VIKING™
Enterprise Solutions

PRODUCT BRIEF | 2U 56 NVMe Storage Server

NSS-2560

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 HA solution that provides a tremendous amount of storage in a small package.

The enclosure contains two hotswappable server modules. Each of the servers is a dual socket Broadwell server with one x16 PCIe add in card slots, 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.

Extremely dense 2U package with 56 NVMe drives and two servers

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

‣ Upgradeable to Broadwell server modules

VES Portfolio of Storage and Storage Server Solutions

VES offers a broad portfolio of product offerings, including:
‣ Leading edge performance SSD arrays, SAS & NVMe
‣ Leading edge high performance & high availability solutions
‣ Industry leading cold storage & 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.

NSS-2560

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

‣ CE Mark

‣ EN55022: 2010

‣ EN61000 3-2:2014

‣ EN61000 3-2:2013

‣ FCC Class A

‣ Canadian IECS-003

Monitoring & Reporting

‣ Monitoring for 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

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For price, availability and sales information, please email us at sales@vikingenterprise.com or call us at +1 (408) 964-3555.