DH-XVR1B08-I(1TB)
8 Channels Penta-brid 1080N/720p Cooper 1U 1SSD 1TB WizSense Digital Video Recorder

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, S-XVR 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

Internal SSD
Unlike the traditional XVR, S-XVR comes with the SSD preinstalled in the device. It is more energy efficient, and has stronger vibration resistance and better heat dissipation. S-XVR also saves you time on selecting the type of hard disk and installing it, greatly increasing your efficiency.

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 Illuminators
With Smart Dual Illuminators 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 illumination technology can meet the requirements of a wide variety of scenes.

- Comes with an internal 1TB SSD, and can record videos for about 22 days.
- H.265+/H.265 dual-stream video compression.
- Supports Full channel AI-Coding.
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs.
- Max 10 channels IP camera inputs, each channel up to 6MP; Max 40 Mbps incoming bandwidth.
- Long transmission distance over coax cable.
- Up to 4 channels video stream (analog channel) SMD Plus.

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.

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.

Smart H.265+
Smart H.265+ Codec reduces bit rate and storage requirements by up to 90%, outranking standard H.264 video compression and eliminating the need to invest in a new camera.

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.

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-channel: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change

Audio and Video

Analog Camera Input	8 BNC ports, supports HDCVI/AHD/TVI/CVBS auto-detect
Camera Input	1. CVI: 1080p@25/30 fps, 720p@25/30 fps. 2. TVI: 1080p@25/30 fps, 720p@25/30 fps. 3. AHD: 1080p@25/30 fps, 720p@25/30 fps.
IP Camera Input	Up to 10 channels of IPC access. 2 IP channels by default + 8 channels (analog channels are converted to IP channels) incoming bandwidth: 40 Mbps, recording bandwidth: 40 Mbps and outgoing bandwidth: 40 Mbps *After IP channels are added beyond the existing channels, the AI Function (SMD) will be disabled.
Encoding Capacity	Main Stream: 8-channel: the 1st channel 1080N/720p@(1 fps–25/30 fps), others 1080N/720p@(1 fps–15 fps); 960H/D1/CIF@(1 fps–25/30 fps) Sub stream: 8-channel: CIF@(1 fps–7 fps)
Dual-stream	Yes
Video Frame Rate	PAL: 1 fps/s–25 fps/s NTSC: 1 fps/s–30 fps/s
Video Bit Rate	32 kbps–4096 kbps
Audio Sampling	8 kHz, 16 bit
Audio Bit Rate	64 kbps
Video Output	1 HDMI, 1 VGA HDMI/VGA: 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
Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Samsung

Compression Standard

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

Network

Network Protocol	HTTP; HTTPS; TCP/IP; IPv4/IPv6; Wi-Fi; 3G/4G; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P; UPnP; IP Filter;FTP; Alarm Server; IP Search (Supports Dahua IP camera, DVR, NVS, etc.)
Mobile Phone Access	iOS; Android
Interoperability	ONVIF 22.06 (Profile T; Profile S; Profile G); CGI; SDK
Browser	Chrome IE 9 or later Firefox
Network Mode	Single-address mode

Recording Playback

Record Mode	General; motion detection; intelligent; alarm
Recording Playback	1/4/9
Backup Method	USB device and network
Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (motion detection)

Alarm

General Alarm	Motion detection; 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; voice prompt; buzzer; log; preset; email

Ports

Audio Input	1-channel RCA 8-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 SSD: 1 TB (replaceable with 256 GB or 512 GB) Stores for 22 days under default settings.
USB	2 (2 rear USB 2.0 ports)
HDMI	1
VGA	1
Network Port	1 (10/100 Mbps Ethernet port, RJ-45)

General

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Power Supply	12 VDC, 1.5 A
Power Consumption	<7 W (with SSD)
Net Weight	0.62 kg (1.37 lb)
Gross Weight	1.13 kg (2.49 lb)
Product Dimensions	198.3 mm × 202.9 mm × 41.5 mm (7.81'' ×7.99'' × 1.63'') (W × D × H)
Packaging Dimensions	332.0 mm × 64.0 mm × 240.0 mm (13.08'' × 2.52'' × 9.45'') (W × D × H)
Operating Temperature	−10 °C to +45 °C (+14 °F to +113 °F)
Operating Humidity	0%–90% (RH)
Installation	Desktop
Certifications	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 FCC: Part 15 Subpart B

Ordering Information

Type	Model	Description
8 Channels WizSense XVR	DH-XVR1B08-I(1TB)	8 CH Penta-brid 1080N/720P Cooper 1U 1SSD 1TB Digital Video Recorder

Dimensions (mm[inch])

198.3 [7.81]

41.5 [1.63]

202.9 [7.99]
192.0 [7.56]
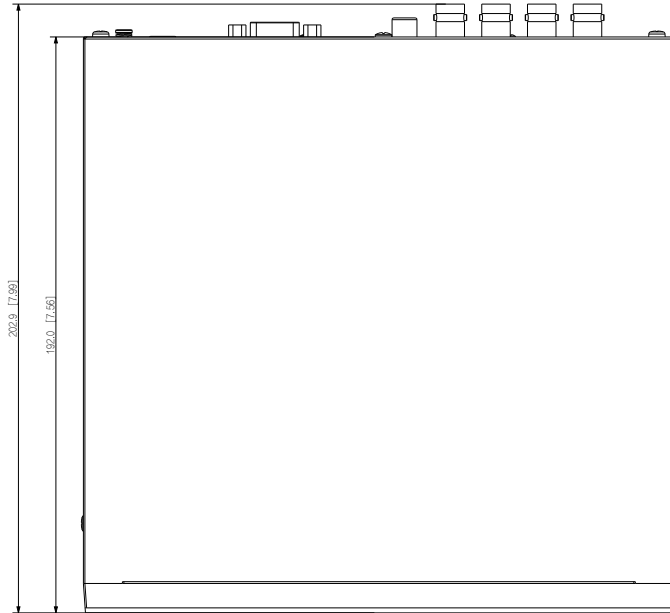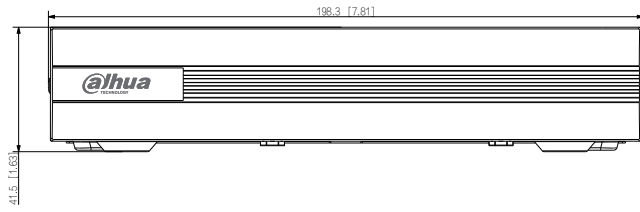
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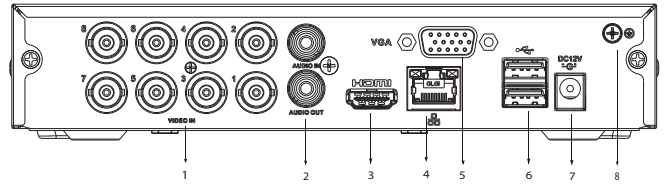
1	VIDEO IN	2	AUDIO IN/OUT, RCA Connector
3	HDMI Port	4	Network Port
5	VGA Port	6	USB Ports
7	Power Input	8	Ground