

# EVS7024D-R

24-HDD Enterprise Video Storage with Dual Controller



- Intel Processor
- Dual Controller architecture
- Max 768 IP Camera Inputs
- Max 1536Mbps Incoming/recording Bandwidth
- 24 HDDs, SAS, Hot-Swap
- Supports RAID 0/1/3/4/5/6/10/50/60/JBOD, Hotspare
- iSCSI and Mini SAS for Expanded Storage Space
- Support standard iSCSI Protocol Storage
- Modular&Cableless Design
- Redundant Power

## System Overview

EVS7024D-R offers unparalleled storage technology. It is designed and developed to meet the needs of medium-range to high-end IP video surveillance applications. It supports 768 channels of IP camera inputs, and 1536Mbps incoming/recording/forwarding bandwidth.

Combined with hot-swap power supplies, fans and hard disk drives, the EVS offers real Enterprise Class availability. This EVS is ideal for a wide range of applications such as public safety, transportation stations, government institutions, hotel resorts, shopping malls, city centers, and financial institutions, where demand expansion flexibility, high reliability and centralized storage management.

This EVS is compatible with numerous third-party devices making it the perfect solution for surveillance systems with or without a video management system (VMS). Its open architecture supports multi-user access and is compatible with ONVIF 2.4.

## Functions

### Dual Controller

The EVS comes with dual controller, which enables a fully redundant mode. Combined with hot-swap power supplies, fans and hard disk drives, the EVS offers real Enterprise Class availability.

### Modular Design

All key modules are hot-swap, redundant configuration. Redundant fans, redundant power, multi-redundant design ensures stability. Brand new design for HDD carrier, ensures good cooling, stability and safety for hard disks.

### Storage Extension Capacity

Local extension, connect to ESS extension storage by mini SAS interface. Extension storage support redundant power and RAID.

### RAID 0/1/3/4/5/6/10/50/60

Offering a balance **between storage** performance, storage capacity, and data integrity, the NVR features fruitfull RAID 0/1/5/6/10/50/60 for faster and safer recording.

### ANR (Automatic Network Replenishment Technology)

Video record in SD card in IP cameras when the network breaks down, and after the network recovered, the video will be transferred to NVR and then recorded in it.

## Technical Specification

### System

Main Processor	64-bit high-performance Intel processor
Controller	Dual controller
Memory	8GB by default(up to 16GB) for each controller
Operating System	Embedded LINUX
User Interface	Web

### Working Mode

Video Stream Mode	Max 768 channel 1536Mbps for incoming/recording/forwarding 64 channel(128Mbps) network playback
Transfer Mode	4096Mbps front-end connection 4096Mbps network transfer
IP SAN Mode	Storage bandwidth shall not be less than 3.6Gbps

### Storage

HDD Amount	24 HDDs, Up to 8 TB capacity for each HDD SAS HDD composite connection
miniSAS	2 miniSAS ports on each controller, for storage extension
HDD Installation	Additional HDD bracket, HDD hot-swap, HDD online replacement
HDD Mode	Single, RAID 0/1/3/4/5/6/10/50/60(Enterprise-level HDDs are recommended), JBOD, hotspare

### Storage Management

HDD Manager	Non-working HDD hibernation to guarantee sound ventilation, reduce power consumption and enhance HDD life span HDD bad track mapping to enhance HDD life span
RAID Rebuild	Dynamically adjust RAID rebuild speed to guarantee system load balance
Logic Volume Manager	Support iSCSI volume management, NAS(SMB/NFS/FTP) volume management
Snapshot	Support snapshot function, create user volume to back data.
Extract Frame	Support extracting P frame function. Customized extracting period and frame rate setup.
Cluster Service	N/A
ANR	After disconnection, system can download the record file from the SD card on the network camera to maintain the full record file.
Shortcut RAID Creation	Click one button to create RAID conveniently.

### Playback and Backup

Search Mode	Time/Date, Channel, Alarm, MD and Exact Search (accurate to second)
Playback Function	Play, Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom
Backup Mode	USB Device/Network/eSATA Device

### Third-party Support

Third-party Support	Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and more
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### Recording

IP Camera Input	768 Channel
Record Rate	1536Mbps
Record Mode	Manual, Schedule(Regular, Continuous), Motion Detection, Alarm
Record Interval	1 ~ 120 min(default 60 min) Pre-record 1 ~ 30 sec, Post-record 10 ~ 300 sec. 1 frame storage by period.

### Auxiliary Interface

USB	2 USB 3.0
Multiplex Interface	2 USB 2.0 & eSATA multiplex interface
RS232	2 Port, for PC communication and Keyboard
RS485	2 Port, for PTZ control

### Network

Interface	2 management RJ-45 ports (10/100/1000Mbps) 2 × 4 data RJ-45 ports (10/100/1000Mbps)
Network Mode	Multi-address, Fault-tolerance, Load balance, Link aggregation
Network Function	HTTP, HTTPS, TCP/IP, IPv4/IPv6, UPnP, RTP, RTCP, RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE, DDNS, iSCSI, SMB, NFS, FTP, Alarm Server, IP Search (Support Dahua IP camera, DVR, NVS, etc.)
Expansion Interface	2 × 2 Giga Optical Fiber Interface
Max. User Access	128 users
Smart Phone	iPhone, iPad, Android
Interoperability	ONVIF 2.4, CGI Conformant

### Electrical

Power Supply	AC100V ~ 240V, 47 ~ 63 Hz 1 + 1 Redundant power, Hot-swap
Power Consumption	200W ~ 400W (With HDD)
Fan	DC12V, 1.5A, Diameter 80mm MTBF > 100,100 hours, Hot-swap

### Environmental

Working Conditions	0°C ~ +40°C (+32°F ~ +104°F), 10 % ~ 80% RH
Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH
Working Altitude	-60m ~ 5000m

### Construction

Chassis	1.2mm extra-thickness hot-dip galvanized steel. High accuracy aluminum alloy slider. Self-developed patent removable HDD bracket.
Dimensions(W x D x H)	4U, 482.6mm x 494.0mm x 175.0mm ; (19.0" x 14.8" x 5.3")
Net Weight	31kg (68.3 lb) (without HDD)
Gross Weight	42kg (92.6 lb)
Installation	Standard 19-inch rack installation

## Certifications

CE	EN55022, EN55024, EN50130-4, EN60950-1
FCC	Part 15 Subpart B, ANSI C63.4-2009
UL	UL 60950-1 and CAN/CSA C22.2 No.60950-1

## Ordering Information

Type	Part Number	Description
24-HDD EVS	EVS7024D-R	24-HDD Enterprise Video Storage with Dual Controller
Accessories	ESS3124D-JR	24 HDDs SAS Storage Cabinet

## Accessories



ESS3124D-JR