RETIRED: This document has been officially retired, and the base products listed herein are now considered obsolete and are no longer available for sale. Consequently, the information contained within may no longer be current. This document is provided exclusively for reference and informational purposes.

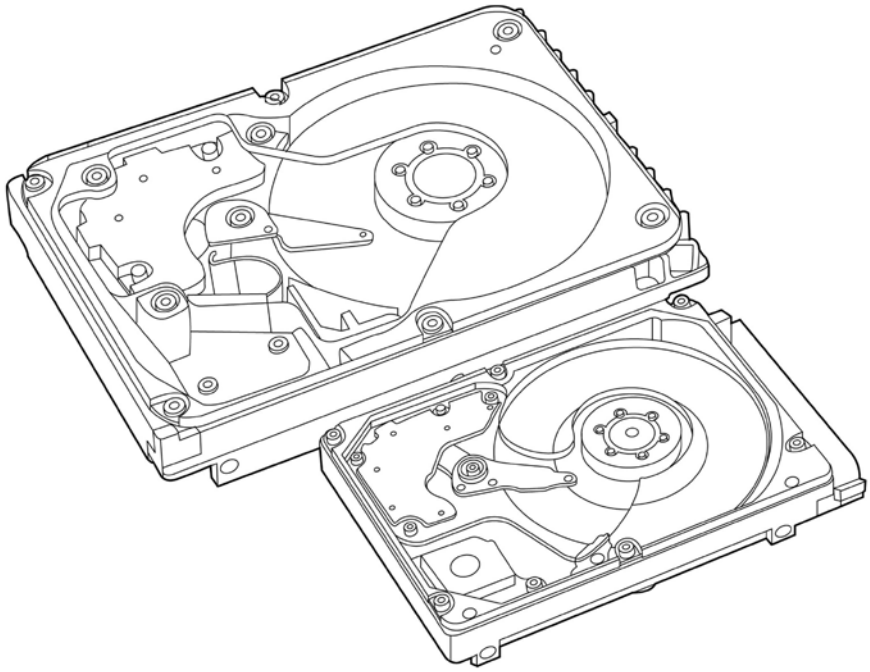
Overview

HPE Hard Disk Drives

HPE Hard Disk Drives (HDDs) delivers proven performance at industry leading capacities backed by high quality and reliability, preferred choice for many workloads ranging from small businesses to large enterprise.

HPE hard disk drives are optimized to deliver maximum performance on HPE server platforms, and are proven for applications that demand reliable performance in 24x7 operational environments. HPE HDDs offer customers great value per gigabyte without sacrificing performance. In addition, an industry-leading testing and qualification program ensures that our drives are rugged enough for any need.

HPE HDDs are available for three types of workloads —Entry, Midline and Enterprise, two interfaces—SAS and SATA, and in a variety of capacities—up to 10 TB and growing.



What's New

- HPE 6TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive
- HPE 10TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive
- HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive
- HPE 1TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive
- HPE 3TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive

Overview

Models

NOTE: SATA Drive Write Cache is disabled by default to minimize the risk of data loss in case of power loss. For information on how to enable Drive Write Cache on SATA drives via supported controllers and HBAs and what precautions should be followed please visit: **http://www.hp.com/go/SATA**

NOTE: The components of a storage subsystem (e.g. the drive, the HBA/controller, firmware, and the server backplane) should operate at the same data transfer rate or the system bandwidth will be negotiated down to an acceptable level for all components.

HPE 6G SATA "SmartDrive" Carriers

6G SATA Hot Plug with SmartDrive SFF (2.5-inch) Midline (MDL) Drives

HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	655710-B21
HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	655708-B21

6G SATA Hot Plug with SmartDrive SFF (2.5-inch) 512e (MDL) Drives

HP 2TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765455-B21
HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765453-B21

NOTE: Not supported by VMWare: VMWare is not 512e "Aware".

6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline (MDL) Drives

HPE 6TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	846510-B21
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	753874-B21
HPE 4TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	861678-B21
HP 4TB 6G SATA 7.2k rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	693687-B21
HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	628061-B21
HPE 3TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	861693-B21
HPE 2TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	861676-B21
HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	658079-B21
HPE 1TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	861691-B21
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	657750-B21
HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	658071-B21

6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline 512e Drives

HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive	819203-B21
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765255-B21
HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765253-B21

NOTE: Not supported by VMWare: VMWare is not 512e "Aware".

6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline 512e Performance Drives

HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	793667-B21
HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drives	793665-B21

NOTE: Not supported by VMWare: VMWare is not 512e "Aware".

6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline 512e Helium Drives

HPE 10TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive	857648-B21
HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive	861594-B21
HP 8TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793695-B21
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793683-B21

NOTE: Not supported by VMWare: VMWare is not 512e "Aware".

HPE 6G SATA "Non-hot Plug" Carriers

6G SATA Non-hot Plug LFF (3.5-inch) Midline (MDL) Drives

HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	628065-B21

Overview

HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	659339-B21
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	659337-B21
HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	659341-B21

6G SATA Non-hot Plug LFF (3.5-inch) Standard (STND) Drives

HP 4TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	801888-B21
HP 3TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	801886-B21
HP 2TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	801884-B21
HP 1TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	801882-B21

6G SATA Non-hot Plug LFF (3.5-inch) Entry (ETY) Drives

NOTE: Supported on select 10 series servers only.

HP 4TB 6G SATA 5.9K rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	815635-B21
HPE 3TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	843270-B21
HPE 2TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	843268-B21
HPE 1TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	843266-B21
HPE 500GB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	843264-B21

HPE 6G SATA Hot Plug Hard Drives

NOTE: These drives are not supported by Gen8/Gen9 servers.

SATA Hot Plug SFF (2.5-inch) Midline (MDL) Drives

HP 1TB 3G SATA 7.2K rpm SFF (2.5-inch) Hot Plug Midline 1yr Warranty Hard Drive	625609-B21
HP 500GB 3G SATA 7.2K rpm SFF (2.5-inch) Midline 1yr Warranty Hard Drive	507750-B21

SATA Hot Plug LFF (3.5-inch) Midline (MDL) Drives

HP 4TB 3G SATA 7.2k rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive	694374-B21
HP 3TB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive	628059-B21
HP 2TB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive	507632-B21
HP 1TB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive	454146-B21
HP 500GB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive	458928-B21

SATA Hot Plug LFF (3.5-inch) Midline (MDL) 512e Drives

HP 8TB 6G SATA 7.2K rpm LFF (3.5-inch) 512e Helium 1yr Warranty Hard Drive	793693-B21
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) 512e Helium 1yr Warranty Hard Drive	793680-B21

NOTE: Not supported by VMWare: VMWare is not 512e “Aware”.

HPE 6G SATA Quick Release Hard Drives

6G SATA Quick Release SFF (2.5-inch) Midline (MDL) Drives

NOTE: These drives are supported by the SL Gen8 servers and Moonshot server.

HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) Quick Release Midline 1yr Warranty Hard Drive	632080-B21
HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) Quick Release Midline 1yr Warranty Hard Drive	632078-B21

6G SATA Quick Release LFF (3.5-inch) Midline (MDL) Drives

NOTE: These drives are supported by the SL Gen8 servers.

HP 4TB 6G SATA 7.2k rpm LFF (3.5-inch) Quick-release Midline 1yr Warranty Hard Drive	697954-B21
HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) Quick Release Midline 1yr Warranty Hard Drive	647274-B21
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) Quick Release Midline 1yr Warranty Hard Drive	672621-B21

Standard Features

Drive Quality	Today's entry-level servers and external storage solutions are seeing an increase in maximum storage capacity and demand for increased levels of drive quality. In the often-changing entry-level server and storage environment, storage has become a critical component of the information system, significantly defining both the systems reliability. This is why HPE drives undergo an intense qualification process that eliminates firmware and O/S incompatibilities. All drives are proven to perform in the HPE ProLiant and Modular Smart Array (MSA) storage systems for which they were designed.
Performance	Only those drives whose quality is suitable for an entry-level, external storage enclosures and server environments are selected through the Hewlett Packard Enterprise qualification process. All our drives are proven to be reliable in the ProLiant server and MSA storage environment.
Native Command Queuing	Native Command Queuing (NCQ) is a technology designed to increase performance of SATA hard disk drives by allowing the individual hard disk to internally optimize the order in which received read and write commands are executed. This can reduce the amount of unnecessary going back-and-forth on the drive's heads, resulting in increased performance for workloads where multiple simultaneous read/write requests are outstanding, most often occurring in server or storage-type applications. Without NCQ the drive has to process and complete one command at a time. For NCQ to be enabled, it must be supported and turned on in the controller and in the hard drive itself. **NOTE:** Please reference the HPE Smart Array Controller website for NCQ enabled controllers at: **http://www.hp.com/products/smartarray**. Please see SATA hard drive Technical Specifications section for specific capacities supported with NCQ.
Integration	Many issues customers have with third party Serial-ATA drives are integration related issues. When buying from another supplier, there is no guarantee that a drive has been correctly set for proper operation with ProLiant entry-level servers or MSA enclosures. These incompatibilities can create problems in configuration, can rob your system of performance, or at their worst, can result in data corruption. HPE hard drives are specifically designed and tested for flawless operation in your Hewlett Packard Enterprise equipment. The integration of hard drives in HPE systems means that cables, controllers, and firmware are right for your ProLiant entry level server or MSA enclosures.
Pre-Failure Alert	When used in conjunction with a SMART Array Controller and Systems Insight Manager, the SMART capable firmware in HPE hard drives enables extensive fault prediction capabilities. If potential problems develop in one of the drives, the Smart Array Controller, Systems Insight Manager and/or SMART hard disk drive lets you know in advance so you can have the drive replaced, before it fails, under warranty. **NOTE:** All drives are protected by a Pre-Failure Alert when used with a HPE Smart Array controller and Systems Insight Manager, allowing hard drives to be replaced before failure under warranty. In addition, all drives are covered by a 1 or 3 year limited on-site warranty, regardless of the warranty period of the system in which they are installed. However, the drive warranty is automatically uplifted when used in a server or MSA for which a care pack is purchased. Please see the below HPE Care Pack Information section for additional services. **NOTE:** SATA hard drives have a 1 year limited warranty regardless of the warranty period for the system in which they are installed.
Server and Storage Support	Please see the following URL for the latest list of supported servers and enclosures: **http://www.hp.com/servers/hdd-documentation**

Service and Support

Service and Support

NOTE: HPE SATA and SAS Hard drives are covered under the HPE Support Service/ Service Contract applied to the HPE ProLiant Server. No separate HPE Support Service need to be purchased.

HPE Technology Services for Industry Standard Servers
HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability powered by a rich portfolio of consulting and support services designed to add value to our core products and solutions Connect to Hewlett Packard Enterprise to help prevent problems and solve issues faster. Our support technology lets you to tap into the knowledge of millions of devices and thousands of experts to stay informed and in control, anywhere, any time.

Protect your business beyond warranty with HPE Support Services
HPE support services offer complete care and support expertise with committed response choices that are designed to meet your IT and business needs.

Connect your devices to HPE

Unlock all of the benefits of your technology investment by connecting your products to Hewlett Packard Enterprise. Achieve up to 77% reduction in down time, near 100% diagnostic accuracy and a single consolidated view of your environment. By connecting, you will receive 24x7monitoring, pre-failure alerts, automatic call logging, and automatic parts dispatch. HPE Proactive Care Service and HPE Datacenter Care Service customers will also benefit from proactive activities to help prevent issues and increase optimization. All of these benefits are already available to you with your server storage and networking products, securely connected to HPE support.

Warranty

ATA, SATA and MDL SAS hard drives have a maximum warranty period of one (1) year regardless of the warranty period for the system in which they are installed.

Service Coverage

For ProLiant servers and storage systems, the service on the main product covers HPE-branded hardware options not designated by Hewlett Packard Enterprise as requiring separate coverage that are qualified for the server, are purchased at the same time or afterward, and are internal to the enclosure. The service also covers external monitors up to 22 inches in size and tower UPS products during their supported life of up to 5 years beyond sales discontinuance. These items will be covered at the same service level as the main product.

Maximum supported lifetime/maximum usage:
Parts and components that have exceeded their maximum supported lifetime and/or the maximum usage limitations as set forth in the manufacturer's operating manual, product QuickSpecs, or the technical product data sheet will not be provided, repaired, or replaced as part of this service.

Data Retentive components that are specified by Hewlett Packard Enterprise as consumable parts and/or that have exceeded the maximum supported lifetime and/or the maximum usage limit as set forth in the manufacturer's operating manual, the product QuickSpecs, or the technical data sheet are not eligible for the defective media retention or the comprehensive defective material retention service feature option.

For more information

To learn more on services for HPE ESSN Options, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Or visit:
http://www.hp.com/services/proliant or **http://www.hp.com/services/bladesystem**

Technical Specifications

6G SATA Hot Plug with SmartDrive SFF (2.5-inch) Midline (MDL) Drives

HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	**655710-B21**	**Capacity**	1,000,204MB	
		Height	0.62 in (15.6 mm)	
		Width	2.98 in (75.7 mm)	
		Depth	4.67 in (118.7 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.7 ms
			Average	<8.5 ms
			Full-Stroke	16.96 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	1,953,525,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	**655708-B21**	**Capacity**	500,107MB	
		Height	0.62 in (15.6 mm)	
		Width	2.98 in (75.7 mm)	
		Depth	4.67 in (118.7 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.7ms
			Average	<8.5ms
			Full-Stroke	16.96ms
			Rotational Speed	7200
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	976,773,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

6G SATA Hot Plug with SmartDrive SFF (2.5-inch) Midline (MDL) 512e Drives

HP 2TB 6G SATA 7.2K	**765455-B21**	**Capacity**	2,000,398MB

Technical Specifications

rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	**Height**	0.62 in (15.6 mm)	
	Width	2.98 in (75.7 mm)	
	Depth	4.67 in (118.7 mm)	
	Interface	Serial ATA	
	Transfer Rate (Maximum)	6Gb/s	
	Native Command Queuing	Supported	
	Seek Time (typical reads, including settling)	Single Track	.5 ms
		Average	<7.2 ms
		Full-Stroke	17 ms
		Rotational Speed	7,200 rpm
	Physical Configuration	Bytes/Sector	512
		Logical Blocks	3,907,029,168
	Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	**765453-B21**	**Capacity**	1,000,204MB
		Height	0.62 in (15.6 mm)
		Width	2.98 in (75.7 mm)
		Depth	4.67 in (118.7 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported
		Seek Time (typical reads, including settling)	Single Track .5 ms
			Average <7.2 ms
			Full-Stroke 17 ms
			Rotational Speed 7200
		Physical Configuration	Bytes/Sector 512
			Logical Blocks 1,953,525,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)

6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline (MDL) Drives

HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	**753874-B21**	**Capacity**	6,001,175MB
		Height	1.06 in (26.8 mm)
		Width	4.16 in (105.8 mm)
		Depth	6.69 in (170.0 mm)

Technical Specifications

	Interface	Serial ATA	
	Transfer Rate (Maximum)	6Gb/s	
	Native Command Queuing	Supported	
	Seek Time (typical reads, including settling)	Single Track	0.25ms
		Average	8.5 ms
		Full-Stroke	22 ms
		Rotational Speed	7,200 rpm
	Physical Configuration	Bytes/Sector	512
		Logical Blocks	11,721,045,168
	Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HPE 6TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	**846510-B21**	**Capacity**	6,001,175MB
		Height	1.06 in (26.8 mm)
		Width	4.16 in (105.8 mm)
		Depth	6.69 in (170.0 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported
		Seek Time (typical reads, including settling)	Single Track 0.8 ms
			Average 8.5 ms
			Full-Stroke 15.7 ms
			Rotational Speed 7,200 rpm
		Physical Configuration	Bytes/Sector 512
			Logical Blocks 11,721,045,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)
HPE 4TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	**861678-B21**	**Capacity**	4,000,787MB
		Height	1.06 in (26.8 mm)
		Width	4.16 in (105.8 mm)
		Depth	6.69 in (170.0 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported

Technical Specifications

		Seek Time (typical reads, including settling)	Single Track	0.25ms
			Average	7.6 ms
			Full-Stroke	15ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	7,814,037,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 4TB 6G SATA 7.2k rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	**693687-B21**	**Capacity**	4,000,787MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.8 ms
			Average	8.5 ms
			Full-Stroke	16.2 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	7,814,037,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	**628061-B21**	**Capacity**	3,000,592,982,016	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.5 ms
			Average	8.2 ms
			Full-Stroke	16.0 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512

Technical Specifications

			Logical Blocks	5,860,533,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HPE 3TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	**861693-B21**	**Capacity**	3,000,592,982,016	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.32 ms
			Average	7.45 ms
			Full-Stroke	14.2 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	5,860,533,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HPE 2TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	**861676-B21**	**Capacity**	2,000,398MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.25ms
			Average	7.6 ms
			Full-Stroke	15ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	3,907,029,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

Technical Specifications

HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	**658079-B21**	**Capacity**	2,000,398MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.5 ms
			Average	<8.5ms
			Full-Stroke	16.0 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	3,907,029,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	**657750-B21**	**Capacity**	1,000,204MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.5 ms
			Average	<8.5 ms
			Full-Stroke	16.5 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	1,953,525,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HPE 1TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive	**861691-B21**	**Capacity**	1,000,204MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	

Technical Specifications

	Interface	Serial ATA	
	Transfer Rate (Maximum)	6Gb/s	
	Native Command Queuing	Supported	
	Seek Time (typical reads, including settling)	Single Track	0.32 ms
		Average	7.45 ms
		Full-Stroke	14.2 ms
		Rotational Speed	7,200 rpm
	Physical Configuration	Bytes/Sector	512
		Logical Blocks	1,953,525,168
	Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	**658071-B21**	**Capacity**	500,107MB
		Height	1.06 in (26.8 mm)
		Width	4.16 in (105.8 mm)
		Depth	6.69 in (170.0 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported
		Seek Time (typical reads, including settling)	Single Track .5ms
			Average <8.5ms
			Full-Stroke 16.3ms
			Rotational Speed 7200
		Physical Configuration	Bytes/Sector 512
			Logical Blocks 976,773,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)

6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline 512e Drives

HPE 10TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive	**857648-B21**	**Capacity**	10,000,831 MB
		Height	1.06 in (26.8 mm)
		Width	4.16 in (105.8 mm)
		Depth	6.69 in (170.0 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported

Technical Specifications

		Seek Time (typical reads, including settling)	Single Track	0.22 ms
			Average	8.0 ms
			Full-Stroke	16.0 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	19,532,873,728
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1 yr Warranty Hard Drive	**861594-B21**	**Capacity**	8,001,563MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.22 ms
			Average	8.0 ms
			Full-Stroke	16.0 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	15,628,053,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline 512e Drives

HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1 yr Warranty Hard Drive	**819203-B21**	**Capacity**	8,001,563MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.7ms
			Average	8.5 ms
			Full-Stroke	15.7 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	15,628,053,168
		Operating Temperature (system inlet air	50° to 95° F (10° to 35° C)	

Technical Specifications

		temperature)		
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e 1yr Warranty Hard Drive	**765255-B21**	**Capacity**	6,001,175MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.7ms
			Average	8.5 ms
			Full-Stroke	15.7 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	11,721,045,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e 1yr Warranty Hard Drive	**765253-B21**	**Capacity**	4,000,787MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.7ms
			Average	8.5 ms
			Full-Stroke	15.7 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	7,814,037,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline 512e Performance Drives

HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	**793667-B21**	**Capacity**	6,001,175MB
		Height	1.06 in (26.8 mm)
		Width	4.16 in (105.8 mm)
		Depth	6.69 in (170.0 mm)

Technical Specifications

	Interface	Serial ATA	
	Transfer Rate (Maximum)	6Gb/s	
	Native Command Queuing	Supported	
	Seek Time (typical reads, including settling)	Single Track	0.25ms
		Average	7.6ms
		Full-Stroke	15ms
		Rotational Speed	7,200 rpm
	Physical Configuration	Bytes/Sector	512
		Logical Blocks	11,721,045,168
	Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	**793665-B21**	**Capacity**	4,000,787MB
		Height	1.06 in (26.8 mm)
		Width	4.16 in (105.8 mm)
		Depth	6.69 in (170.0 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported
		Seek Time (typical reads, including settling)	Single Track 0.25ms
			Average 7.6ms
			Full-Stroke 15ms
			Rotational Speed 7,200 rpm
		Physical Configuration	Bytes/Sector 512
			Logical Blocks 7,814,037,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)

6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline 512e Helium Drives

HP 8TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	**793695-B21**	**Capacity**	8.001,563MB
		Height	1.06 in (26.8 mm)
		Width	4.16 in (105.8 mm)
		Depth	6.69 in (170.0 mm)
		Interface	SATA
		Transfer Rate Synchronous (Maximum)	6 Gb/sec
		Seek Time (typical reads, including	Single Track

Technical Specifications

		settling)		
		Seek Time (typical reads, including settling)	Average	8.5 ms
			Full-Stroke	16.0 ms
			Rotational Speed	7200 rpm
		Physical Configuration	Bytes/Sector	512
		Physical Configuration	Logical Blocks	15,628,053,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
		Capacity	8.001,563MB	
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	**793683-B21**	**Capacity**	6,001,175MB	
		Height	1.06 in (26.8 mm)	
		Width	4.16 in (105.8 mm)	
		Depth	6.69 in (170.0 mm)	
		Interface	SATA	
		Transfer Rate Synchronous (Maximum)	6 Gb/sec	
		Seek Time (typical reads, including settling)	Single Track	
		Seek Time (typical reads, including settling)	Average	8.5 ms
			Full-Stroke	16.0 ms
			Rotational Speed	7200 rpm
		Physical Configuration	Bytes/Sector	512
		Physical Configuration	Logical Blocks	11,721,045,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

6G SATA Non-hot Plug LFF (3.5-inch) Midline (MDL) Drives

HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	**628065-B21**	**Capacity**	3,000,592,982,016	
		Height	1.028 in (26.1 mm)	
		Width	4.00 in (101.6 mm)	
		Depth	5.75 in (146.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.5 ms
			Average	8.2 ms
			Full-Stroke	16.0 ms
			Rotational Speed	7,200 rpm

Technical Specifications

		Physical Configuration	Bytes/Sector	512
			Logical Blocks	5,860,533,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	**659339-B21**	**Capacity**	2,000,398MB	
		Height	1.028 in (26.1 mm)	
		Width	4.00 in (101.6 mm)	
		Depth	5.75 in (146.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.5 ms
			Average	<8.5ms
			Full-Stroke	16.0 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	3,907,029,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	**659337-B21**	**Capacity**	1,000,204MB	
		Height	1.028 in (26.1 mm)	
		Width	4.00 in (101.6 mm)	
		Depth	5.75 in (146.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.5ms
			Average	<8.5 ms
			Full-Stroke	16.3ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	976,773,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

Technical Specifications

HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	**659341-B21**	**Capacity**	500,107MB	
		Height	1.028 in (26.1 mm)	
		Width	4.00 in (101.6 mm)	
		Depth	5.75 in (146.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.5 ms
			Average	<8.5 ms
			Full-Stroke	17.55 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	1,953,525,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

6G SATA Non-hot Plug LFF (3.5-inch) Standard (STND) Drives

HP 4TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	**801888-B21**	**Capacity**	4,000,787MB	
		Height	1.028 in (26.1 mm)	
		Width	4.00 in (101.6 mm)	
		Depth	5.75 in (146.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.8ms
			Average	<8.5ms
			Full-Stroke	16.2ms
			Rotational Speed	7200
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	7,814,037,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

HP 3TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot	**801886-B21**	**Capacity**	3,000,592MB
		Height	1.028 in (26.1 mm)

Technical Specifications

Plug Standard 1yr Warranty Hard Drive		**Width**	4.00 in (101.6 mm)
		Depth	5.75 in (146.0 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported
		Seek Time (typical reads, including settling)	Single Track .8ms
			Average <8.5ms
			Full-Stroke 16.2ms
			Rotational Speed 7200
		Physical Configuration	Bytes/Sector 512
			Logical Blocks 5,860,533,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)
HP 2TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	**801884-B21**	**Capacity**	2,000,398MB
		Height	1.028 in (26.1 mm)
		Width	4.00 in (101.6 mm)
		Depth	5.75 in (146.0 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported
		Seek Time (typical reads, including settling)	Single Track .8ms
			Average <8.5ms
			Full-Stroke 16.2ms
			Rotational Speed 7200
		Physical Configuration	Bytes/Sector 512
			Logical Blocks 3,907,029,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)
HP 1TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Standard 1yr Warranty Hard Drive	**801882-B21**	**Capacity**	1,000,204MB
		Height	1.028 in (26.1 mm)
		Width	4.00 in (101.6 mm)
		Depth	5.75 in (146.0 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported

Technical Specifications

	Seek Time (typical reads, including settling)	Single Track	.8ms
		Average	<8.5ms
		Full-Stroke	16.5ms
		Rotational Speed	7200
	Physical Configuration	Bytes/Sector	512
		Logical Blocks	1,953,525,168
	Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

6G SATA Non-hot Plug LFF (3.5-inch) Entry (ETY) Drives

NOTE: Supported on select 10 series servers only.

HP 4TB 6G SATA 5.9K rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	**815635-B21**	**Capacity**	4,000,787MB	
		Height	0.63 in (16.0 mm)	
		Width	3.00 in (72.2 mm)	
		Depth	5.38 in (136.6 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	1.2ms
			Average	<12ms
			Full-Stroke	25ms
			Rotational Speed	5900
		Physical Configuration	Bytes/Sector	512e
			Logical Blocks	980,270,955
		Operating Temperature (system inlet air temperature)	41° to 140° F (5C° to 60° C)	

HP 3TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	**843270-B21**	**Capacity**	3,000,593MB	
		Height	0.63 in (16.0 mm)	
		Width	3.00 in (72.2 mm)	
		Depth	5.38 in (136.6 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	1.0ms
			Average	<8.5ms
			Full-Stroke	18.00ms
			Rotational Speed	7200
		Physical Configuration	Bytes/Sector	512e

Technical Specifications

			Logical Blocks	5,860,533,167
		Operating Temperature (system inlet air temperature)	41° to 140° F (5C° to 60° C)	
HP 2TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	**843268-B21**	**Capacity**	2,000,398MB	
		Height	0.63 in (16.0 mm)	
		Width	3.00 in (72.2 mm)	
		Depth	5.38 in (136.6 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	1.0ms
			Average	<8.5ms
			Full-Stroke	18.00ms
			Rotational Speed	7200
		Physical Configuration	Bytes/Sector	512e
			Logical Blocks	3,907,029,167
		Operating Temperature (system inlet air temperature)	41° to 140° F (5C° to 60° C)	
HP 1TB 6G SATA 7.2K rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	**843266-B21**	**Capacity**	1,000,204MB	
		Height	0.63 in (16.0 mm)	
		Width	3.00 in (72.2 mm)	
		Depth	5.38 in (136.6 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	1.0ms
			Average	<8.5ms
			Full-Stroke	18ms
			Rotational Speed	7200
		Physical Configuration	Bytes/Sector	512e
			Logical Blocks	1,953,525,168
		Operating Temperature (system inlet air temperature)	41° to 131° F (5C° to 131° C)	
HP 500GB 6G SATA 7.2K	**843264-B21**	**Capacity**	500,107MB	

Technical Specifications

rpm LFF (3.5in) Non-hot Plug Entry 512e 1yr Warranty Hard Drive	**Height**	0.63 in (16.0 mm)	
	Width	3.00 in (72.2 mm)	
	Depth	5.38 in (136.6 mm)	
	Interface	Serial ATA	
	Transfer Rate (Maximum)	6Gb/s	
	Native Command Queuing	Supported	
	Seek Time (typical reads, including settling)	Single Track	1.0ms
		Average	<8.5ms
		Full-Stroke	18ms
		Rotational Speed	7200
	Physical Configuration	Bytes/Sector	512e
		Logical Blocks	976,773,168
	Operating Temperature (system inlet air temperature)	41° to 140° F (5C° to 60° C)	

SATA Hot Plug SFF (2.5-inch) Midline (MDL) Drives

NOTE: These drives are not supported by Gen8/Gen9 servers.

HP 1TB 3G SATA 7.2K rpm SFF (2.5-inch) Hot plug Midline 1yr Warranty Hard Drive	**625609-B21**	**Capacity**	1,000,204MB	
		Height	0.63 in (16.0 mm)	
		Width	3.00 in (72.2 mm)	
		Depth	5.38 in (136.6 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	3Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.7ms
			Average	<8.5ms
			Full-Stroke	16.96ms
			Rotational Speed	7200
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	1,953,525,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 500GB 3G SATA 7.2K rpm SFF (2.5-inch) Midline 1yr Warranty Hard Drive	**507750-B21**	**Capacity**	500,107MB	
		Height	0.63 in (16.0 mm)	
		Width	3.00 in (72.2 mm)	
		Depth	5.38 in (136.6 mm)	
		Interface	Serial ATA	

Technical Specifications

	Transfer Rate (Maximum)	3Gb/s	
	Native Command Queuing	Supported	
	Seek Time (typical reads, including settling)	Single Track	.5 ms
		Average	8.2 ms
		Full-Stroke	17.55 ms
		Rotational Speed	7,200 rpm
	Physical Configuration	Bytes/Sector	512
		Logical Blocks	976,773,168
	Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

SATA Hot Plug LFF (3.5-inch) Midline (MDL) Drives

NOTE: These drives are not supported by Gen8/Gen9 servers.

HP 4TB 3G SATA 7.2k rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive	**694374-B21**	**Capacity**	4,000,787MB	
		Height	1.04 in (26.4 mm)	
		Width	4.36 in (110.7 mm)	
		Depth	7.25 in (184.2 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	3Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.8 ms
			Average	8.5 ms
			Full-Stroke	16.2 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	7,814,037,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

HP 3TB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive	**628059-B21**	**Capacity**	3,000,592,982,016	
		Height	1.04 in (26.4 mm)	
		Width	4.36 in (110.7 mm)	
		Depth	7.25 in (184.2 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	3Gb/s	
		Native Command Queuing	Supported	
		Seek Time	Single Track	0.5 ms

Technical Specifications

		(typical reads, including settling)	Average	<8.5 ms
			Full-Stroke	16.9 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	3,907,029,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 2TB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive	**507632-B21**	**Capacity**	2,000,398MB	
		Height	1.04 in (26.4 mm)	
		Width	4.36 in (110.7 mm)	
		Depth	7.25 in (184.2 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	3Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.5 ms
			Average	<8.5 ms
			Full-Stroke	16.9 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	3,907,029,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 500GB 3G SATA 7.2K rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive	**458928-B21**	**Capacity**	500,107MB	
		Height	1.04 in (26.4 mm)	
		Width	4.36 in (110.7 mm)	
		Depth	7.25 in (184.2 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	3Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	2.0 ms
			Average	<8.5 ms
			Full-Stroke	21.0 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	976,773,168
		Operating Temperature (system inlet air	50° to 95° F (10° to 35° C)	

Technical Specifications

temperature)

SATA Hot Plug LFF (3.5-inch) Midline (MDL) 512e Helium Drives

NOTE: These drives are not supported by Gen8/Gen9 servers.

HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) 512e Helium 1yr Warranty Hard Drive	**793680-B21**	**Capacity**	6,001,175MB	
		Height	1.04 in (26.4 mm)	
		Width	4.36 in (110.7 mm)	
		Depth	7.43 in (188.7 mm)	
		Interface	SATA	
		Transfer Rate Synchronous (Maximum)	6 Gb/sec	
		Seek Time (typical reads, including settling)	Single Track	
		Seek Time (typical reads, including settling)	Average	8.5 ms
			Full-Stroke	16.0 ms
		Physical Configuration	Rotational Speed	7200 rpm
			Bytes/Sector	512
		Physical Configuration	Logical Blocks	11,721,045,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

HP 8TB 6G SATA 7.2K rpm LFF (3.5-inch) 512e Helium 1yr Warranty Hard Drive	**793693-B21**	**Capacity**	8,001,563MB	
		Height	1.04 in (26.4 mm)	
		Width	4.36 in (110.7 mm)	
		Depth	7.43 in (188.7 mm)	
		Interface	SATA	
		Transfer Rate Synchronous (Maximum)	6 Gb/sec	
		Seek Time (typical reads, including settling)	Single Track	
		Seek Time (typical reads, including settling)	Average	8.5 ms
			Full-Stroke	16.0 ms
		Physical Configuration	Rotational Speed	7200 rpm
			Bytes/Sector	512
		Physical Configuration	Logical Blocks	15,628,053,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives

Technical Specifications

NOTE: These drives are not supported by Gen8/Gen9 servers.

HP 2TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	**507774-B21**	**Capacity**	2,000,398MB	
		Height	1.028 in (26.1 mm)	
		Width	4.00 in (101.6 mm)	
		Depth	5.75 in (146.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	3Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.5 ms
			Average	<8.5 ms
			Full-Stroke	16.9 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	3,907,029,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 1TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	**507772-B21**	**Capacity**	1,000,204MB	
		Height	1.028 in (26.1 mm)	
		Width	4.00 in (101.6 mm)	
		Depth	5.75 in (146.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	3Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	2.0 ms
			Average	<8.5 ms
			Full-Stroke	25.0 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	1,953,525,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 500GB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot Plug Midline 1yr Warranty Hard Drive	**458941-B21**	**Capacity**	500,107MB	
		Height	1.028 in (26.1 mm)	
		Width	4.00 in (101.6 mm)	
		Depth	5.75 in (146.0 mm)	
		Interface	Serial ATA	

Technical Specifications

	Transfer Rate (Maximum)	3Gb/s	
	Native Command Queuing	Supported	
	Seek Time (typical reads, including settling)	Single Track	2.0 ms
		Average	<8.5 ms
		Full-Stroke	21.0 ms
		Rotational Speed	7,200 rpm
	Physical Configuration	Bytes/Sector	512
		Logical Blocks	976,773,168
	Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

6G SATA Quick Release SFF (2.5-inch) Midline (MDL) Drives (Gen8 only)

HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) Quick Release Midline 1yr Warranty Hard Drive	**632080-B21**	**Capacity**	1,000,204MB
		Height	0.74 in (18.8mm)
		Width	2.91 in (73.9 mm)
		Depth	3.95 in (100.2 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported
		Seek Time (typical reads, including settling)	Single Track .7ms
			Average <8.5ms
			Full-Stroke 16.96ms
			Rotational Speed 7200
		Physical Configuration	Bytes/Sector 512
			Logical Blocks 976,773,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)
HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) Quick Release Midline 1yr Warranty Hard Drive	**632078-B21**	**Capacity**	500,107MB
		Height	0.74 in (18.8mm)
		Width	2.91 in (73.9 mm)
		Depth	3.95 in (100.2 mm)
		Interface	Serial ATA
		Transfer Rate (Maximum)	6Gb/s
		Native Command Queuing	Supported
		Seek Time (typical reads, including	Single Track .7ms
			Average <8.5ms

Technical Specifications

		settling)	Full-Stroke	16.96ms
			Rotational Speed	7200
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	976,773,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

6G SATA Quick Release LFF (3.5-inch) Midline (MDL) Drives (Gen8 only)

HP 4TB 6G SATA 7.2k rpm LFF (3.5-inch) Quick Release Midline 1yr Warranty Hard Drive	**697954-B21**	**Capacity**	4,000,787MB	
		Height	1.16 in (29.6 mm)	
		Width	4.16 in (105.6 mm)	
		Depth	5.79 in (147.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	0.8ms
			Average	8.5ms
			Full-Stroke	16.2ms
			Rotational Speed	7200
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	7,814,037,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	
HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) Quick Release Midline 1yr Warranty Hard Drive	**647274-B21**	**Capacity**	3,000,592,982,016	
		Height	1.16 in (29.6 mm)	
		Width	4.16 in (105.6 mm)	
		Depth	5.79 in (147.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.5ms
			Average	<8.5ms
			Full-Stroke	16.3ms
			Rotational Speed	7200
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	976,773,168
		Operating Temperature (system inlet air	50° to 95° F (10° to 35° C)	

Technical Specifications

			temperature)	
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) Quick Release Midline 1yr Warranty Hard Drive	**672621-B21**	**Capacity**	1,000,204MB	
		Height	1.16 in (29.6 mm)	
		Width	4.16 in (105.6 mm)	
		Depth	5.79 in (147.0 mm)	
		Interface	Serial ATA	
		Transfer Rate (Maximum)	6Gb/s	
		Native Command Queuing	Supported	
		Seek Time (typical reads, including settling)	Single Track	.5 ms
			Average	<8.5 ms
			Full-Stroke	16.5 ms
			Rotational Speed	7,200 rpm
		Physical Configuration	Bytes/Sector	512
			Logical Blocks	1,953,525,168
		Operating Temperature (system inlet air temperature)	50° to 95° F (10° to 35° C)	

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NOTE: To support HPE hard drives exceeding 2.2TB, HPE Smart Array Firmware version 5.0 or later is required for the following controllers:

- HPE Smart Array P212 Controller
- HPE Smart Array P410 Controller
- HPE Smart Array P411 Controller
- HPE Smart Array P711m Controller
- HPE Smart Array P812 Controller

Technical Specifications

To use hard drives exceeding 2.2TB, you must create a boot volume using offline ACU version 8.75 or later. HPE Smart Array controllers do not support boot volumes exceeding 2.2TB.

Summary of Changes

Date	Version History	Action	Description of Change
28-Nov-2016	From Version 35 to 36	Added	Added new HPE 6TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive.
		Changed	Overview, Models, and Technical Specifications were revised.
		Removed	Obsolete Hard Drives were removed from the QuickSpecs.
26-Sep-2016	From Version 34 to 35	Added	Added new SATA HDD offering. HPE 10TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive HPE 1TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive HPE 3TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive
06-Jun-2016	From Version 33 to 34	Added	Added the following HPE drives to the Models and Technical Specifications sections: HPE 4TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive HPE 2TB 6G SATA 7.2K rpm LFF (3.5in) SC Midline 1yr Warranty Hard Drive HPE 8TB 6G SATA 7.2K rpm LFF (3.5in) 512e SC Midline 1yr Warranty Hard Drive
01-Dec-2015	From Version 32 to 33	Added	Added new 6G SATA Non-hot Plug LFF (3.5-inch) Entry Drives.
		Changed	Service and Support section and Technical Specifications were revised.
28-Sep-2015	From Version 31 to 32	Added	Added note to drives not supported by VMWare and note to drives supported on ML10v2 only.
01-Jun-2015	From Version 30 to 31	Added	Added the following to the Models and Technical Specifications sections: HPE 6TB 6G SATA 7.2K rpm LFF (3.5-inch) 512e Helium 1yr Warranty Hard Drive HPE 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive HPE 8TB 6G SATA 7.2K rpm LFF (3.5-inch) 512e Helium 1yr Warranty Hard Drive HPE 8TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive
		Changed	Service and Support section was revised.
30-Mar-2015	From Version 29 to 30	Added	Added new SATA Hard Drives offering.
		Changed	Overview, Service and Support, and Technical Specifications were revised.

Summary of Changes

09-Feb-2015	From Version 28 to 29	Added	Added the following to the Models and Technical Specifications Sections: 765253-B21 HPE 4TB 6G SATA 7.2K 3.5in 512e SC MDL HDD 765255-B21 HPE 6TB 6G SATA 7.2K 3.5in 512e SC MDL HDD
		Changed	What's New section was changed. Service and Support section was revised.
28-Aug-2014	From Version 27 to 28	Added	Added the following to the Models and Technical Specifications sections: HPE 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive
		Changed	Overview and What's New sections were revised.
18-Aug-2014	From Version 26 to 27	Changed	Models section was revised.
		Removed	Removed HPE 3TB 3G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive from Models and Technical Specifications sections.
09-Dec-2013	From Version 25 to 26	Removed	Discontinued models were removed.
23-Nov-2013	From Version 24 to 25	Removed	Discontinued models were removed.
24-Jul-2013	From Version 23 to 24	Removed	Discontinued models were removed.
19-Feb-2013	From Version 22 to 23	Changed	Added the following to the Models and Technical Specifications sections: HPE 4TB 6G SATA 7.2k rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive HPE 4TB 6G SATA 7.2k rpm LFF (3.5-inch) Quick Release Midline 1yr Warranty Hard Drive HPE 4TB 3G SATA 7.2k rpm LFF (3.5-inch) Quick Release Midline 1yr Warranty Hard Drive HPE 4TB 3G SATA 7.2k rpm LFF (3.5-inch) Midline 1yr Warranty Hard Drive
11-May-2012	From Version 21 to 22	Changed	Changed "Smart Drive" to "SmartDrive" in the Models section.
09-Apr-2012	From Version 20 to 21	Changed	Change made in the Models section only.
22-Mar-2012	From Version 19 to 20	Changed	Changes made to the Models and Technical Specifications sections.
06-Mar-2012	From Version 18 to 19	Changed	Changes made throughout the entire QuickSpecs.
20-Oct-2011	From Version 17 to 18	Changed	Changes made in the North America and Canada versions only.
29-Aug-2011	From Version 16 to 17	Removed	Removed SATA Hot Plug SFF (2.5-inch) Entry (ETY) Drives
20-Jun-2011	From Version 15 to 16	Changed	Service and Support was completely revised and HPE 3TB 3G SATA 7.2K rpm LFF Midline and Non-hot Plug Midline Drives and HPE 500GB 3G SATA 7.2K rpm SFF Non-hot Plug Entry Drive were added.
25-Apr-2011	From Version 14 to 15	Removed	HPE 250GB 3G SATA 7.2K rpm SFF Midline Drive was removed from Models and Technical Specifications sections.
08-Apr-2011	From Version 13 to 14	Changed	Minor edit was made in Technical Specifications.
06-Apr-2011	From Version 12 to 13	Changed	Seek Time and Physical Configuration were revised for the HPE 1TB 3G SATA 7.2K rpm SFF Hot Plug Midline Hard Drive

Summary of Changes

			in Technical Specifications.
05-Apr-2011	From Version 11 to 12	Added	HPE 250GB and 1TB 3G SATA 7.2K rpm SFF Hot plug Midline 1yr Warranty Hard Drives were added throughout.
14-Jun-2011	From Version 10 to 11	Changed	Changes made in the North America and Canada versions only.
05-Oct-2010	From Version 9 to 10	Added	Service and Support section was added.
21-Jun-2010	From Version 8 to 9	Removed	HPE 750GB 3G SATA 7.2k rpm LFF Midline and Non-hot Plug Midline 1yr Warranty Hard Drives and HPE 250GB 3G SATA 7.2k rpm LFF Midline and Non-hot Plug Midline 1yr Warranty Hard Drives were removed.
01-Apr-2010	From Version 7 to 8	Changed	Changes made in the Technical Specifications section only.
16-Feb-2010	From Version 6 to 7	Added	HPE 2TB 3G SATA 7.2k rpm Midline 1yr Warranty and Non-hot Plug Midline 1y Wty Hard Drives, HPE 1TB 3G SAS 7.2k rpm Non-hot Plug Midline 1y Wty Hard Drive and HPE 250GB 2G SATA 7.2k rpm Entry 1yr Warranty and Non-hot Plug Entry 1y Wty Hard Drives were added to Models.
13-Jul-2009	From Version 5 to 6	Changed	Completely revised Models throughout the QuickSpecs, as well as made other minor additional edits within the Overview section.
09-Dec-2008	From Version 4 to 5	Changed	Completely revised the Pre-Failure Alert section in the Standard Features.
15-Sep-2008	From Version 3 to 4	Changed	The Models in the Overview and Technical Specifications sections were rewritten.
16-May-2008	From Version 2 to 3	Changed	Change made in the Technical Specifications sections.
12-May-2008	From Version 1 to 2	Changed	Changes made throughout the Overview and Technical Specifications sections.

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For hard drives, 1GB = 1 billion bytes. Actual formatted capacity is less.

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c04111725 - 13021 - Worldwide - V36 - 28-November-2016