

## **Polaris UZ36** NVMe Hybrid Single Node

The Nemix's Polaris UZ36 (UZHS457R-S36N4) from Nemix Computer Spain delivers exceptional performance thanks to its design as a single-node data storage system. This powerful solution, certified for usage with Open-E JovianDSS software, combines the power of NVMe drives with flexible SSD and hybrid HDD configurations, offering an optimal balance between performance and cost.

Its streamlined, single-node architecture ensures high performance and reliability, making it the ideal choice for a wide range of business applications, from virtualization to data centers and video streaming. With dedicated NVMe slots and PCIe expansion, it integrates seamlessly into modern IT environments, backed by Open-E certification.

#### The certified solution with ZFS- and Linux-based Open-E JovianDSS data storage software and Nemix hardware provides:

- Versatile Data Storage Configurations
- Optimization for -> Performance and Cost
- Dedicated NVMe Slots
- PCIe Expansion Slots
- → High-Speed Data Access

**Purpose-Oriented Setup** Options

NEMIX

The Nemix Single Node system stands out for its remarkable versatility, offering you the ability to transform it into a data storage solution meticulously designed to meet the unique demands of your tasks, your organization's challenges, and your budget constraints. By selecting and configuring your preferred combination of NVMes, SSDs, or HDDs with the option for NVMe caching support, you gain the flexibility to create a data storage foundation that is not only efficient but also purpose-driven. This customized approach ensures a robust and scalable platform to support your ongoing and future data processing needs with precision and reliability.

Ideal for virtualization, it ensures the smooth operation of multiple virtual machines, making it a prime choice for virtualized environments. Its ability to manage high-resolution video makes it perfect for video streaming and surveillance applications. Robust features and high availability make it a dependable choice for data centers.

Nemix's partnership with Open-E ensures the system works efficiently with Open-E JovianDSS software. Open-E-certified engineers at Nemix bring expert knowledge and support, ensuring reliability for diverse industries.





Virtualization

0 **CCTV & Surveillance** Cameras



With the Open-E certified Nemix's Polaris UZ36, you can build:

- → High-performance foundation for ongoing production work
- → Budget-optimized system with the utilization of NVMes & HDDs
- → Task-tailored setup with the utilization of your drives of choice



# Hybrid Data Storage Support with NVMe Boost

Extended data storage versatility is a standout feature of the Nemix Single Node, thanks to the flexibility in terms of utilizing different types of drives and their advantages. Users can craft tailored configurations that merge the speed of NVMe drives with the high capacity of HDDs, striking an ideal balance between performance and cost. This flexibility makes it possible to optimize for various workloads, ranging from latency-sensitive applications to highcapacity archiving. The hybrid setup ensures data storage scalability that adapts to diverse performance and budgetary needs, offering a practical and efficient option for modern data centers.

### Enhanced storage performance

The Nemix Single Node is designed to support a broad spectrum of configurations, ranging from high-performance all-flash setups to cost-effective hybrid systems incorporating HDDs. This flexibility allows the system to seamlessly adapt to a wide variety of workloads, ensuring it meets diverse operational needs. Equipped with advanced NVMe caching algorithms, the Nemix Single Node optimizes performance by accelerating data access speeds. At the same time, it maintains an efficient balance between cost and storage capacity, making it an ideal choice for both performancedriven and budget-conscious applications.

# Optimized for Private Cloud, and Data Centers

Built to meet the demands of modern data centers, **Nemix's Polaris UZ36** excels in compute-intensive workloads like big data analytics, extensive virtualization, and high-density server deployments. Its single-node design ensures exceptional performance and seamless operations, even during updates or system upgrades. Users enjoy intuitive data storage management, flexible configurations, and expert support tailored to their server needs. Offering a reliable and powerful foundation, it drives the advancement of data centers and private cloud capabilities.

#### **Flexible scalability**

The Nemix Single Node is designed to support a broad spectrum of configurations, ranging from high-performance all-flash setups to cost-effective hybrid systems incorporating HDDs. This flexibility allows the system to seamlessly adapt to a wide variety of workloads, ensuring it meets diverse operational needs. Equipped with advanced NVMe caching algorithms, the Nemix Single Node optimizes performance by accelerating data access speeds. At the same time, it maintains an efficient balance between cost and storage capacity, making it an ideal choice for both performancedriven and budget-conscious applications.



Maximize your business's data storage performance and reliability with the **Nemix's Polaris UZ36 System**. Contact us today to learn more and enhance your data storage capabilities! **Explore the solution now!** 



### **Nemix's Polaris UZ36:** Connecting High Performance with Freedom of Choice

### Simplified system management

Managing the **Nemix's Polaris UZ36** system and its advanced Open-E JovianDSS features is simple and intuitive, setting it apart from many competing solutions. The Open-E JovianDSS GUI offers a comprehensive overview and streamlined management of all storage resources and functions. Based on an analysis of user workflows, the number of clicks required for common tasks—such as creating iSCSI targets or expanding storage volumes—has been minimized. This ensures you can efficiently manage the **Nemix's Polaris UZ36** system with minimal involvement from data storage administrators, saving time and effort.

# Data compression and in-line deduplication

Enhancing data storage efficiency, the **Nemix's Polaris UZ36** system employs advanced data compression and in-line deduplication technologies. It offers a range of compression protocols, including low-impact options for seamless system performance and high-compression configurations ideal for archival needs. The deduplication feature intelligently identifies and removes redundant data, significantly reducing data storage demands. This makes it particularly effective in environments with repetitive data, such as VDI, server virtualization, and backup systems.

### Data integrity check

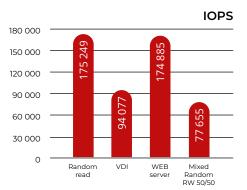
The **Nemix's Polaris UZ36** system ensures data integrity through advanced checksum techniques. Each data block undergoes validation via a checksum to detect discrepancies or errors. If a problematic block is identified, it is promptly repaired and reprocessed. In cases where the error persists, the block is relocated to a new position on the disk. The Nemix Single Node performs integrity checks during all read and write operations, as well as on idle blocks that are rarely accessed.

# Thin provisioning and an unlimited number of Snapshots

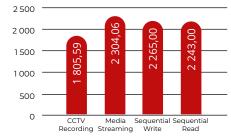
Thin provisioning dynamically allocates data storage capacity, reducing waste and eliminating the need for precise forecasting. Unlimited snapshots provide a powerful Disaster Recovery solution, enabling swift data restoration after deletion, corruption, or ransomware attacks. With customizable snapshot schedules and detailed data storage metrics, Nemix Single Node adapts effortlessly to evolving needs while maintaining peak efficiency.

#### NVMe:

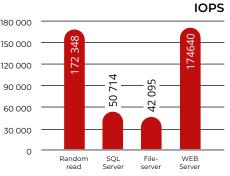
3 000



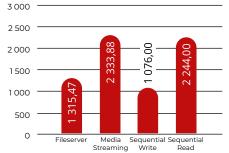
Throughput [MB/s]



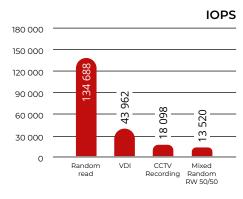
SSD:



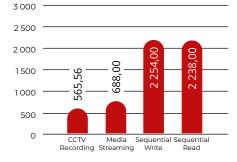




### NVMe + HDD:







WWW.NEMIX.ES

### Hardware details

	Default configuration	Options
Motherboard	MBD-H12SSL-NT	
CPU	AMD Epyc 7232P 8x3.1Ghz	
Chassis	Supermicro 847BE1C4-R1K23LPB	
RAM	64CB DDR4-3200	
Storage raw capacity	15.2TB	up to 111.36TB (for SSD) up to 464TB (for NVMe+HDD)
Data drives	4x 2.5" NVME SSD   SAMSUNG PM9A3   3.8TB	10x HDD   SEAGATE ST16000NM001G-2K   16TB 6x SSD   SAMSUNG PM893   3.84TB
Boot medium	MICRON MTFDKBA480TFR1BC 480GB M.2 7450 PRO NVME PCIE 4.0	· · · · /
НВА	Broadcom SAS 9500-8e SAS 12Gb/s 8-external mini-SAS HD PCIe 3.0 x8	
Network interface	BCM57416 NetXtreme-E Dual-Media 10G RDMA	
Form factor	30	

### About Nemix Computer Spain

At Nemix Computer Spain, we specialize in delivering transformative IT solutions that empower businesses to excel. With over 25 years of experience, we have established ourselves as a trusted provider of cutting-edge servers, advanced storage systems, and robust networking infrastructure.

#### Innovative Solutions for Modern IT Needs

Our mission is to deploy high-performance, efficient, and scalable IT solutions tailored to the unique requirements of our clients. From enterprises to specialized sectors, we combine expertise with a commitment to excellence, ensuring optimal results every time.

#### **Experience You Can Trust**

Backed by decades of industry knowledge, our team is dedicated to providing state-of-the-art technology solutions. We pride ourselves on delivering reliable, cost-effective alternatives to traditional IT infrastructure, ensuring our customers receive the best in quality and value

Nemix Computer Spain c/ Punto Net, 2 B 28805 Alcala de Henares Spain

- (a) comercial@nemix.es
- 🗞 +34 902 400 888
- https://nemix.es/

### About Open-E

Founded in 1998, Open-E is a leading developer of IP-based storage management software. Its flagship product, Open-E JovianDSS, is a robust storage application known for its excellent compatibility with industry standards and ease of use and management. Furthermore, it is one of the most stable solutions on the market, offering an optimal price-performance ratio. Thanks to its reputation, experience, and reliability, Open-E is a valued technology partner for leading IT companies. Open-E has over 40,000 installations worldwide and has received numerous industry awards. For more 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.