

## EVS5036S-R

### 36-HDD Enterprise Video Storage



# System Overview

EVS5036S-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 320 channels of IP camera inputs, and 640 Mbps incoming/recording 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, 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.

- Intel Processor
- Max 320 IP Camera Inputs
- Max 640 Mbps Incoming/recording Bandwidth
- · 36 HDDs, SATA, Hot-Swap
- Supports RAID 0/1/5/6/10/50/60/JBOD, Hotspare
- iSCSI and Mini SAS for Expanded Storage Space
- Support standard iSCSI Protocol Storage
- · Modular&Cableless Design
- · Redundant Power

#### Storage Extension Capacity

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

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

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.

#### 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 ensuring no data is lost.

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.



System   Scale   December   Select Expression   Select Expressio	Technical Specification		Recording	
Manual Schedulefleguer, Corthough Motion   Manual Schedulefleguer,	System		IP Camera Input	320 Channel
Decetion Alam   Decetion Alam   Decetion Alam   Decetion Alam   Persecut 1 **20 marked at the Unit of the Persecut 1 **20 marked at the Unit of Unit of the Unit	Main Processor	64-bit high-performance Intel processor	Record Rate	640 Mbps
Deer Interface Web Working Mode  Video Stream Mode  ADD sharmin (SAMM-bys) incoming and recording (SAMM-bys) incoming and samm-bys) incoming and recording (SAMM-bys) incoming and recording incoming and recording (SAMM-bys) incoming and recording recording and recording and recording and recording and recording recor	Controller	Single controller	Record Mode	
User Interface Whith Mode  Short channel (640Meter) incoming and recording and recording (540Meter) incoming and recording and recording (540Meter) incoming and recording incomi	Memory		Record Interval	Pre-record 1 ~ 30 sec, Post-record 10 ~ 300 sec.
Working Mode  Video Stream Mode  Storage Sandwards 12 70 fbps  Write-through 370 channel (\$40 Mpp) incoming and recording (50 Adminst) \$10 Mpp) incoming and	Operating System	Embedded LINUX	Auviliary Interface	Thame storage by period.
Video Stream Mode  Video M	User Interface	Web	Auxiliary interrace	
Secretary   Secr	Working Mode		USB	2 USB 3.0
Storage   Storage   Storage category   Storage   Stora	Video Stream Mode	, 160-channel (320Mbps) forwarding, 32-channel		
Storage	IP SAN Mode		Network	
Network Mode  Multi-address, Fault-tolerance, Load balance, Link aggregation  Mode SATA HDD composite connection  MinisAS	Storage		Interface	
miniSAS 1 miniSAS ports, for storage extension  Network Function PPPG-DINIS, SIGS, 188, MS, FPR, Park and PPG-DINIS, ISS, 188, MS, Park and PPG-DINIS, INTERCEDED, INTERCED AND PROBLEM AND PROBLE	-		Network Mode	· · · · · · · · · · · · · · · · · · ·
HDD Installation HDD bracket, HDD hode Single, RAID (VI/S/S/OS/OS/OS/OS/OS/OS/OS/OS/OS/OS/OS/OS			Network Function	RTSP, UDP, SMTP, NTP, DHCP, DNS, IP Filter, PPPoE,DDNS, iSCSI, SMB, NFS, FTP, Alarm Server, IP
Storage Management  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 HDD bad track HDD life span HDD bad track HDD life span HDD life span HDD bad track HDD life span HDDD life spa	HDD Installation		Expansion Interface	
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 HDD bad track HDD life span HDD bad track HDD has a HDD life span HDD life span HDD has a HDD life span HDD has a HDD life span	HDD Mode	- · · · · · · · · · · · · · · · · · · ·	Max. User Access	128 users
HDD Manager    Sound ventilation, reduce power consumption and enhance HDD life span HDD bad track mapping to enhance HDD life span HDD bad track mapping to enhance HDD life span HDD bad track mapping to enhance HDD life span HDD bad track mapping to enhance HDD life span HDD bad track mapping to enhance HDD life span HDD bad track mapping to enhance HDD life span HDD bad track mapping to enhance HDD life span HDD bad track mapping to enhance HDD life span HDD bad kDD life system HDD life span HDD bad kDD life span HDD bad kDD life system HDD life span HDD bad kDD life system kDD life span HDD life system kDD life span HDD l	Storage Management		Smart Phone	iPhone, iPad, Android
### RAID Rebuild ### Do bad track mapping to enhance HDD life span HDD bad track has not provided to system to exceed HDD life span HDD bracket. HDD bad track hDD log tracket. HDD log trac	HDD Manager	sound ventilation, reduce power consumption and enhance HDD life span	Interoperability	ONVIF 2.4, CGI Conformant
Logic Volume Manager  Support iSCSI volume management, NAS(SMB/NFS/FTP) volume management  Support snapshot function, create user volume to back data.  Support snapshot function, create user volume to back data.  Extract Frame  Support extracting P frame function. Customizied extracting period and frame rate setup.  Cluster Service  N+M cluster service  Norking Conditions  Storage Conditions  -20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH  Working Altitude  -60m ~ 3000m  Construction  Playback and Backup  Construction  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  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Wvotec, and  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Wvotec, and  Installation  Standard 19-inch rack installation			Electrical	
Snapshot Support snapshot function, create user volume to back data.  Extract Frame Support extracting P frame function. Customizied extracting period and frame rate setup.  Cluster Service N+M cluster service  After diconnection, 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 conveniectly.  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  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Dinter Support Support  Fan DC12V, 1:5A, Diameter 80mm MTBF > 100,100 hours, Hot-swap  Environmental  Environmental  Environmental  Environmental  Cover +40°C (+32°F ~ +104°F), 10 % ~ 80% RH  Working Conditions 0°C ~ +40°C (+32°F ~ +104°F), 10 % ~ 80% RH  Environmental  Environmental  Environmental  Cover +70°C (-4°F ~ +104°F), 10 % ~ 80% RH  Working Conditions -20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH  Working Altitude -60m ~ 3000m  Construction  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) 1, 10,0° x 26.4° x 6.9°)  Net Weight 35kg (77.2 lb) (without HDD)  Third-party Support Capport 47kg (103.6 lb)  Third-party Support 1, 2nd x	RAID Rebuild		Power Supply	
Extract Frame  Support extracting P frame function. Customized extracting period and frame rate setup.  Cluster Service  N+M cluster service  N+M cluster service  After diconnection, 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 conveniectly.  Playback and Backup  Search Mode  Play, Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom  Backup Mode  Time/Date, Channel, Alarm, MD and Exact Search (accurate to second)  Play, Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom  Playback Function  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LIG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Dinter Storage Conditions  O"C ~ +40°C (+32°F ~ +104°F), 10 % ~ 80% RH  Working Conditions  O"C ~ +40°C (+32°F ~ +104°F), 10 % ~ 80% RH  Working Conditions  O"C ~ +40°C (+32°F ~ +104°F), 10 % ~ 80% RH  Storage Conditions  O"C ~ +40°C (+32°F ~ +104°F), 10 % ~ 80% RH  Working Conditions  O"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 ~ 3000m  Construction  Chassis  Lamm extra-thickness hot-dip galvanized steel. High accuracy aluminum alloy slider. Self-developed patent removable HDD bracket.  Dimensions(W x D x H)  Wet Weight  35kg (77.2 lb) (without HDD)  Third-party Support  Cross Weight  Third-party Support  Standard 19-inch rack installation	Logic Volume Manager		Power Consumption	200W ~ 400W (With HDD)
Environmental  Cluster Service  N+M cluster service  N+M cluster service  After diconnection, 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 conveniectly.  Playback and Backup  Search Mode  Time/Date, Channel, Alarm, MD and Exact Search (accurate to second)  Play back Function  Play Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom  Backup Mode  USB Device/Network/eSATA Device  Third-party Support  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Environmental  Working Conditions  0°C ~ +40°C (+32°F ~ +104°F), 10 % ~ 80% RH  Working Conditions  -20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH  Storage Conditions  -20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH  Working Altitude  -60m ~ 3000m  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)  Net Weight  35kg (77.2 lb) (without HDD)  Third-party Support  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Installation  Standard 19-inch rack installation	Snapshot		Fan	
After diconnection, 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 conveniectly.  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  Third-party Support  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Working Conditions  0°C ~ +40°C (+3°E° ~ +104°F), 10 % ~ 80% RH  Storage Conditions  -20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH  Storage Conditions  -20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH  Storage Conditions  -20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH  Storage Conditions  -20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH  Working Altitude  -60m ~ 3000m  Construction  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)  Net Weight  35kg (77.2 lb) (without HDD)  Gross Weight  Third-party Support  Third-party Support  LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Norking Altitude  Construction  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)  Net Weight  35kg (77.2 lb) (without HDD)  Gross Weight  Third-party Support  Standard 19-inch rack installation	Extract Frame		Environmental	
ANR 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 conveniectly.  Playback and Backup  Search Mode Time/Date, Channel, Alarm, MD and Exact Search (accurate to second)  Play, Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom  Backup Mode USB Device/Network/eSATA Device  Third-party Support  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Storage Conditions  -20°C ~+70°C (-4°F~ +158°F), 5% ~ 90% RH  Working Altitude  -60m ~ 3000m  Construction  1.2mm extra-thickness hot-dip galvanized steel. High accuracy aluminum alloy slider. Self-developed patent removable HDD bracket.  Playback Function Dimensions(W x D x H)  Working Altitude  -60m ~ 3000m  Chassis  1.2mm extra-thickness hot-dip galvanized steel. High accuracy aluminum alloy slider. Self-developed patent removable HDD bracket.  Playback Function  Backup Mode  USB Device/Network/eSATA Device  Net Weight  Gross Weight  47kg (103.6 lb)  Third-party Support  Installation  Standard 19-inch rack installation	Cluster Service	N+M cluster service	Working Conditions	0°C ~ +40°C (+32°F ~ +104°F), 10 % ~ 80% RH
Playback and Backup  Search Mode  Time/Date, Channel, Alarm, MD and Exact Search (accurate to second)  Play Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom  Backup Mode  USB Device/Network/eSATA Device  Dimensions(W x D x H)  Third-party Support  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)  Weight  Third-party Support  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)  Weight  35kg (77.2 lb) (without HDD)  Third-party Support  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Discontinuous developed patent removable HDD bracket.  Dimensions(W x D x H)  4U, 482.6mm x 670.5mm x 175.0mm; (19.0" x 26.4" x 6.9")  Ret Weight  35kg (77.2 lb) (without HDD)  Third-party Support  Chassis  Standard 19-inch rack installation	ANR	record file from the SD card on the network camera	Storage Conditions	-20°C ~ +70°C (-4°F ~ +158°F), 5% ~ 90% RH
Search Mode  Time/Date, Channel, Alarm, MD and Exact Search (accurate to second)  Play, Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom  Backup Mode  USB Device/Network/eSATA Device  Third-party Support  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Time/Date, Channel, Alarm, MD and Exact Search (accurate to second)  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 670.5mm x 175.0mm; (19.0" x 26.4" x 6.9")  Net Weight  35kg (77.2 lb) (without HDD)  Third-party Support  Installation  Standard 19-inch rack installation	Shortcut RAID Creation	Click one button to create RAID conveniectly.	Working Altitude	-60m~3000m
Play, Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom  Backup Mode  USB Device/Network/eSATA Device  Third-party Support  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Chassis  High accuracy aluminum alloy slider. Self-developed patent removable HDD bracket.  Dimensions(W x D x H)  4U, 482.6mm x 670.5mm x 175.0mm; (19.0" x 26.4" x 6.9")  Net Weight  35kg (77.2 lb) (without HDD)  Gross Weight  47kg (103.6 lb)  Installation  Standard 19-inch rack installation	Playback and Backup		Construction	
Play, Pause, Stop, Fast play, Slow play, Full screen, Backup selection, Digital zoom  Dimensions(W x D x H)  Dimensions(W x D x H)  USB Device/Network/eSATA Device  Net Weight  Third-party Support  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Dimensions(W x D x H)  4U, 482.6mm x 670.5mm x 175.0mm; (19.0" x 26.4" x 6.9")  Ret Weight  35kg (77.2 lb) (without HDD)  Forss Weight  A7kg (103.6 lb)  Installation  Standard 19-inch rack installation	Search Mode		Chassis	High accuracy aluminum alloy slider.
Backup Mode  USB Device/Network/eSATA Device  Net Weight  35kg (77.2 lb) (without HDD)  Third-party Support  Gross Weight  47kg (103.6 lb)  Third-party Support  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Installation  Standard 19-inch rack installation	Playback Function		Dimensions(W x D x H)	4U, 482.6mm x 670.5mm x 175.0mm ;
Third-party Support  Gross Weight  47kg (103.6 lb)  Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, Third-party Support  LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and  Installation  Standard 19-inch rack installation	Backup Mode	USB Device/Network/eSATA Device		
Dahua, AEBell, Arecont, AXIS, Dynacolor, HIKVISION, Third-party Support LG, Panasonic, PSIA, Samsung, Sony, Vivotec, and Installation Standard 19-inch rack installation	Third-party Support		-	
	Third-party Support		-	

#### 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			
Туре	Part Number	Description	
36-HDD EVS	EVS5036S-R	36-HDD Enterprise Video Storage	
Accessories	ESS3124S-JR	24 HDDs SAS Storage Cabinet	

### **Accessories**



ESS3124S-JR

