

# PENDVR-ELE4ME-X

## 4CH 1080P H.265+ DVR



### System Overview

With the PENDVR-ELE4ME-X, you can connect four HD (CVI, TVI, AHD, Analog) and two IP cameras up to 6MP or you can use all six channels for just IP cameras. It can record 5M-N at 10fps, 4M-N/1080P at 15fps, and 1080N, 1MP, 960H at 30fps. Plus, it has Smart H.265+ video compression which works to reduce transmission bit rate while reducing storage space. This allows your recorder to work more efficiently and saves you hard drive space. IVS (Intelligent Video System) is a set of analytics that allow the recorder to work in conjunction with your IVS capable cameras to recognize certain behaviors and occurrences.

### Features

#### Smart H.265+

Smart H.265+ technology is a collection of intelligent encoding algorithms based on H.265. To meet the characteristics of video surveillance, Smart H.265+ adopts some key video encoding techniques can be flexibly added/deleted or combined according to different applications and products. Smart H.265+ codec can effectively enhance video encoding efficiency according to the characteristics of different surveillance environments; furthermore, it can greatly reduce transmission bit rate, storage capacity to improve the overall system.

#### HDCVI/AHD/TVI/CVBS Auto-detect

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

#### High Definition Camera Input

This unit supports up to 4MP HDCVI camera and 6MP IP camera input.

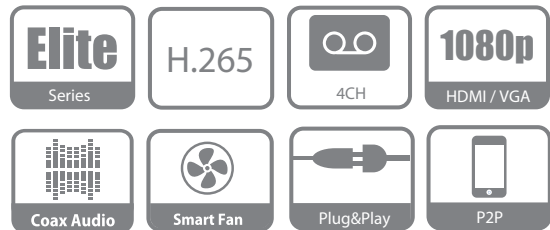
#### Coaxial Audio/Upgrade/Alarm

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.

#### 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.

- H.265+/H.265 dual-stream video compression
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 6 channels IP camera inputs, each channel up to 6MP; Max 24Mbps Incoming Bandwidth
- Smart Search and Intelligent Video System



#### POS Functionality

This function includes POS ticket information overlay and search which can be widely used in retail programs.

#### 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.

#### Smart Fan Design

The smart 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.

#### Intelligent Video System (IVS)

IVS system provides advanced, accurate video analytic for both IP and analog cameras. The IVS engine can track, classify and analyze the behavior of individual or group of objects over 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.

## Technical Specification

### System

|                  |                    |
|------------------|--------------------|
| Main Processor   | Embedded Processor |
| Operating System | Embedded LINUX     |

### Video and Audio

|                     |                                                        |
|---------------------|--------------------------------------------------------|
| Analog Camera Input | 4 Channel, BNC                                         |
| HDCVI Camera        | 5MP, 4MP, 1080P@25/30fps, 720P@50/60fps, 720P@25/30fps |
| AHD Camera          | 5MP, 4MP, 1080P@25/30, 720P@25/30fps                   |
| TVI Camera          | 5MP, 4MP, 1080P@25/30, 720P@25/30fps                   |
| CVBS Camera         | PAL/NTSC                                               |
| IP Camera Input     | 4+2 Channel, each channel up to 6MP                    |
| Audio In/Out        | 1/1, RCA                                               |
| Two-way Talk        | Reuse audio in/out, RCA                                |

### Recording

|                   |                                                                                                                                                    |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| Compression       | H.265+/H.265/H.264+/H.264                                                                                                                          |
| Resolution        | 5M-N, 4M-N, 1080P, 1080N, 720P, 960H, D1, CIF                                                                                                      |
| Record Rate       | Main stream:the 1st channel 5M-N(1~10fps), other channels 4M-N/1080P(1~15fps); 1080N/720P/960H/ D1/CIF (1~25/30fps)<br>Sub stream: D1/CIF(1~15fps) |
| Bit Rate          | 32Kbps ~ 6144Kbps 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 ~ 30 sec, Post-record: 10 ~ 300 sec                                                                    |
| Audio Compression | AAC(only for the 1st channel), G.711A, G.711U, PCM                                                                                                 |
| Audio Sample Rate | 8KHz, 16 bit Per Channel                                                                                                                           |
| Audio Bit Rate    | 64Kbps Per Channel                                                                                                                                 |

### Display

|                      |                                                                                  |
|----------------------|----------------------------------------------------------------------------------|
| Interface            | 1 HDMI ,1 VGA                                                                    |
| Resolution           | 1920×1080, 1280×1024, 1280×720                                                   |
| Multi-screen Display | When IP extension mode not enabled: 1/4<br>When IP extension mode enabled: 1/4/6 |
| OSD                  | Camera title, Time, Video loss, Camera lock, Motion detection, Recording         |

### Network

|                  |                                                                                                                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interface        | 1 RJ-45 Port (100M)                                                                                                                                                                             |
| 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 8TB capacity |
| eSATA        | N/A                             |

### Auxiliary Interface

|       |                         |
|-------|-------------------------|
| USB   | 2 USB 2.0               |
| RS232 | N/A                     |
| RS485 | 1 Port, for PTZ Control |

### Electrical

|                                 |          |
|---------------------------------|----------|
| Power Supply                    | DC12V/2A |
| Power Consumption (Without HDD) | <10W     |

### Construction

|                                    |                                                |
|------------------------------------|------------------------------------------------|
| Dimensions                         | Mini 1U, 325mm×255mm×55mm (12.8" x 10" x 2.2") |
| Device with PFH101 Rack Mount Tray | 483mmx281mmx56mm (19.0"x11.1"x2.2")            |
| Net Weight (without HDD)           | 1.0kg (2.2lb)                                  |
| Gross Weight                       | 1.9kg (4.2lb)                                  |
| Installation                       | Desktop installation                           |

### Environmental

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

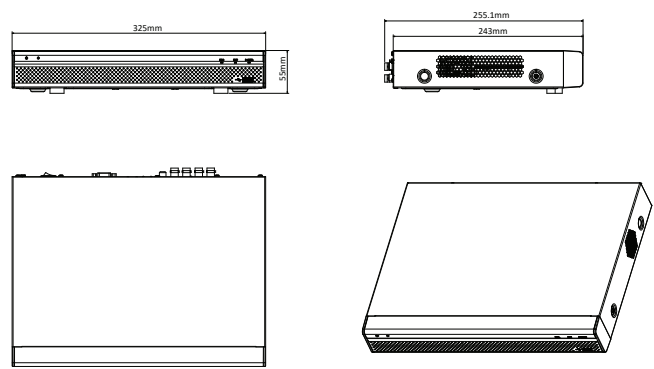
### Third-party Support

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

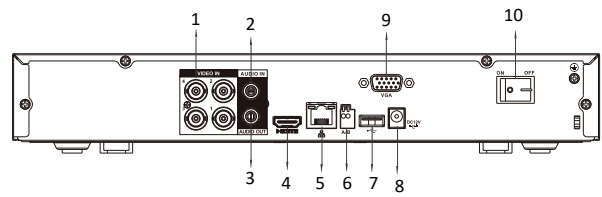
### Certifications

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

Dimensions (mm)



Rear Panel



- |   |                          |    |                    |
|---|--------------------------|----|--------------------|
| 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       |