High Density and High Capacity

Zstor GS41102 Open PetaByte+ System

Experience unrivaled storage capacity and reliability with **Zstor GS41102 Open PetaByte+ System, an industry-leading 4U storage server chassis with a remarkable 1-meter depth**. This powerhouse supports an astounding 102-bay 3.5" HDD configuration and features a dual socket INTEL® XEON® Scalable motherboard. With its exceptional redundant thermal performance, **The Open-E JovianDSS-powered Zstor GS41102 Open PetaByte+ System** is the perfect solution for data centers that prioritize system reliability and time efficiency.

In today's data-driven world, data centers are faced with immense volumes of information. To meet the demands of emerging technologies like Artificial Intelligence, Virtual Reality, Machine Learning, Edge Computing, and the Internet of Things, efficient and high-density data storage is essential. The **Zstor GS41102 Open PetaByte+ System** offers versatility and scalability in data storage capacities, providing the ideal solution for all new applications.

The **Zstor GS41102 Open PetaByte+ System** sets the standard for compact yet high-capacity data storage solutions, thanks to:

- industry-best density of 3.5" 6Gb/s HDD
- exceptional data storage capacity of **2.2 PB with up to 102x 22TB HDDs**
- being equipped with a **CRPS 2000W 80 Plus Titanium PSU**

The Zstor GS41102 Open PetaByte+ System offers superior thermal performance while saving valuable space in your server room. Its tool-less and hot-swappable designs eliminate single points of failure, ensuring uninterrupted operations. It's designed to be easily managed by IT professionals, and can be used in public, private, or hybrid cloud environments.

Zstor is Open-E's Gold Partner with more than 14 years of experience in building ZFS based storage systems. Zstor's product lineup, including servers, storage solutions and networking equipment, undergo rigorous certification and testing by our dedicated team.

Data Centers | **Cloud Infrastructure** | **Artificial Intelligence** | **IoT** | **Edge computing**

With the **Zstor GS41102 Open PetaByte+ System**, you can build:

- Compute-intensive applications
- High-performance and high-capacity storage
- High-throughput storage
- and more!

High Capacity Zstor GS41102 Open PetaByte+ System for Data Centers

Data compression and in-line deduplication

The Zstor GS41102 Open PetaByte+ System enhances storage efficiency through data compression and in-line deduplication. It offers various compression protocols, such as lz4 for medium compression with low system impact and gzip-9 for high compression rates suited to archiving. The system's deduplication feature identifies and removes redundant data, often achieving a 3:1 ratio, meaning 3TB of data occupies only 1TB of physical space. This is particularly valuable in environments with repetitive data like VDI, server virtualization, or backups, where even higher deduplication ratios are possible.

Data integrity check

The Zstor GS41102 Open PetaByte+ System maintains data integrity through sophisticated checksum techniques. Every data block is validated via a checksum to identify any discrepancies or errors. When an error-prone block is found, it is promptly fixed and reprocessed. Should the error recur, the block is transferred to a new location on the HDD. **The Zstor GS41102 Open PetaByte+ System** executes integrity checks during all read and write activities, as well as on seldom-used idle blocks.

Thin provisioning

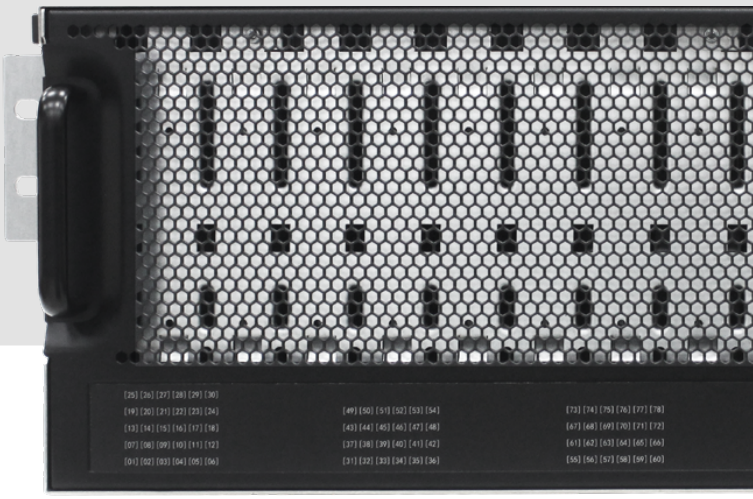
The Zstor GS41102 Open PetaByte+ System enhances storage efficiency through thin provisioning. This functionality dynamically allocates storage only as required, preventing the excessive reservation of space and associated costs. It eliminates the need to predict storage needs precisely and the risk of space shortages that necessitate system overhauls. Thin provisioning enables you to establish adaptable and scalable data storage volumes that expand in alignment with your evolving data requirements.

Unlimited Snapshots and Clones

The Zstor GS41102 Open PetaByte+ System offers unlimited snapshots and clones, crucial for robust disaster recovery. These features enable data restoration after deletion, corruption, or malware attacks. You can customize snapshot schedules and monitor storage metrics closely, setting alerts for low physical space. Integrated with Open-E JovianDSS, the **Zstor GS41102 Open PetaByte+ System** ensures optimal performance and efficiency without limits on snapshot and clone creation.

Maximize your business's data storage performance and reliability with the **Zstor GS41102 Open PetaByte+ System**. Contact us today to learn more and enhance your data storage capabilities!
Explore the solution now!

The Zstor GS41102 Open PetaByte+ System: Powering Next-Gen Data Centers with Cutting-Edge Efficiency



Guaranteed data protection

The Zstor GS41102 Open PetaByte+ System, integrated with Open-E JovianDSS, ensures your data is secure through multiple protection layers. It conducts automatic and scheduled integrity checks to correct errors and inconsistencies. The system supports unlimited snapshots and clones for flexible data backup and recovery. In case of drive failure, software-based RAID arrays provide further security. Additionally, its self-healing mechanism detects and corrects malfunctions, ensuring data redundancy. This comprehensive approach facilitates effective disaster recovery and safeguards against data loss or damage.

Optimized for Data Centers and Private Cloud

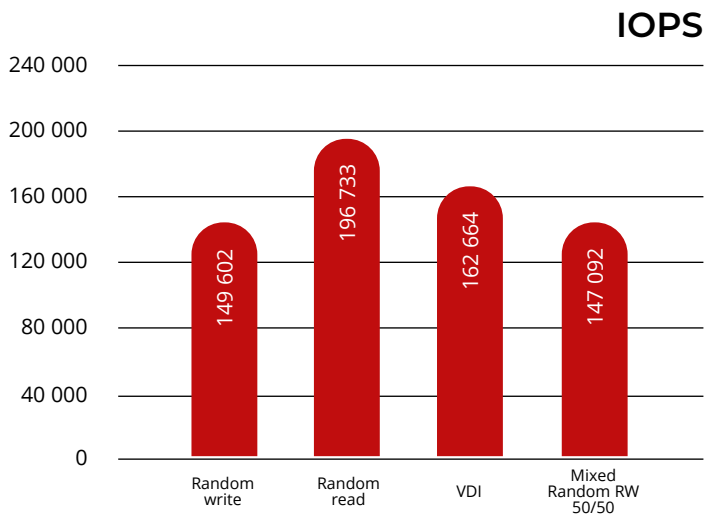
The Zstor GS41102 Open PetaByte+ System is engineered for contemporary data centers, adept at managing compute-intensive tasks like big data analytics, extensive virtualization, and high-density server environments. It offers easy and intuitive storage management, ensuring seamless operations even during updates or system refreshes. With the Zstor GS41102 Open PetaByte+ System users gain access to flexible Open-E JovianDSS data storage configurations and Zstor's expertise in crafting servers tailored for data center demands. This system is a robust solution for enhancing data center and private cloud capabilities.

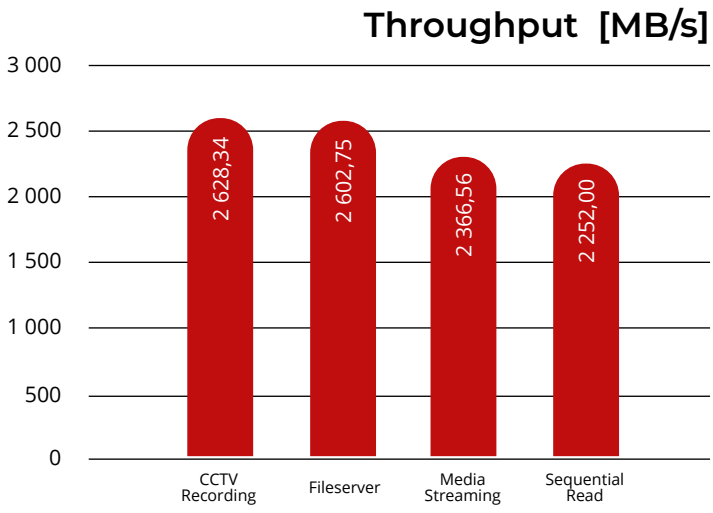
Optimal resource utilization

The Zstor GS41102 Open PetaByte+ System, equipped with Open-E JovianDSS, optimizes your storage resources, making it ideal for virtual environments where efficiency and flexibility are the key. Features like deduplication and compression minimize your storage footprint while maximizing capacity. Thin provisioning allows for on-demand space allocation and the ability to expand physical storage without downtime. These capabilities not only extend disk retention periods but also reduce costs, enhancing overall storage management.

Enhanced storage performance

The Zstor GS41102 Open PetaByte+ System meets modern enterprise demands with its high capacity, reliability, speed, and cost-effectiveness. This innovative solution enhances efficiency and performance suitable for varied workloads like I/O-intensive databases or high-throughput video recording. Utilize its powerful tuning tools to tailor the system to specific needs or choose from predefined profiles to streamline setup and operations, saving time and reducing complexity.





Hardware details

	Default configuration	Options
Motherboard	Zstor GS41102	-
CPU	Intel® Xeon® Silver 4210R 10-core 2.2 GHz	-
Chassis	Zstor GS41102	-
RAM	12x Samsung 32GB DDR4 3200MHz ECC RAM	-
Storage raw capacity	1.5PB	2.2PB
Data drives	70x Western Digital DC HC570 22TB HDD 7200rpm SATA 6Gb/s	Up to 102x Western Digital DC HC570 22TB HDD 7200rpm SATA 6Gb/s
Boot medium	2x Samsung PM893 960GB SATA 6Gb/s	-
HBA	Broadcom/LSI 9500-8i	-
Network interface	Broadcom P225P Ethernet Server Adapter 10/25 GbE PCI-e dual port SFP28	-
Form factor	4U	-

About Zstor Data Center Solutions Provider

At Zstor, we are dedicated to revolutionizing the data center landscape. Our mission is to deliver cutting-edge, high-performance, and cost-effective data center solutions tailored to your needs. With a strong focus on innovation, quality, and customer satisfaction, we have become a trusted partner for a wide range of industries, including hosting/cloud internet providers, universities, and research institutes.

Experience Excellence: Our team boasts a wealth of experience in the server, storage, and networking industry. This expertise enables us to provide Enterprise Class Storage and Networking features to our clients, all while keeping costs significantly lower than traditional server, storage, and networking vendors.

Performance Meets Reliability: At Zstor, we take pride in offering products that combine exceptional performance with unwavering reliability. Our solutions are built on a field-proven customizable hardware platform, allowing us to deliver highly scalable and dependable storage and networking solutions. From a cluster-in-a-box to several PetaBytes of storage, we offer an efficient, high-density, and cost-effective platform for your evolving needs.

Zstor GmbH
Gutenbergstr. 18
D-41564 Kaarst
Germany

info@zstor.de
https://zstor.de/
+49 2131 3867640

About Open-E

Open-E, founded in 1998, is a well-established developer of IP-based storage management software. Its flagship product Open-E JovianDSS is a robust, award-winning storage application which offers excellent compatibility with industry standards, and is the easiest to use and manage. Additionally, it is of the most stable solutions on the market and undisputed price performance leader.

Thanks to its reputation, experience and business reliability, Open-E has become the technology partner of choice for industry-leading IT companies. Open-E accounts for over 37,000 installations world-wide and has received numerous industry awards and recognition, also with its product Open-E DSS V7. For further information about Open-E, its products and partners, visit www.open-e.com.

About the Open-E JovianDSS Server Certification

Open-E JovianDSS delivers software-defined storage which results in a wide variety of different hardware requirements such as performance, range, capacity, capability, and connectivity. To ensure compatibility and robust storage environments, all selected partners offer storage systems which are tested, benchmarked, and certified by Open-E. This way, customers are able to use solutions that require exceptional security and redundancy, without compromising performance.