

DS-A720XXR-CVS Series



Introduction

The DS-A720XXR-CVS series CVS 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. 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 surveillance industry.

Available Model

DS-A72024R-CVS, DS-A72048R-CVS
SF Version: DS-A72024R-CVS (C)

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.
- When there are K fault devices, data will not lose, and the business will not be interrupted.
- When the fault device number exceeds K, the business will not be interrupted.

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.

Direct Storage of Mixed Stream

- Supports mixed storage of video stream and picture stream.
- Supports camera access through RTSP, ONVIF, PSIA protocol, etc.

User-Friendly Operation and Maintenance

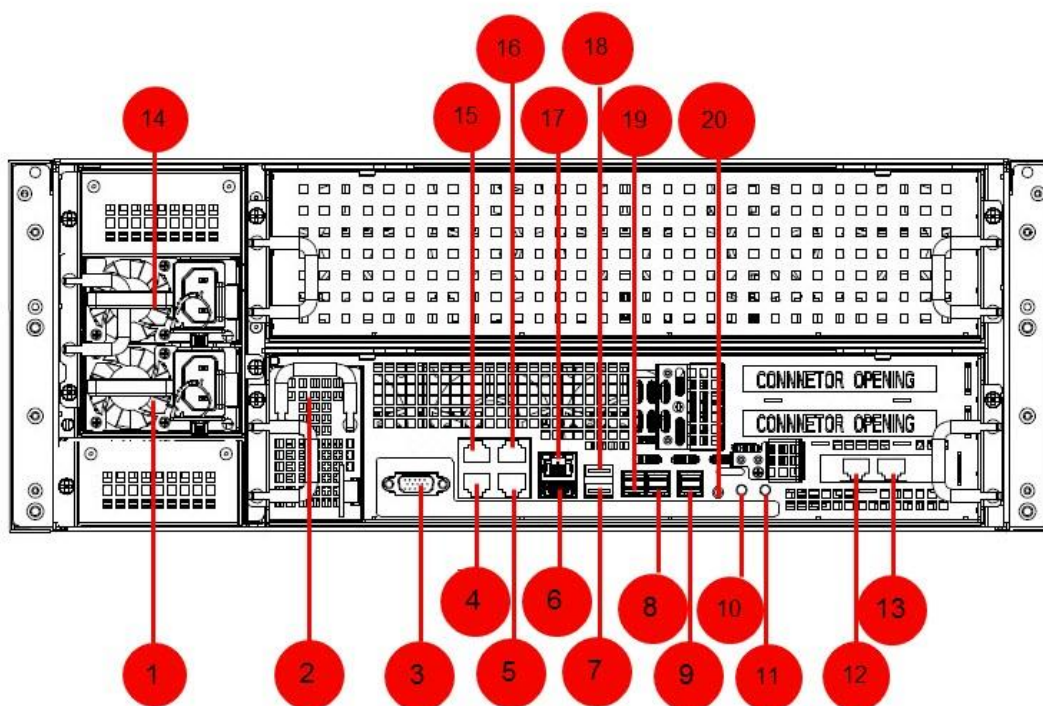
- Centralized operation and maintenance, realizing centralized management of multi-devices.
- Supports changing disk/device in batch.
- Supports abundant alarm management methods, including alarm via indicators, mobile phone messages, emails, etc. to raise device maintenance efficiency.

Specification

| Model | | DS-A72024R-CVS | DS-A72048R-CVS |
|-----------------------------------|------------------------------|---|--|
| Performance | Standard cluster (2 Mbps) | 410-ch | 430-ch |
| | Standard cluster (4 Mbps) | 200-ch | 220-ch |
| | Micro cluster (2 Mbps) | 380-ch | 420-ch |
| | Micro cluster (4 Mbps) | 180-ch | 200-ch |
| Controller | Processor | 2 Xeon 64-bit 6-core processors | |
| | Cache | 64 GB standard, extendable to 384 GB | |
| HDD | HDD slot | 24 | 48 |
| | Interface | SAS/SATA | |
| | Capacity | 1 TB/2 TB/3 TB/4 TB/6 TB/8 TB/10 TB/12 TB (enterprise HDD) | |
| | Hot-swapping | Supported | |
| | RAID | Network RAID: N + M: K, N + M ≤ 16, M ≥ K, N ∈ [1, 15], M ∈ [1, 4], K ∈ [1, 4] | |
| Storage Management | 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. | |
| Device Maintenance and Management | Management method | GUI based on web, serial port CLI, management based on platform | |
| | Alarm method | Audio, indicator, GUI | |
| Interfaces | Data network interface | 6, 1000M Ethernet interface (8 × GbE or 4 × 10GbE is extendable) | |
| | Management network interface | 1, 1000M Ethernet interface | |
| | 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) | |
| General | Power supply (rated) | Redundant 1 + 1, ≤ 550 W | Redundant 2 + 1, ≤ 1600 W |
| | Consumption (with HDDs) | ≤ 484 W | ≤ 763 W |
| | Environment temperature | <ul style="list-style-type: none"> Working: +5 °C to +40 °C (+41 °F to +104 °F) Storing: -20 °C to +70 °C (-4 °F to +158 °F) | |
| | Environment humidity | <ul style="list-style-type: none"> Working: 20% to 80%RH (non-condensing/frozen) Storing: 5% to 90%RH (non-condensing/frozen) | |
| | Dimension (W × H × D) | 486 x 173 x 760 mm (19.1 x 6.8 x 29.9 inch) | 486 x 344 x 750 mm (19.1 x 13.5 x 29.5 inch) |
| | Weight (without HDDs) | ≤ 43 kg (94.8 lb) | ≤ 93 kg (205 lb) |

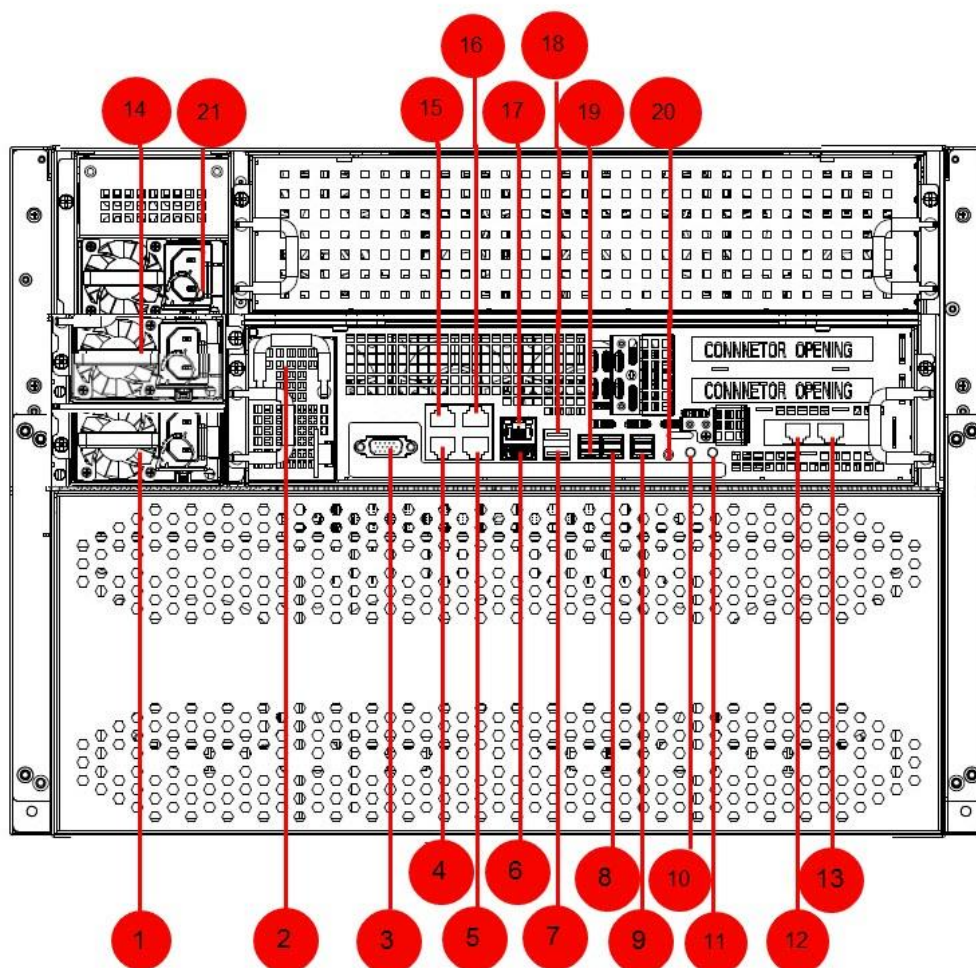
Physical Interface

DS-A72024R-CVS



| 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-A72048R-CVS



| No. | Name | No. | Name |
|-----|------------------|-----|-----------------|
| 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 | | |

Available HDD

Hikvision Tested and recommended HDDs:

| Model | Capacity (TB) |
|-----------------|---------------|
| ST12000NM0008 | 12 |
| ST10000NM0086 | 10 |
| ST8000NM0055 | 8 |
| ST6000NM0115 | 6 |
| ST4000NM0035 | 4 |
| HUS726T4TALA6L4 | 4 |
| HUS726T6TALE6L4 | 6 |
| HKS728T8TALE-31 | 8 |
| HUS728T8TALE6L4 | 8 |
| HUH721212ALE-31 | 12 |

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