



# DH-XVR5216A-I3

## 16 Channels Penta-brid 5M-N/1080P 1U 2HDDs 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-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 takes effect when Face is selected in Al Mode.

## **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.

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

### **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.

\*SMD Plus takes effect when SMD or IVS&SMD is selected in Al Mode

- · 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
- Up to 4 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



#### **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, Al 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.

System         Video Output         And in Processor         Control of System         Video Output         And in Processor         Control of System         Control of Syste	Technical Specification	on		1 HDMI, 1 VGA	
Main Processor			Video Output	· · · · · · · · · · · · · · · · · · ·	
Operating interface Web; local GUI Per immeter Protection Per immeter Per operation of the Per immeter Protection Per immeter Per operation of the Per immeter Per operation Per immeter Per operation Per immediate Per operation Per i	Main Processor	Embedded processor		It changes to 1920 × 1080, 1280 × 1024, 1280 × 720	
Per inter Protection	Operating System	Embedded Linux	Multi-screen Display		
Perimeter Protection  Proceed Model 2 channel, 30 tys for each channel by Recorder (Number of Channels)  Face Detection  Face Detection  Face Detection  Face Percention  Face Recognition  Face	Operating Interface	Web; Local GUI	Third-party Camera Access	Onvif, Panasonic, Sony, Axis, Arecont, Pelco, Canon,	
Perimeter Performance Al by Recorder (Number of General Models 2 channels, 10 IVS for each channel Channels)  Pace Detection  Face Detection  Gender; age group; plasses; expressions; face mask; beard  Recorder (Number of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels)  Detail Secondary (plasses; expressions; face mask; beard of Channels, plasses;	Perimeter Protection		Compression Standay	<u> </u>	
Face Detection  Audio Compression	by Recorder (Number of				
Record Attributes   Gender, age group; glasser, expressions; face mask; beard   Network Protocol   Network Protocol   NET PITTPS, TOP /IP, IP44, RTSP, UDB, SMTE NTP, DMC   NEtwork Protocol   NET, DINK, DINK, P2P   No. (DINK,	,		Audio Compression	G.711A/G.711u/PCM	
Network Protocol Performance of Al by Recorder (Number of Chambels (up to 12 face images/s) Recorder (Number of Chambels (up to 12 face images/s) Recorder (Number of Chambels (up to 12 face images/s) Recorder (Number of Chambels)  Face Recognition  Face Beatabase Capacity  The Control of Chambels (up to 12 face images/s)  The Control of Chambels (up to 12 face images/s)  The Chambels (up to 12 face images/s)  The Recorder (Number of Chambels Capacity)  The Chambels Capacity  The Chambels Capacity (Number of Chambels)  The Recorder (Number of Chambels Capacity)  The Chambels Capacity (Number of Chambels)  The Chambels Capacity (Num		Gender: age group: plasses: expressions: face mask:	Network		
Performance of Al by Recorder (Number of Channels) Face Recognition  Face Batabase Capacity Face Recognition  Face Batabase Capacity Continue No. Durantees No. countries Regions and state can be added to each face picture Face Recognition  Face R			Network Protocol	HTTP, HTTPS, TCP / IP, IPv4, RTSP, UDP, SMTP, NTP, DHCF	
Face Recognition    Page   Pag	Performance of AI by	2 channels (up to 12 face images/s)	Mobile Phone Access		
Face Database Capacity  to 10 face databases with 10000 face images in total. Name, gender, birthday, address, certificate type, certificate to New Countries Regions and state can be added to each face picture  Face Recognition Performance of Al by Recorder (Number of Channels)  SMD Plus  3 fichannels Secondary filtering for human and motor vehicle SMD Plus, reducing false alarms caused by leaves, rain and lighting condition change  Audio and Video  Analog Camera Input  16 END ports, CVI access by default, supports HDCVV/ AHDIVIVE/SB auto-detect  1 CVI: SMP, AMP, 1080p825/30 fps, 720p825/30 fps, 2 10 ys 720p825/30 fps, 3 Artio-SMP, 3MP, 1080p825/30 fps, 720p825/30 fps, 3 Artio-SMP, AMP, 3MP, 1080p825/30 fps, 720p825/30 fps, 3 Artio-SMP, AMP, 3MP, 1080p825/30 fps, 720p825/30 fps, 3 Artio-SMP, AMP, 3MP, 1080p825/30 fps, 720p825/30 fps,	Channels)		Interoperability	ONVIF 21.06, CGI	
Face Database Capacity critical Name, gender, birthalay, address, certificate type, certificate Noc, countries-Regions and state can be added to each face picture  Recording Playback  Record Mode  Recording Playback  Record Mode  Recording Playback  Recording Playba	Face Recognition		Browser	Chrome, IE9 or above, Firefox	
Face Recognition to each face picture  Face Recognition to each face picture  Face Recognition Performance of AI by Recorder (Number of Channels)  SMD Plus  16 channels Secondary filtering for human and motor whicle SMD Plus reducing false alarms caused by leaves, rain and lighting condition change  Audio and Video  Analog Camera Input  16 RNC ports, CVI access by default, supports HDCVV AHD/TVI/CVBS auto-detect  1. CVI: SMP, 4MP, 1060po@25/30 fps. 3. AHD: SMP, 3MP, 1060po@25/30, 720p@50/60 fps. 720p@57/30 fps. 2. TVI: SMP, 4MP, 3MP, 1060po@25/30, 720p@25/30 fps. 3. AHD: SMP, 4MP, 3MP, 3MP, 1060po@25/30, 720p@25/30 fps. 3. AHD: SMP, 3MP, 3MP, 3MP, 3MP, 3MP, 3MP, 3MP, 3	Face Database Canacity		Network Mode	Single-address mode	
Performance of Al by Recorder (Number of Channels)  SMD Plus    16 channels Secondary filtering for human and motor vehicle SMD Plus, reducing false alarms caused by leaves, rain and lighting condition change   16 ENC ports, CVI access by default, supports HDCVI/ AHD/TVI/CVIS auto-detect   16 ENC ports, CVI access by default, supports HDCVI/ AHD/TVI/CVIS auto-detect   16 ENC ports, CVI access by default, supports HDCVI/ AHD/TVI/CVIS auto-detect   16 ENC ports, CVI access by default, supports HDCVI/ AHD/TVI/CVIS auto-detect   16 ENC ports, CVI access by default, supports HDCVI/ AHD/TVI/CVIS auto-detect   16 ENC ports, CVI access by default, supports HDCVI/ AHD/TVI/CVIS auto-detect   16 ENC ports, CVI access by default, supports HDCVI/ AHD/TVI/CVIS auto-detect   16 ENC ports, CVI access by default, supports HDCVI/ AHD/TVI/CVIS auto-detect   17 EVI SMP, AMP, BOSD@25/30 fps, 720p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MM, 1080p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 1080p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 1080p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 1080p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 1080p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 1080p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 1080p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 1080p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 1080p@25/30 fps, 720p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 1080p@25/30 fps, 3, AHD: 5MM, AMP, 3MP, 108	race Database Capacity		Recording Playback		
Recording Playback  Recording Playback, general playback, event playback, tage  Recording Playback, tage  Recording Playback  Recording Playback  Recording Playback  Recording Playback, Mode  Recording Playback, tage  Recording Playback, tage  Recording Playback, tage  Recording Playback  Recording Playback, tage  Recording Playback  Recording Playback  Recording Playback  Recording Playback  Recording Playback  Recordin	•		Record Mode	General, motion detection; intelligent; alarm; POS	
SMD Plus by Recorder vehicle SMD Plus, reducing false alarms caused by leaves, rain and lighting condition change  Audio and Video  Analog Camera Input  16 BNC ports, CVI access by default, supports HDCVI/AHDTVI/CVBS auto-detect  1. CVI: SMP, MMP, 1080p@25/30 fps, 720p@50/60 fps, 720p@25/30 fps. 3. AHD: SMP, 4MP, 3MP, 1080p@25/30, 720p@25/30, 720p@25/30 fps. 3. AHD: SMP, 4MP, 3MP, 1080p@25/30, 720p@25/30, 720p@25/30 fps. 3. AHD: SMP, 4MP, 3MP, 1080p@25/30, 720p@25/30, 720p@25/30, 720p@25/30 fps. 3. AHD: SMP, 4MP, 3MP, 1080p@25/30, 720p@25/30, 720p@25/3	Recorder (Number of Channels)	2 channels	Recording Playback	It changes to 1/4/9 split when Face or IVS&SMD is	
SMD Plus by Recorder vehicle SMD Plus, reducing false alarms caused by leaves, rain and lighting condition change  Audio and Video  Analog Camera Input  16 BNC ports, CVI access by default, supports HDCVI/AHD/TVI/CVBS auto-detect  1. CVI: SMP, 4MP, 1080p@25/30 fps, 720p@25/30 fps, 720p@25/30 fps, 720p@25/30 fps, 3. AHD: SMP, 4MP, 3MP, 1080p@25/30, 720p@25/30 fps. 4nomaly Alarm  PC Camera Input  IP Camera Input  IP Camera Input  IP Camera Input  Main stream: All channels of IPC access 81P channels are added beyond the existing channels, the AI function (IVS, SMD, FACE) will be disabled.  Intelligent Alarm  Face detection, face recognition, perimeter protection untput, access controller, voice prompt, buzzer, log, preset, email  POrts  Alarm Linkage  Ports  Audio Input  Audio Output  1-channel RCA (external)  4-channel BNC (coaxial audio)  Audio Output  1-channel RCA  Yes (share the same audio input with the first channel)  Video Bit Rate  32 Kbps-6144 Kbps Per Channel  Audio Sampling  8 KHz, 16 bit  HDD Interface  4 Intelligent Alarm  Branch Motion detection, Video Loss, tampering, and local alarm  Motion detection, Video Loss, tampering, and local alarm  Motion detection, Video Loss, tampering, and local alarm  Alarm Intelligent Alarm  Alarm Intelligent Alarm  Alarm Intelligent Alarm  10 1-channel RCA  Alarm Input  10 1-channel RCA  Alarm Input  3 1-channels RCA  Alarm Output  3 1-channels  Alarm Input  Alarm Output  3 1-channels  Alarm Output  3 1-channels  Alarm Output  4 2 SATA Ports, up to 16TB for a single HDD, the maximum HDD capacity varies with	SMD Plus		Backup Method	USB Device/Network	
Analog Camera Input    16 BNC ports, CVI access by default, supports HDCVI/   AHD/TVI/CVBS auto-detect   1. CVI: 5MP, 4MP, 1080p@25/30 fps, 720p@25/30 fps, 720p@25/30 fps, 720p@25/30 fps, 3. AHD: 5MP, 4MP, 3MP, 1080p@25/30, 720p@25/30 fps, 3. AHD: 5MP, 4MP, 4MP, 3MP, 1080p@25/30, 720p@25/30 fps, 3. AHD: 5MP, 4MP, 4MP, 4MP, 4MP, 4MP, 4MP, 4MP, 4	SMD Plus by Recorder	vehicle SMD Plus, reducing false alarms caused by	Playback Mode		
Analog Camera input  AHD/TVI/CVBS auto-detect  1. CVI: SMP, AMP, 1080p@25/30 fps, 720p@50/60 fps, 720p@25/30 fps. 2. TVI: SMP, AMP, 1080p@25/30, 720p@25/30 fps. 3. AHD: SMP, 4MP, 3MP, 1080p@25/30, 720p@25/30 fps. 4 Anomaly Alarm  Du fo 24 channels of IPC access 8 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 recording bandwidth: 128 Mbps and outgoing bandwidth: 128 Mbps recording bandwidth: 128 Mbps and outgoing bandwidth: 128 Mbps recording bandwidth: 128 Mbps rec	Audio and Video		Storage		
L. CVI: SMP, 4MP, 1080p@25/30 fps. 22 TVI: 5MP, 4MP, 1080p@25/30, 720p@25/30 fps. 3. AHD: 5MP, 4MP, 3MP, 1080p@25/30, 720p@25/30 fps. 4. Audiol Intelligent Alarm 4. Alarm Linkage 4. Alarm Linkage 4. Alarm Linkage 4. Audio Input 5. CALAP ORTO, Video Loss, tampering, and local alarm 4. Alarm Linkage 5. Audio Input 5. CALAP ORTO, Video Loss, tampering, and local alarm 5. Audio Input 5. CALAP ORTO, Video Extending, and local alarm 5. Audio Input 5. CALAP ORTO, Video Extending, and loca	Analog Camera Input		Disk Group	Yes	
Camera Input    720@25/30 fps. 2. T.VI: 5MP, AMP, 3MP, 1080p@25/30, 720p@25/30 fps. 3. AHD: 5MP, 4MP, 3MP, 1080p@25/30, 720p@25/30 fps.			Alarm		
Part   Part   Post	Camera Input	720p@25/30 fps. 2. TVI: 5MP, 4MP, 3MP, 1080p@25/30, 720p@25/30 fps.	General Alarm		
are converted to IP channels) incoming bandwidth: 128 Mbps and outgoing 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.  Encoding Capacity  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: Supported (D1/CIF (1 fps-15 fps)).  Audio Output  1-channel RCA (external) 4-channel RCA  Paulio Output 1-channel RCA  Yes  Two-way Talk Yes (share the same audio input with the first channel)  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  HDD Interface  Intelligent Alarm Face detection, face recognition, perimeter protection Record, snapshot (panoramic), IPC external alarm output, access controller, voice prompt, buzzer, log, preset, email  Ports  Audio Input 1-channel RCA (external) 4-channel RCA (external) 4-channel RCA  Yes (share the same audio input with the first channel)  Alarm Input 16 channels  Alarm Output 3 channels  Alarm Output 4-channel BNC (coaxial audio)  Alarm Output 3 channels  Alarm Output 4-channel BNC (coaxial audio)  Alarm Output 4-channel BNC (coaxial audio)  Alarm Input 4-channel RCA  Paulio Sampling  Alarm Input 4-channel RCA  Alarm Input 4-channel RCA  Alarm Input 4-channel BNC (coaxial audio)  Alarm Input 4-channel BNC (coaxial aud		fps.	Anomaly Alarm		
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.  Encoding Capacity  Audio Input  1-channel RCA (external) 4-channel BNC (coaxial audio)  4-channel RCA  Two-way Talk  Yes (share the same audio input with the first channel)  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  HDD Interface  Audio Bit Rate  64 Kbps  Alarm Linkage  output, access controller, voice prompt, buzzer, log, output, access controller, voice	IP Camera Input	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	Intelligent Alarm	Face detection, face recognition, perimeter protection	
disabled.  Ports  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: Supported (D1/CIF (1 fps-15 fps)).  Audio Output 1-channel RCA (external) 4-channel BNC (coaxial audio)  Audio Output 1-channel RCA  Yes Two-way Talk Yes (share the same audio input with the first channel)  Video Frame Rate PAL: 1 fps-25 fps. NTSC: 1 fps-30 fps.  Alarm Input 16 channels  Video Bit Rate Audio Sampling  8 KHz, 16 bit HDD Interface Audio Bit Rate 64 Khps			Alarm Linkage	output, access controller, voice prompt, buzzer, log,	
Encoding Capacity  4M-N/1080p (1 fps-15 fps); 1080N/720p/960H/D1/CIF (1 fps-25/30 fps) Sub stream: Supported (D1/CIF (1 fps-15 fps)).  Audio Output  1-channel RCA (external) 4-channel BNC (coaxial audio)  1-channel RCA  1-channel R		, , , , ,	Ports		
Dual-stream  Yes  Two-way Talk  Yes (share the same audio input with the first channel)  Video Frame Rate  PAL: 1 fps-25 fps. NTSC: 1 fps-30 fps.  Alarm Input  16 channels  Video Bit Rate  32 Kbps-6144 Kbps Per Channel  Audio Sampling  8 KHz, 16 bit  HDD Interface  Audio Bit Rate  64 Kbps  64 Kbps	Encoding Capacity	4M-N/1080p (1 fps–15 fps); 1080N/720p/960H/D1/CIF (1 fps–25/30 fps)	Audio Input	,	
Video Frame Rate  PAL: 1 fps-25 fps. NTSC: 1 fps-30 fps.  Alarm Input  16 channels  Video Bit Rate  32 Kbps-6144 Kbps Per Channel  Audio Sampling  8 KHz, 16 bit  HDD Interface  Audio Bit Rate  64 Kbps  64 Kbps			Audio Output	1-channel RCA	
Video Bit Rate  NTSC: 1 fps-30 fps.  Alarm Input  16 channels  Video Bit Rate  32 Kbps-6144 Kbps Per Channel  Alarm Output  3 channels  4 HDD Interface  Audio Sampling  8 KHz, 16 bit  HDD capacity varies with environment temperature;	Dual-stream		Two-way Talk	Yes (share the same audio input with the first channel)	
Audio Sampling  8 KHz, 16 bit  HDD Interface  2 SATA Ports,up to 16TB for a single HDD, the maximum HDD capacity varies with environment temperature;  Audio Bit Rate	Video Frame Rate		Alarm Input	16 channels	
Audio Sampling  HDD Interrace  HDD capacity varies with environment temperature;  Audio Bit Rate  64 Kbps	Video Bit Rate	32 Kbps–6144 Kbps Per Channel	Alarm Output	3 channels	
Audio Bit Rate 64 Kbps RS-485 1 Port, for PTZ Control	Audio Sampling	8 KHz, 16 bit	HDD Interface	2 SATA Ports,up to 16TB for a single HDD, the maximum HDD capacity varies with environment temperature;	
	Audio Bit Rate	64 Kbps	RS-485	1 Port, for PTZ Control	

USB

2 (1 front USB 2.0 port, 1 rear USB 3.0 port)

# Wiz Sense | DH-XVR5216A-I3

HDMI	1	
VGA	1	
Network Port	1 (10/100/1000 Mbps Ethernet port, RJ-45)	
General		
Power Supply	DC12V, 4A	
Power Consumption	Lower than 12 W	
Net Weight	1.64 kg (3.62 lb)	
Gross Weight	2.94 kg (6.48 lb)	
Product Dimensions	1U, 375.0 mm × 289.4 mm × 53.0 mm 14.76" × 11.39" × 2.09" (W × D × H)	
Packaging Dimensions	433.0 mm × 141.0 mm × 366.0 mm 17.05" × 5.55" × 14.41" (W × D × H)	
Operating Temperature	-10 °C to +55 °C (+14 °F to +131 °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				
Туре	Model	Description		
16 Channels WizSense XVR	DH-XVR5216A-I3	1U DIGITAL VIDEO RECORDER		

## Dimensions (mm[inch])





