



DHI-IVD5148-31

48CH 1U INTELLIGENT VIDEO DEVICE





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

Dahua IVD is an AI edge computing device that combines traditional video management with intelligent video analytics. It provides real-time AI monitoring and high-speed data processing on site, to produce an automatic monitoring system that detects hazards and extracts useful information. With its built-in deep learning module, this series offers high-precision AI functions including human face recognition, perimeter protection and video metadata. Other industrial algorithms allow IVD to be widely applicable to various industries, such as banking and retail, and for use in different scenes, such as factories. IVD is compatible with numerous third-party devices, making it the perfect solution for upgrading traditional CCTV systems in the most cost-effective way.

Functions

Face Recognition

Supports recording faces with incredible accuracy through metadata and real-time cross-check to recognize faces with target features. With Regular and Stranger face modes, the device triggers a wide variety of alarm actions to suit different situations.

AI IVS

With deep learning algorithms, AI IVS technology can recognize humans and vehicles accurately. In restricted areas (such as pedestrian and vehicle areas), there is a great reduction in the generation of false alarms of intelligent detection based on target type (such as tripwire, intrusion, parking detection, loitering detection, crowd gathering estimation and more).

- · 64-bit High-performance multi-core processor
- · Max 48-ch IP camera inputs
- · Max 256 Mbps incoming/recording/outgoing bandwidth
- · Up to 48-channel AI IVS
- · Up to 48-channel face recognition with normal IPC
- · Up to 32-channel face recognition with face detection IPC
- · Up to 48-channel video metadata
- · Up to 100 face databases with 500,000 face pictures in total
- · Up to 48-channel AcuPick with normal IPC
- · 1 SATA bay, Max.20 TB
- · 2 HDMI/1 VGA video output









Video Metadata

Metadata is the information on the features and attributes that is extracted from target objects which can be used for data retrieval. Currently, there are 4 main kinds of metadata in the security industry: Human face, human body, and motor vehicle and non-motor vehicle metadata.

Al Search

Supports search by metadata of humans and vehicles. Face images can be uploaded to the device and compared with recorded faces in the device by their similarities. The device enables operators to quickly and easily search for data stored for a long time through multiple channels, to quickly identify when and where a person of interest appeared.

ANPR

Automatic Number Plate Recognition is available for convenient entrance and exit management. This feature provides license plate recognition (working with Dahua ITC cameras), license plate comparison with blocklist and allowlist, vehicle database management, and vehicle records search.

AcuPick

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

System Main Processor 64-bit high-performance multi-core processor Operating System Embedded Linux OS Operating Interface Web (PCAPP); local GUI Al Applications Face detection; face recognition; video metadata (human; yehicle; non-motin vehicle); IVS; leense plate comparison; tripwire people counting; regional people counting, abnormal number of people in queue; smoking detection; call detection; face & body detection Al by Recorder Face detection face recognition; video metadata (human; vehicle; non-motor vehicle); IVS 1. Al by Recorders Supports 48-channel 2 MP or 48-channel 4 MP resolution. 2. Al by Carmera Supports 48-channel 2 MP or 32-channel 4 MP resolution Face Detection 1. Al by Recorder: Supports 48-channel 2 MP or 32-channel 4 MP resolution. Face Detection 2. Al by Carmera Supports 52-channel 2 MP or 32-channel 4 MP resolution 3. Supports properties: ciender, age, glasses, expression, face mask, and beard Search by Image Search by Image Search by Image, but the face database, search by face or human body images, and 3.1 face recognition. Face Database Capacity 2. Spasserby databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in the luman face databases with 500,000 face pictures in total in total in total in the luman face databases with 500,000 face pictures in total in tota	Technical Specification	nn			
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Al Applications See detection, face recognition, video metadata (thuman, vehidor, non-motor vehidor), IV5, license plate companion, tripwine people counting, abnormal number of people in queue, smoking detection, face & body detection, face section, face with people counting, abnormal number of people in queue, smoking detection, face & body detection, face & body detection, face detection, face & body detection (all detection, face & body detection). All by Recorder All by Recorder Supports 48-channel 2 MP or 48-channel 4 MP resolution.	Operating System	Embedded Linux OS	IVS Analytics		
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AcuPick channel 4 MP resolution 2. A by Camera: Supports 32-channel 2 MP or 32-channel 2 MP or 32-channel 4 MP resolution 3. A by Camera: Supports 32-channel 2 MP or 48-channel 4 MP resolution 4. A by Camera: Supports 32-channel 2 MP or 48-channel 4 MP resolution 5. A by Camera: Supports 32-channel 2 MP or 32-channel 4 MP resolution 4. A by Camera: Supports 32-channel 2 MP or 32-channel 4 MP resolution 5. Search by Image 5. Search by Image 6. Search by Image 7. Search by Image 8. Search by Image 8. Search by Image 5. Search by Image 6. Search by Image 6. Search by Image 7. Search by Image 7. Search by Image 8. Search by Image 8. Search by Image 8. Search by Image 8. Search by Image 9. Sea	Al by Recorder		Video Diagnosis		
Audio and Video Access Channel AMP resolution 2. Al by Camera: Supports 43-channel 2 MP or 48-channel 4 MP resolution 3. Supports 6 properties: Gender, age, glasses, expression, face mask, and beard Network Bandwidth Network Bandwidth Network Bandwidth Outgoing ba		channel 4 MP resolution. 2. Al by Camera: Supports 32-channel 2 MP or 32-	Video Diagnosis	Supports 1-channel t Supports 12 detection scene changing, video ji interference, video loss defocus detection, video change and low contrast	
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Face Database Capacity Compression Comp		human body images, and 1:1 face recognition.	Decoding Capability	1-channel 32 MP; 1-ch 4-channel 8 MP@30 fp channel 5 MP@30 fps; channel 1080p@30 fps	
share the total capacity and number of face images. Multi-screen Display Max. 16-channel PCA Third-party Camera Access ONVIF, RTSP, Sony, Pa Canon, Samsung Compression Standard Video Compression Standard Video Compression Standard Video Compression Max. 16-channel PCA Network Network Network Network Network Protocol PlyPv4;RTSP; UDP; My PryPv4;RTSP;	Face Database Capacity	in total 2. 5 passerby databases with 500,000 face pictures in total The human face database and the passerby database share the total capacity and number of face images. 1. Al by Recorder: Supports 48-channel 2 MP or 48-channel 4 MP resolution with normal IP camera; 32-channel with face detection IP camera (Totally 32 face pictures analyzed per second) 2. Al by Camera: Supports 32-channel 2 MP or 32-channel 4 MP resolution 3. Supports entries frequency alarm	Video Output	1-channel VGA output, HDMI 1 outputs the sa	
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License Plate Database Capacity 1. 50 plate databases with 300,000 plate numbers in total 2. Supports allowlist and blocklist Vehicle License Plate Comparison Video Metadata 1. Al by Recorder: Supports 48-channel 2 MP or 48-channel 4 MP resolution 2. Al by Camera: Supports 32-channel 2 MP or 32-channel 2 MP or 32-channel 2 MP or 32-channel 4 MP resolution 3. Object type: Human body: Gender, age, sleeves length, top color, bottom type, bottom color, bag, rain coat, umbrella, hat, hairstyle, direction, hold a baby, 1. 50 plate databases with 300,000 plate numbers in total Network Protocol HTTP;HTTPS;TCP/ IP;IPV4;RTSP;UDP;SM UPnP;SNMP Mobile Phone Access DMSS Interoperability ONVIF (Profile S, T and Browser Chrome; PCAPP; IE9 of Network Mode Multiple-address mode tolerance; Link aggregory Network Mode Multi-channel Playback Multi-channel Playback Multi-channel Playback Multi-channel Playback Max. 16-channel play			Audio Compression	G.711a;G.711u;PCM;G.	
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coat, umbrella, hat, hairstyle, direction, hold a baby, Multi-channel Playback Max. 16-channel play	Video Metadata	3. Object type: Human body: Gender, age, sleeves	Recording Playback		
issue mask remote type, remote color, place			Multi-channel Playback	Max. 16-channel playba	

Record Mode	Search auto; manual; video detection; IO alarm; thermal imaging; intelligent event; all record file	
Storage Method	Internal HDD	
Backup Method	HDD, peripheral USB storage device	
Playback Function	Play; Pause; Stop; Fast forward; Fast backward; Reverse play; Frame by frame; Full-screen; Backup (clip and file); Snapshot; Digital zoom; Audio on and off	
Storage		
Record Management	Supports record control (continuous, event-based, scheduled, scheduled & event-based)	
Alarm		
General Alarm	Motion detection; tampering; IPC external alarm; heat alarm; temperature alarm; temperature difference alarm; hot spot alarm; cold spot alarm	
Anomaly Alarm	IPC offline alarm; storage error; HDD full; IP conflict; MAC conflict; login lock; AI module temperature alarm; AI module offline; fan malfunction; no HDD; network security exception; power exception	
Alarm Linkage	Record; snapshot (full image); alarm uploading; remote device alarm output; camera audio; buzzer; log; preset; email, and smart tracking. Disarming alarm linkage action by period or one-click sync disarm config with channels	
Port		
Audio Input	1 channel	
Audio Output	1 channel	
Alarm Input	4 channels	
Alarm Output	2 channels	
Disk Interface	1 slot, SATA3.0. Max.20 TB/HDD	
RS-232	1 port	
RS-485	1 port	
USB	4 ports. 2 USB2.0 ports at the front panel and 2 USB3.0 ports at the rear panel.	
HDMI	2 ports. Port 1 supports 4K output.	
VGA	1 port	
Network Port	2 RJ-45 10/100/1000Mbps self-adaptive Ethernet ports	
Power	Single supply	
General		
Disk Bay	1	
Form Factor	10	
Power Supply	12 VDC,5 A	
Power Consumption	28 W (without HDD, idling) 35 W(all HDDs connected)	
Fan	Intelligent speed regulation fan	
Net Weight	1.75 kg (3.86 lb)	
Gross Weight	2.78 kg (6.13 lb)	

Product Dimensions	Chassis: 304 mm× 43.5 mm× 223.8 mm (11.97" × 1.71" × 8.11") (W × H × D)	
	NO.II / (W NII N D)	
Packaging Dimensions	With packaging: 399 mm × 133 mm × 304 mm (15.71" × 23.58" × 11.97")(W × L × H)	
Operating Temperature	-10 °C to +55 °C (+14 °F to +131 °F)	
Operating Humidity	10%–80% (RH), non-condensing	
Operating Altitude	≤5,000 m (16,404.20 ft)	
Installation	Desktop; Rack	
	CE-LVD: EN 62368-1	
Certifications	CE-EMC: EN IEC 61000-3-2, EN 61000-3-3, EN 55032, EN 50130-4, EN 55035	
Installation Certifications	CE-LVD : EN 62368-1 CE-EMC : EN IEC 61000-3-2 , EN 61000-3-3 , EN	

Ordering Information						
Туре	Model	Description				
INTELLIGENT VIDEO DEVICE	DHI-IVD5148-3I	48CH 1U INTELLIGENT VIDEO DEVICE				

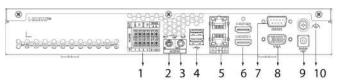
Dimensions (mm[inch])



mm [inch]



Panels



- 1 Alarm In/Out
- 2 AUDIO IN
- 3 AUDIO OUT
- 4 USB Port
- 5 Network Port
- 6 HDMI Port
- 7 RS-232 Port
- 8 VGA Port
- 9 Power Input
- 10 Ground