# DH-XVR4104HS-I

## 4CH Penta-brid 1080N/720P Compact 1U 1HDD WizSense Digital Video Recorder

WizSense

Launched by Dahua Technology, WizSense is a series of AI products and solutions that adopt independent AI chip and deep learning algorithm. It focuses on human and vehicle with high accuracy, enabling users to fast act on defined targets. Based on Dahua's advanced technologies, WizSense provides intelligent, simple and inclusive products and solutions.

## Series Overview

Dahua Technology, a world-leading video-centric smart IoT solution and service provider, debuted its new XVR series, XVR4000-I Series featuring max.full-channel SMD Plus to benefit customers from AI upgrade (The number of channels differs depending on the model. Please refer to the specifications below for information on the number of channels.). This series has been developed to reduce false-alarm rates and the cost of human surveillance, thus bringing great value to customers in search of products with accurate human/vehicle alarm to raise the security level of various indoor and outdoor facilities.

## Functions

### SMD Plus
With intelligent algorithm, Dahua Smart Motion Detection technology can categorize the targets that trigger motion detection and filter the motion detection alarm triggered by non-concerned targets to realize effective and accurate alarm.

\* *The information below only applies to hardware version 2.0 of the product.*

- · 4-channel SMD Plus for analog channels which allows the device to trigger accurate alarms for humans and vehicles.
- · 4-channel AI Coding saves on storage and bandwidth while maintaining the details of targets in videos.
- · Supports HDCVI, AHD, TVI, CVBS and IP video input.
- · Supports up to 5-channel IP camera input and each channel can be up to 2 MP. The incoming bandwidth reaches 32 Mbps.
- · Smart H.265+ and H.265 dual-stream video compression.

| SMD Plus | Smart Dual Light | One-click Arming/Disarming | Customizable Alarm Audio | AI Coding | Audio over Coax |

1080p
HDMI/VGA

### Smart Dual Light
With Smart Dual Light technology, you can select Smart Illumination Mode for the system to automatically switch between IR mode and white light mode. It allows white light to be turned on when a target is detected by the SMD Plus/Perimeter Protection function of AI-enabled XVR. This significantly reduces light pollution at night. Together with other modes, including IR Mode and White Light Mode, the smart dual light technology can meet the requirements of a wide variety of scenes.

### One-click Arming/Disarming
With just one click, you can enable or disable alarm linkages to show messages, send emails, output audio alarms and more, through the mobile app and platform.

### Customizable Alarm Audio
Designed for your convenience, the TiOC alarm can be customized to meet your needs. It is flexible, allowing you to directly upload your customized audio through the mobile app and XVR.

### AI Coding
Compared with H.265/H.264, AI coding can reduce more than 50% bit rate and storage requirements without loss of decoding compatibility, providing clear human and vehicle details.

### Audio over Coax
The integrated design can reduce wiring troubles which makes it much more cost-effective and convenient for installation.

## Technical Specification

### System

| | |
|---|---|
| Main Processor | Industrial-grade processor |
| Operating System | Embedded Linux |
| Operating Interface | Web; Local GUI |

### SMD Plus

| | |
|---|---|
| SMD Plus by Recorder | 4 channels: Secondary filtering for human and vehicle, reducing false alarms caused by leaves, rain and lighting condition change |

### Audio and Video

| | |
|---|---|
| Analog Camera Input | 4 BNC ports, supports HDCVI/AHD/TVI/CVBS auto-detect |
| Camera Input | 1. CVI: 1080p@25/30 fps; 720p@50/60 fps; 720p@25/30 fps.<br>2. TVI: 1080p@25/30 fps; 720p@25/30 fps.<br>3. AHD: 1080p@25/30 fps; 720p@25/30 fps. |
| IP Camera Input | Up to 5 channels of IPC access<br>1 IP channel by default + 4 channels (analog channels are converted to IP channels)<br>Incoming bandwidth: 32 Mbps, recording bandwidth: 32 Mbps and outgoing bandwidth: 32 Mbps<br>*After IP extension is enabled, the AI Function (SMD) will be disabled. |
| Encoding Capacity | Main stream: 1080N/720p/960H/D1/CIF@(1 fps–25/30 fps)<br>Sub stream: CIF@(1 fps–15 fps) |
| Dual-stream | Yes |
| Video Bit Rate | 32 kbps–4096 kbps |
| Audio Sampling | 8 kHz, 16 bit |
| Audio Bit Rate | 64 kbps |
| Video Output | 1 HDMI, 1 VGA<br>HDMI: 1920 × 1080, 1280 × 1024, 1280 × 720<br>VGA: 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 |
| Third-party Camera Access | Panasonic; Sony; Hanwha; Axis; Arecont; ONVIF |

### Compression Standard

| | |
|---|---|
| Video Compression | AI Coding; Smart H.265+; H.265; Smart H.264+; H.264 |
| Audio Compression | G.711a; G.711u; PCM |

### Network

| | |
|---|---|
| Network Protocol | HTTP; HTTPS; TCP/IP; IPv4; IPv6; RTSP; UDP; NTP; DHCP; DNS; SMTP; UPnP; IP Filter; FTP; DDNS; SNMP; Alarm Server; P2P; Auto Registration; IP Search (Supports IP camera, DVR, NVS, etc.) |
| Mobile Phone Access | iOS; Android |
| Interoperability | ONVIF 22.12 (Profile T; Profile S; Profile G); CGI; SDK |
| Browser | Chrome; IE; Safari; Edge; Firefox |

### Recording Playback

| | |
|---|---|
| Record Mode | General; alarm; motion detection |
| Recording Playback | 1/4 |
| Backup Method | USB device and network |
| Playback Mode | Instant playback; general playback; event playback; tag playback; smart playback |

### Alarm

| | |
|---|---|
| General Alarm | Motion detection; alarm box; HDCVI alarm; camera external alarm; network alarm; PIR alarm |
| Anomaly Alarm | Error (no disk, disk error, low space, low quota space; network disconnection; IP conflict; MAC conflict); video loss; video tampering; camera offline |
| Intelligent Alarm | SMD Plus |
| Alarm Linkage | Record; snapshot (panoramic); IPC external alarm output; audio; buzzer; log; preset; email |

### Ports

| | |
|---|---|
| Audio Input | 1-channel RCA<br>4-channel BNC (Coaxial Audio) |
| Audio Output | 1-channel RCA |
| Two-way Talk | Yes (share the same audio input with the first channel) |
| Disk Interface | 1 SATA port, up to 16 TB. This limit varies depending on the environment temperature. |
| RS-485 | 1 |
| USB | 2 (1 front USB 2.0 port, 1 rear USB 2.0 port) |
| HDMI | 1 |
| VGA | 1 |
| Network Port | 1 (10/100 Mbps Ethernet port, RJ-45) |

### General
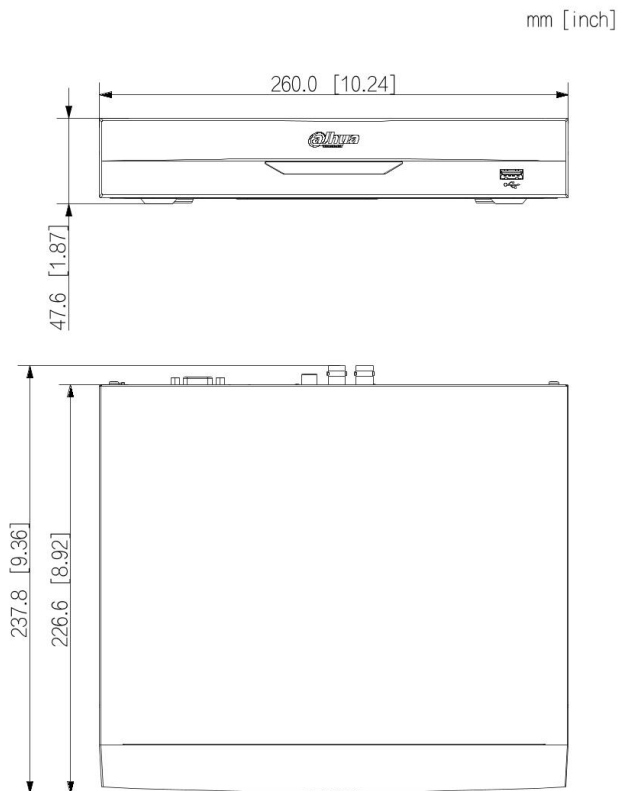
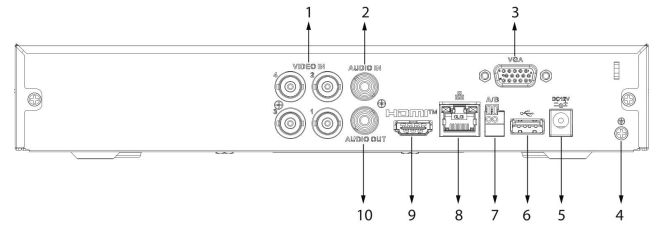| | |
|---|---|
| Power Supply | 12 VDC, 1.5 A |
| Power Consumption | <4 W (without HDD) |
| Net Weight | 0.86 kg (1.90 lb) |
| Gross Weight | 1.37 kg (3.02 lb) |
| Product Dimensions | 260.0 mm × 237.8 mm × 47.6 mm (10.24" × 9.36" × 1.87") (W × D × H) |
| Packaging Dimensions | 333.0 mm × 89.0 mm × 315.0 mm (13.11" × 3.50" × 12.40") (W × D × H) |
| Operating Temperature | −10 °C to +55 °C (+14 °F to +131 °F) |
| Storage Temperature | −20 °C to +60 °C (−4 °F to +140 °F) |
| Operating Humidity | 10%–90% (RH), non-condensing |
| Installation | Desktop |
| Certifications | CE-LVD: IEC 62368-1:2014<br>CE-EMC: EN IEC 61000-3-2:2019, EN 61000-3-3:2013+A1:2019, EN 55032:2015+A11:2020, EN 55035:2017+A11:2020, EN 55024:2010+A1:2015, EN 50130-4:2011+A1:2014<br>FCC: 47 CFR Part 15, Subpart B |

## Ordering Information

| Type | Part Number | Description |
|---|---|---|
| DIGITAL VIDEO RECORDER | DH-XVR4104HS-I | 4CH Penta-brid 1080N/ 720P Compact 1U 1HDD WizSense Digital Video Recorder |

## Dimensions (mm[inch])

mm [inch]

260.0 [10.24]

47.6 [1.87]

237.8 [9.36]

226.6 [8.92]

## Panels



| | |
|---|---|
| 1 VIDEO IN | 2 AUDIO IN, RCA Connector |
| 3 VGA Port | 4 Ground |
| 5 Power Input | 6 USB Port |
| 7 RS-485 Port | 8 Network Port |
| 9 HDMI Port | 10 AUDIO OUT, RCA Connector |