

# GX-HT-NVR5208-P8-EI

8 Channels 1U 8PoE 2HDDs WizSense Network Video Recorder



Launched by Technology, WizSense is a series of AI products solutions that adopt independent AI chip deep learning algorithm. It focuses on human vehicle with high accuracy, enabling users to fast act on defined targets. Based on advanced technologies, WizSense provides intelligent, simple inclusive products solutions.

## Series Overview

NVR5000-EI series offers outstanding performance high-grade recording technology that make it ideal for IP video surveillance applications. It a powerful processor, that offers high access forwarding bandwidth strong decoding capabilities that together produce unimpeded streams. Thanks to its built-in AI chip advanced deep learning algorithms, NVR supports a variety of AI functions, such as high-precision face recognition perimeter protection. They shorten response time to events make videos more interactive. This NVR is compatible with numerous third-party devices, making it a great solution for surveillance systems that work with Video Management Software (VMS).

## Functions

### AcuPick

This industry-leading search technology effectively utilizes both front-end back-end intelligence to help with searching through massive video to quickly conveniently locate targets with greater precision.

### Perimeter Protection

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

### Face Detection

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

- Smart H.265+/H.265/Smart H.264+/H.264/MJPEG decoding format.
- . decoding capability: 32 × 1080p@30 fps or 8 × 8MP@30 fps.
- . 384 Mbps incoming/recording/outgoing bandwidth.
- Support AcuPick with . 16-Channel.
- Support N+M cluster.
- AI by recorder: 2-channel face detection recognition, 4-channel perimeter protection, 8-channel SMD Plus.
- AI by camera: Face detection recognition, perimeter protection, SMD Plus, metadata, ANPR, stereo analysis, heat , people counting.
- Security baseline 2.3.



## Face Recognition

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

## Heat by Camera

heat technology is used to display crowd density people appearance probability. Export display crowd status by different colors. Generally, crowd status is statistics of people quantity in space time dimensions.

## ANPR by Camera

With deep learning algorithm, ANPR technology recognize number plate information of vehicles in image with ANPR cameras. Support blocklist/allowlist mode, searching target vehicles from recorded video.

## SMD Plus

With intelligent algorithm, Smart Motion Detection technology categorize targets that trigger motion detection filter motion detection alarm triggered by non-concerned targets to realize effective accurate alarm.

## Technical Specification

### System

Main Processor	Industrial-grade processor
Operating System	Embedded Linux
Operating Interface	Web, Local

### AI

AI by Recorder	Face detection; face recognition; perimeter protection; SMD Plus
AI by Camera	Face detection; face recognition; video metadata (human, motor vehicles, non-motor vehicles); perimeter protection; SMD Plus; stereo analysis; crowd distribution; people counting; ANPR; vehicle density; heat
AcuPick AI by Camera + Recorder	. 16-channel, 1 combined event per channel/s

### Perimeter Protection

Perimeter Performance AI by Recorder (Number of Channels)	4 channels, 10 IVS rules for channel
Perimeter Performance of AI by Camera (Number of Channels)	8 channels

### Face Detection

Face Attributes	Gender; age group; glasses; expressions; face mask; beard
Face Detection Performance of AI by Recorder (Number of Channels)	2 channels (up to 12 face images/s channel)
Face Detection Performance of AI by Camera (Number of Channels)	8 channels

### Face Recognition

Face Database Capacity	Up to 20 face databases with 20,000 images, with a total capacity of 2.5 G. Name, gender, birthday, address, credential type, credential No., countries & regions state be added to face image.
Face Recognition Performance of AI by Recorder (Number of Channels)	1. 8-channel FD (by camera) + FR (by recorder), image stream: 16 face images/s 2. 2-channe FD (by recorder) + FR (by recorder), video stream: 12 face images/s
Face Recognition Performance of AI by Camera (Number of Channels)	8 channels

### SMD Plus

SMD Plus by Recorder	8 channels: Secondary filtering for human motor vehicle , reducing false alarms caused by leaves, rain lighting condition change
SMD Plus by Camera	8 channels

### Video Metadata

Metadata Performance of AI by Camera (Number of Channels)	8 channels
Human Attributes	Top color, top type, bottom color, bottom type, , , age, gender umbrella
Motor Vehicle Attributes	License plate, plate color, vehicle body, vehicle model, vehicle logo, calling, seatbelt, vehicle interior, vehicle registration location.

Non-motor Vehicle Attributes	Vehicle model, vehicle color, number of persons, helmet.
------------------------------	--

### Vehicle License Plate Comparison

ANPR by Camera (Number of Channels)	8 channels
License Plate Database Capacity	1. Create up to 20,000 plate numbers. 2. Blocklist allowlist

### Audio Video

Access Channel	8
Network Bandwidth	AI disabled: 384 Mbps incoming, 384 Mbps recording 384 Mbps outgoing AI enabled: 200 Mbps incoming, 200 Mbps recording 200 Mbps outgoing
Resolution	32 MP; 24 MP; 16 MP; 12 MP; 8 MP; 5 MP; 4 MP; 1080p; 720p; D1; CIF; QCIF
Decoding Capability	AI disabled: 2-channel 32 MP@20 fps; 2-channel 24 MP@20 fps; 4-channel 16 MP@30 fps; 5-channel 12 MP@30 fps; 8-channel 8 MP@30 fps AI enabled: 1-channel 32 MP@20 fps; 1-channel 24 MP@20 fps; 2-channel 16 MP@30 fps; 4-channel 12 MP@30 fps; 4-channel 8 MP@30 fps; 8-channel 5 MP@30 fps
Video Output	1 VGA, 1 HDMI VGA:1920 × 1080, 1280 × 1024, 1280 × 720 HDMI:3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 Heterogeneous video source output for HDMI VGA
Multi-screen Display	Main screen: 1/4/8/9 screen: 1/4/8/9
Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Samsung

### Compression Standard

Video Compression	Smart H.265+; H.265; Smart H.264+; H.264; MJPEG
Audio Compression	G.711a; G.711u; PCM; G726

### Network

Network Protocol	HTTP; HTTPS; TCP/IP; IPv4/IPv6; UDP; SNMP; NTP; ; ; SMTP; UPnP; IP Filter; PPPoE; FTP; DDNS; Alarm Server; IP Search (Supports IP camera, , NVS, etc.); Multicast; P2P; Auto Registration; iSCSI
Mobile Phone Access	iOS; Android
Interoperability	ONVIF 22.06 (Profile T; Profile S; Profile G); CGI; SDK
Browser	Chrome;IE;Safari;Edge;Firefox

### Recording Playback

Multi-channel Playback	Up to 8 channels
Record Mode	General, motion detection; intelligent; alarm; POS
Backup Method	USB device network
Playback Mode	Instant playback, general playback, event playback, playback, smart playback (face motion detection)

### Storage

Disk Group	Yes
------------	-----

### Alarm

General Alarm	Motion detection; privacy masking; local alarm
---------------	--

Anomaly Alarm	Camera offline; storage error; disk full; IP conflict; conflict; login lock; abnormal behavior of ; cybersecurity exception
Intelligent Alarm	Face detection; perimeter protection; face recognition; video metadata (human, motor vehicles, non-motor vehicles); SMD Plus; stereo analysis; crowd distribution; people counting; ANPR; vehicle density; heat
Alarm Linkage	Record; snapshot (panoramic); local alarm output; IPC external alarm output; access controller; audio; buzzer; log, preset; email

## Port

Audio Input	1-channel RCA
Audio Output	1-channel RCA
Alarm Input	4 channels
Alarm Output	2 channels
Interface	2 ports, disk contain up to 16 TB. This limit varies depending on environment temperature.
RS-232	1
RS-485	1
USB	2 (1 front USB 2.0 port, 1 rear USB 3.0 port)
HDMI	1
VGA	1
Network Port	1(10/100/1000 Mbps Ethernet port, RJ-45)
PoE Port	8 ports, 10/100 Mbps, IEEE 802.3 af/at, 1-8 ports support ePoE

## General

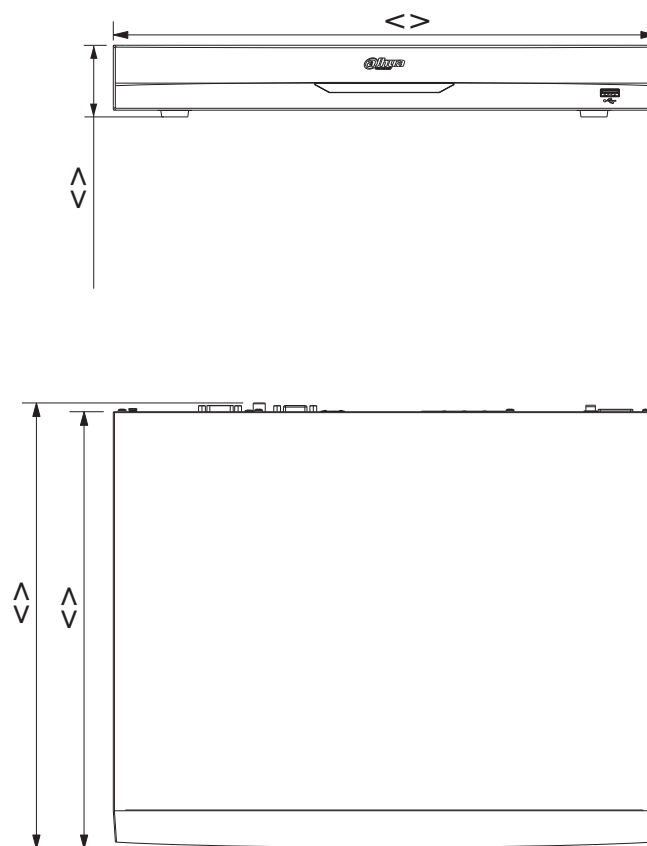
Power Supply	100–240 , 47-63 Hz
Power Consumption	Total output of NVR is ≤ 10 W (without ) Total output power of PoE is 130 W, maximum output power of a single port is 25.5W
Net Weight	2.57 kg (5.67 lb)
Gross Weight	3.8 kg (8.38 lb)
Product Dimensions	375.0 mm × 329.4 mm × 53.0mm (14.76" × 12.97" × 2.09") (W × D × H)
Packaging Dimensions	451.0 mm × 147.0 mm × 425.0 mm (17.76" × 5.79" × 16.73") (W × D × H)
Operating Temperature	–10 °C to +55 °C (14 °F to +131 °F)
Storage Temperature	–20 °C to +60 °C (–4 °F to +140 °F)
Operating Humidity	10%–93% (RH)
Installation	Rack or desktop
Certifications	FCC: 47 CFR FCC Part15, SubpartB, Class A CE-EMC: EN 55032: 2015+A1: 2020; EN IEC 61000-3-2: 2019+A1: 2021; EN 61000-3-3: 2013+A1: 2019+A2: 2021; EN 55035: 2017+A11: 2020; EN 50130-4: 2011+A1: 2014 CE-LVD: EN 62368-1: 2014

## Ordering Information

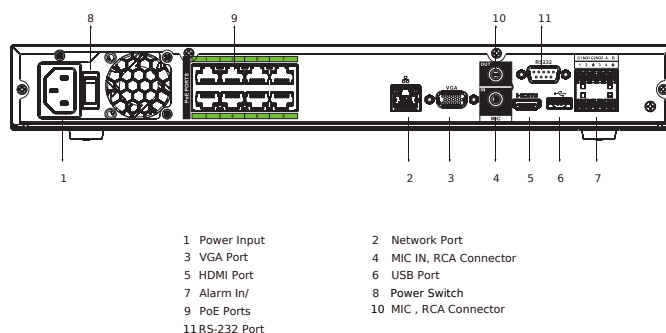
Type	Model	Description
8 Channels WizSense NVR	GX-HT-NVR5208-P8-EI	8 Channels 1U 8PoE 2HDDs WizSense Network Video Recorder

## Dimensions (mm[inch])

mm [inch]



## Panels



- 1 Power Input
- 2 Network Port
- 3 VGA Port
- 4 MIC IN, RCA Connector
- 5 HDMI Port
- 6 USB Port
- 7 Alarm In/
- 8 Power Switch
- 9 PoE Ports
- 10 MIC , RCA Connector
- 11 RS-232 Port

**Galaxy**  
SECURITY

Markham Head Office: 1-866-946-8998  
7755 Warden Ave, Unit 1, Markham ON L3R 0N3, CA

Mississauga Branch: 1-855-999-6998  
1200 Aerowood Dr, Unit 5, Mississauga ON L4W 2S7, CA