

# VKDN 5864XI PRO

64CH 2U 8HDDs WizMind Network Video Recorder



Launched by Dahua Technology, Dahua WizMind is a full portfolio of solutions composed of project-oriented products including IPC, IVSS, NVR, PTZ, XVR, Thermal and software platform which adopts industry-leading deep learning algorithms. Focusing on customer's requirements, WizMind provides precise, reliable and comprehensive AI solutions for verticals.

## Series Overview

With the innovation and advancement of Xinghan Large-Scale Model technology, Dahua makes a landmark launch of the WizSeek NVR. It achieves efficient alignment and collaborative understanding between images and natural language, empowering diverse applications such as text-to-image search with WizSeek and the Text-Defined Alarms feature. These capabilities make it ideally suited for a wide range of scenarios, including public safety and security, retail businesses, smart home, residential communities and more.

## Functions

### WizSeek

Powered by Xinghan large-scale AI model, WizSeek enables natural-language video search for human, vehicle, object, and event with high accuracy, while reducing investigation time by transforming manual reviews into instant results.

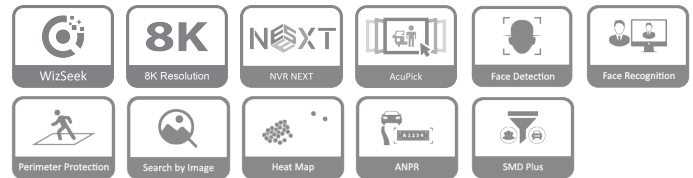
### NVR NEXT

With its enhanced system, the NVR introduces NVR NEXT, a user-friendly GUI featuring a modular design to improve operation efficiency and streamline work flows, catering to the needs of small and medium-sized businesses.

### AcuPick

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

- Supports Smart H.265+, H.265, Smart H.264+, H.264 and MJPEG decoding formats.
- Max. decoding capability: 40 × 1080p@30 fps.
- Max. 512/512/384 Mbps incoming/recording/outgoing bandwidth.
- Supports IP cameras with a resolution up to 32 MP.
- Supports 8K HDMI output.
- Intelligent analytics based on Xinghan Large-Scale AI Models
- AI by Recorder supports 8-channel face detection and recognition, up to 20 face databases and 200,000 face images; 8-channel metadata; 8-channel AcuPick; 16-channel perimeter protection;
- AI by Camera supports face detection and recognition, perimeter protection, SMD Plus, metadata, ANPR, stereo analysis, heat map, people counting and AcuPick
- Supports N+M cluster, Raid 0/1/5/6/10, iSCSI.
- Supports EPTZ, and one-click arming and disarming.



### Face Recognition

Dahua Face Recognition technology extracts the features of captured faces and compares them with that in face database.

### 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.

## Technical Specification

### System

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

### AI

AI by Recorder	Face detection; face recognition; video metadata (human, motor vehicles, and non-motor vehicles); perimeter protection; SMD; AcuPick; WizSeek; Texted-Defined Alarming
AI by Camera	Face detection; face recognition; video metadata (human, motor vehicles, and non-motor vehicles); perimeter protection; SMD; stereo analysis; crowd distribution; people counting; ANPR; heat map; PPE detection; AcuPick
AcuPick Performance of AI by Recorder (1080P) (Number of Channels)	Xinghan Large-Scale AI Models enabled : 8 channels Xinghan Large-Scale AI Models disabled : 16 channels
AcuPick Performance of AI by Camera (1080P) (Number of Channels)	All channels (36 targets/s)

### WizSeek

Performance	<ol style="list-style-type: none"> <li>Compatible with cameras that support AcuPick, it can meet full-channel WizSeek.</li> <li>Compatible with normal cameras, after enabling AcuPick by NVR, it can offer up to 8-channel WizSeek.</li> <li>Modeling capability: up to 432,000 targets per day.</li> </ol>
Search Language	English; TradChinese; Korean

### Perimeter Protection

Perimeter Performance AI by Recorder (Number of Channels)	Xinghan Large-Scale AI Models enabled : 16 channels, 10 IVS rules for each channel Xinghan Large-Scale AI Models disabled : 32 channels, 10 IVS rules for each channel
Perimeter Performance of AI by Camera (Number of Channels)	All channels (32 targets/s)

### Face Detection

Face Attributes	6 attributes
Face Detection Performance of AI by Recorder (Number of Channels)	Xinghan Large-Scale AI Models enabled : 8 channels (up to 12 face images/s each channel) Xinghan Large-Scale AI Models disabled : 16 channels (up to 12 face images/s each channel)
Face Detection Performance of AI by Camera (Number of Channels)	All channels (32 targets/s)

### Face Recognition

Face Database Capacity	Up to 20 face databases with 200,000 images, with a total capacity of 44 G.
Face Recognition Performance of AI by Recorder (Number of Channels)	32-channel FD (by camera) + FR (by recorder), image stream: 32 face images/s Xinghan Large-Scale AI Models enabled : 8-channel FD (by recorder) + FR (by recorder), video stream: 16 face images/s

Face Recognition Performance of AI by Recorder (Number of Channels)	Xinghan Large-Scale AI Models disabled : 16-channel FD (by recorder) + FR (by recorder), video stream: 16 face images/s
Face Recognition Performance of AI by Camera (Number of Channels)	All channels (32 targets/s)

### SMD

SMD Plus by Recorder	Xinghan Large-Scale AI Models enabled : Not support Xinghan Large-Scale AI Models disabled : 32 channels: Secondary filtering for human and motor vehicle, reducing false alarms caused by leaves, rain and lighting condition change
SMD by Camera	All channels (64 targets/s)

### Video Metadata

Metadata Performance of AI by Recorder (Number of Channels)	Xinghan Large-Scale AI Models enabled : 8 channels, 23 attributes extraction. Xinghan Large-Scale AI Models disabled : 16 channels, 23 attributes extraction.
Metadata Performance of AI by Camera (Number of Channels)	All channels (32 targets/s)
People Attributes	9 human body attributes
Motor Vehicle Attributes	9 attributes
Non-motor Vehicle Attributes	4 attributes

### Vehicle License Plate Comparison

ANPR by Camera (Number of Channels)	All channels (32 targets/s)
License Plate Database Capacity	<ol style="list-style-type: none"> <li>Create up to 20,000 plate numbers.</li> <li>Blocklist and allowlist</li> </ol>

### Audio and Video

Access Channel	64 channels
Network Bandwidth	AI disabled: 512 Mbps incoming, 512 Mbps recording and 384 Mbps outgoing AI enabled: 200 Mbps incoming, 200 Mbps recording and 200 Mbps outgoing
Resolution	32 MP;24 MP;16 MP;12 MP;8 MP;6 MP;5 MP;4 MP;3 MP;1080p;720p;960p;D1;CIF;QCIF
Decoding Capability	AI disabled: 2-channel 32 MP@30 fps; 3-channel 24 MP@30 fps; 5-channel 16 MP@30 fps; 6-channel 12 MP@30 fps; 10-channel 8 MP@30 fps; 13-channel 6 MP@30 fps; 16-channel 5 MP@30 fps; 20-channel 4 MP@30 fps; 40-channel 1080p@30 fps; 64-channel 720p@30 fps AI enabled: 1-channel 32 MP@30 fps; 1-channel 24 MP@30 fps; 2-channel 16 MP@30 fps; 4-channel 12 MP@30 fps; 6-channel 8 MP@30 fps; 8-channel 6 MP@30 fps; 8-channel 5 MP@30 fps; 12-channel 4 MP@30 fps; 24-channel 1080p@30 fps; 48-channel 720p@30 fps; 64-channel D1@30 fps

Video Output	2 VGA, 2 HDMI VGA:1920 × 1080, 1280 × 1024, 1280 × 720 HDMI: 7680×4320, 3840 × 2160, 1920 × 1080, 1280 × 1024, 1280 × 720 Heterogeneous video source output for HDMI1 and HDMI2 Simultaneous video source output for VGA1 and HDMI1 Simultaneous video source output for VGA2 and HDMI2
Multi-screen Display	Main screen: 1/4/8/9/16/25/36/64 Sub screen: 1/4/8/9/16
Third-party Camera Access	ONVIF; Panasonic; Sony; Axis; Arecont; Pelco; Canon; Hanwha

### 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; NTP; DHCP; DNS; SMTP; UPnP; IP Filter; FTP; DDNS; SNMP; Alarm Server; P2P; Auto Registration; IP Search (Supports IP camera, DVR, NVS, etc.); ISCSI
Mobile Phone Access	iOS; Android
Interoperability	ONVIF 24.12(Profile T; Profile S; Profile G); CGI; SDK
Browser	Chrome; Firefox; IE
Network Mode	Multi-address; load balance; fault tolerance

### Recording Playback

Multi-channel Playback	Up to 16 channels
Record Mode	General; motion detection; intelligent; alarm; POS
Backup Method	USB device and network
Playback Mode	Instant playback; general playback; event playback; tag playback; smart playback

### Storage

Disk Group	Yes
RAID	RAID 0/1/5/6/10

### Alarm

General Alarm	Motion detection; local alarm; alarm box; camera external alarm; network alarm; scene changing; PIR alarm; thermal alarm
Anomaly Alarm	Error (no disk, disk error, low space, RAID exception, low quota space; abnormal disk health; network disconnection; IP conflict; MAC conflict; abnormal fan speed); video loss; video tampering; camera offline; audio detection
Intelligent Alarm	Face detection; face recognition; video metadata (human, motor vehicle, and non-motor vehicle); perimeter protection; license plate comparison
Alarm Linkage	Record; snapshot (panoramic); local alarm output; IPC external alarm output; audio; buzzer; log, preset; email

### Port

Audio Input	1-channel RCA
Audio Output	2-channel RCA
Alarm Input	16 channels

Alarm Output	8 channels (1-channel 12 V 1 A output )
Disk Interface	8 SATA ports. Each disk can contain up to 20 TB. This limit varies depending on the environment temperature.
eSATA	1
RS-232	1
RS-485	2 (1 port for half-duplex serial communication, 1 port for full-duplex serial communication)
USB	4 (2 front USB 2.0 ports, 2 rear USB 3.0 ports)
HDMI	2
Network Port	2 (10/100/1000 Mbps Ethernet port, RJ-45)

### General

Power Supply	100–240 VAC, 50-60 Hz
Power Consumption	<18 W (without HDD)
Net Weight	6.33 kg (13.96 lb)
Gross Weight	8.84 kg (19.49 lb)
Product Dimensions	440.0 mm × 451.3 mm × 94.9 mm (17.32" × 17.77" × 3.74") (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)
Storage Temperature	–20 °C to +60 °C (–4 °F to +140 °F)
Operating Humidity	10%–93% (RH), non-condensing
Certifications	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

**Accessories**

Optional:



DH-RailBracket60/L-  
Shaped  
Domestic DH OCH 0  
Server Cabinet Rail  
Bracket

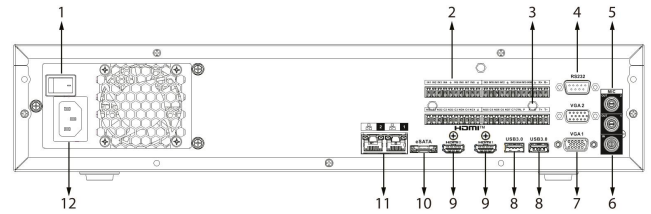


DHI-ARB1606  
Alarm Box

**Dimensions (mm[inch])**



**Panels**



- |                            |                           |
|----------------------------|---------------------------|
| 1 Power Switch             | 2 Alarm In/Out            |
| 3 RS-485 Port              | 4 RS-232 Port             |
| 5 AUDIO OUT, RCA Connector | 6 AUDIO IN, RCA Connector |
| 7 VGA Port                 | 8 USB 3.0 Port            |
| 9 HDMI Port                | 10 eSATA Port             |
| 11 Network Ports           | 12 Power Input            |

Distribuito da

