Revolutionize Your Data Storage With Adaptec® SmartRAID 24G RAID Adapters

Our high-density, internal and external 24G RAID adapters empower users to optimize storage infrastructure for better performance, reliability and scalability.

As data storage demands escalate, optimizing infrastructure for peak performance, reliability and scalability has never been more crucial. Enter Adaptec® 24G RAID adapters—designed to transform your storage capabilities.

In this blog post, we will explore the features, benefits and applications of our 24G RAID adapters, highlighting how they empower users to unlock next-generation data center and server storage performance.

Why Choose Adaptec SmartRAID 32xx Adapters?

The higher data rate offered by 24G RAID delivers enhanced scalability, accommodating larger storage infrastructures with improved performance for data-intensive environments. Additionally, 24G provides superior signal integrity and reliability, ensuring consistent data transfer even in challenging conditions. The SAS-4 (24G) standard is compatible with older SAS-3 (12G) systems and offers better power efficiency, supporting a seamless and cost-effective upgrade.

Experience unmatched data transfer speeds and reliability with our Adaptec SmartRAID 32xx 24G RAID. Designed for the most demanding environments, they offer superior signal integrity and seamless upgrades, ensuring your storage infrastructure is always ahead of the curve. As a leader in RAID technology, we stand as the market leader in offering the most complete **family of 24G RAID adapters** that support configurations for both ×8 and ×16 PCIe® Gen 4 host interface adapters, with 32, 16 and 8 media-facing port variants for internal and external tri-mode connectivity. The integrated PCIe switch enables DirectPath technology, providing the industry's lowest latency and highest bandwidth NVMe® solution with the flexibility to support ×1, ×2, ×4 and ×8 wide NVMe Solid State Drives (SSDs). The benefits of RAID for external storage offer powerful advantages:

- Large-scale data transfer: 24G RAID offers a higher transfer rate, improving data throughput.
- Data redundancy: Critical for external storage where data loss is intolerable. External adapters enable RAID protection that extends beyond internal storage.

- Higher port density: Lead the industry with the highest density 32-internal and 16-external port RAID adapters. The enhanced connectivity reduces costs on upfront hardware investment and maintenance expenses.

Your Needs

- Data centers: 24G RAID optimizes storage performance for demanding data center workloads.
- Cloud storage: Scalable and fast, 24G RAID is ideal for cloud-based storage solutions.
- High-performance computing: Scientific simulations, data analytics, and AI applications benefit from accelerated data transfer rates.
- Enterprise storage: 24G RAID enhances storage capabilities for businesses requiring high performance and reliability.

Our Solutions

- Unparalleled performance: 24G RAID unlocks faster data transfer rates, reducing latency and enhancing overall system responsiveness.
- Scalability: With support for up to 32 internal and 16 external ports, users can easily expand their RAID storage infrastructure as their needs grow.
- Flexibility: Advanced RAID levels and compatibility with multiple PCIe generations ensure adaptability in diverse environments.
- Security: In addition to support Self Encrypting Drives (SED), every SmartRAID 32xx adapter comes equipped with proprietary Controller-Based Encryption (CBE).
- Value: A matching cache protection module, additional brackets are included with every 325x model, offering exceptional value and eliminating concerns over data loss during unexpected power shutdowns.

Conclusion

Our **24G Adaptec RAID adapters** represent a significant milestone in storage technology, offering unprecedented performance, scalability and security. By adopting this innovative solution, organizations can unlock next-generation storage capabilities, empowering them to tackle demanding workloads and drive innovation. As data storage needs continue to evolve, our 24G RAID solution is poised to play a pivotal role in shaping the future of storage infrastructure.

Ready to elevate your data storage infrastructure?