DH-XVR5108HS-I3

8 Channel Penta-brid 5M-N/1080p Compact 1U 1HDD WizSense Digital Video Recorder



- H.265+/H.265 dual-stream video compression
- Supports Full-channel AI-Coding
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 12 channels IP camera inputs, each channel up to 6MP; Max 64 Mbps incoming bandwidth
- Up to 1 channel video stream (analog channel) Perimeter Protection
- Up to 8 channels video stream (analog channel) SMD Plus
- Up to 1 channel video stream (analog channel) human face recognition
- IoT & POS functionalities



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 featuring full-channel SMD Plus (except for 32-channel devices) to benefit customers from AI upgrade. The series are designated to reduce false-alarm rates and human surveillance costs, 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 Time Face Recognition

Video stream real time face recognition. Facial attributes analysis features including gender, age, expression, glasses, moustache, mouth mask. Identify people and also capture, record faces with metadata. Facial feature filtering while real time display, only show faces with target features.

*Face Recognition takes effect when Face is selected in AI Mode.

Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to act secondary recognition for the targets. Improving alarm accuracy.

*Perimeter Protection takes effect when IVS&SMD is selected in AI Mode.

SMD Plus

SMD Plus, referred to as Smart Motion Detection Plus, which is an upgrading version of SMD that greatly improves the alarm accuracy by loading deep-learning algorithm. It analyzes person and vehicle shapes based on motion detection and send alarms only when person and vehicle intrudes.

*SMD Plus takes effect when SMD or IVS&SMD is selected in AI Mode.

AI Coding

Compared with H.265, AI codec can reduce up to 50% bit rate and storage requirements while have no loss of decoding compatibility, providing clear human and vehicle details.

Smart H.265+

Smart Codec, H.265+ can reduce up to 90% bit rate and storage requirements compared with H.264 without having to invest in new cameras.

HDCVI/AHD/TVI/CVBS Auto-detect

The XVR can auto recognize the signal of front-camera without any setting. It makes operation more friendly and convenient.

High Definition Camera Input

The XVR supports up to 5MP HDCVI camera and 6MP IP camera input.

Coaxial Audio/Upgrade/Alarm

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

Long Distance Transmission

The HDCVI system supports long distance transmission over coaxial cable and UTP, max. 700 m for 4K/4MP, 800 m for 1080p and 1200 m for 720p.

AI Search

Extract and classify person and vehicles from massive video data, easy for end users to trace historical informaton and analyze. Person & Vehicle optonal for playback to achieve quick target search, saving event retrieval tme.

Technical Specification

System

Main Processor	Embedded processor
Operating System	Embedded linux

Perimeter Protection

Performance	1 channel, 10 IVS for each channel
Object classification	Human/Vehicle secondary recognition for tripwire and intrusion
AI Search	Search by target classification (Human, Vehicle)

Face Recognition

Performance	Max 8 face pictures/sec processing
	1 channel video stream face recognition, only support analog camera
Stranger Mode	Detect strangers' faces (not in device's face database). Similarity threshold can be set manually
AI Search	Up to 8 target face images search at same time, similarity threshold can be set for each target face image
Database Management	Up to 10 face databases with 10,000 face images in total. Name, gender, birthday, address, certificate type, cerificate No., countries&regions and state can be added to each face picture
Database Application	Each database can be applied to video channels independently
Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Recording, Alarm Out, PTZ Activation, etc.

SMD Plus

Performance	8 channels
AI Search	Search by target classification (Human, Vehicle)

Video and Audio

Analog Camera Input	8 channels, BNC
HDCVI Camera Input	5MP, 4MP, 1080p@ 25/30 fps, 720p@ 50/60 fps, 720p@ 25/30 fps
AHD Camera Input	5MP, 4MP, 1080p@ 25/30 fps, 720p@ 25/30 fps
TVI Camera Input	5MP, 4MP, 1080p@ 25/30 fps, 720p@ 25/30 fps
CVBS Camera Input	PAL/NTSC
IP Camera Input	8+4 channels, each channel up to 6MP
Audio In/Out	1/1, RCA
Two-way Talk	Reuse audio in/out, RCA

Recording

Compression	AI Coding/H.265+/H.265/H.264+/H.264
Resolution	5M-N; 4M-N; 1080p; 1080N; 720p; 960H; D1; CIF
Record Rate	Main stream: All channel 5M-N (1 fps–10 fps); 4M-N/1080p (1 fps–15 fps); 1080N/720p/960H/ D1/CIF (1 fps–25/30 fps) Sub stream: D1/CIF (1 fps–15 fps)
Bit Rate	32 kbps–6144 kbps per channel
Record Mode	Manual; Schedule (General, Continuous); MD (Video detection: Motion Detection, Video Loss, Tampering); Alarm; Stop
Record Interval	1 min–60 min (default: 60 min), Pre-record: 1 s–30 s, Post-record: 10 s–300 s
Audio Compression	G.711A; G.711U; PCM
Audio Sample Rate	8 KHz, 16 bit per channel
Audio Bit Rate	64 kbps per channel

Display

Interface	1 HDMI; 1 VGA
Resolution	1920 × 1080; 1280 × 1024; 1280 × 720
Multi-screen Display	When IP extension mode not enabled: 1/4/8/9 When IP extension mode enabled: 1/4/8/9/16
OSD	Camera title, Time, Video loss, Camera lock, Motion detection, Recording

Network

Interface	1 RJ-45 Port (100 MB)
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	1/4/9 It changes to 1/4 split when Face or IVS&SMD is selected in AI Mode.
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 10 TB capacity
eSATA	N/A

Auxiliary Interface

USB	2 USB ports (USB 2.0)
RS485	1 port, for PTZ control
RS232	N/A

Electrical

Power Supply	DC 12V/2A
Power Consumption (Without HDD)	< 7W

Construction

Dimensions	Compact 1U, 260.0 mm × 237.9 mm × 47.6 mm (10.24" × 9.37" × 1.87")
Net Weight (without HDD)	1.19 kg (2.62 lb)
Gross Weight	1.639 kg (3.61 lb)
Installation	Desktop installation

Environmental

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

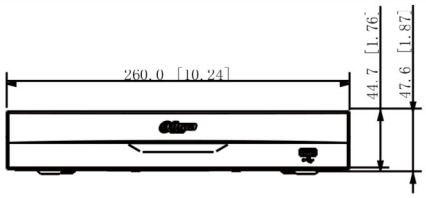
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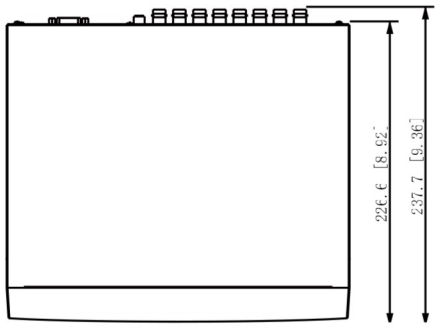
Certifications	FCC: Part 15 Subpart B CE: CE-LVD: EN 60950-1/IEC 60950-1 CE-EMC: EN 61000-3-2; EN 61000-3-3; EN 55032; EN 50130; EN 55024

Ordering Information

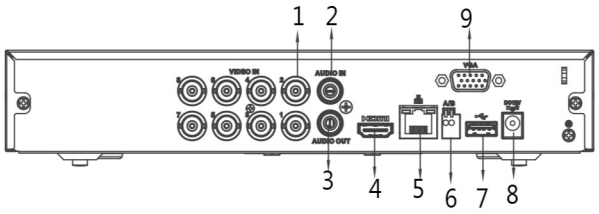
Type	Model	Description
8 Channel WizSense XVR	DH-XVR5108HS-I3	Compact 1U WizSense Digital Video Recorder

Dimensions (mm[inch])





Panels



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		

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