

DH-XVR5116HE-4KL-I3

16 Channels Penta-brid 4K-N/5MP Mini 1U 1HDD 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, XVR5000-4KL-I3 Series featuring max.full-channel SMD Plus to benefit customers from Al 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 Full-channel AI-Coding.
- · Supports HDCVI/AHD/TVI/CVBS/IP video inputs.
- · Max 32 channels IP camera inputs, each channel up to 8MP; 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.
- \cdot 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 Al-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.

Al 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.



Wiz Sense | DH-XVR5116HE-4KL-I3

Administration (Anthony System of Industrial Entrol (Industrial Entrol					
Video Output 720 Video Output 730 Video Output	Technical Specification	on			
Administration (Anthony System of Industrial Entrol (Industrial Entrol	System		Video Output	720 VGA: 1920 × 1080, 1280 × 1024, 1280 × 720 *Simultaneous/heterogeneous video sources output for	
Description interface Webs I road GUI Multi-screen Display When the extremous notes does for instance and wholes if Jay Application is a control of the party Camera Access ONUF, Panasonic, Sony, Asis, Arecord; Sanssing Access (NOVE, Panasonic, Sony, Asis, Arecord; Sanssing Access (Access and Panasonic, Sony, Asis, Arecord; Sanssing Access (Access and Sony, Asis, Arecord) Access (Access and Access and Sony, Asis, Arecord) Access (Access and Sony, Asis, Arecord) Access (Access and Access and Access and	Main Processor	Industrial-grade processor			
Special principator Protection Perfineter Protection Perfineter Protection Advanced Models 8 channels, 10 MS for each channel Access All Advanced Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels, 10 MS for each channel Caneral Models 8 channels Caneral Models 9 channels Caneral Caneral Models 9 channels Caneral	Operating System	Embedded Linux	Multi caroon Display	When IP extension mode not enabled: 1/4/8/9/16	
Performance of Authority (Protection) Access Compression Standard Compression Standard Compression Advanced Model 2 channels, 10 https://doi.org/10.1006/j.com/10.1006/	Operating Interface	Web; Local GUI		When IP extension mode enabled: 1/4/8/9/16/25/3	
y Recorder (Number of Animanes) y Proceedings of Number of Secretary Model & Channels, 30 MS for each channel Secretary Model & Channels, 10 MS for each channel Secretary Model & Channels, 10 MS for each channel Secretary Model & Channels, 10 MS for each channel Secretary Model & Channels, 10 MS for each channel Secretary Model & Channels, 10 MS for each channel Secretary Model & Channels (pp to 12 face images), each channel) Mobile Phone Access 10 MS, Android Uniteroperability ONVIP 21.12, GG1 Uniter	Perimeter Protection			ONVIF; Panasonic; Sony; Axis; Arecont; Samsung	
Face Detection Since Attributes Gender; age group; glasser; expressions; face mask; beard Network Network Protocol Mobile Phone Access OS, Android Interoperability ONN/F 2.132, CGI Mobile Phone Access OS, Android Interoperability ONN/F 2.132, CGI White Database Capacity Face Database Secondary filtering for human and motor whole, recturing false alarms caused by leaves, rain and leibning condition change Face Recognition Face Database Capacity Face Database Capacity Face Database Capacity Face Database Capacity Face Database Secondary filtering for human and motor whole, recturing false alarms caused by leaves, rain and leibning condition change Face Database Capacity Fac	Perimeter Performance Al by Recorder (Number of	·	·		
Audio Compression (A/Tilly PLM)	,		Video Compression	Al Coding; Smart H.265+; H.265; Smart H.264+; H.264	
Network Network Network Network Network Network Protocol SHTP, NTTP, NTTP, STONP, PIP4, NTSP, LUPP, SMTP, NTP, NTP, DRCP, DNS, DDNS, P2P Mobile Phone Access OS, Android Interoperability ONVF 21.12; Col Interoperability ONVF 21.12; Col Stones, Control on the Con	acc Detection	Gender: age group: glasses: expressions: face mask:	Audio Compression	G.711a; G.711u; PCM	
Performance of Al by kectored (Number of Channels) Us to 10 face databases with 20,000 face images in total same, gender, both with 20,000 face images in total same, gender, both with address, certificate type, certificate No. countries & regions and state can be added to each face image. Us to 10 face databases with 20,000 face images in total same, gender, both with address, certificate type, certificate No. countries & regions and state can be added to each face image. Sace Recognition Learnes of Al by kecorder (Number of Ahannels) SMD Plus 16 channels Secondary filtering for human and motor vehicle, reducing faise admiss caused by keaves, rain and algining condition change. MIMD Plus by Recorder 16 channels Secondary filtering for human and motor vehicle, reducing faise admiss caused by keaves, rain and algining condition change. Audio and Video Analog Camera Input 16 BNC ports, supports HDCV/AHD/TVI/CVBS autodated address. 1. CVH 4K8/73/50 fps; 56 MPR/20 fps; 5 MPR/205 fps; 4 MPR/205 fps; 5 MPR/205 fps; 4 MR/205 fps; 50 MPR/205 fps; 5 MPR	ace Attributes		Network		
Mobile Phone Access 105, Android	Face Detection Performance of AI by Recorder (Number of	2 channels (up to 12 face images/s each channel))	Network Protocol		
Up to 10 face databases with 20,000 face images in total. Name, gender, birthday, address, certificate type, certificate No. countries 8 regions and state can be added to each face image. Acce Recognition Berformance of Al by eccorder (Number of Ahannels) 2 channels 2 channels 16 channels 16 channels 16 channels 16 channels 16 channels 16 channels Secondary filtering for human and motor whice; reducing false alarms caused by leaves, rain and lighting condition change. Audio and Video Analog Camera Input 16 EBVC ports, supports HDCVV/AHD/TV/CVBS autodives 4 CVL 4K@25/30 fps; 1080@25/30 fps; 5 MP@20 fps; 5 MP@2	•		Mobile Phone Access	IOS; Android	
total Name, gender, birthday, address, certificate type, crificates to control to the control of	Face Recognition		Interoperability	ONVIF 21.12; CGI	
carlicate No. countries & regions and state can be added to each face image added to each face image canded to each face i	Face Database Capacity	,	Browser	Chrome, IE9 or later, Firefox	
Recording Playback Record Mode General, motion detection; intelligent, alarm; POS Recording Playback 1/4/9/16 Record Mode General, motion detection; intelligent, alarm; POS Recording Playback 1/4/9/16 Record Mode General, motion detection; intelligent, alarm; POS Recording Playback 1/4/9/16 Record Mode USB device and network Listenanesis. Secondary filtering for human and motor velicile, reducing false alarms caused by leaves, rain and lighting condition change Audio and Video Analog Camera Input detect L. CVI: 4K@25/30 fps; 6MP@20 fps; 5MP@25 fps; 4 MP@25/30 fps; 1080p@25/30 fps; 720p@25/30 fps; 72		cerificate No., countries & regions and state can be	Network Mode	Single-address mode	
Record Mode Recording Playback R	Face Recognition Performance of AI by Recorder (Number of	dada to cash lase image	Recording Playback	Recording Playback	
Recording Playback 17/49/16 Backup Method USB device and network Instant playback, general playback, event playback, technic, reducing false alarms caused by leaves, rain and lighting condition change Audio and Video Analog Camera Input 16 BNC ports, supports HDCV/AHD/TVVCVBS autodetect I. CVI: 4K@25/30 fps; 5 MP@20 fps; 5 MP@25 fps; 4 MP@25/30 fps; 720p@25/30 fps; 3 MP@25/30 fps; 720p@25/30 fps; 720p@25/30 fps; 3 MP@25/30 fps; 720p@25/30 fps		2 channels	Record Mode	General, motion detection; intelligent; alarm; POS	
Instant playback, general playback, event playback, to playback Mode playback, smart playback, general playback, event playback, to playback, smart playback, general playback, smart playback, general playback, smart playback, general playback, smart playback, smart playback, general ge	Channels)		Recording Playback	1/4/9/16	
MD Plus by Recorder vehicle , reducing false alarms caused by leaves, rain and lighting condition change Audio and Video Alarm General Alarm Motion detection; video loss; tampering; local alarm and detect 1. CVI: 4K@25/30 fps; 6 MP@20 fps; 5 MP@25 fps; 4 MP@25/30 fps; 1080p@25/30 fps; 1080p@25/30 fps; 20p@25/30 fps; 1080p@25/30 fps; 1080p@25/30 fps; 3 MP@20 fps; 5 MP@20 fps	SMD Plus		Backup Method	USB device and network	
Alarm Alarm 16 BNC ports, supports HDCVI/AHD/TVI/CVBS autodetect 1. CVI: 4K@25/30 fps; 6 MP@20 fps; 5 MP@20 fps; 4 MP@25/30 fps; 720p@25/30 fps; 720p@25/30 fps; 720p@25/30 fps; 720p@25/30 fps; 3 MP@25/30 fps; 1080p@25/30 fps; 720p@25/30 fps; 3 MP@25/30 fps; 1080p@25/30 fps; 1080p@25/30 fps; 1080p@25/30 fps; 3 MP@25/30 fps; 1080p@25/30 fps; 1	MD Plus by Recorder	vehicle, reducing false alarms caused by leaves, rain and	Playback Mode	Instant playback, general playback, event playback, ta playback, smart playback (face and motion detection)	
Anomalog Camera Input 16 BNC ports, supports HDCVI/AHD/TVI/CVBS auto-detect 1. CVI: 4K@25/30 fps; 6 MP@20 fps; 5 MP@20 fps; 4 MP@25/30 fps; 720p@25/30 fps;)		Alarm		
detect Anomaly Alarm No disk, storage error; disk full; camera offline; IP conflict; MAC conflict 1. CVI: 4K@25/30 fps; 1080p@25/30 fps; 720p@25/30 fps; 720p@25/30 fps; 720p@25/30 fps; 720p@25/30 fps; 3 MP@25/30 fps; 1080p@25/30 fps; 720p@25/30 fps; 3 MP@25/30 fps; 720p@25/30 fps; 3 MP@25/30 fps; 720p@25/30 f	Audio and video	AS DAS A LIDENTIAL TANDOVERS A	General Alarm	Motion detection; video loss; tampering; local alarm	
Intelligent Alarm Face detection; face recognition; perimeter protection in the prot	Analog Camera Input	detect	Anomaly Alarm		
amera Input 2. TVI: 4X@15 fps; 5 MP@20 fps; 4 MP@25/30 fps; 3 MP@25/30 fps; 720p@25/30 fps; 3 MP@25/30 fps; 720p@25/30 fps; 30 MP@25/30 fps; 720p@25/30 fps; 3 MP@25/30 fps; 720p@25/30 fps;	Camera Input	MP@25/30 fps; 1080p@25/30 fps; 720p@25/30 fps; 720p@50/60 fps. 2. TVI: 4K@15 fps; 5 MP@20 fps; 4 MP@25/30 fps; 3 MP@25/30 fps; 1080p@25/30 fps; 720p@25/30 fps. 3. AHD: 4K@15 fps; 5 MP@20 fps; 4 MP@25/30 fps; 3 MP@25/30 fps; 1080p@25/30 fps; 4 MP@25/30 fps; 3 MP@25/30 fps; 1080p@25/30 fps; 720p@25/30 fps. Up to 32 channels of IPC access 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 *After IP channels are added beyond the existing channels, the AI Function (IVS, SMD, FACE) will be	Intelligent Alarm	Face detection; face recognition; perimeter protection	
Ports Up to 32 channels of IPC access 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 *After IP channels are added beyond the existing channels, the AI Function (IVS, SMD, FACE) will be disabled. Main stream: **A(E) (Ifps-7fps); 6 MP@(Ifps-10fps); 5 MP@(Ifps-12fps); 4K-N, 4 MP, 3 MP@(Ifps-15fps); 4M-N, 1080p, 720p, 960H, D1,CIF@(Ifps-25/30fps); Sub stream: 960H@(Ifps-15fps); D1/CIF@(I fps-25/30fps) Dual-stream Yes **A(E) (Ifps-7fps); D1/CIF@(I fps-25/30fps); Sub stream: 960H@(Ifps-15fps); D1/CIF@(I fps-25/30fps) Budio Sampling **A(E) (Ifps-12fps); D1/CIF@(I fps-25/30fps); Sub stream: 960H@(Ifps-15fps); D1/CIF@(I fps-25/30fps) **A(E) (Ifps-12fps); D1/CIF@(I fps-25/30fps); Sub stream: 960H@(Ifps-15fps); D1/CIF@(I fps-25/30fps) **D(Ifps-12fps); D1/CIF@(I fps-25/30fps); Sub stream: 960H@(Ifps-15fps); D1/CIF@(I fps-25/30fps) **A(E) (Ifps-12fps); D1/CIF@(I fps-25/30fps); Sub stream: 960H@(Ifps-15fps); D1/CIF@(I fps-25/30fps) **A(E) (Ifps-12fps); D1/CIF@(I fps-25/30fps); Sub stream: 960H@(Ifps-15fps); D1/CIF@(I fps-25/30fps) **D(Ifps-12fps); D1/CIF@(I fps-25/30fps); Sub stream: 960H@(Ifps-15fps); P1/CIF@(I fps-25/30fps) **D(Ifps-12fps); D1/CIF@(I fps-15fps); P1/CIF@(I			Alarm Linkage	output; access controller; voice prompt; buzzer; log;	
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 *After IP channels are added beyond the existing channels, the AI Function (IVS, SMD, FACE) will be disabled. Main stream: 4K@(Ifps-7fps); 6 MP@(Ifps-10fps); 5 MP@(Ifps-12fps); 4K-N, 4 MP, 3 MP@(Ifps-15fps); 4M-N, 1080p, 720p, 960H, DI,CIF@(Ifps-25/30fps); Sub stream: 960H@(Ifps-15fps); DI/CIF@(Ifps-25/30fps) Dual-stream Yes RS-485 1 port, for PTZ control USB 2 (1 front USB 2.0 port, 1 rear USB 3.0 port) HDMI 1 sudio Bit Rate 64 kbps			Ports		
128 Mbps and outgoing bandwidth: 128 Mbps *After IP channels are added beyond the existing channels, the Al Function (IVS, SMD, FACE) will be disabled. 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) Dual-stream Yes Audio Output 1-channel RCA Yes (share the same audio input with the first channel of the same audio input with the fir	IP Camera Input		Audio Input		
channels, the Al Function (IVS, SMD, FACE) will be disabled. 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, DI,CIF@(1fps-25/30fps); Sub stream: 960H@(1fps-15fps); DI/CIF@(1 fps-25/30fps) Qual-stream Yes RS-485 1 port, for PTZ control WSB 2 (1 front USB 2.0 port, 1 rear USB 3.0 port) HDMI 1 audio Bit Rate 64 kbps			Audio Output	1-channel RCA	
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) Dual-stream Yes RS-485 1 port, for PTZ control USB 2 (1 front USB 2.0 port, 1 rear USB 3.0 port) HDMI 1 Alarm Input 16-channels 1-channels 1			Two-way Talk	Yes (share the same audio input with the first channel	
AK-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) Dual-stream Yes RS-485 1 port, for PTZ control USB 2 (1 front USB 2.0 port, 1 rear USB 3.0 port) HDMI 1 Alarm Output 3-channels 1 SATA port, up to 16TB capacity for each disk. The maximum HDD capacity varies with environment temperature. USB 2 (1 front USB 2.0 port, 1 rear USB 3.0 port) HDMI 1		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@(1fps-	Alarm Input	16-channels	
960H, D1,CIF@(1fps-25/30fps); Sub stream: 960H@(1fps-15fps); D1/CIF@(1 fps-25/30fps) Dual-stream Yes RS-485 1 port, for PTZ control USB 2 (1 front USB 2.0 port, 1 rear USB 3.0 port) HDMI 1 Audio Sampling 8 kHz, 16 bit HDMI 1	Encoding Capacity		Alarm Output	3-channels	
Avail-stream Yes RS-485 1 port, for PTZ control USB 2 (1 front USB 2.0 port, 1 rear USB 3.0 port) Availio Sampling 8 kHz, 16 bit HDMI 1 Availio Bit Rate 64 kbps			HDD Interface	maximum HDD capacity varies with environment	
Video Bit Rate 32 kbps-6144 kbps USB 2 (1 front USB 2.0 port, 1 rear USB 3.0 port) HDMI 1 udio Bit Rate 64 kbps	Dual-stream	Yes	RS-485	·	
Audio Sampling 8 kHz, 16 bit HDMI 1 Audio Bit Rate 64 kbps	/ideo Bit Rate	32 kbps-6144 kbps			
Audio Bit Rate 64 kbps	Audio Sampling	8 kHz, 16 bit			
VGA 1	udio Bit Rate	64 kbps		1	

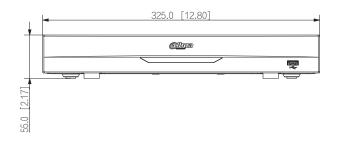


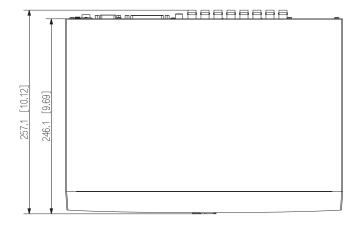
Wiz Sense | DH-XVR5116HE-4KL-I3

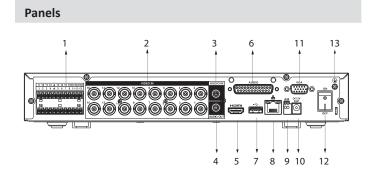
Network Port	1 (10/100/1000 Mbps Ethernet port, RJ-45)	
General		
Power Supply	DC 12V, 3A	
Power Consumption	<15 W (without HDD)	
Net Weight	1.50 kg (3.31 lb)	
Gross Weight	2.30 kg (5.08 lb)	
Product Dimensions	325.0 mm \times 257.1 mm \times 55.0 mm (12.80" \times 10.12" \times 2.17") (W \times D \times H)	
Packaging Dimensions	372.0 mm \times 117.0 mm \times 308.0 mm (14.65" \times 4.61" \times 12.13") (W \times D \times 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	

Ordering Information				
Туре	Model	Description		
16 Channels WizSense XVR	DH-XVR5116HE- 4KL-I3	Mini 1U DIGITAL VIDEO RECORDER		

Dimensions (mm[inch])







- 1 Alarm In/Out 2 VIDEO IN
- 3 AUDIO IN, RCA Connector 4 AUDIO OUT, RCA Connector
- 5 HDMI Port 6 D
 - 6 DB-25 Port
- 7 USB Port9 RS-485 Port
- 8 Network Port
- y 113-40310
- 10 Power Input
- 11 VGA Port
- 12 Power Switch
- 13 Ground



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