

# PENDVR-ELE32-X

## 32 Channel 2U DVR



### System Overview

This 32 channel DVR is capable of recording HD-TVI, HD-CVI, AHD and up to 8MP IP cameras. Although this recorder is capable of working with higher resolution cams, they will only record in 5M-N at 10fps, 4M-N/1080P at 15fps, and 1080N, 1MP, 960H at 30fps. You can have a total of 32 cameras using a mix of coax technology cameras and IP cameras or you can use it for a total of 32 channels of IP. Thanks to the H.265+ video compression codec, bit rate and storage requirements will be reduced by 90%. Even so, depending on your camera's settings, you'll still need to have plenty of storage space and that's no problem with room for up to 8 SATA drives up to 8TB each.

### 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.

#### 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.  
\*CVI ONLY

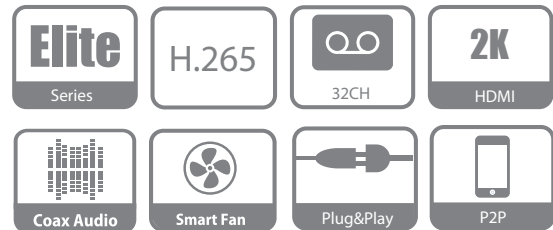
#### POS Functionality

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.

- 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 8MP; Max 128Mbps incoming bandwidth
- First 16 channels support Tripwire & Intrusion; First 2 channels support Object Abandoned & Missing



#### 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.

#### 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 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.

#### 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.

## Technical Specification

### System

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

### Video and Audio

|                     |                                                        |
|---------------------|--------------------------------------------------------|
| Analog Camera Input | 32 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     | 32 Channel, each channel up to 8MP                     |
| Audio In/Out        | 16/1, BNC                                              |
| Two-way Talk        | 1 Mic In, 1 Mic Out, BNC                               |

### 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 & 2nd channel 5M-N (1~10fps), others 4M-N/1080P(1~15fps); 1080N/720P/960H/ D1/CIF (1~25/30fps)<br>Sub steram: 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            | 2 HDMI ,1 VGA, 1 TV                                                                                                                       |
| Resolution           | 1920×1080, 1280×1024, 1280×720                                                                                                            |
| Multi-screen Display | HDMI 1:3840×2160, 2560×1440, 1920×1080, 1280×1024, 1280×720<br>HDMI 2 / VGA: 1920×1080, 1280×1024, 1280×7201920×1080, 1280×1024, 1280×720 |
| OSD                  | Camera title, Time, Video loss, Camera lock, Motion detection, Recording                                                                  |

### Network

|                  |                                                                                                                                                                                                 |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Interface        | 2 RJ-45 Ports (1000M)                                                                                                                                                                           |
| 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     | 16                                                                             |
| Relay Output    | 6                                                                              |

### 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 | 8 SATA Ports, up to 10TB capacity |
| eSATA        | N/A                               |

### Auxiliary Interface

|       |                                         |
|-------|-----------------------------------------|
| USB   | 2 USB 2.0, 2 USB 3.0                    |
| RS232 | 1 port, for PC communication & Keyboard |
| RS485 | 1 Port, for PTZ Control                 |
| RS422 | 1 Port, for PTZ Control                 |

### Electrical

|                                 |                      |
|---------------------------------|----------------------|
| Power Supply                    | AC100V-240V, 50/60Hz |
| Power Consumption (Without HDD) | <35W                 |

### Construction

|              |                                             |
|--------------|---------------------------------------------|
| Dimensions   | 2U, 440mm×455mm×95mm (17.3" x 17.9" x 3.7") |
| Net Weight   | 7kg (15.4 lb) (without HDD)                 |
| Gross Weight | 9.8kg (21.6lb)                              |
| Installation | Desktop installation/Rack-mounted           |

### 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  |

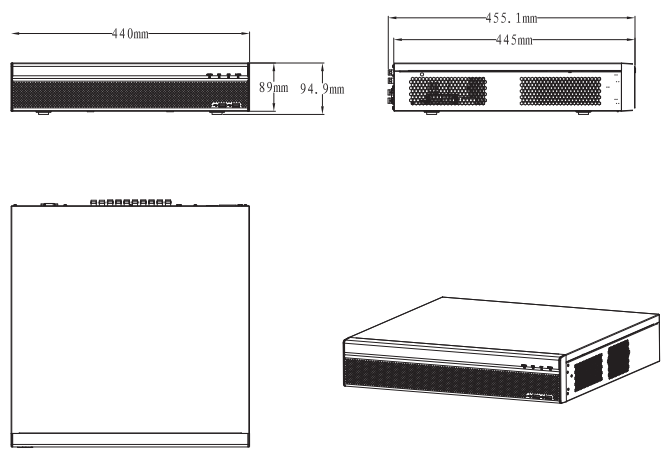
### Third-party Support

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

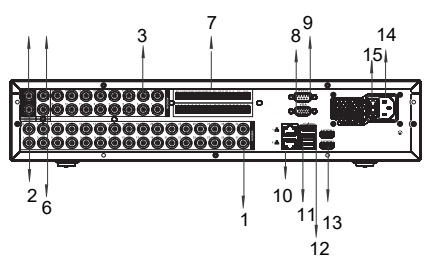
### Certifications

|                |                                                                                                        |
|----------------|--------------------------------------------------------------------------------------------------------|
| 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                       | 9  | RS232        |
| 2 | VIDEO OUT                      | 10 | VGA port     |
| 3 | AUDIO IN, BNC Connector        | 11 | 2*USB port   |
| 4 | AUDIO OUT, BNC Connector       | 12 | eSATA port   |
| 5 | MIC IN, BNC Connector          | 13 | 2*HDMI port  |
| 6 | MIC OUT, BNC Connector         | 14 | Power Input  |
| 7 | ALARM IN/OUT; RS485;<br>RS422; | 15 | Power Switch |
| 8 | VGA port                       |    |              |