

DHI-EVS7148S 48-bay Embedded Video Storage



- 64-bit High-performance multi-core processor
- Max 512-ch IP camera inputs
- Max 1024 Mbps incoming/recording/forwarding bandwidth
- 48 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-EVS7148S 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 1024 Mbps 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. 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.

EVS7 Series | DHI-EVS7148S

Technical Specification

System

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				
SAS	2 mini SAS HD ports with maximum speed 12Gb/s			
Network	1 × 1GbE management port; 4 × 1GbE LAN ports			
Network Extension	$4\times1\text{-}\text{GbE}$ LAN ports and $2\times10\text{-}\text{GbE}$ optical fiber ports are optional			
eSATA	1 × eSATA			
RS-232	1 × DB9			
HDMI	1 × HDMI			
Internal Expansion				
M.2 SSD	2 × NVMe SSD ports			
PCI-E	1 × PCI-E X8; 1 × PCI-E X4			
Disk	1 × 2.5-inch SATA			
Disk				
Disk Bay	48			
Disk Type	1TB; 2TB; 3TB; 4TB; 5TB; 6TB; 8TB; 10TB; 12TB; 14TB; 16TB; 2.5-inch and 3.5-inch HDD Support simultaneously connecting to SATA/ SAS/SSD			
Disk Installation	Independent disk tray			
Hot Swapping	Yes			
RAID Type	RAID 0/1/5/6/10/50/60; JBOD; hot-spare			
Disk Processing	Bad sector mapping			
Disk Management	Non-working disks automatic sleep			
Disk Inspection	Inspection before use and during use			
Performance				
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	Write-through: 900 Mbps Write-back: 1200 Mbps			

AnswersenONVIF; GB28181RTSPONVIF; GB28181ClusterN+MAutomatic Network Replenishment (ANR)Videos during network failure upload to EVS automatically afterwardsNetwork ModeMultiple-address, link aggregation, fault-tolerance, load balanceQuick RAIDYesRAID Instant UseYesRAID-write SynchronizationScheduled, manual, motion-triggered and alarm triggeredRvideo PlaybackScheduled, manual, motion-triggered and alarm triggeredVideo PlaybackScheduled, manual, motion-triggered and alarm triggeredVideo CodecScheduled, manual, motion-triggered and slame triggeredVideo CodecAccess by cameras with encoding formats of MPEG4, MJPEG, H.264, H.265, and SVAC Access by until-sensor cameras, thermal cameras, and panoranic camerasVideo BackupBack up video through USB, network, and eSATA CeneralPower Supply100–127V/200–240V AC, S0/60Hz, 8A/4AFanDual ball-bearing fansPower Consumption<800 W (include disks)Operating Temperature-20 °C to 470 °C (-4 °F to +158 °F)Operating Temperature-20 °C to 470 °C (-4 °F to +158 °F)Operating AltitudeS5000 (16404.20 ft) mChassis.12 mm hot ding galvanized steel plate EC: ANSI CG3.4, 47 CFR PART 15B Subpart BChassis.12 mm hot ding galvanized steel plate Medependent developed pul-uot disk tray	Function	
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Power Supply100–127V/200–240V AC, 50/60Hz, 8A/4AFanDual ball-bearing fansPower Consumption< 800 W (include disks)	Video Backup	Back up video through USB, network, and eSATA
FanDual ball-bearing fansPower Consumption< 800 W (include disks)	General	
Power Consumption< 800 W (include disks)Operating Temperature0 °C to 45 °C (32 °F to 113 °F)Operating Humidity10%–80% (RH) (non-condensation)Storage Temperature-20 °C to +70 °C (-4 °F to +158 °F)Storage Humidity5%–90% (RH) (non-condensation)Operating Altitude< 5000 (16404.20 ft) m	Power Supply	100–127V/200–240V AC, 50/60Hz, 8A/4A
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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 With hanger: 482.6 mm × 261.4 mm × 736.5 mm	Operating Humidity	10%–80% (RH) (non-condensation)
Operating Altitude < 5000 (16404.20 ft) m	Storage Temperature	–20 °C to +70 °C (–4 °F to +158 °F)
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 With hanger: 482.6 mm × 261.4 mm × 736.5 mm	Storage Humidity	5%–90% (RH) (non-condensation)
CertificationsEN 61000-3-2; EN 61000-3-3; EN 62368 FCC: ANSI C63.4, 47 CFR PART 15B Subpart BChassis1.2 mm hot dip galvanized steel plate Independent developed pull-out disk trayWith hanger: 482.6 mm × 261.4 mm × 736.5 mm	Operating Altitude	≤ 5000 (16404.20 ft) m
Chassis Independent developed pull-out disk tray With hanger: 482.6 mm × 261.4 mm × 736.5 mm	Certifications	
*	Chassis	
Dimensions (19" × 10.29" × 29") (W × H × D) Without hanger: 446 mm × 261.4 mm × 736.5 mm (17.56" × 10.29" ×29") (W × H × D)	Dimensions	
Net Weight 36 kg (79.37 lb)	Net Weight	36 kg (79.37 lb)
Gross Weight 75 kg (165.35 lb)	Gross Weight	75 kg (165.35 lb)
Installation Standard 19 inch rack	Installation	Standard 19 inch rack

EVS Series | DHI-EVS7148S

Ordering Information

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Туре	Model	Description
48-bay EVS	DHI-EVS7148S	48-bay Embedded Video Storage
24-bay ESS	ESS3124S-JR	24-bay Expansion Storage Cabinet

Expansion Storage Cabinet

T BBBBT		
TEBEET		
EBBB		1 2322
	TERES I	8888
T BBBBT		LEEEE I

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