



PRODUCT BRIEF | 2U 56 NVMe Storage Server

NSS2560

High Performance Enterprise Class Storage Using NVMe

The Viking Enterprise Solutions (VES) NSS2560 storage server offers fifty-six, 2.5" NVMe drives (U.2) combined with two server modules. Each server has access to all fifty-six NVMe drives with dual port devices. The NSS2560 is a dense High-Availability solution that provides a tremendous amount of storage in a small package.

The enclosure contains two hot swappable server modules. Each of the servers is a dual socket Broadwell server with one x16 PCIe add in card slot, and up to 8 DIMMs per CPU. The NSS2560 fits into an industry standard 19" wide by 1.2m deep rack. Its flexible configuration allows it to be deployed in a variety of applications.

FEATURES

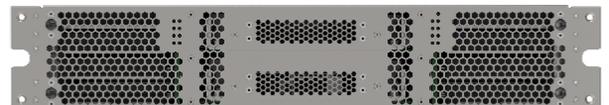
- ▶ 56 Hot-pluggable NVMe drives
- ▶ HA system with each server able to access all of the drives
- ▶ Management interface to control drive access & provisioning
- ▶ Hot-pluggable servers, power supplies, fans & drives
- ▶ SFF-8639, PCIe Gen 3 NVMe (U.2) drive support (up to 18W per drive)
- ▶ Single 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
- ▶ Provisions for battery backup/super caps for NVDIMMs
- ▶ 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.



NSS2560

AC Power

- ▶ Nominal Input Range: 100 - 240VAC
- ▶ Input frequency: 47-64 Hz
- ▶ Power Source: dual redundant 3kwatts (4 total 1.5kwatt 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: 3kwatts

Hot-Swappable Components

- ▶ Two Server Modules
- ▶ Four fans
- ▶ Four AC to DC power supplies – Each supply provides up to 1500W of power
- ▶ Two independent AC power inputs
- ▶ 56 NVMe drives (hot pluggable)

Firmware

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

Drive Partitioning

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

2U Enclosure

- ▶ Dimensions: 3.2 in. H X 17.6 in. W X 37.4 in. D (87 mm H X 448 mm W X 951 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 64 GB/s bandwidth between both servers

Capacity

- ▶ 56-drive capacity
 - ▶ U.2 PCIe 3.0 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 and access to each drive. One port of a single port drive can be hidden for data protection

Safety Standards

- ▶ UL 60950
- ▶ CSA 22.2-950

Quality Standards

- ▶ Manufactured under an ISO 9002 registered quality system

Servers

- ▶ One or two Server modules
- ▶ Intel Broadwell processors
 - ▶ Upgradeable to Intel Broadwell processors
- ▶ Each server takes 1 x16 PCIe add in card

Electromagnetic Emissions & Immunity Standards

Electromagnetic Emissions & Immunity Standards

- ▶ CE Mark
- ▶ EN55022 : 2010
- ▶ EN61000 3-2 :2014
- ▶ EN61000 3-2 :2013
- ▶ FCC Class A
- ▶ Canadian IECS-003

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

