

DHI-NVR2104HS-I2

4 Channel Compact 1U 1HDD WizSense Network 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

This AI network video recorder is a highly cost-effective product, providing functions such as local live view, multi-screen display, real-time storage on local HDD, fast operation by mouse, and remote management and control. This product is suitable for face detection and recognition at entrances and exits, and perimeter protection of people and vehicles.

Functions

Face Detection

Face detection is to detect if there is any human face appearing in the video. This technology adopts a deep learning algorithm to support face detection, tracking, optimization and capturing, and then output the best face snapshot.

Face Recognition

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

- Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format
- Max. decoding capability: 6 × 1080p@30 fps. Supports adaptive decoding
- 1-channel face detection and recognition (AI by NVR); 1-channel perimeter protection (AI by NVR); up to 10 face databases and 5,000 face images; 4-channel SMD Plus (AI by NVR);
- Al by camera: Face detection and recognition, perimeter protection, and SMD Plus
- · Connected to the third-party network cameras
- Security baseline 2.1



Perimeter Protection

Automatically filtering out false alarms caused by animals, rustling leaves, bright lights, etc. Enables system to perform secondary recognition for the targets. Improving 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.

AI Search

Support AI seach by metadata of different targets or uploading face pictures to device and comparing them with recorded faces by similarity. Enable operators to quickly and easily search through multi channels and long duration, efficiently find out when and where a person of interest appeard.

Smart Fan

The NVR is equipped with a smart fan to achieve high cooling efficiency. It automatically turns on or turns off according to CPU and ambient temperature. The fan is long-lasting and low noise, reducing maintenance costs and improving the user experience.

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Technical Specification

System		
Main Processor	Industrial-grade embedded processor	
Operating System	Embedded Linux	
Operation Interface	Web; local GUI	
Al		
AI by Camera	Face detection; face recognition; perimeter protection; SMD Plus	
Al by Device	Face detection; face recognition; perimeter protection; SMD Plus	
Perimeter Protection		
Perimeter Performance Al by Device(Number of Channels)	1	
Perimeter Performance of Al by Camera (Number of Channels)	4	
Face Detection		
Face Attributes	6 attibutes: Gender; age group (6); glasses; expressions (8); mouth mask; beard	
Face Detection Performance of Al by Device (1080P) (Number of Channels)	1 (up to 12 face images/second)	
Face Detection Performance of Al by Camera (Number of Channels)	4	
Face Recognition		
Face Database Capacity	Up to 10 face databases with 5,000 images	
Face Recognition Performance of Al by Device (1080P) (Number of Channels)	1 (up to 4 face images/second)	
Face Recognition Performance of AI by Camera (Number of Channels)	4	
SMD Plus		
SMD Plus by Device	4	
SMD Plus by Camera	4-channel SMD Plus (AI by camera): Detects tripwire and intrustion of human or vehicle; filters false alarms caused by leaves, raindrops and change of brightness away	
Video		
Access Channel	4 channels	
Network Bandwidth	80 Mbps for access, 80 Mbps for storage and 60 Mbps for forwarding.	
Resolution	12MP; 8MP; 5MP; 4MP; 3MP; 2MP; 720p; D1	
Decoding Capability	Al disabled: 1-channel 12MP@30 fps; 1-channel 8MP@30 fps; 2-channel 5MP@30 fps; 3-channel 4MP@30 fps; 6-channel 1080p@30 fps Al enabled: 1-channel 8MP@30 fps; 1-channel 5MP@30 fps; 2-channel 4MP@30 fps; 4-channel 1080p@30 fps	
Video Output	1 × VGA, 1 × HDMI (simultaneous)	

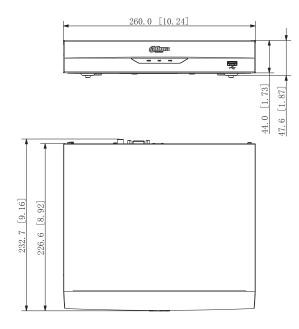
Multi-screen Display	1, 4 views			
Third Party Camera Access	Onvif; RTSP;			
Compression				
Video	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG			
Audio	PCM; G711A; G711U; G726			
Network				
Network Protocol	HTTP; HTTPS; TCP/IP; IPv4; RTSP; UDP; NTP; DHCP; DNS; SMTP; UPnP; IP Filter; DDNS; Alarm Server; IP Search (Supports Dahua IP camera, DVR, NVS, etc.); P2P;Auto Registration			
Mobile Phone Access	Android; iOS			
Interoperability	ONVIF (profile T; profile S; profile G); CGI; SDK			
Browser	Chrome; IE9 or later; Firefox			
Record Playback				
Multi-channel Playback	Up to 4 channels			
Record Mode	Manual record; alarm recordings; motion detection recordings; scheduled recordings			
Storage	Local HDD and network			
Backup	USB device			
Playback Function	 Play; pause; stop; fast forward; fast backward; rewind; play by frame Full screen; backup (vide clip/file); partially zom in; audio on/off 			
Alarm				
General Alarm	Motion detection; privacy masking; video loss; PIR alarm; IPC alarm			
Anomaly Alarm	Camera offline; storage error; disk full; IP conflict; MAC conflict; login lock; cyber security exception			
Intelligent Alarm	Face detection; face recognition; perimeter protection (intrusion and tripwire); IVS; SMD Plus			
Alarm Linkage	Recording; snapshot; buzzer; log; preset; email; tour			
External Port				
HDD	1 SATA port, up to 10 TB. The maximum HDD capacity varies with environment temperature			
USB	1 × front USB2.0; 1 × back USB2.0			
HDMI	1 (max. resolution: 4K)			
VGA	1			
Network	1 × RJ-45 (10 or 100 Mbps)			
RCA Input	1			
RCA Output	1			
General Parameter				
Power Supply	12 V DC, 1.5 A			
Power Consumption	Total output of NVR is \leq 10 W (without HDD)			
Net Weight	0.81 kg (1.79 lb)			
Gross weight	1.38 kg (3.04 lb)			
Product Dimensions	260 mm × 232.7 mm × 47.6 mm (10.24" × 9.16" × 1.87") (W × L × H)			

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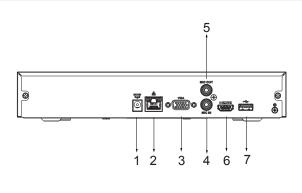
Package Dimensions	89 mm × 333 mm × 315 mm (3.50" × 13.11" × 12.40") (W × L × H)	
Operating Temperature	-10 °C to +55 °C (+14 °F to +131 °F)	
Storage Temperature	0 °C to 40 °C (32 °F to 104 °F)	
Operating Humidity	10%-93%	
Storage Humidity	30%-85%	
Operating Altitude	3,000 m (9,842.52 ft)	
Installation	Desktop	
Certifications	FCC:47 CFR FCC Part15,SubpartB,Class A CE-EMC:EN 55032:2015,Class A;EN IEC 61000- 3-2:2019;EN 61000-3-3:2013+A1:2019;EN 55024:2010+A1:2015;EN 55035:2017;EN 50130- 4:2011+A1:2014 CE-LVD:EN 62368-1:2014+A11:2017	

Ordering Information				
Туре	Model	Description		
4 Channel WizSense NVR	DHI-NVR2014HS-I2	4 Channel Compact 1U WizSense Network Video Recorder		

Dimensions (mm[inch])



Panels



- DC 12V Power Input 1
- VGA Port 3
- 5 AUDIO OUT, RCA Connector
- 7 USB Port
- Network Port AUDIO IN, RCA Connector 4
- 6 HDMI Port

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