

# HPE 960GB SAS 12G MIXED USE SFF BC VALUE SAS MULTI VENDOR SSD (P40510-K21)

**Server Solid State Drives** 



## **WHAT'S NEW**

- HPE 800 GB, 1.6 TB, 3.2 TB, 6.4 TB SAS
  24G Mixed Use SFF, BC, PM6 SSDs
- HPE 1.6 TB 24G Mixed Use SFF, LPC, PM6 SSDs
- HPE 800 GB, 1.6 TB, 3.2 TB, 6.4 TB SAS
  12 G Mixed Use SFF, BC, PM1645a SSDs
- HPE 800 GB, 1.6 TB, 3.2 TB SAS 12 G
  Mixed Use SFF, BC, SS540 SSDs

## **OVERVIEW**

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

HPE SAS Mixed Use (MU) Solid State Drives (SSDs) deliver high performance and endurance for applications requiring high read and write IOPS performance. HPE 12Gb Enterprise SAS MU SSDs transfer data at full duplex (bidirectional) allowing greater I/O bandwidth to alleviate bottlenecks at twice Data sheet Page 2

- Next Generation of 24Gb SAS-4 SSD Interface
- Capable of doubling 12Gb Enterprise SAS SSD performance with future 24Gb SAS controller and server technology enhancements

the 6Gb interface of SATA drives.

HPE 12Gb Enterprise SAS MU SSDs are best suited for mission-critical applications requiring a balanced mix of read and write I/O to deliver significantly faster data transfers from storage than SATA SSDs. HPE 12Gb SAS MU SSDs are ideal for big data analytics, high performance compute and virtualization workloads.

SAS technology continues to be the interface of choice for many workloads for its reliability and 24x7 operation in the enterprise data center.

HPE SSDs are backed by over 3 million hours of testing and qualification [1] ensuring reliable, high performing drives.

## **FEATURES**

# High Performance, Exceptional Reliability, and Efficiency for Faster Business Results

HPE 12Gb SAS Mixed Use (MU) SSDs are ideal for big data analytics, cloud computing, high performance compute, database applications and virtualization.

Achieve higher IOPS and lower latency to enhance the performance of your data center.

Maintain data accuracy with full data-path error detection and surprise power loss protection.

Choose from a broad portfolio of enhanced solutions in a wide variety of capacities.

# HPE 24Gb Enabled SAS SSDs are Capable of 2x the Performance of 12Gb SAS SSDs.

Next Generation of SAS interface, based on the SAS-4 specification.

HPE 24Gb Enterprise SAS capability relies on a complete ecosystem enablement requiring a 24G SAS controller and updated server infrastructure which is set to launch in 2021.

HPE 24Gb Enterprise SAS SSDs are compatible with 12Gb Enterprise SAS ecosystem.

**Data sheet** Page 3

# **Technical specifications**

# **HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD**

Product Number (SKU)	P40510-K21
Lifetime Writes	5,250
Endurance DWPD (Drive Writes Per Day)	3
Read IOPS	Random Read IOPS (4KiB, Q=16)=105,000 Max Random Read IOPS (4KiB)=155,000@Q32
Write IOPS	Random Write IOPS (4KiB, Q=16)=47,000 Max Random Write IOPS (4KiB)=48,000@Q4
Power (Watts)	6.52
Plug Type	Hot pluggable
Height	15mm
Product Dimensions (metric)	21.92 x 22.86 x 14.61 cm
Weight	0.5 kg
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.

## **HPE POINTNEXT SERVICES**

Most, if not all IT organizations are on a digital transformation journey — each at a different stage. With over 11,000 IT projects conducted and 1.4 million customer interactions each year, HPE Pointnext Services' 15,000+ experts and its vast ecosystem of solution partners and channel partners are uniquely able to help you at every stage of your digital transformation. We bring together technology and expertise to help you drive your business forward and prepare for whatever is next.

Advisory and Professional Services help you accelerate your digital transformation. Operational Services help you remove complexity and respond rapidly to business demands.

#### **Operational Services from HPE Pointnext Services**

<u>HPE Pointnext Tech Care</u> provides fast access to product-specific experts, an Al-driven digital experience, and general technical guidance to help enable constant innovation. We have reimagined IT support from the ground up to deliver faster answers and greater value. By continuously searching for better ways to do things—as opposed to just fixing things that break—HPE Pointnext Tech Care helps you focus on achieving your business goals.

- HPE Datacenter Care helps modernize and simplify IT operations. Partner with an assigned account team, access technical expertise, an enhanced call experience gives you priority access, choose hardware and software support, implement proactive monitoring to help stay ahead of issues, and access HPE IT best practices and IP.
- HPE Proactive Care offers an enhanced call experience and helps reduce problems with personalized proactive reports and advice. This also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.). Read more
- HPE Foundation Care helps when there is a problem and has a choice of response levels. Collaborative software support is included and provides troubleshooting help for ISVs running on your server. Read more.

#### Other related services

**Defective Media Retention** is optional and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

**HPE Service Credits** offers a menu of technical services, access additional resources, and specialist skills.

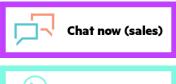
**HPE Education Services** delivers a comprehensive range of services to support your people as they expand their skills required for a digital transformation.

Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and support options.

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

Make the right purchase decision. Contact our presales specialists.

### Chat online









### **HPE GREENLAKE**

<u>HPE Greenlake</u> is HPE's market-leading IT as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model. HPE GreenLake delivers public cloud services and infrastructure for workloads on premises, fully managed in a pay per use model.

If you are looking for more services, like **IT financing solutions**, please explore them here.

[1] HPE Specified Testing: Over 3M hour test quant, derived from a combination of drive qualification test plans, specifically HDDQ spec-supplier responsibility to perform, HDDQ spec-HPE responsibility to perform, Reliability Demonstration Test (RDT) spec, CSI integration test spec, and Pilot test requirements. Tests were conducted in June 2020.

© Copyright 2021 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

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.

Microsoft is either a registered trademark or trademark of Microsoft Corporation in the United States and/or other countries. All other third-party trademark(s) is/are property of their respective owner(s).