

DHI-EVS7136S

36-bay Embedded Video Storage



- 64-bit High-performance multi-core processor
- Max 512-ch IP camera inputs
- Max 1024 Mbps incoming/recording/forwarding bandwidth
- 36 bays, SAS/SATA, Hot-Swap
- Supports RAID 0/1/5/6/10/50/60, JBOD, Hot spare
- Supports video stream/ Picture direct storage mode and IPSAN storage mode
- Supports N+M cluster
- Supports Automatic Network Replenishment (ANR)
- SAS cascade for expanded storage space
- Modular and drawer-like design
- 1+1 redundant 80PLUS platinum power supply

System Overview

DHI-EVS7136S 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 512 channels of IP camera inputs, and 1024Mbps 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

Modular Design

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

Storage Extension Capacity

Local extension, connecting to expansion storage cabinet by mini SAS interface. Extension storage supports redundant power and RAID.

RAID 0/1/5/6/10/50/60

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

N+M Hot Standby

The highly reliable redundancy N+M Hot Standby design provides a secure, failover technique, ensuring immediate backup. In the event of a system failure, the sub server instantly takes over the main server to ensure no data is lost.

ANR (Automatic Network Replenishment Technology)

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

Technical Specification

System

| | |
|---------------------|---------------------------------------|
| Main Processor | 64-bit multi-core processor |
| Operating System | Embedded Linux |
| Operation Interface | Web |
| Controller | Single controller |
| RAM | 8 GB by default (extendable to 64 GB) |
| Power Redundancy | 1+1 |

External Ports

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|-------------------|---|
| SAS | 2 mini SAS HD ports with maximum speed 12Gb/s |
| Network | 1 × 1GbE management port; 4 × 1GbE LAN ports |
| Network Extension | 4 × 1-GbE LAN ports and 2 × 10-GbE optical fiber ports are optional |
| eSATA | 1 × eSATA |
| RS-232 | 1 × DB9 |
| HDMI | 1 × HDMI |

Internal Expansion

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|---------|----------------------------|
| M.2 SSD | 2 × NVMe SSD ports |
| PCI-E | 1 × PCI-E X8; 1 × PCI-E X4 |
| Disk | 1 × 2.5 inch SATA |

Disk

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|-------------------|--|
| Disk Bay | 36 |
| Disk Type | 1TB; 2TB; 3TB; 4TB; 6TB; 8TB; 10TB; 12TB; 14TB; 16TB; 18TB; 20TB 2.5-inch and 3.5-inch HDD Support simultaneously connecting to SATA/SAS |
| Disk Installation | Independent disk tray |
| Hot Swapping | Yes |
| RAID Type | RAID 0/1/5/6/10/50/60; JBOD; hot-spare |
| Disk Processing | Dad sector mapping |
| Disk Management | Non-working disks automatic sleep |
| Disk Inspection | Inspection before use and during use |

Performance

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|---|--|
| Video Direct Storage (Private Protocol) | Up to 512-channel (1024 Mbps) access, storage, and forwarding; 32-channel (64 Mbps) online playback |
| Video Direct Storage (ONVIF) | Up to 512-channel (1024 Mbps) access, storage, and forwarding; 32-channel (64 Mbps) online playback |
| Video Direct Storage (Auto Register) | Up to 512-channel (1024 Mbps) access, storage, and forwarding; 32-channel (64 Mbps) online playback |
| Picture Direct Storage | Up to 512-channel access, storage, and forwarding (250 KB/Picture) |
| IPSAN Performance | 360-channel × 2 Mbps video stream writing and 24-channel × 2 Mbps video playback (I/O size of VMS is 64 KB) |

Function

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|---------------------------------------|---|
| IPSAN Mode | Yes |
| IPSAN Function | Dynamic online extension of logic volumes |
| Video Storage | Direct storage |
| Network Protocol | RTP; RTCP; RTSP; UDP; HTTP; NTP; SNMP; iSCSI; FTP; SMB; NFS |
| RTSP | ONVIF |
| Cluster | N+M |
| Automatic Network Replenishment (ANR) | Videos during network failure upload to EVS automatically afterwards |
| Network Mode | Multiple-address, link aggregation, fault-tolerance, load balance |
| Quick RAID | Yes |
| RAID Instant Use | Yes |
| RAID Rebuilding | Self-adaptive rebuilding |
| RAID-write Synchronization | Yes |
| Record Mode | Scheduled, manual, motion-triggered and alarm triggered |
| Video Playback | Web playback, concentrated playback, slice playback, synchronous playback Search video by second Adjustable playback speed |
| Video Codec | Access by cameras with encoding formats of MPEG4, MJPEG, H.264, H.265, and SVAC Access by multi-sensor cameras, thermal cameras, and panoramic cameras |
| Video Backup | Back up video through USB, network, and eSATA |

General

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|-----------------------|--|
| Power Supply | 100–127V/200–240 VAC, 50/60 Hz, 6A/3A |
| Fan | Dual ball-bearing fans |
| Power Consumption | <85 W (without HDD, idling) <600 W (all HDDs connected) |
| Operating Temperature | 0 °C to 45 °C (32 °F to 113 °F) |
| Operating Humidity | 10%–80% (RH) (non-condensation) |
| Storage Temperature | –20 °C to +70 °C (–4 °F to +158 °F) |
| Storage Humidity | 5%–90% (RH) (non-condensation) |
| Operating Altitude | ≤ 5000 (16404.20 ft) m |
| Certifications | CE: EN 55024; EN 55032; EN 55035; EN 50130-4; EN 61000-3-2; EN 61000-3-3; EN 62368 FCC: ANSI C63.4, 47 CFR PART 15B Subpart B |
| Chassis | 1.2 mm hot dip galvanized steel plate Independent developed pull-out disk tray |
| Dimensions | With hanger: 482.6 mm × 175 mm × 736.5 mm (19" × 6.89" × 29") (W × H × D) Without hanger: 446 mm × 175 mm × 736.5 mm (17.56" × 6.89" × 29") (W × H × D) |
| Net Weight | 26 kg (57.32 lb) |
| Gross Weight | 44 kg (97 lb) |
| Installation | Standard 19 inch rack |

Ordering Information

| Type | Model | Description |
|------------|--------------|----------------------------------|
| 36-bay EVS | DHI-EVS7136S | 36-bay Embedded Video Storage |
| 24-bay ESS | ESS3124S-JR | 24-bay Expansion Storage Cabinet |

Expansion Storage Cabinet

