Data sheet

HPE NVMe High Performance Mixed Use EDSFF E3.S Solid State Drives

HPE 12.8TB NVMe Gen5 High Performance Mixed Use E3.S EC1 E3 Thin Multi Vendor SSD (P91102-K21)

What's new

- Offering 3.2 TB, 6.4 TB, and 12.8 TB storage capacities for HPE NVMe High Performance Mixed Use EDSFF E3.S SSDs.

Overview

Do you need to accelerate the performance of your mixed use applications?

HPE NVMe High Performance Mixed Use (MU) Enterprise and Datacenter Standard Form Factor (EDSFF) E3.S Solid State Drives (SSDs) are best suited for high I/O applications that require a balanced performance between reads and writes to deliver high performance and endurance for data-intensive applications. NVMe High Performance MU SSDs communicate directly to applications via the PCIe bus to boost I/O bandwidth and reduce latency.

HPE NVMe High Performance MU EDSFF E3.S SSDs replace the traditional 2.5 inch small form factor SSD while supporting greater density of NVMe drives. It delivers high performance, lower latency data transfers from storage significantly faster than SAS or SATA SSDs. Designed to utilize the high bandwidth of PCIe Gen5 or Gen6 for mixed use workloads such as Big Data analytics, HPC, and virtualization.

Features

High performance and exceptional reliability for faster business results

HPE NVMe High Performance Mixed Use Enterprise and Datacenter Standard Form Factor (EDSFF) E3.S Solid State Drives (SSDs) are ideal for Big Data analytics, cloud computing, high performance compute, business intelligence, database applications, and virtualization.

Achieve higher IOPS and lower latency to enhance the performance of your enterprise servers while maintaining data accuracy with full data-path error detection.

Improved thermals, power, and scalability provide better system efficiency for high I/O applications.

Lastest PCIe Gen5 and Gen6 technology only available with EDSFF E3.S SSDs.

Improved design and efficiency for increased performance on HPE Gen11, Gen12, and Gen13 servers

HPE NVMe High Performance Mixed Use EDSFF E3.S Solid State Drives dramatically increase density for a 1U server that can fit 20 E3.S or 10 E3.S 2T drives, or a 2U server that can fit 36 E3.S or 18 E3.S 2T drives.

Improved power management and density while utilizing less wattage per server with EDSFF E3.S SSDs.

Technical specifications	HPE 12.8TB NVMe Gen5 High Performance Mixed Use E3.S EC1 E3 Thin Multi Vendor SSD
Product Number	P91102-K21
Lifetime writes	70,080 TB
Endurance DWPD (Drive Writes Per Day)	3.0 DWPD
Read IOPS	Random Read IOPS (4KiB, Q=16) = 260,069 Max Random Read IOPS (4KiB) = 1,218,330@Q256
Write IOPS	Random Write IOPS (4KiB, Q=16) = 847,716 Max Random Write IOPS (4KiB) = 868,855@16
Power (Watts)	23.46W
Plug type	Hot pluggable
Height	7.5 mm
Warranty	HPE Solid State Drives and Add-In Cards have a standard 3/0/0 warranty Customer Self Repair (CSR) subject to maximum usage limitations. Maximum usage limit is the maximum amount of data that can be written to the drive. Drives that have reached this limit will not be eligible for warranty coverage.
Shipping weight	0.54 kg
Shipping dimensions	20 x 25.4 x 11.6 cm
Platform supported	HPE Storage Platforms, see QuickSpecs for more information
Capacity	12.8 TB
Drive form factor	EDSFF E3.S
Interface	NVMe
Workload	Mixed Use
Carrier type	EC1 E3 Thin

HPE Services

No matter where you are in your transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From strategy and planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.

Advisory & Professional services

Experts can help you map out your path to hybrid cloud and optimize your operations.

Managed services

HPE runs your IT operations, giving you unified control, so can focus on innovation.

Support services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources.

— **HPE Complete Care Service:** a modular service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals. All delivered by an assigned team of HPE experts.

— **HPE Tech Care Service:** the operational service experience for HPE products. The service provides access to product specific experts, an AI driven digital experience, and general technical guidance to help reduce risk and search for ways to do things better.

— **HPE Multivendor Services:** Single point of accountability for managing on-site hardware and software support for multivendor products. HPE experts help manage your IT across technologies and platforms for HPE and non-HPE technologies, acting as the single point of contact for your IT operational needs.

Lifecycle Services

Address your specific IT deployment project needs with tailored project management and deployment services.

HPE Education Services

Training and certification designed for IT and business professionals across all industries. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options

Defective Media Retention is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

GreenLake

GreenLake is the cloud to run and manage your entire hybrid landscape—private, public, and edge. It helps you to:

— Streamline IT Operations across compute, storage, and networking without the chaos

— Unify and secure data, as you move faster

— Accelerate AI, from pilot to production

The result: greater operational efficiency, lower TCO, and faster AI delivery—all from one unified, intelligent platform built for today's hybrid enterprise.

For additional technical information, available models and options, please reference the QuickSpecs

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Parts and Materials: HPE will provide HPE-supported replacement parts and materials required to maintain the covered hardware.

Parts and components that have reached their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product quick-specs, or the technical product data sheet will not be provided, repaired, or replaced as part of these services.

Image may differ from the actual product.

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