

DH-XVR5816S-4KL-I3

16 Channels Penta-brid 4K-N/5MP 2U 8HDDs WizSense Digital Video Recorder



Wiz Sense

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, XVR5000-4KL-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

Face Recognition

Dahua Face Recognition technology extracts the features of captured faces and compares them with that in face database to recognize the person identity.

*Face Recognition conflicts with SMD Plus and Perimeter Protection.

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.

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.

- H.265+/H.265 dual-stream video compression.
- Supports 16-channel AI-Coding.
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs.
- Max 32 channels IP camera inputs, each channel up to 12MP; Max 128 Mbps incoming bandwidth.
- Up to 8 channels video stream (analog channel) perimeter protection.
- Up to 16 channels video stream (analog channel) SMD plus.
- Up to 2 channels video stream (analog channel) human face recognition.
- IoT & POS functionalities.



Scheduled AI

This technology allows multiple AI functions to be set for one channel based on time frames, eliminating the need to manually configure the system to switch between functions each time. Scheduled AI greatly increases efficiency and widens the number of scenarios that the device can be used in.

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.

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.



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Technical Specification

lechnical Specificatio	on	
System	Video Output	
Main Processor	Industrial-grade processor	
Operating System	Embedded Linux	
Operating Interface	Web; Local GUI	Multi-screen Display
Perimeter Protection		Third-party Camera Access
Perimeter Performance Al by Recorder (Number of Channels)	Advanced Model: 2 channels, 10 IVS for each channel General Model: 8 channels, 10 IVS for each channel	Compression Sta
Face Detection		Video Compression
Face Attributes	Gender; age group; glasses; expressions; face mask;	Audio Compression
Face Detection	beard	Network
Performance of AI by Recorder (Number of Channels)	2 channels (up to 12 face images/s)	Network Protocol
Face Recognition		Mobile Phone Access
	Up to 10 face databases with 20,000 face images in	Interoperability
Face Database Capacity	Up to 10 face databases with 20,000 face images in total. Name, gender, birthday, address, certificate type, cerificate No., countries & regions and state can be added to each face image	Browser
		Network Mode
Face Recognition Performance of AI by		Recording Playba
Recorder (Number of Channels)	2 channels	Record Mode
SMD Plus		Recording Playback
	16 channels: Secondary filtering for human and motor	Backup Method
SMD Plus by Recorder	vehicle SMD Plus, reducing false alarms caused by leaves, rain and lighting condition change	Playback Mode
Audio and Video		Storage
Analog Camera Input	16 BNC ports, supports HDCVI/AHD/TVI/CVBS auto- detect	Disk Group
	1. CVI: 4K, 6 MP, 5 MP, 4 MP, 1080p@25/30 fps;	Alarm
Camera Input	720p@50/60 fps; 720p@25/30 fps. 2. TVI: 4K, 5 MP, 4 MP, 3 MP, 1080p@25/30 fps;	General Alarm
Camera input	720p@25/30 fps. 3. AHD: 4K, 5 MP, 4 MP, 3 MP, 1080p@25/30 fps; 720p@25/30 fps.	Anomaly Alarm
	Up to 32 channels of IPC access	Intelligent Alarm
IP Camera Input	16 IP channels by default + 16 channels (analog channels are converted to IP channels) incoming bandwidth: 128 Mbps, recording bandwidth: 128 Mbps and outgoing bandwidth: 128 Mbps	Alarm Linkage
	*After IP channels are added beyond the existing channels, the AI Function (IVS, SMD, FACE) will be disabled.	Ports
	Main stream:	TV Output
Encoding Conscient	Main stream: 4K@(1fps-7fps); 6 MP@(1fps-10fps); 5 MP@(1fps-12fps); 4K-N, 4 MP, 3 MP@(1fps-15fps); 4M-N, 1080p, 720p, 960H, D1,CIF@(1fps-25/30fps); Sub stream: 960H@(1fps-15fps); D1/CIF@(1 fps- 25/30fps)	Audio Input
Encoding Capacity		Audio Output
Dual-stream	Yes	Two-way Talk
Video Bit Rate	32 kbps–6144 kbps	Alarm Input
Audio Sampling	8 kHz, 16 bit	Alarm Output
Audio Bit Rate	64 kbps	HDD Interface

Video Output	2 HDMI, 1 VGA, 1 TV Resolution VGA/HDMI2: 1920 × 1080, 1280 × 1024, 1280 × 720 HDMI1: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 *Heterogeneous video sources output for HDMI2 is configurable.			
Multi-screen Display	When IP extension mode not enabled: 1/4/8/9/16 When IP extension mode enabled: 1/4/8/9/16/25/36			
Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Samsung			
Compression Standard				
Video Compression	Al 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	iOS; Android			
Interoperability	ONVIF 21.12; CGI			
Browser	Chrome, IE9 or later, Firefox			
Network Mode	Multi-address mode, Fault Tolerance, Load Balance			
Recording Playback				
Record Mode	General, motion detection; intelligent; alarm; POS			
Recording Playback	1/4/9/16			
Backup Method	USB device and network			
Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)			
Storage				
Disk Group	Yes			
Alarm				
General Alarm	Motion detection; video loss; tampering; local alarm			
Anomaly Alarm	No disk; storage error; disk full; camera offline; IP conflict; MAC conflict			
Intelligent Alarm	Face detection; face recognition; perimeter protection			
Alarm Linkage	Record; snapshot (panoramic); IPC external alarm output; access controller; voice prompt; buzzer; log; preset; email			
Ports				
TV Output	Yes			
Audio Input	16-channel BNC (external) 16-channel BNC (coaxial audio)			
Audio Output	1-channel BNC			
Two-way Talk	1-channel BNC			
Alarm Input	16 channels			
Alarm Output	6 channels			
HDD Interface	8 SATA ports, up to 16TB for a single HDD, the maximum HDD capacity varies with environment temperature			
eSATA	1			



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RS-232	1 port, for PC Communication & Keyboard	
RS-485	1 port, for PTZ control	
USB	4 (2 front USB 2.0 ports, 2 rear USB 3.0 ports)	
HDMI	2	
VGA	1	
Network Port	2 (10/100/1000 Mbps Ethernet port, RJ-45)	
General		
Power Supply	100-240 VAC, 50/60 Hz	
Power Consumption	<20 W	
Net Weight	6.8 kg (14.99 lb)	
Gross Weight	9.3 kg (20.50 lb)	
Product Dimensions	2U, 439.9 mm × 463.0 mm × 94.9 mm (17.32" × 18.23" × 3.73") (W × D × H)	
Packaging Dimensions	570.0 mm × 570.0 mm × 226.0 mm (22.44" × 22.44" × 8.90") (W × D × H)	
Operating Temperature	–10 °C to +55 °C (14 °F to +131 °F)	
Operating Humidity	10%-90% (RH)	
Installation	Rack or 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	

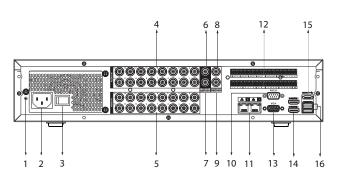
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Dimensions (mm[inch])

Ordering Information

Туре	Model	Description
16 Channels WizSense XVR	DH-XVR5816S- 4KL-I3	2U DIGITAL VIDEO RECORDER

Panels



1 Ground

- 3 Power Switch
- 5 VIDEO IN 7 MIC OUT, BNC Connector 8 AUDIO OUT, BNC Connector
- 9 VIDEO OUT

13 VGA Port 15 eSATA Port

- 11 Network Ports
- 12 Alarm In/Out
 - 14 HDMI Ports

10 RS-232 Port

2 Power Input 4 AUDIO IN, BNC Connector

6 MIC IN, BNC Connector

16 USB Ports

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