

PRODUCT BRIEF | 2U/56-Bay Dual-Node NVMe Storage Server

VSS2562

High Performance, High-Capacity Enterprise Class Storage Using NVMe PCIe v4.0

The Viking Enterprise Solutions (VES) VSS2562 storage server offers fifty-six (56), 2.5" NVMe drives (U.2) combined with two, redundant server modules. Each server has access to all fifty-six NVMe drives with dual port devices.

The VES patented VSS2562 is a dense, high-availability storage solution that provides up to 3.3 PB's in a 2U form factor using 60 TB drives.

The enclosure contains two hot swappable server modules. Each of the server modules is a single socket AMD Milan-based server with two x16 PCIe add-in card slots, and up to 8 DIMMs per CPU. The VSS2562 fits into an industry standard 19" wide by 1m deep rack. Its flexible configuration allows it to be deployed in a variety of applications.

FEATURES

- ▶ 56 Hot-pluggable NVMe drives
- ▶ HA system with each server able to access all of the drives
- ▶ Management interface to control drive access & provisioning
- ▶ Hot-pluggable servers, power supplies, fans & drives
- ▶ SFF-8639, PCIe Gen 3/4 NVMe (U.2) drive support (up to 18W per drive)
- ▶ PCIe Gen4 NVMe support for 20 SSD slots
- ▶ Single and dual port NVMe drive support. Single port drives are only seen by one server
- ▶ Resilient environmental specification with up to a 35C ambient inlet
- ▶ Standard chassis customization & branding available

VES Portfolio of Storage and Storage Server Solutions

VES offers a broad portfolio of product offerings, including:

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

Working with VES provides you with an accelerated time-to-market for your server and storage product needs, and allows you to leverage our portfolio of proven product designs. Customers are backed by an industry leading design team and a world-class Electronics Manufacturing Services organization.

A side load enclosure with 56 U.2 NVMe drives. Each server has access to all 56 drives providing a highly available system.



PRODUCT BRIEF | 2U/56-Bay Dual-Node NVMe Storage Server

VSS2562

AC Power

- ▶ Input voltage: 200-240VAC
- ▶ Input frequency: 50-60 Hz
- ▶ Power source: redundant 2.7kwatt power supplies
- ▶ Input current: 15 amps max @ 180V AC per power supply
- ▶ Inrush current: 40 amps peak per power supply
- ▶ Maximum system continuous DC output power rating: 2.7kwatts

Hot-Swappable Components

- ▶ Two Server Modules
- ▶ Eight server fans
- ▶ Four SSD fans
- ▶ Two AC to DC power supplies – Each supply provides up to 2700W of power
- ▶ Two independent AC power inputs
- ▶ 56 NVMe drives (hot pluggable)

Firmware

- ▶ IPMI and Redfish 1.16 management
- ▶ CLI and GUI control for drive management & status of the enclosure

2U Enclosure

- ▶ Dimensions:
3.2 in. H X 17.6 in. W X 34.42 in. D (81 mm H X 448 mm W X 874 mm D)
- ▶ Weight with drives: 85 lbs (39 kg) max
- ▶ Railkit with CMA Failure Notifications

Failure Notifications

- ▶ Status & fault LEDs for the enclosure, drives & servers

Performance

- ▶ Up to 128 GB/s bandwidth between both servers

Capacity

- ▶ 56-drive capacity
 - ▶ U.2 PCIe 4.0 NVMe drives
 - ▶ Dual port drive
 - ▶ Up to 18W per drive

Operating Environment

- ▶ Temperature: 5° to 35°C
- ▶ Relative humidity: 20% to 80% (non-condensing)
- ▶ Altitude: -200 to 10,000 ft
- ▶ Shock: 3G at 11ms, 1/2 sine wave pulse
- ▶ Vibration: 0.10G at 5 Hz to 500 Hz

Non-Operating Environment

- ▶ Temperature: -40° to 60°C
- ▶ Relative humidity: 10% to 90% (non-condensing)
- ▶ Altitude: -200 to 40,000 ft
- ▶ Shock: 10G at 11ms, 1/2 sine wave pulse
- ▶ Vibration: 0.5G at 5 Hz to 500 Hz

Drive Partitioning

- ▶ Management software controls the visibility & access to each drive
- ▶ One port of a single port drive can be hidden for data protection

Safety Standards

- ▶ IEC 62368-1:3rd Ed, 2021-10-22
- ▶ CAN/CSA C22.2 No. 62368-1:19, 3rd Ed, 2021-10-22

Quality Standards

- ▶ Manufactured under an ISO 9002 registered quality system

Servers

- ▶ One or two Server modules
- ▶ AMD Milan processors
 - ▶ In High Performance configuration
- Each server takes 2x x16 PCIe v4 add in card
- OR
- ▶ In High Availability configuration
- Each server takes 1x OCP v3 and 1x HHHH PCIe Gen4 add in card

Electromagnetic Emissions & Immunity Standards

- ▶ EN 55032:2015 + A11:2020
- ▶ EN 55035:2017 + A11:2020
- ▶ EN 61000-3-2:2014
- ▶ EN 61000-3-3:2013 +A1:2019
- ▶ FCC 47 CFR PART 15 CLASS A SUBPART B
- ▶ CANADIAN ICES-003 ISSUE 7:2020
- ▶ CANADIAN ICES-Gen Issue 1 +A1:2021
- ▶ VCCI-CISPR 32:2016
- ▶ CE Mark

Monitoring & Reporting

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

