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24 Bays NAS
(Dual Controller Active+Active)

Model
ASSV-E24C2R

Key Features:

- High Storage Capacity: Supports up to 480TB of storage with 24 drive bays.
- Modular Design: Hot-swappable components for easy maintenance and service.
- Modular Expandability: Easy expansion with additional storage modules for scaling.
- SSD and HDD Optimization: Maximizes performance with a mix of SSD and HDD storage.
- High Availability: Based on Intel 64-bit multi-core platform, ensuring 24/7 stable operations.
- Power Protection: Automatic protection and restoration of services in case of power failure.
- Comprehensive Front-End Ports: Includes multiple Ethernet and FC host ports for connectivity.
- HASS Technology: Advanced hard disk stabilization to improve reliability and reduce failure rates.
- Cache Mirroring Technology: Redundant write cache ensures zero data loss during power failures.
- Environmentally Optimized: Operates in a wide temperature range with efficient humidity control.
- Wide Protocol Support: Supports FC, iSCSI, NFS, and CIFS storage protocols for flexible deployment.
- Snapshot and LUN Management: Supports up to 1024 snapshots and LUN copies for data consistency.
- Anti-Vibration Features: Vibration-reduction technology for improved hard disk stability and performance.
- RAID Roaming and Metadata Protection: Ensures permanent RAID metadata protection and easy migration.
- VRAID 2.0 Technology: Advanced RAID management for high performance, redundancy, and data protection.
- Dual Controller: Active-Active controller mode with fast switchover technology for uninterrupted service.

High Storage Capacity:

The NAS is designed to meet the growing storage demands of businesses with its impressive capacity of up to 2400TB across 24 drive bays. This vast storage potential makes it suitable for a wide range of applications, from large-scale data centers to enterprises with high-volume data management needs. The ability to support a significant amount of storage ensures that businesses can consolidate their data in one location, simplifying management and reducing the need for multiple storage systems. With support for both SSDs and HDDs, users can balance high-speed performance with cost-effective storage, maximizing the return on investment

Modular Design:

The modular design of the storage system offers a flexible and scalable solution for businesses that need to expand their storage infrastructure as they grow. Each component is hot-swappable, allowing for easy maintenance and service without interrupting operations. This design ensures that businesses can easily replace or upgrade individual parts of the system, such as hard drives or power supplies, without needing to replace the entire unit. The ability to add or remove modules quickly and efficiently means that the system can evolve alongside business needs, making it a future-proof solution.

Modular Expandability

Modular expandability allows the system to grow in tandem with your business needs. The ability to seamlessly add additional storage modules gives businesses the flexibility to scale their infrastructure without the need for significant upfront investments. This expansion can be done without disruption to ongoing operations, enabling businesses to maintain continuity even as they increase their storage capacity. The modular nature of the design allows for customized solutions, tailored to the specific requirements of the enterprise, whether it's increasing storage, improving performance, or enhancing data redundancy.

SSD and HDD Optimization

The NAS leverages both Solid-State Drives (SSD) and Hard Disk Drives (HDD) to optimize storage performance and cost-effectiveness. By utilizing SSDs for high-performance tasks and HDDs for bulk storage, the system maximizes the efficiency of each type of storage medium. This hybrid approach ensures fast data access for mission-critical applications, such as virtual machines or databases, while maintaining an affordable and scalable solution for less frequently accessed data. This optimization not only boosts performance but also reduces operational costs, allowing businesses to enjoy the benefits of both storage types.

High Availability:

Built on an Intel 64-bit multi-core platform, the NAS system is designed to ensure high availability, making it suitable for mission-critical applications that require uninterrupted service. This platform guarantees 24/7 stable operations with minimal downtime, which is essential for businesses that rely on constant data access. The redundancy built into the system, including dual controllers and failover mechanisms, ensures that even if one part of the system fails, the other continues to function, keeping your operations running smoothly. The system is ideal for environments where data availability and reliability are paramount.

Power Protection:

The NAS system features automatic power protection to safeguard your data and operations in the event of a power failure. When a power outage or fluctuation occurs, the system's power protection feature kicks in to ensure that services are restored as soon as possible. This helps to prevent data loss, system crashes, and downtime, which can be costly to businesses. In addition, the built-in protection mechanisms allow for smooth recovery and transition to backup power, reducing the risk of disruption to critical operations and providing peace of mind

Comprehensive Front-End Port

Modular expandability allows the system to grow in tandem with your business needs. The ability to seamlessly add additional storage modules gives businesses the flexibility to scale their infrastructure without the need for significant upfront investments. This expansion can be done without disruption to ongoing operations, enabling businesses to maintain continuity even as they increase their storage capacity. The modular nature of the design allows for customized solutions, tailored to the specific requirements of the enterprise, whether it's increasing storage, improving performance, or enhancing data redundancy.

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HASS Technology

Hard Disk Drive (HDD) reliability is crucial for any storage system, and the NAS employs HASS (Hard Disk Stabilization System) technology to address this concern. HASS technology improves the reliability of hard drives by stabilizing them, reducing vibration, and minimizing the likelihood of failure. By actively controlling the temperature and vibration within the system, HASS technology ensures that the hard drives function optimally, even in high-demand environments. This advanced stabilization technique extends the lifespan of the drives, reduces maintenance costs, and enhances overall system reliability, making it an excellent choice for businesses that need

Cache Mirroring Technology

Cache Mirroring Technology is a critical feature that provides enhanced data protection and reliability. In the event of a power failure or system crash, the redundant write cache ensures that no data is lost during the process. By mirroring the cache, the NAS can quickly restore data and continue operations with minimal disruption. This feature is especially important for applications that require continuous data flow, such as databases or virtualized environments. With cache mirroring in place, businesses can rest assured that their data remains intact and that recovery processes are streamlined and efficient.

Environmentally Optimized

The NAS system is designed to operate efficiently across a wide range of temperatures and environmental conditions, making it ideal for deployment in various regions and climates. With built-in humidity control and thermal management features, the system maintains optimal operating conditions, ensuring maximum performance and longevity. Whether deployed in a data center, an office, or a remote location, the environmentally optimized design reduces the risk of overheating, corrosion, or other environmental factors that could impact system performance. This feature not only ensures reliability but also contributes to the overall sustainability of the system

Wide Protocol Support

Supporting a broad range of storage protocols, including Fiber Channel (FC), iSCSI, NFS, and CIFS, the NAS system offers unmatched flexibility in deployment. These protocols allow businesses to choose the most suitable one for their network infrastructure and storage needs. Whether integrating with existing Fibre Channel networks, deploying iSCSI over IP-based networks, or leveraging NFS for Unix-based systems, the NAS ensures compatibility and performance. This protocol versatility simplifies integration, reduces compatibility issues, and provides a future-proof solution that can easily adapt to evolving network technologies.

24 Bays Network Attached Storage with Dual Controller Active + Active

Storage Capacity	Up to 480TB (24 drive bays) & Expandable up to 2 Petabyte (PB)
Drive Bays	24 hot-swappable drive bays
Storage Types Supported	SSD, HDD
RAID Levels Supported	RAID 0, RAID 1, RAID 5, RAID 6, RAID 10, RAID 50, RAID 60, VRAID 2.0
Cache Mirroring	Yes (Redundant write cache for zero data loss during power failures)
Operating System	Proprietary Storage Management OS
CPU	Intel 64-bit multi-core processor
Memory	Up to 128GB ECC RAM
Front-End Ports	Multiple Ethernet (1GbE, 10GbE), Fibre Channel (FC)
Back-End Ports	SAS/SATA ports for internal drive connections
Power Protection	Automatic power failure protection, fast recovery
Cooling	Temperature-controlled fans, efficient power supply and cooling system
Protocol Support	FC, iSCSI, NFS, CIFS
Snapshot Support	Up to 1024 snapshots
LUN Management	Up to 1024 LUNs for data consistency and management
Data Protection Features	Remote replication, snapshot, LUN copy, metadata protection
Expansion	Modular expandability with additional storage modules
Power Supply	Redundant power supplies, energy-efficient
Environmental Range	Operating Temperature: 0°C to 40°C, Humidity: 5% to 90% RH
Backup Integration	Built-in backup function eliminating the need for additional software
Server-Class Hardware	Redundant, modular server-class hardware for high availability
Vibration Control	Anti-vibration features for hard disk stability
Cache Technology	SSD and HDD optimisation, SSD caching for improved read/write performance
Dual Storage Controllers	Active-Active controller technology for high availability and uninterrupted service
HASS Technology	Advanced hard disk stabilisation technology
Data Recovery	Delta Reconstruction and Synchronisation for quick recovery and synchronisation across multiple locations
Snapshot Frequency	Up to multiple times per day for high-frequency data backup and protection
Data Security	AES-256 bit encryption, RAID Roaming, Metadata protection for easy migration
Compatibility	OS (Windows, Linux, macOS) and hypervisors (VMware, Hyper-V)
Management Interface	Web-based GUI, CLI, SNMP for easy monitoring and management
Form Factor	2U Rackmount (or customisable for other setups)

ABOUT AVAIVI

AVAIVI is a dynamic and innovative DPIIT recognized Startup Company for its commitment to driving excellence, fostering innovation, and contributing to Bharat's burgeoning entrepreneurial landscape. AVAIVI specializes in providing cutting-edge Audio-Visual Solutions, AI-based Software and Security & Surveillance Technology.

AV Technology: AVAIVI's state-of-the-art audio-visual solutions redefine how information is presented and shared. Our innovative AV solutions include interactive displays, digital signage, audio systems, and immersive multimedia experiences.

AI Software Suite: From predictive analytics to process optimization, our AI-based software applications empower organizations to make informed decisions, streamline operations, and stay ahead in a rapidly evolving digital landscape.

Video Surveillance: AVAIVI's expertise in CCTV security surveillance technology goes beyond traditional monitoring. Our comprehensive solutions encompass advanced camera systems, intelligent video analytics, and remote monitoring capabilities.