

DHI-EVS5124S 24-bay Embedded Video Storage



- 64-bit high-performance multi-core processor.
- Max 320-ch IP camera inputs.
- Max 800 Mbps incoming/recording/forwarding bandwidth.
- 24 bays, SATA, Hot-Swap.
- Supports RAID 0/1/5/6/10/50/60, Hot spare.
- Supports N+M cluster.
- · Supports Automatic Network Replenishment (ANR).
- Modular and drawer-like design.
- 1+1 redundant 80PLUS platinum power supply.

System Overview

EVS5 Series offers unparalleled storage technology. It is designed and developed to meet the needs of medium-range to high-end IP video surveillance applications.

Combined with hot-swap power supplies 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

The hard disk and the main controller have a modular hardware design, and key modules such as the fan and power supply have a redundant design that improve the reliability of the overall hardware. The hard disk, fan, power supply and other modules are pluggable, and can be replaced for quick and easy maintenance.

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)

Videos are recorded and saved to the SD card of cameras when the network breaks down. When the network recovers, the videos will be transferred to EVS and then recorded through it.

EVS5 Series | DHI-EVS5124S

Technical Specification	on	
System		
Main Processor	64-bit high-performance multi-core processor	
Operating System	Embedded Linux OS	
Operating Interface	Web (PCAPP)	
Controller	Single controller	
Cache	8 GB by default (extendable to 64 GB)	
AI Applications		
Al by Camera	Face detection, face recognition, IVS (abandoned object, missing object, loitering, crowd gathering, parking, fence-crossing, fast moving, tripwire and intrusion), video metadata (human, vehicle, non-motor vehicle), vehicle recognition, people counting (fisheye or people counting camera required),face & body detection, crowd distribution, smart thermal (call detection, visible channel-smoking detection, thermal channel-smoking detection)	
Camera Compatibility		
Thermal	Works with camera for fire alarm, temperature alarm, temperature difference alarm, hot spot, cold spot, smoking and calling	
People Counting	Works with camera for tripwire people counting, regional people counting and queue people counting	
Bullet-PTZ Smart Track	Works with camera for manual tracking, auto tracking, click positioning and select positioning	
Fisheye Dewarp	Supports dewarping for fisheye cameras	
Cluster		
Cluster	N+M	
Audio and Video		
Third-party Camera Access	Onvif, Onvifs, RTSP, Sony, Panasonic, Axis, Arecont, Pelco, Canon, Samsung, Hikvision	
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; RTSP; UDP; SMTP; NTP; DHCP; DNS; DDNS; P2P; GAT1400; ISCSI; FTP; SMB; NFS	
Mobile Phone Access	DMSS	
Interoperability	ONVIF (Profile S); CGI; SDK	
Browser	Chrome; PCAPP; IE9 or higher; Firefox	
Network Mode	NIC binding mode such as multiple-address mode, load balance, fault-tolerance, link aggregation, etc	
Recording Playback		
Multi-channel Playback	Max. 16-channel playback	
Record Mode	Auto record; manual record; search video detection; IO alarm; thermal imaging; intelligent event; all record file	
Storage Method	Internal HDD and network disk	
Backup Method	HDD, peripheral USB storage device	

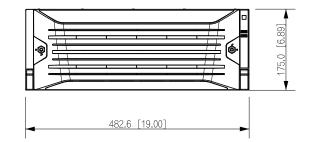
Playback Function	1. Play, pause, stop, fast forward, fast backward, reverse play, frame by frame 2. Full-screen, backup (clip; file), snapshot, digital zoom, audio on; off	
Storage		
Video Direct Storage (Private Protocol)	Incoming: 320-channel (bandwidth: 800 Mbps) Recording: 320-channel (bandwidth: 800 Mbps) Outgoing: 320-channel (bandwidth: 800 Mbps) Playback: 32-channel (bandwidth: 64 Mbps)	
Video Direct Storage (Onvif)	Incoming: 320-channel (bandwidth: 800 Mbps) Recording: 320-channel (bandwidth: 800 Mbps) Outgoing: 320-channel (bandwidth: 800 Mbps) Playback: 32-channel (bandwidth: 64 Mbps)	
Video Direct Storage (Auto Register)	Incoming: 320-channel (bandwidth: 800 Mbps) Recording: 320-channel (bandwidth: 800 Mbps) Outgoing: 320-channel (bandwidth: 800 Mbps) Playback: 32-channel (bandwidth: 64 Mbps)	
Video Direct Storage (International Protocol)	Incoming: 320-channel (bandwidth: 800 Mbps) Recording: 320-channel (bandwidth: 800 Mbps) Outgoing: 320-channel (bandwidth: 800 Mbps) Playback: 32-channel (bandwidth: 64 Mbps)	
Picture Direct Storage	Incoming: 120-channel (550 KB/picture) Recording: 120-channel (550 KB/picture) Outgoing: 120-channel (550 KB/picture) Playback: 32-channel (550 KB/picture)	
Disk Group	Yes	
iSCSI	Supports client and Server	
Network Disk	Supports client	
RAID	RAID 0/1/5/6/10/50/60; (with enterprise-grade HDD)	
Record Management	Supports record control (continuous, event-based, scheduled, scheduled & event-based).	
Storage Pool	Yes	
IPSAN		
IPSAN Performance	280-channel × 2 Mbps video stream writing and 24-channel × 2 Mbps video playback (I/O size of VMS is 64 KB) 400-channel × 2 Mbps video stream writing and 24-channel × 2 Mbps video playback (I/O size of VMS is 512 KB)	
Alarm		
General Alarm	Motion detect; tampering; IPC external alarm	
Anomaly Alarm	IPC offline alarm; storage error; HDD full; video frame loss; SSD exception; IP conflict; MAC conflict; login lock; fan malfunction; no HDD; network security exception; power exception; disk health exception; RAID exception; storage pool exception; temperature alarm; share service	
Alarm Linkage	Record; snapshot (full image); alarm uploading; remote device alarm output; camera audio; buzzer; log; preset; email, smart tracking and warning light. Disarming alarm linkage action by period or one-click sync disarm config with channels	
Port		
HDD Interface	24 slots, SATA Max.18 T/HDD hot swapping CMR support enterprise-grade HDD	
eSATA	1 port	
RS-232	1 port, for debug or COM data transmission	

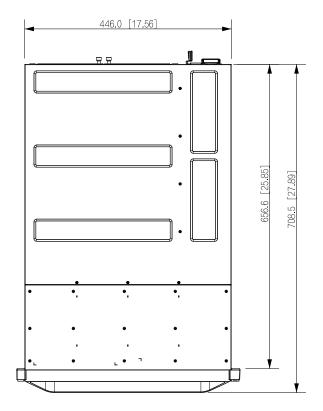
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USB	4 ports. 2 USB2.0 ports at the front panel and 2 USB3.0 ports at the rear panel	
HDMI	1 port, only for debug	
Network Port	4 RJ-45 10/100/1000 Mbps self-adaptive Ethernet port (gigabit electrica port) 1 RJ-45 10/100 Mbps self-adaptive Ethernet ports. (100 Mbps electrical port)	
Power	1+1 redundant power	
Network Port Extension	4 × 1-GbE LAN ports (optional) 2 × 10-GbE optical fiber ports (optional)	
Network Port Extension	4×1 -GbE LAN ports (optional) 2 × 10-GbE optical fiber ports (optional)	
General		
Power Supply	100-240 VAC 50-60 Hz	
Power Consumption	<100 W (without HDD, idling) <300 W (all HDDs connected)	
Fan	Intelligent speed regulation fan	
Net Weight	28.4 kg (62.61 lb)	
Gross Weight	43.5 kg (95.90 lb)	
Product Dimensions	Chassis: 446 mm × 175mm × 736.5 mm (17.56" × 6.89" × 29.00") (W × L × H) Max. size: 482.6 mm (with hanger) × 175 mm × 736.5 mm (19.00" × 6.89" × 29.00") (W × L × H)	
Packaging Dimensions	With packaging: 562 mm × 599 mm × 235 mm (22.13" × 23.58" × 9.25") (W × L × H) Protection box: 491 mm × 584 mm × 631 mm (19.33" × 22.99" × 24.84") (W × L × H)	
Operating Temperature	0 °C to 45 °C (+32 °F to +113 °F)	
Operating Humidity	10%–80% (RH), non-condensing	
Operating Altitude	5000 m (16404.20 ft)	
Installation	Standard 19 inch rack	
Certifications	CE: CE-LVD: EN 60950-1/IEC 60950-1 CE-EMC: EN 61000-3-2, EN 61000-3-3, EN 55032, EN 50130, EN 55024 FCC: Part 15 Subpart B	

Ordering Information Type Model Description 24-bay EVS DHI-EVS5124S 24-bay Embedded Video Storage 24-bay ESS ESS3124S-JR 24-bay Expansion Storage Cabinet

Dimensions(mm[inch])





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