



# DHI-NVR2108-I

# 8 Channel Smart 1U 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 economical 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/exits, and perimeter protection of people and vehicles.

## **Functions**

## **New User Interface**

Local and web interfaces adopt the new UI 4.0 style which caters to users habits. Functional modules are divided more clearly and easier to understand.

#### Decoding (Smart H.265+/Smart H.264+)

Dahua smart encoding (H.265+/ H.264+) is the optimized implementation of (H.265/H.264) codec that uses a scene-adaptive code rate control algorithm, providing more efficiency in the encoding process and higher video quality, and reducing the cost of storage and transmission significantly. This NVR supports the corresponding decoding.

## **SMD Plus**

SMD Plus, referred to as Smart Motion Detection Plus, which is an upgrading version of SMD that greatly improves the alarm accuracy by loading deep-learning algorithm. It analyzes person and vehicle shapes based on motion detection and sends alarms only when person or vehicle intrudes.

- New 4.0 user interface
- Remote surveillance, live view and video play on mobile phone App
- Max. decoding capability: 4 × 1080p@30fps. Supports adaptive decoding
- Supports mainstream cameras of ONVIF and RTSP protocols
- H.264/.H265/Smart H.264+/Smart H.265+/MJPEG, H.265 auto switch
- 1 VGA/1 HDMI simultaneous video output by default, the maximum resolution of HDMI is 4K; and non-simultaneous video output is also supported, the maximum resolution is 1080p
- 1-channel face detection and recognition (AI by NVR); or 2-channel perimeter detection (AI by NVR); or 4-channel SMD (AI by NVR); up to 10 face databases and 5,000 face images
- · Security baseline 2.1











#### 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**

Face recognition is to figure out the captured face with target features, and compare them with the face database to identify the personnel.

#### **Perimeter Protection**

Based on the deep learning algorithm, perimeter protection provides accurate human and vehicle classification detection. It grealy reduces false alarms by smartly detecting behaviors such as tripwire and intrusion according to the detected object in restricted areas (e.g., for human or vehicle) .

Technical Specification			Up to 10 face databases with 5,000 face ima
System		Database Management	total. Name, gender, birthday, address, certificerificate No., countries&regions and state cato each face picture
Main Processor	Industrial-grade embedded processor	Database Application	Each database can be applied to video chanr independently
Operating System	Embedded Linux	Trigger Events	Buzzer, Voice Prompts, Email, Snapshot, Rec
Operation Interface	Web/operating in local GUI		Alarm Out, PTZ Activation, etc.
Video		Alarm Linkage	Video recording, snapshot, log, preset, tour
Access Channel	8 channels	Perimeter Protection	
Network Bandwidth	80 Mbps for access, 80 Mbps for storage and 60 Mbps for forwarding	Performance	2 channels
Resolution	12M/8M/5M/4M/3M/2M/720p/D1	Object classification	Human/Vehicle secondary recognition for tri intrusion
Decoding Capability	1-channel 8MP@30fps 4-channel 1080p@30fps	Al Search	Search by target classification (human, vehic
Video Output	1 VGA/1 HDMI simultaneous video output by default, the maximum resolution of HDMI is 4K	Alarm	Marian darantan makanan makanan dalah lan
Multi-screen Display	1/4/8/9	General Alarm	Motion detection, privacy masking, video los IPC alarm
Third Party Camera Access	Onvif, RTSP	Anomaly Alarm	Front-end device going offline, storage error, storage, IP conflict, MAC conflict, login lock, r security anomaly
Compression		Alarm Linkage	Video recording, snapshot, log, preset, tour
Video	H.264/.H265/Smart H.264+/Smart H.265+/MJPEG	External Port	
Audio	PCM/G711A/G711U/G26/AAC	HDD	1 SATA port, up to 6 TB. The maximum HDD o
Network			varies with environment temperature
Network Protocol	HTTP, HTTPS, TCP/IP, IPv4, IPv6, RTSP, UDP, NTP, DHCP, DNS	HDMI	2 rear USB 2.0 ports
Mobile Phone Access	Android, iOS	VGA	1
Interoperability	ONVIF (profile T/profile S/profile G), CGI, SDK	Network	1 RJ-45 port (10/100 Mbps)
Browser	Chrome, IE9 or above, Firefox	RCA Input	1
Record Playback		RCA Output	1
Multi-channel Playback	Up to 8 channels playback	General Parameter	
Record Mode	Priority of record mode: Manual recording > alarm recording > motion detection recording > timed	Power Supply	DC 12V, 1.5A
Characa	recording	Power Consumption	Total output of NVR is ≤ 10W (without HDD)
Storage	Local HDD and network	Net Weight	0.45 kg (0.99 lb)
Backup	USB device	Gross weight	1.07 kg (2.36 lb)
Playback Function	Play, pause, stop, fast forward, fast backward, rewind, play by frame     Full screen, backup (cut/file), partially enlarge, audio on/off	Product Dimensions	204.6 mm $\times$ 206.4 mm $\times$ 48.1 mm (W $\times$ L $\times$ H 8.06 inch $\times$ 8.13 inch $\times$ 1.89 inch (W $\times$ L $\times$ H)
SMD Plus	5., 5.,	Package Dimensions	96 mm × 364 mm × 261 mm (W × L × H) 3.78 inch × 14.33 inch × 10.28 inch (W × L × H
Performance	4 channels	Operating Temperature	-10°C to +50°C (+14°F to +113°F)
Al Search	Search by target classification (human, vehicle)	Storage Temperature	0°C to +40°C (+32°F to +104°F)
Face Recognition		Operating Humidity	10%–93%
Performance	Max 8 face pictures/sec processing	Storage Humidity	30%-85%
	1 channel video stream face recognition	Operating Altitude	3000 m (9843 ft)
Stranger Mode	Detect strangers' faces (not in device's face database). Similarity threshold can be set manually	Installation	Desktop mounting
Al Caarah	Up to 8 target face images search at same time,	Certifications	CE/FCC
Al Search	similarity threshold can be set for each target face image	Certifications	CE/ FCC

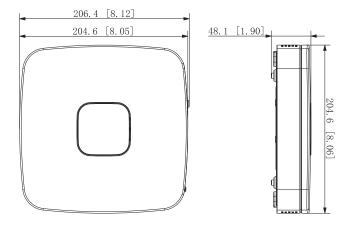


# **Ordering Information**

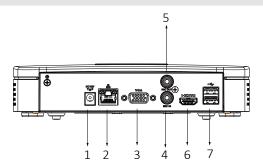
Type Model Description

8 Channel Smart 1U WizSense NvR WizSense NVR 8 Channel Smart 1U WizSense Network Video Recorder

# Dimensions (mm [inch])



## **Panels**



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