

DH-XVR1B16H-I

16 Channel Penta-brid 5M-N/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, Cooper-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.

AI Coding

Compared with H.265/H.264, AI coding can reduce more than 50% bit rate and storage requirements while have no loss of decoding compatibility, providing clear human and vehicle details.

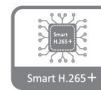
Smart H.265+

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.

- H.265+/H.265 dual-stream video compression
- Supports Full-channel AI Coding
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs
- Max 24 channels IP camera inputs, each channel up to 6MP; Max 128 Mbps incoming bandwidth
- Long transmission distance over coax cable
- Up to 16 channels video stream (analog channel) SMD Plus
- POS functionalities



High Definition Camera Input

The XVR supports up to 1080p 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.

Technical Specification

System

Main Processor	Embedded processor
Operating System	Embedded Linux

SMD Plus

SMD Plus by Recorder	Full-channel SMD Plus (AI by recorder), secondary filtering for human and motor vehicle SMD Plus, reducing false alarms caused by leaves, rain and lighting condition change
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Audio and Video

Analog Camera Input	16 channels, BNC: adaptive access by default; HDCVI, AHD, TVI and CVBS access can be configured.
Camera Input	1. CVI: 5MP, 4MP, 1080p@25/30 fps, 720p@50/60 fps, 720p@25/30 fps. 2. TVI: 5MP, 4MP, 3MP, 1080p@25/30, 720p@25/30 fps. 3. AHD: 5MP, 4MP, 3MP, 1080p@25/30, 720p@25/30 fps.
IP Camera Input	16+8 channels, each channel up to 6MP
Encoding Capacity	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)
Dual-stream	Supported (D1/CIF (1 fps~15 fps)).
Video Frame Rate	PAL: 1 fps~25 fps. NTSC: 1 fps~30 fps.
Video Bit Rate	32 Kbps~6144 Kbps Per Channel
Audio Sampling	8 KHz, 16 bit Per Channel
Audio Bit Rate	64 Kbps Per Channel
Bit Rate Type	Video stream and composite stream.
Video Output	1 HDMI, 1 VGA VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 HDMI: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720
Multi-screen Display	When IP extension mode not enabled: 1/4/8/9/16 When IP extension mode enabled: 1/4/8/9/16/25
Third-party Camera Access	Onvif, RTSP, Panasonic, Sony, Axis, Arecont, Pelco, Canon, 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, RTSP, UDP, SMTP, NTP, DHCP, DNS, DDNS, P2P
Mobile Phone Access	iPhone, iPad, Android
Interoperability	ONVIF 16.12, CGI Conformant
Browser	Chrome, IE9 or above, Firefox
Network Mode	Single-address mode

Recording Playback

Record Mode	Manual, Schedule (General, Continuous), MD (Video detection: Motion Detection, Video Loss, Tampering), Alarm, Stop
Recording Playback	1/4/9/16

Backup Method	USB Device/Network
Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback

Alarm

General Alarm	Motion detection, Video Loss, tampering
Anomaly Alarm	No disk, disk error, low space, offline, ip conflict, MAC conflict
Alarm Linkage	Record, snapshot (panoramic), IPC external alarm output, access controller, voice prompt, buzzer, log, preset, email

Ports

Audio Input	1, RCA (external) 16, BNC (coaxial)
Audio Output	1, RCA
Two-way Talk	Yes (share the same audio input with the first channel)
HDD Interface	1 SATA Port, up to 16TB for a single HDD, the maximum HDD capacity varies with environment temperature
USB	2 USB Ports (2 USB 2.0)
HDMI	1
VGA	1
Network Port	1 (10/100/1000 Mbps Ethernet port, RJ-45)

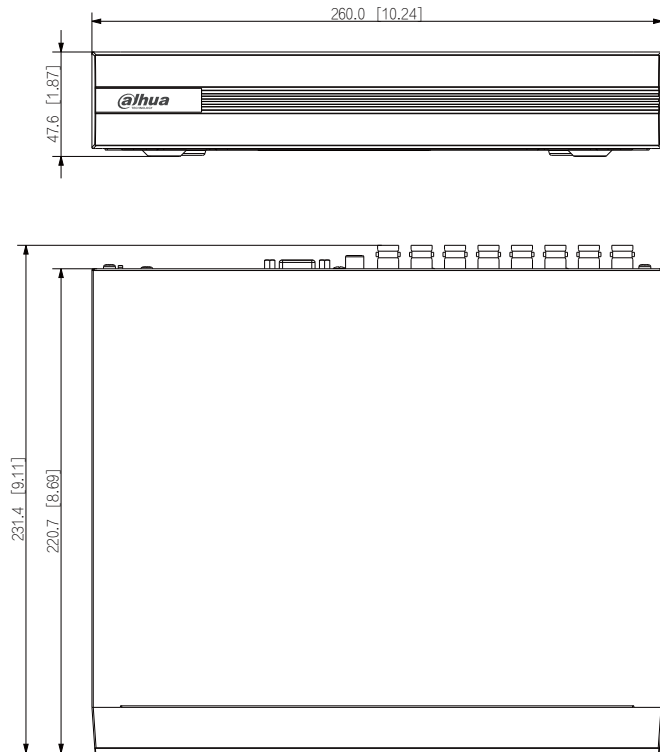
General

Power Supply	DC12V, 2A
Power Consumption	Lower than 12 W
Net Weight	0.93 kg (2.05 lb)
Gross Weight	1.43 kg (3.16 lb)
Product Dimensions	Compact 1U, 260.0 mm × 231.4 mm × 47.6 mm (W × D × H) (10.24" × 9.11" × 1.87")
Packaging Dimensions	333.0 mm × 89.0 mm × 315.0 mm (L × W × H) 13.11" × 3.50" × 12.40" (L × W × H)
Operating Temperature	-10 °C to +45 °C (+14 °F to +113 °F)
Operating Humidity	10%~90%
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

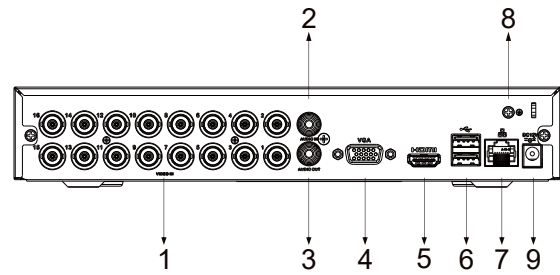
Ordering Information

Type	Model	Description
16 Channels WizSense XVR	DH-XVR1B16H-I	Compact 1U DIGITAL VIDEO RECORDER

Dimensions (mm[inch])



Panels



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