

DHI-IVSS7024DR-8T

4U 24HDD AI Network Video Recorder



DeepSense

DeepSense series products adopt the most advanced AI technologies, including deep learning algorithms that primarily target people and vehicles, which provides higher flexibility and accuracy for end-users. This enables the Dahua DeepSense series to offer various advanced applications such as Face Recognition, ANPR, Metadata, People Counting, traffic data statistics, etc.

The complete lineup of Dahua DeepSense includes network (PTZ) cameras, network video recorders, servers, and platform management products. Beyond seeing the world, the power of AI allows devices to perceive the environment and understand the world in a better way.

System Overview

Dahua IVSS goes beyond the ordinary NVR products. It is an Intelligent Video Surveillance Server combines video management functions with traditional video storage operations in one device. Besides the basic functions as network video recorder, IVSS is integrated with features such as face detection, face recognition for different business and industrial applications.

With build-in deep learning module, IVSS series products adopt video image structuring technology based on deep learning algorithms, achieving high-precision human face analysis, comparison, retrieval, storage, and management. By applying deep learning artificial intelligence, IVSS allow users to focus on what matters most, improve event response time and help make video actionable.

An all new UI design supports device operation and maintenance management, improving the value and experience of surveillance view, and servicing the era of security big data.

- Intel quad-core processor
- Max 512Mbps incoming bandwidth
- 256 Channel IP video access
- Up to 32 Channel back end face recognition
- Regular/stranger mode
- Search by image
- Face database management
- Supports RAID 0/1/5/6/10
- SAS3.0 for storage extension
- 3HDMI/1VGA video output
- Redundant power



Functions

Real Time Face Recognition

Up to 32 channel real time face recognition by IVSS. Facial attributes analysis features including gender, age, expression, glasses, moustache, mouth mask. Identify people and also capture, record faces with structured data. Facial feature filtering while real time display, only show faces with target features.

Regular/Stranger Mode

IVSS support regular and stranger mode. In stranger mode, when IVSS detect a stranger face(not in device's face database), it can trigger alarm, buzzer, snapshot, record, etc. Similarity threshold can be set manually. This function is developed for important infrastructure sites for which access control is critical.

Efficient Search

Support uploading face pictures to IVSS and compare them with recorded faces in IVSS 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 appeared.

Face Database Management

Configurable multiple face databases. Powerful face database management. Face database can be applied to video channels independently. Name, gender, birthday, nationality, address, ID information can be added to each face picture.

Technical Specification

System

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|------------------|---------------------------|
| Main Processor | Intel Quad-core Processor |
| Memory | 16GB, up to 64GB |
| Operating System | Embedded LINUX |

Artificial Intelligence

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| Face Recognition | Up to 32 channel face recognition |
| Metadata | Sturctured data of gender, age, expression, glasses, moustache, mouth mask information. |
| Stranger Mode | Detect strangers' faces(not in device's face database). Similarity threshold can be set manually. |
| Trigger Events | Buzzer, snapshot, recording, etc. |
| Search by Image | Up to 10 target face images search at same time. Support similarity threshold set for each target face image. |
| Database Management | Up to 20 face databases with 100,000 face images in total. Name, gender, birthday, nationality, address, ID information can be added to each face picture. |
| Database Application | Each database can be applied to video channels independently. |

Audio and Video

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| IP Camera Input | 256 Channel |
| Two-way Talk | 1 × 3.5mm audio input, 1 × 3.5mm audio output |

Display

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| Interface | 3 HDMI, 1VGA |
| Resolution | HDMI1/2/3 : 3840 × 2160 , 1920 × 1080 , 1280 × 1024, 1280 × 720 VGA : 1920 × 1080 , 1280 × 1024, 1280 × 720 |
| Decoding Capability | 24-ch@1080P(30fps) |
| Multi-screen Display | Up to 36 split for each screen |
| OSD | Camera title, Time, Motion detection, Recording |

Recording

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|-------------|--|
| Bandwidth | 450Mbps |
| Compression | H.265/H.264/MJPEG/MPEG4 |
| Resolution | 12MP, 8MP, 6MP, 5MP, 4MP, 3MP, 1080P, etc. |
| Record Mode | Schedule (Continuous, Event) |

Video Detection and Alarm

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|-----------------|--|
| Trigger Events | Recording, Snapshot, Buzzer, etc. |
| Video Detection | Motion Detection, MD Zones: 396 (22 × 18); Tampering |
| Alarm input | 16 Channel |
| Relay Output | 8 Channel |

Playback and Backup

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|---------------|---|
| Sync Playback | Up to 16ch sync playback, 128Mbps playback bandwidth |
| Search Mode | Time /Date, Video Detection, Face and Exact Search (accurate to second) |
| Backup Mode | USB Device/Network |

Third-party Support

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|---------------------|-----------------------------|
| Third-party Support | AXIS, Panasonic, Sony, etc. |
|---------------------|-----------------------------|

Network

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| Interface | 4 RJ-45 Ports (10/100/1000Mbps) |
| Optional Interface | 4 Giga Optical Fiber Interface |
| Network Port Mode | Independent Ethernet Ports, Load Balance, Fault-Tolerance, Link Aggregation |
| Network Function | HTTP, HTTPS, TCP/IP, UDP, RTSP, IPv4, NTP, DHCP, DNS, IP Filter, IP Search (Support Dahua IP camera, DVR, etc.), P2P |
| Interoperability | ONVIF 2.4, SDK |

Storage

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| Internal HDD | 24 SAS/SATA HDDs, Up to 10 TB capacity for each HDD, Independent HDD bracket, hot-swap |
| HDD Mode | Single, Raid 0/1/5/6/10(Enterprise-level HDDs are recommended), Support Global HDD Hot-spare |
| eSATA | 1 eSATA Port (Please contact technical engineer to confirm the compatible device) |
| SAS | 2 SAS3.0 Ports |

Auxiliary Interface

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| Front Cover | Support Hot-swap, 7-inch HD LCD (1920 × 1080 , 1280 × 1024) |
| USB | 4 USB Ports (2 USB 2.0 , 2 USB 3.0) |
| RS232 | 1 Port, for PC Communication |
| RS485 | 1 Port |

Electrical

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| Power Supply | AC100V ~ 240V, 50 ~ 60 Hz, Hot-swap, Redundant |
| Power Consumption | <130W (Without HDD) |
| Fan | Dual-ball bearing fans, Hot-swap |

Environmental

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|----------------------|---|
| Operating Conditions | 0°C ~ +45°C (+32°F ~ +113°F), 86 ~ 106kpa |
| Storage Conditions | -20°C ~ +70°C (-4°F ~ +158°F), 0 ~ 90% RH |

Construction

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| Dimensions | 4U, 482.6mm x 543.4mm x 175mm (19" x 21.39" x 6.89") |
| Net Weight | 20kg (44.09 lb) (without HDD) |
| Installation | Standard 19-inch Rack-mounted |

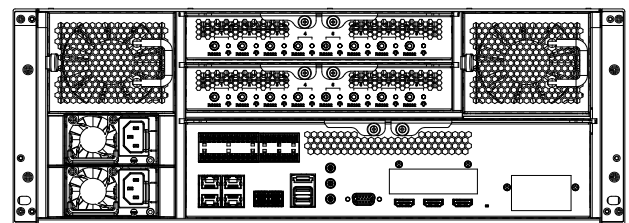
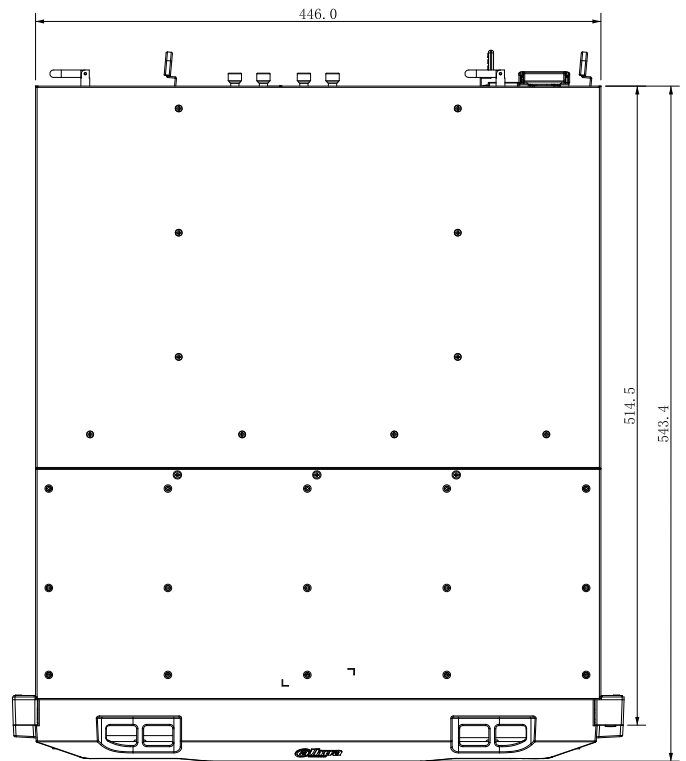
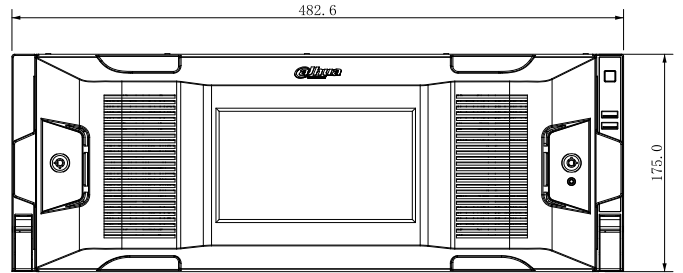
Certifications

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| CE | EN55032, EN55024, EN50130-4, EN60950-1 |
| FCC | Part 15 Subpart B, ANSI C63.4-2014 |
| UL | UL 60950-1 |

Ordering Information

| Type | Part Number | Description |
|-------------------|-------------------|--|
| IVSS | DHI-IVSS7024-8T | 4U 24HDD Intelligent Video Surveillance Server with 32 Channel Back End Face Recognition |
| IVSS | DHI-IVSS7024DR-8T | 4U 24HDD Intelligent Video Surveillance Server with Redundant Power, LCD screen and 32 Channel Back End Face Recognition |
| Relevant Products | DH-IPC-HF8242F-FD | 2MP Starlight Face Detection Box Network Camera |

Dimensions(mm)



Relevant Products



DH-HF8242F-FD