

# DHI-EVS7124S

## 24-bay Embedded Video Storage



- · 64-bit High-performance multi-core processor
- · Max 512-ch IP camera inputs
- · Max 1024 Mbps incoming/recording/forwarding bandwidth
- · 24 HDDs, 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-EVS7124S 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 slave instantly takes over the master 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		IPSAN Performance	360-channel × 2 Mbps video stream writing and 24-channel × 2 Mbps video playback (I/O size of	
System		Franchis a	VMS is 64 KB)	
Main Processor	64-bit multi-core processor	Function		
Operating System	Embedded Linux	IPSAN Mode	Yes	
Operation Interface	Web	IPSAN Function	Dynamic online extension of logic volumes	
Controller	Single controller	Video Storage	Direct storage	
RAM	8 GB by default (extendable to 64 GB)	Network Protocol	RTP; RTCP; RTSP; UDP; HTTP; NTP; SNMP; iSCSI; FTP; SMB; NFS	
Power Redundancy	1+1	RTSP	ONVIF	
External Ports		Cluster	N+M	
SAS	2 mini SAS HD ports with maximum speed 12Gb/s	Automatic Network Replenishment (ANR)	Videos during network failure upload to EVS automatically afterwards	
Network	$1 \times 1$ GbE management port; $4 \times 1$ GbE LAN ports	Network Mode	Multiple-address, link aggregation, fault-tolerance, load balance	
Network Extension	$4 \times 1$ -GbE LAN ports and $2 \times 10$ -GbE optical fiber ports are optional	Quick RAID	Yes	
eSATA	1 × eSATA	RAID Instant Use	Yes	
RS-232	1 × DB9	RAID Rebuilding	Self-adaptive rebuilding	
HDMI	1×HDMI	RAID-write Synchronization	Yes	
Internal Expansion		Record Mode	Scheduled, manual, motion-triggered and alarm triggered	
M.2 SSD	2 × NVMe SSD ports	Web playback Video Playback Search video	Web playback, concentrated playback, slice	
PCI-E	1 × PCI-E X8; 1×PCI-E X4		playback, synchronous playback Search video by second Adjustable playback speed	
Disk	1 × 2.5 inch SATA		Access by cameras with encoding formats of MPEG4, MJPEG, H.264, H.265, and SVAC	
Disk		Video Codec	Access by multi-sensor cameras, thermal cameras, and panoramic cameras	
Disk Bay	24 1TB; 2TB; 3TB; 4TB; 5TB; 6TB; 8TB; 10TB; 12TB;	Video Backup	Back up video through USB, network, and eSATA	
Disk Type	14TB; 16TB; 2.5-inch and 3.5-inch HDD Support simultaneously connecting to SATA/ SAS/SSD	General		
		Power Supply	100-127V/200-240 VAC, 50/60 Hz, 5A/2.5A	
Disk Installation	Independent disk tray	Fan	Dual ball-bearing fans	
Hot Swapping	Support	Power Consumption	< 500 W (include disks)	
RAID Type	RAIDO, 1, 5, 6, 10, 50, 60, JBOD, Hot-Spare	Operating Temperature	0 °C to 45 °C (32 °F to 113 °F)	
Disk Processing	Dad sector mapping	Operating Humidity	10%–80% (RH) (non-condensation)	
Disk Management	Non-working disks automatic sleep	Storage Temperature	-20 °C to +70 °C (-4 °F to +158 °F)	
Disk Inspection	Inspection before use and during use	Storage Humidity	5%–90% (RH) (non-condensation)	
Performance		Operating Altitude	≤ 5000 (16,404.20 ft) m	
Video Direct Storage (Private Protocol)	Up to 512-channel (1024 Mbps) access, storage, and forwarding; 32-channel (64 Mbps) online playback	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	
Video Direct Storage (ONVIF)	Up to 512-channel (1024 Mbps) access, storage, and forwarding; 32-channel (64 Mbps) online	Chassis	1.2 mm hot dip galvanized steel plate Independent developed pull-out disk tray	
Video Direct Storage (Auto Register)	playback Up to 512-channel (1024 Mbps) access, storage, and forwarding; 32-channel (64 Mbps) online playback	Dimensions	With hanger: $482.6 \text{ mm} \times 175 \text{ mm} \times 736.5 \text{ mm}$ ( $19" \times 6.89" \times 29"$ ) ( $W \times H \times D$ ) Without hanger: $446 \text{ mm} \times 175 \text{ mm} \times 736.5 \text{ mm}$ ( $17.56" \times 6.89" \times 29"$ ) ( $W \times H \times D$ )	
Picture Direct Storage	Up to 512-channel access, storage, and forwarding (250 KB/Picture)	Net Weight	29 kg (63.93 lb)	
		Gross Weight	44 kg (97 lb)	



Installation

Standard 19 inch rack

# EVS Series | DHI-EVS7124S

Ordering Information			
Туре	Model	Description	
24-bay EVS	DHI-EVS7124S	24-bay Embedded Video Storage	
24-bay ESS	ESS3124S-JR	24-bay Expansion Storage Cabinet	

### **Expansion Storage Cabinet**



