

## DS-A830XXS-ICV SCKV Series ICVS



### Introduction

The DS-A830XXS-ICV SCKV series ICVS is Hikvision high-end storage product. The controller architecture and no-cable design guarantee system stability. The high-end hardware design adopts two Xeon 64-bit 6-core processors for each controller, realizing 64 GB cache. The hardware platform adopts PCI-E 3.0 bus and SAS 3.0 high-speed I/O channel technology to lay a solid foundation for the system performance. One cluster system support 300 storage devices and totally capacity can be scalable up-to 300 PB . Support fully symmetric or asymmetric and fully distributed clustered architecture, the storage have fully journaled. The product makes use of ultra-fault-tolerant network RAID technology which is based on Eraser Code. It is not only provided with multi-HDD/multi-device fault-tolerant mechanism of the traditional network RAID, but also can continue data reading and writing service when the fault HDD/device number exceeds the redundant amounts. It provides data storage service with high reliability, high stability, and high performance, widely applicable to video security industry.

### Available Model

DS-A83024S-ICV SCKV, DS-A83048S-ICV SCKV

### Features

#### Hardware Platform of New Generation

- PCI-E 3.0 bus.
- 12 Gb SAS 3.0 high-speed I/O channel.
- Brand new controller design.
- Redundant design for key components.

#### System Configuration of High Performance

- Modular and no-cable design.
- Single controller with two Xeon 64-bit 6-core processors.
- 64 GB cache.
- 6 Gigabit network interfaces.

#### Ultra-Fault-Tolerant Network RAID

- N + M: K redundant mechanism, protection level which can protect data against simultaneous 2 disks failures or 4 storage device failure.
- When there are K fault devices, data will not lose, and the business will not be interrupted, it able to assign protection level on cluster.
- When the fault device number exceeds K, the business will not be interrupted.
- Support video lock for data protection.

#### SAS Exchange Architecture of High Availability

- When SAS is exchanging, if the controller software fails, it will not affect the HDD capacity of the current node and normal use of data.

#### Stream Data Management Structure of High Performance

- Based on the bottom layer management structure of the stream media, it can solve the problem that the damaged file system will lead to file unreadability or loss. The cyclic covering writing will not produce file fragments.
- When capacity expansion via the storage device, performance will be expand at the same time.
- The cluster system support load balance between nodes to avoid any performance hotspot.

#### Direct Storage of Mixed Stream (SAN)

- Supports mixed storage of video stream and picture stream.
- Supports camera access through RTSP, ONVIF, PSIA protocol, etc.
- Supports remote backup, local backup ( Via USB, External Drive).

#### User-Friendly Operation and Maintenance

- Centralized operation and maintenance, realizing centralized management of multi-devices.
- Supports changing disk/device in batch.
- Supports abundant alarm management methods, including alarm via indicators, mobile phone messages, emails, etc. to raise device maintenance efficiency.
- Support robust network capacity, capable of handling a minimum incoming/recording/forwarding bandwidth of 10 Gbps or higher.

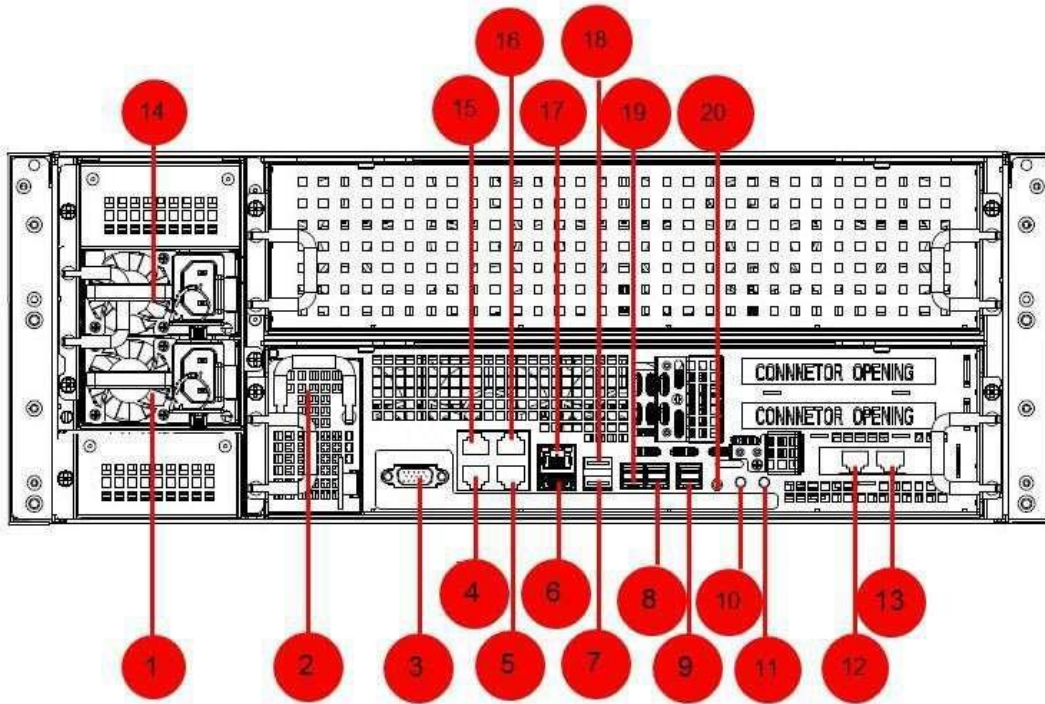


## Specification

<b>Model</b>	<b>DS-A83048S-ICVSKV</b>	
<b>Performance</b>	Standard cluster (2 Mbps)	600-ch
<b>Controller</b>	Processor	2 Xeon 64-bit 6-core processors
	Cache	64 GB DDR4 standard, extendable to 384 GB
<b>HDD</b>	HDD slot	48 Support large cluster storage, each storage node capacity up to 768 TB, 6PB can easily support
	Interface	SSD/SAS/SATA
	Capacity	1 TB/2 TB/3 TB/4 TB/6 TB/8 TB/10 TB/12 TB/14 TB/16TB (enterprise HDD)
	Hot-swapping	Supported
	RAID	RAID configurations includes RAID 0/1/5/6/10/50/60 band Network RAID: N + M: K, N + M ≤ 16, M ≥ K, N ∈ [1, 15], M ∈ [1, 4], K ∈ [1, 4]
<b>Video Recording Compression</b>	Security Recording	Device Data Security Level, Support with RAID, Cluster Data Security Level, Support iRAID technology Support HDD encryption technology for data protection
	Video Compression	H.265+/H.265/H.264+/H.264
<b>Storage Management</b>	System	CentOS
	Disk management	Disk detection pre-alarm and repair
	Cache protection	Supports customizing BBU in case of unexpected power failure to protect the cache data from being lost.
<b>Device Maintenance and Management</b>	Management method	GUI based on web, serial port CLI, management based on platform
	Alarm method	Audio, indicator, GUI
<b>Interfaces</b>	Data network interface	6, 1000M Ethernet interface (8 × GbE or 4 × 10GbE is extendable)
	Management network interface	1, 1000M Ethernet interface
	Bandwidth	20Gbps Incoming / Recording / Forwarding
	Network Protocols	UDP, HTTP, RTCP, RTSP, RTP, FTP, SNMP, ANR (Automatic Network Replenishment).
	SAS extension interface	3, 12 Gbps SAS 3.0
	COM	2: 1 for RS-232, 1 for RS-485
	USB	3 (2 × USB 3.0, 1 × USB 2.0)
<b>General</b>	Power supply (rated)	Redundant 2 + 1, ≤ 1600 W
	Consumption (with HDDs)	≤ 763 W
	Environment temperature	<ul style="list-style-type: none"> <li>● Working: 0 °C to +40 °C (+41 °F to +104 °F)</li> <li>● Storing: -20 °C to +70 °C (-4 °F to +158 °F)</li> </ul>
	Environment humidity	<ul style="list-style-type: none"> <li>● Working: 20% to 80%RH (non-condensing/frozen)</li> <li>● Storing: 5% to 90%RH (non-condensing/frozen)</li> </ul>
	Dimension (W × H × D)	487 x 345 x 751 mm (19.2 x 13.6 x 29.6 inch)
	Weight (without HDDs)	≤ 93 kg (205 lb)
	Certification	CE-EMC, CE-LVD, CE-RoHs, UL

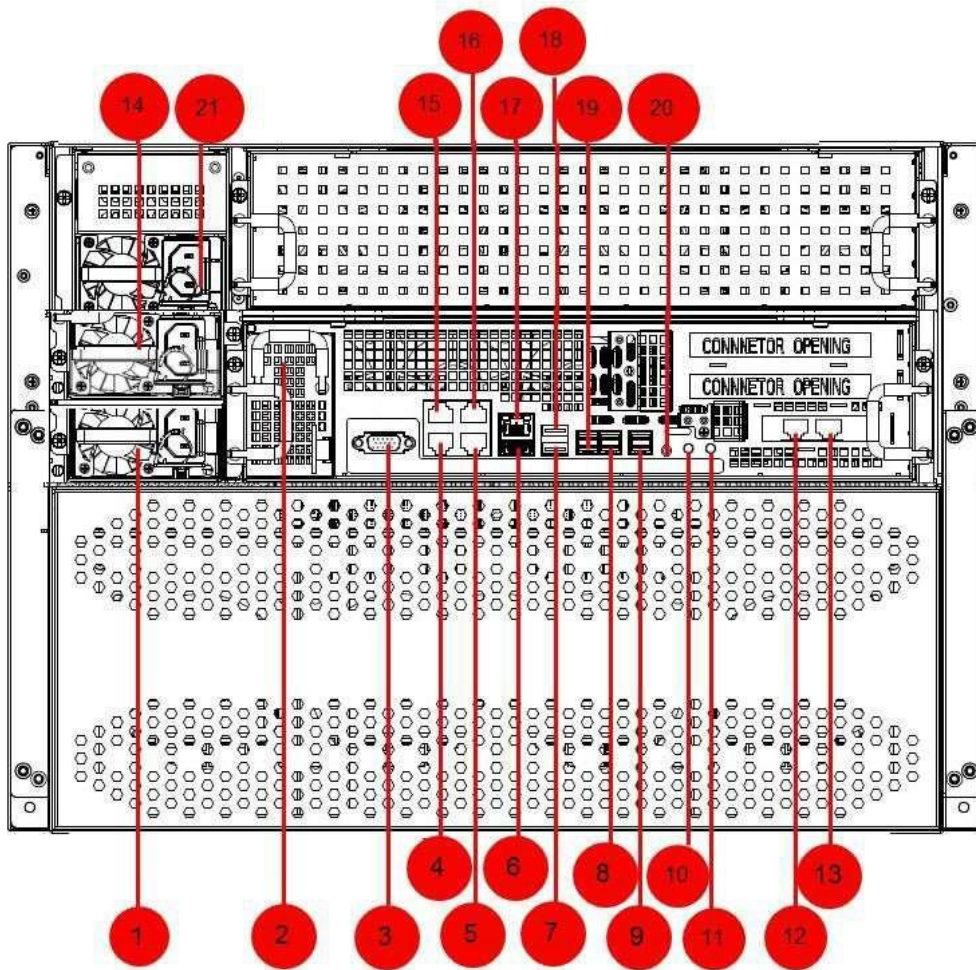
## Physical Interface

### DS-A83024S-ICVS



No.	Name	No.	Name
1	Power module 1	11	Power switch
2	BBU (optional)	12	LAN 5
3	RS-232 interface	13	LAN 6
4	LAN 1	14	Power module 2
5	LAN 2	15	LAN 3
6	USB interface 1	16	LAN 4
7	USB interface 2	17	Management LAN
8	SAS interface 2	18	USB interface 3
9	SAS interface 3	19	SAS interface 1
10	FN button	20	COM

DS-A83048S-ICVSKV



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1	Power module 1	12	LAN 5
2	BBU (optional)	13	LAN 6
3	RS-232 interface	14	Power module 2
4	LAN 1	15	LAN 3
5	LAN 2	16	LAN 4
6	USB interface 1	17	Management LAN
7	USB interface 2	18	USB interface 3
8	SAS interface 2	19	SAS interface 1
9	SAS interface 3	20	COM
10	FN button	21	Power module 3
11	Power switch		

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## HIK VISION™

### Headquarters

No.555 Qianmo Road, Binjiang District,  
Hangzhou 310051, China  
T 86-571-8807-5998  
oversasbusiness@hikvision.com

### Hikvision USA

T +1-909-895-0400  
sales.usa@hikvision.com

Hikvision Australia  
T +61-2-8599-4233  
salesau@hikvision.com

Hikvision India  
T +91-22-28469900  
sales@prambhikvision.com

Hikvision Canada  
T +1-866-200-6690  
sales.canada@hikvision.com

Hikvision Thailand  
T +662-275-9949  
sales.thailand@hikvision.com

### Hikvision Europe

T +31-23 0  
saleseu@hikvision.com

Hikvision Brazil  
T +39-0 02  
infoit@hikvision.com

Hikvision Brazil  
T +5511 3318-0050  
Latamsupport@hikvision.com

Hikvision Turkey  
T +90121615217070-7074  
salestr@hikvision.com

Hikvision Malaysia  
T +601-7652-2413  
sales.my@hikvision.com

### Hikvision UK & Ireland

T +01628902140  
sales.uk@hikvision.com

Hikvision South Africa  
Tel. +27 (1010351172  
sale.africa@hikvision.com

Hikvision France  
T +33101-85-330-450  
info.fr@hikvision.com

Hikvision Kazakhstan  
T +7-727-9730667  
nikia.panfilov@hikvision.ru

Hikvision Vietnam  
T +84-974270888  
sales.vt@hikvision.com

### Hikvision UAE

T +971-4-4432090  
salesme@hikvision.com

Hikvision Singapore  
T +65-6684-4718  
sg@hikvision.com

Hikvision Spain  
T +34-91-73746-55  
info.es@hikvision.com

Hikvision Tashkent  
T +99-87-1238-9438  
uzb@hikvision.ru

Hikvision HK  
T +852-2151-1761  
info.hk@hikvision.com

### Hikvision

T +82-7-495-669-67-99  
sateru@hikvision.com

Hikvision Korea  
T +82-10131-731-8817  
sates.korea@hikvision.com

Hikvision Poland  
T +48-22-460-01-50  
info.pl@hikvision.com

Hikvision Indonesia  
T +62-21-2933759  
Sates.Indonesia@hikvision.com

Hikvision Colombia  
sates.colombia@hikvision.com