, 3MP, 1080P@25/30, 720P@25/30fps
CVBS Camera	PAL/NTSC
IP Camera Input	16+8 Channel, each channel up to 8MP
Audio In/Out	1/1, RCA
Two-way Talk	Reuse audio in/out, RCA

Recording

Compression	H.264+/H.264
Resolution	4K, 5MP, 4MP, 3MP, 1080P, 720P, 960H, D1, CIF, QCIF
Record Rate	Main stream: 4K(1~7fps); 5MP(1~12fps); 4MP/3MP(1~15fps); 1080P/720P/960H/D1/CIF/QCIF (1~25/30fps) Sub stream: 960H(1~15fps); D1/CIF/QCIF(1~25/30fps)
Bit Rate	1Kbps ~ 6144Kbps Per Channel
Record Mode	Manual, Schedule (Regular, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop
Record Interval	1 ~ 60 min (default: 60 min), Pre-record: 1 ~ 30 sec, Post-record: 10 ~ 300 sec

Display

Interface	1 HDMI, 1 VGA
Resolution	HDMI: 3840×2160, 2560×1440, 1920×1080, 1280×1024, 1280×720, 1024×768 VGA: 1920×1080, 1280×1024, 1280×720, 1024×768
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
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Network

Interface	1 RJ-45 Port (1000M)
Network Function	HTTP, TCP/IP, IPv4/IPv6, UPnP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, FTP, Alarm Server, P2P, IP Search (Support Dahua IP camera, DVR, NVS, etc.)
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 2.42, 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	1/4/9/16
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	2 SATA Ports, up to 8TB capacity for each disk
eSATA	N/A

Auxiliary Interface

USB	2USB Ports (1 USB 2.0 , 1 USB 3.0)
RS232	N/A
RS485	1 Port, for PTZ Control

Electrical

Power Supply	DC12V/5A
Power Consumption	<15W (Without HDD)

Construction

Dimensions	1U, 375mm×287mm×53mm (14.8" x 11.3" x 2.1")
Net Weight	2.35kg (5.2 lb) (without HDD)
Gross Weight	3.2kg (7.05lb)
Installation	Desktop installation

Environmental

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

Third-party Support

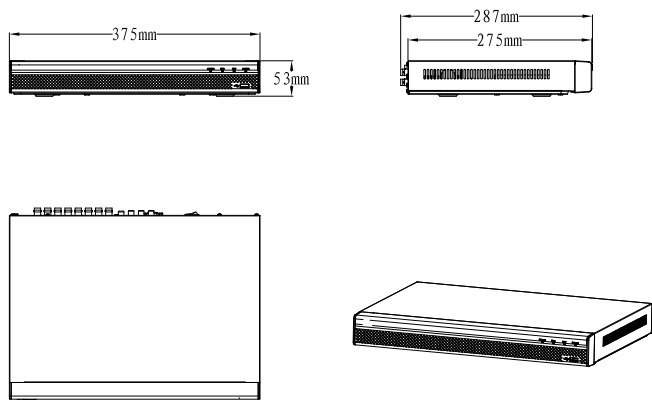
Third-party Support	Dahua, Arecont Vision, AXIS, Bosch, Brickcom, Canon, CP Plus, Dynacolor, Honeywell, Panasonic, Pelco, Samsung, Sanyo, Sony, Videotec, Vivotek, and more
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Certifications

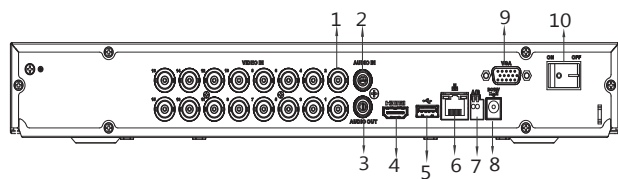
Certifications	FCC: Part 15 Subpart B
	CE: CE-LVD: EN 60950-1/IEC 60950-1 CE-EMC: EN 61000-3-2, EN 61000-3-3, EN 55032, EN 50130, EN 55024
	UL: UL 60950-1

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Dimensions (mm)



Rear Panel



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