

# HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.2 P5520 SSD (P51457-K21)

Server Solid State Drives



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## What's new

- HPE 1.92 TB, 3.84 TB, 7.68 TB NVMe High Performance Read Intensive SFF (2.5-inch), U.2, P5520 SSDs
- HPE 1.92 TB, 3.84 TB, 7.68 TB, 15.36 TB NVMe High Performance Read Intensive SFF (2.5-inch), U.3, PM1733a SSDs

## Overview

Do you need to accelerate the performance of your read intensive applications?

HPE NVMe High Performance Read Intensive (RI) Solid State Drives (SSDs) are best suited for applications requiring a strong blend of high read IOPS, low latency and high endurance at a strong price point. NVMe SSDs communicate directly to applications via the PCIe bus to boost I/O bandwidth and reduce latency.

HPE NVMe High Performance RI SSDs provide high-performance data transfers from storage, at rates faster than SAS or SATA SSDs. Designed to utilize the high bandwidth of

PCIe Gen3 and PCIe Gen4 in select servers for workloads high in reads such as read caching, web servers and boot/swap.

HPE SSDs are backed by up to 3.35 million hours of testing and qualification [1] ensuring reliable, high performing drives. HPE Digitally Signed Firmware prevents unauthorized access to data by providing the assurance that drive firmware comes from a trusted source.

## Features

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

HPE NVMe High Performance Read Intensive (RI) Solid State Drives are ideal for read caching, social media, bulk storage, email and boot/swap.

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

Maintain data accuracy with full data-path error detection.

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

HPE NVMe High Performance SSDs.

### **HPE Continues to Enhance its SSD Portfolio by Offering NVMe U.3 Universal Connect PCIe Gen4 SSDs**

HPE NVMe U.3 Universal Connect PCIe Gen4 SSDs deliver higher performance for server-storage solutions to better meet the challenges within high performance workloads.

HPE NVMe U.3 Universal Connect PCIe Gen4 NVMe SSDs are 100% backwards compatible with NVMe U.2 SSD backplanes on HPE Gen10 servers.

### **Self-encrypting FIPS**

Supports Self-Encrypting TCG Opal FIPS-140-2.

Protect data if the storage device is physically stolen or subject to inappropriate chain of custody, returned for warranty, repair, expired lease, disposal, or repurposed for other storage duties.



**Technical specifications****HPE 7.68TB NVMe Gen4 High Performance Read Intensive SFF BC U.2 P5520 SSD**

<b>Product Number</b>	P51457-K21
<b>Lifetime Writes</b>	14,000
<b>Endurance DWPD (Drive Writes Per Day)</b>	1
<b>Read IOPS</b>	Random Read IOPS (4KiB, Q=16)=220,000, Max Random Read IOPS (4KiB)=850,000@Q256
<b>Write IOPS</b>	Random Write IOPS (4KiB, Q=16)=230,000, Max Random Write IOPS (4KiB)=235,000@Q16
<b>Power (Watts)</b>	15.52
<b>Plug Type</b>	Hot Pluggable
<b>Height</b>	15 mm
<b>Warranty</b>	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.
<b>Platform Supported</b>	Storage Platforms

[1] HPE Internal lab testing. Up to 3.35 million hour test quant is derived from a combination of drive qualification test plans, specifically HDDQ spec-supplier responsibility to perform, HDDQ spec-HPE responsibility to perform, RDT-Reliability Demonstration Test (RDT) spec, CSI integration test spec and pilot test requirements.



For additional technical information, available models and options, please reference the [QuickSpecs](#)

## HPE Pointnext Services

[HPE Pointnext Services](#) brings together technology and expertise to help you drive your business forward and prepare for whatever is next.

### Operational Services from HPE Pointnext Services

[HPE Pointnext Tech Care](#) provides fast access to product-specific experts, an AI-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 Pointnext Complete Care](#) is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment, and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts.

**HPE Integration and Performance Services** help you customize your experience at any stage of your product lifecycle with a menu of services based on individual needs, workloads, and technologies.

- Advise, design, and transform
- Deploy
- Integrate and migrate
- Operate and improve
- Financial Services
- GreenLake Management Services
- Retire and sanitize
- IT Training and personal development

### Other related services

[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.

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

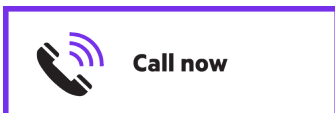
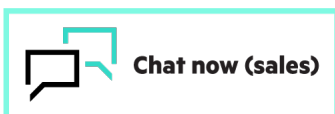
## HPE GreenLake

[HPE GreenLake](#) 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.

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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.

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[PSN1014670673BREN](#), March, 2023.