DH-XVR5104HS-I3

4CH Penta-brid 5MP Value/1080P 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, XVR5000-I3 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

Real 5MP Mode
This mode can enhance XVR preview and playback resolution to Real 5MP. Enable more clarity image experience.

Face Recognition
Dahua Face Recognition technology extracts the features of captured faces and compares them with that in face database.
**Face Recognition takes effect when Face is selected in AI Mode.*

Perimeter Protection
Automatically filters out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improves alarm accuracy.
**Perimeter Protection takes effect when IVS&SMD is selected in AI Mode.*

** The parameters and datasheets below can only be applied to Hardware Version 3.0.*

- 4-ch SMD Plus for analog channel to achieve accurate alarm for human and vehicles.
- 4-ch Perimeter Protection for analog channel to detect tripwire and intrusion violation powered by AI.
- 1-ch Face Recognition for analog channel to realize face comparison.
- 4-ch AI Coding to save storage and bandwidth costs while maintaining target details.
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs.
- Up to 6-ch IP camera inputs and each channel supports up to 6 MP. Max 32 Mbps incoming bandwidth.
- Smart H.265+/H.265 dual-stream video compression.
- IoT & POS functionalities.



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.

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.

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.
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Technical Specification

System

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

Perimeter Protection

Perimeter Performance AI by Recorder (Number of Channels)	Advanced Model: 2 channels, 10 IVS rules for each channel General Model: 4 channels, 10 IVS rules for each channel

Face Detection

Face Attributes	6 attributes
Face Detection Performance of AI by Recorder (Number of Channels)	1 channel (up to 8 face images/s each channel))

Face Recognition

Face Database Capacity	Up to 10 face databases with 10,000 images.
Face Recognition Performance of AI by Recorder (Number of Channels)	1 channel

SMD Plus

SMD Plus by Recorder	4 channels: Secondary filtering for human and motor 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: 5MP@20fps, 5MP@25fps, 5MP@10/12.5fps, 4MP@25/30fps, 1080p@25/30fps, 720p@50/60fps, 720p@25/30fps. 2. TVI: 5MP@20fps, 4MP@25/30fps, 1080p@25/30fps, 720p@25/30fps. 3. AHD: 5MP@20fps, 4MP@25/30fps, 1080p@25/30fps, 720p@25/30fps.
IP Camera Input	Up to 6 channels of IPC access 2 IP channels by default + 4 channels (analog channels are converted to IP channels) incoming bandwidth: 32 Mbps, recording bandwidth: 32 Mbps and outgoing bandwidth: 32 Mbps *After IP channels are added beyond the existing channels, the AI Function (IVS、SMD、Face) will be disabled.
Encoding Capacity	Main stream: 5MP Mode: All channel 5MP@(1-6fps) 5M-N Mode: All channel 5M-N@(1–12fps);4M-N,1080p@(1–15fps); 1080N, 720p, 960H, D1,CIF@(1–25/30fps) Sub stream: D1, CIF@(1–15fps)
Dual-stream	Yes
Video Bit Rate	32 kbps–6144 kbps
Audio Sampling	8 kHz, 16 bit
Audio Bit Rate	64 kbps
Video Output	1 HDMI, 1 VGA HDMI: 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: 1/4/6
Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Samsung

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; UDP; NTP; DHCP; DNS; SMTP; UPnP; IP Filter; FTP; DDNS; 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; Firefox; IE 9 or later
Network Mode	Single-address mode

Recording Playback

Record Mode	General, motion detection; intelligent; alarm; POS
Recording Playback	Up to 4 channels
Backup Method	USB device and network
Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)

Alarm

General Alarm	Motion detection; alarm box; 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	Face detection; face recognition; perimeter protection
Alarm Linkage	Record; snapshot (panoramic); IPC external alarm output; audio; buzzer; log, preset; email

Ports

Audio Input	1-channel RCA 4-channel BNC (Coaxial Audio)
Audio Output	1-channel RCA
Two-way Talk	Yes (share the same audio input with the first channel)
HDD Interface	1 SATA port, up to 16TB capacity. The maximum HDD capacity varies with 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

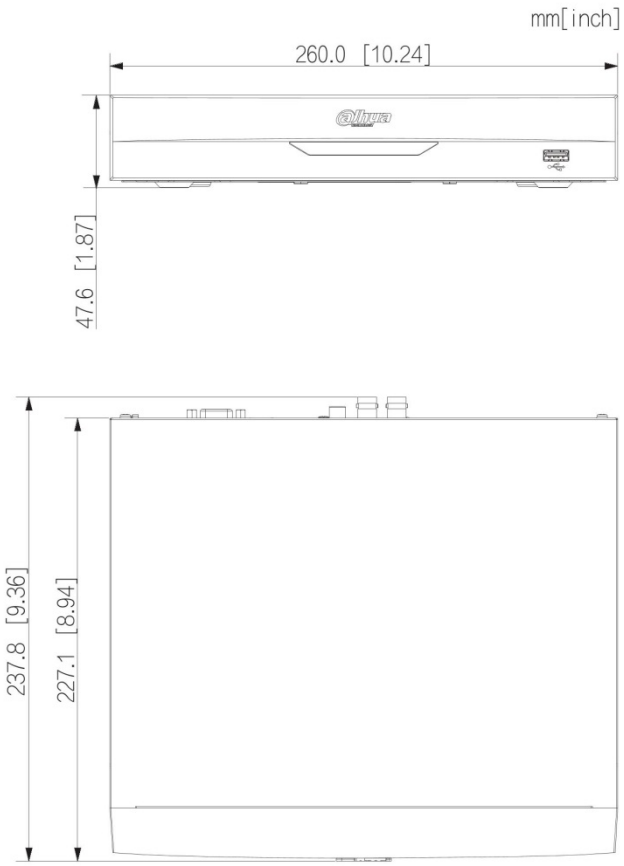
Power Supply	12 VDC, 1.5A
Power Consumption	<5 W (without HDD)
Net Weight	0.84 kg (1.85 lb)
Gross Weight	1.37 kg (3.02 lb)

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	≤93% (RH)
Installation	Rack or desktop
Certifications	CE-LVD: IEC 62368-1:2014 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

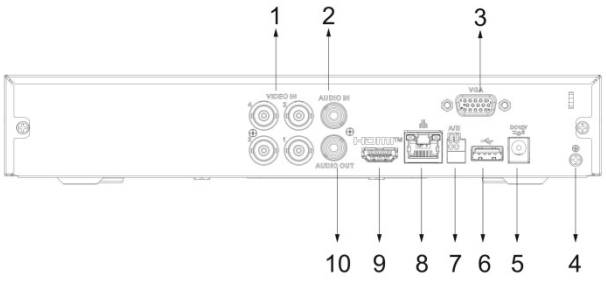
Ordering Information

Type	Part Number	Description
DIGITAL VIDEO RECORDER	DH-XVR5104HS-I3	4CH Penta-brid 5MP Value/1080P Compact 1U 1HDD WizSense Digital Video Recorder

Dimensions (mm[inch])



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

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