VIKING™
Enterprise Solutions

PRODUCT BRIEF | 2U 24 NVMe PCI Gen 4 drive Storage Server

VSS2249R

Ultra Performance Storage Server Using Gen 4 PCIe NVMe SSDs and AMD EPYC™ Rome CPUs

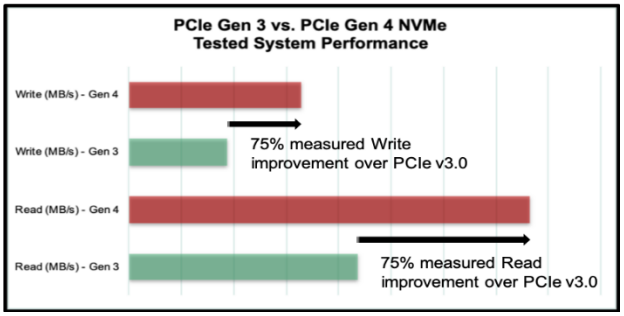
The Viking Enterprise Solutions (VES) VSS2249R storage Server offers 24, 2.5-inch U.2 (SFF-8639) SSDs utilizing the PCIe Gen 4 NVMe interface combined with two server modules equipped with AMD EPYC Rome CPUs. Each server has access to all 24 NVMe drives. The VSS2249R is a dense high availability solution that provides the ultimate storage performance in a small package.

The enclosure contains two hot swappable server modules. Each of the server modules includes an AMD EPYC™ Rome CPU, with x16 PCIe Gen4 and one OCPNIC v3.0 that supports Gen 4 PCIe add-in cards, and up to 8 DIMMs. The VSS2249R fits into an industry standard 19-inch 1.0 meter rack. The storage server's flexible configuration allows it to be deployed in a variety of applications. This extremely fast 2U storage server supports 96 PCIe lanes to the drives and network, delivering a non-blocking architecture.

The VSS2249R alleviates job pipeline congestion, a common limitation caused by I/O bottlenecks in many high-performance applications, such as edge computing storage, analytics, machine learning, AI, OLTP databases, high frequency trading, as well as modeling, simulation, scientific research, and other HPC use cases.

FEATURES

- Dimensions: 3.43 in. H x 17.2 in. W x 27.44 in. D (87 mm H x 438 mm W x 697 mm D)
- Latest AMD CPU technology provides 128 Gen 4 PCIe lanes per CPU and 24 hot-pluggable Gen 4 PCIe NVMe SSDs
- High availability system, each server accessing all drives
- Management interface for drive access and provisioning
- Hot-pluggable servers, power supplies, fans, and drives
- Up to 24 U.2 (SFF-8639) SSDs utilizing PCIe and NVMe protocols, (up to 25W per drive)
- Environmental operation up to 35°C ambient inlet
- Standard chassis customization and branding available
- Optional rail kit with CMA (cable management assembly)
- Optional TPM (trusted platform module)

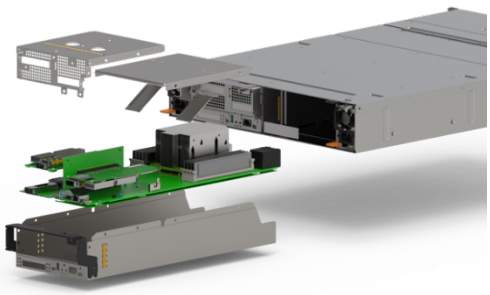


VES offers a broad portfolio of product offerings:

Leading-edge performing SSD arrays, SAS & NVMe
Leading-edge high performance and high availability solutions
Industry leading cold storage & object storage solutions
Purpose-built compute and storage platforms

Working with VES provides an accelerated time-to-market for all server and storage product needs, and enables customers to leverage Viking Enterprise Solutions' portfolio of proven product designs. Customers are also backed by an industry-leading design team and world-class electronics manufacturing services organization.

A front load enclosure with 24 U.2 NVMe drives. Each server has access to all 24 drives providing a highly available system.



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VSS2249R

AC Power

- Nominal input range: 200-240V AC
- Input frequency: 50-60 Hz
- Power source: dual redundant 1600W
- Input current: 4 A max @ 180V AC per PSU
- Inrush current: 40 A peak per PSU
- Maximum system output power rating: 2200W

Hot-swappable Components

- Two server modules
- Six fans
- Two AC to DC 1600W power modules
- Two independent AC power inputs
- U.2 (SFF-8639) SSDs utilizing Gen 4 PCIe and NVMe technology (hot pluggable)

Firmware

- IPMI and Redfish (R) management
- CLI and GUI control for drive management & status of the enclosure

Drive Partitioning

- Management software controls the visibility and access to each drive

2U Enclosure

- Dimensions: 3.43 in. H X 17.2 in. W X 27.44 in. D (87 mm H X 438 mm W X 697 mm D)
- Weight with drives ,CMA, and rail kit: 56.2 lbs (22.8 kg) max
- Optional rail kit with CMA (cable management assembly)
- Optional TPM (trusted platform module)

Failure Notifications

- Status LEDs for the enclosure, drives, servers, and fans

Performance

- Up to 96 Gb/s bandwidth between both servers
- 24-drive capacity
- Dual port drive support
- Up to 25W per drive

Operating Environment

- Temperature: 5°C to 35°C
- Relative humidity: 20% to 80% (non-condensing)
- Altitude: -200 ft to 10,000 ft
- Shock: 5G at 11ms, 1/2 sine wave pulse
- Vibration: 0.10G at 5 Hz to 500 Hz

Non-Operating Environment

- Temperature: -40°C to 60°C
- Relative humidity: 10% to 90% (non-condensing)
- Altitude: -200 ft to 40,000 ft
- Shock: 10G at 11ms, half sine wave pulse
- Vibration: 0.5G at 5 Hz to 500 Hz

Drive Partitioning

- Management software controls the visibility and access to each drive

Safety Standards

- IEC 62368 -1:2018

Quality Standards

- Manufactured under an ISO 9002 registered quality system

Servers

- AMD EPYC™ processors
- Eight lanes Gen 3 PCIe NTB
- Each CPU sees all 24 drives
- Each drive is dual ported and connected to each server module
- Highly available system

Electromagnetic Emissions & Immunity Standards

- EN 55035:2017
- EN 55024:2010
- EN 55032:2015 + AC:2016
- EN 61000-3-2:2014
- EN 61000-3-3:2013
- FCC 47 CFR PART 15 SUBPART B
- ICES-003 ISSUE 6:2016

Monitoring & Reporting

- Monitors temperature, power, cooling (including fan speed control), drives, as well as error rates and quality of service
- Reporting of all serial number, part number, and revisions of the server modules, power supplies, drives & chassis

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For price, availability and sales information, please email us at sales@vikingenterprise.com or call us at +1 (408) 964-3730.
www.vikingenterprisesolutions.com