



## DH-XVR5816S-I3

### 16 Channels Penta-brid 5M-N/1080P 2U 8HDDs 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 Al 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 AI Mode.

- H.265+/H.265 dual-stream video compression.
- · Supports 16-channel Al-Coding.
- Supports HDCVI/AHD/TVI/CVBS/IP video inputs.
- Max 24 channels IP camera inputs, each channel up to 8MP; 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.



#### 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.

#### **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.





Technical Specification	on		2 HDMI, 1 VGA, 1 TV	
System			Resolution VGA/HDMI2: 1920 × 1080, 1280 × 1024, 1280 × 720	
, Main Processor	Embedded Processor	Video Output	HDMI1: 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720	
Operating System	Embedded Linux		It changes to 1920 × 1080, 1280 × 1024, 1280 × 720 when Face or IVS&SMD is selected in Al Mode.	
Operating Interface	Web; Local GUI		*Heterogeneous video sources output for HDMI2 is configurable.	
Perimeter Protection		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	
Perimeter Performance of Al by Recorder (Number of Channels)	Advanced Model: 2 channels, 10 IVS for each channel General Model: 4 channels, 10 IVS for each channel	Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Samsung	
Face Detection		Compression Stand	ard	
	Gender; age group; glasses; expressions; face mask;	Video Compression	Al Coding; H.265+; H.265; H.264+; H.264	
Face Attributes	beard	Audio Compression	G.711a; G.711u; PCM	
Face Detection Performance of AI by Recorder (Number of	2 channels (up to 12 face images/s)	Network		
Channels)		Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P	
Face Recognition		Mobile Phone Access	iOS; Android	
Face Database Capacity	Up to 10 face databases with 10,000 face images in total. Name, gender, birthday, address, certificate type, cerificate No., countries&regions and state can be added to each face image	Interoperability	ONVIF 21.06; CGI	
		Browser	Chrome, IE9 or later, Firefox	
Face Recognition	2 channels	Network Mode	Multi-address mode, Fault Tolerance, Load Balance	
Performance of AI by Recorder (Number of Channels)		Recording Playback		
SMD Plus		Record Mode	General, motion detection; intelligent; alarm; POS	
SMD Plus by Recorder	16 channels: Secondary filtering for human and motor vehicle SMD Plus, reducing false alarms caused by leaves,	Recording Playback	1/4/9/16 It changes to 1/4/9 split when Face or IVS&SMD is selected in Al Mode	
Sivid Flus by Recorder	rain and lighting condition change	Backup Method	USB device and network	
Audio and Video		Playback Mode	Instant playback, general playback, event playback, tag playback, smart playback (face and motion detection)	
Analog Camera Input	16 BNC ports, CVI access by default, supports HDCVI/ AHD/TVI/CVBS auto-detect	Storage		
Camera Input	1. CVI: 5MP, 4MP, 1080p@25/30 fps, 720p@50/60 fps, 720p@25/30 fps. 2. TVI: 5MP, 4MP, 1080p@25/30 fps, 720p@25/30 fps. 3. AHD: 5MP, 4MP, 1080p@25/30 fps, 720p@25/30 fps.	Disk Group	Yes	
		Alarm		
		General Alarm	Motion detection; video loss; tampering; local alarm	
	Up to 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 *After IP channels are added beyond the existing channels, the AI Function (IVS, SMD, FACE) will be disabled.	Anomaly Alarm	No disk; storage error; disk full; camera offline; IP conflict; MAC conflict	
		Intelligent Alarm	Face detection; face recognition; perimeter protection	
IP Camera Input		Alarm Linkage	Record; snapshot (panoramic); IPC external alarm output; access controller; voice prompt; buzzer; log; preset; email	
	Main stream: All channels 5M-N@(1 fps-10 fps); 4M-N@ (1 fps-15 fps); 1080p@(1 fps-15 fps); 1080N@(1 fps-25/30 fps); 720p@(1 fps-25/30 fps); 960H@(1 fps-25/30 fps); D1@(1 fps-25/30 fps); CIF@(1 fps-25/30 fps) Sub stream: D1@(1 fps-15 fps); CIF@(1 fps-15 fps)	Ports		
Encoding Capacity		TV Output	Yes	
		Audio Input	16-channel BNC (external)	
Dual-stream	Yes	Audio Outout	16-channel BNC (coaxial audio)	
Video Frame Rate	PAL: 1 fps-25 fps	Audio Output Two-way Talk	1-channel BNC 1-channel BNC	
Video Bit Rate	NTSC: 1 fps–30 fps 32 kbps–6144 kbps	Alarm Input	1-channels	
Audio Sampling	8 kHz, 16 bit	·		
		Alarm Output	6 channels	
Audio Bit Rate	64 kbps	HDD Interface	8 SATA ports,up to 16TB, the maximum HDD capacity varies with environment temperature	



### Wiz Sense | DH-XVR5816S-I3

eSATA	1
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)

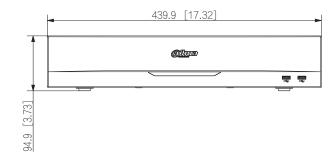
#### General

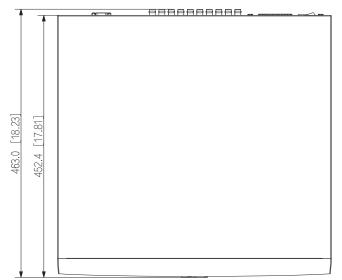
Power Supply	100–240 VAC, 50±2% Hz		
Power Consumption	<15 W (without HDD)		
Net Weight	6.72 kg (14.81 lb)		
Gross Weight	9.32 kg (20.55 lb)		
Product Dimensions	2U, 439.9 mm × 463 mm × 94.9 mm (17.32" × 18.23" × 3.73") (W × D × H)		
Packaging Dimensions	570.0 mm × 570.0 mm × 226.0 mm (22.44" × 22.44" × 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		

# Ordering Information Type Model Descript

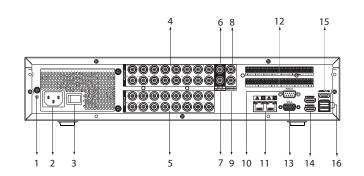
турс	WIGGET	Description
16 Channels WizSense XVR	DH-XVR5816S-I3	2U DIGITAL VIDEO RECORDER

#### Dimensions (mm[inch])





#### **Panels**



- 1 Ground
- 3 Power Switch
- 5 VIDEO IN
- 7 MIC OUT
- 9 VIDEO OUT
- 11 Network Ports
- 13 VGA Port 15 eSATA Port
- 2 Power Input
- 2 Power Input 4 AUDIO IN
- 6 MIC IN
- 8 AUDIO OUT
- 8 AUDIO 001
- 10 RS-232 Port 12 Alarm In/Out
- 14 HDMI Ports
- 16 USB Ports



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