Overview

HPE Hard Disk Drives

HPE Hard Disk Drives (HDDs) deliver 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 10TB and growing.

HPE HDD portfolio: Proven performance for every workload

Class	Enterprise		Midline	Entry*
Workload	**High**		**Medium**	**Low**
Usage	**Mission-critical, high I/O:** Email, enterprise resource planning (ERP), customer relationship management (CRM)		**High capacity, high availability storage:** Backup, archive, reference	**Low I/O:** Boot and backup
Interface	SAS 12Gb		SAS 12Gb SATA 6Gb	SATA 6Gb
RPM	15000	10000	7200	7200/5900
Form factor	SFF & LFFc	SFF	SFF & LFF	LFF
Capacities	Up to 900GB	Up to 1.8TB	Up to 10TB	Up to 4TB
Warranty	3 years	3 years	1 year	1 year

* Supported on select HPE ProLiant 10 series servers only.

What's New

- New 900GB 512n/512e 15K SAS drives
- Next Gen 600/300GB 512n/512e 15K SAS Enterprise drives
- Next Gen 6/4TB 512e 7.2K SAS & SATA Midline drives

Overview

Models

Category	Interface	Form factor	Format	Capacity	HDD Carrier		
					Smart Carrier SKU	Low Profile SKU	Standard carrier SKU
Enterprise (15K rpm)	6G SAS	SFF	512n	146GB	652605-B21	-	512547-B21
	12G SAS		512n	300GB	759208-B21 870753-B21*	-	785099-B21 872842-B21*
			512n	450GB	759210-B21	-	785101-B21
			512n	600GB	759212-B21 870757-B21*	-	785103-B21 872844-B21*
			512e	600GB	748387-B21 870763-B21*	-	-
			512n	900GB	870759-B21	-	872846-B21
			512e	900GB	870765-B21	-	-
		LFF	512n	300GB	737261-B21	797285-B21 870755-B21*	737390-B21
			512n	450GB	737394-B21	797287-B21	737392-B21
			512n	600GB	765424-B21	797283-B21	737396-B21
			512n	900GB	-	870761-B21	-
Enterprise (10K rpm)	12G SAS	SFF	512n	300GB	785067-B21 872475-B21*	-	785071-B21 873008-B21*
			512n	600GB	781516-B21 872477-B21*	-	785073-B21 873010-B21*
			512n	900GB	785069-B21	-	785075-B21
			512n	1.2TB	781518-B21 872479-B21*	-	785079-B21 873012-B21*
			512e	1.8TB	791034-B21 872481-B21*	-	-
Midline 7.2K rpm	12G SAS	LFF	512n	1TB	846524-B21	846526-B21	-
			512n	2TB	818365-B21	833926-B21	-
			512n	3TB	846528-B21	846530-B21	-
			512n	4TB	818367-B21	833928-B21	-
			512e	4TB	765257-B21 793669-B21 861756-B21*	846996-B21 861748-B21*	-
			512n	6TB	846514-B21	846516-B21	-
			512e	6TB	765259-B21 793671-B21 793699-B21[He] 861754-B21*	846998-B21 861746-B21*	793697-B21[He]
			512e	8TB	819201-B21 861590-B21[He]	834031-B21 861592-B21[He]	858384-B21
			512e	10TB	857644-B21[He]	857646-B21[He]	869347-B21

Overview

Category	Interface	Form factor	Format	Capacity	HDD Carrier		
					Smart Carrier SKU	Low Profile SKU	Standard carrier SKU
Midline 7.2K rpm	6G SATA	LFF	512n	1TB	861691-B21	861686-B21	-
			512n	2TB	861676-B21	861681-B21	-
			512n	3TB	861693-B21	861688-B21	-
			512n	4TB	861678-B21	861683-B21	-
			512e	4TB	765253-B21 793665-B21 861752-B21*	846783-B21 861744-B21*	-
			512n	6TB	846510-B21	846512-B21	-
			512e	6TB	765255-B21 793667-B21 793683-B21[He] 861750-B21*	846785-B21 861742-B21*	-
			512e	8TB	819203-B21 861594-B21[He]	834028-B21 861596-B21[He]	
			512e	10TB	857648-B21[He]	857650-B21[He]	-
	6G SAS	SFF	512n	1TB	832514-B21	-	-
	12G SAS		512e	1TB	765464-B21	-	-
			512e	2TB	765466-B21	-	-
	6G SATA		512n	1TB	655710-B21	-	-
			512e	1TB	765453-B21	-	-
			512e	2TB	765455-B21	-	-

Category	Interface	Form factor	Format	Capacity	HDD Carrier		
					Smart Carrier SKU	Low Profile SKU	Non Hot Plug SKU
Entry	6G SATA	LFF	512n	500GB	-	-	659341-B21
			512n	1TB	-	-	801882-B21
			512n	2TB	-	-	801884-B21
			512n	4TB	-	-	801888-B21
Entry (Standard)	6G SATA	LFF	512n	1TB	858594-B21	-	-
			512n	2TB	858596-B21	-	-
Entry (Desktop)	6G SATA	LFF	512e	500GB	-	-	843264-B21
			512e	1TB	-	-	843266-B21
			512e	2TB	-	-	843268-B21
			512e	3TB	-	-	843270-B21
			512e	4TB	-	-	815635-B21

NOTE: * Newer SKU that will replace equivalent older SKUs.
NOTE: [He] Helium Drive.
NOTE: Standard Carrier drives are not supported by Gen8/Gen9 servers.
NOTE: Refer to the appropriate Server QuickSpecs for full compatibility details.

Standard Features

What is HPE Hard disk drive?	Hewlett Packard Enterprise drives are tuned to deliver optimum performance for HPE Servers. They undergo an intense qualification process to eliminate firmware and O/S incompatibilities. HPE drive firmware is designed to maximize both functionality and compatibility with HPE ProLiant Rack and Tower Servers, Apollo family, Blade and Synergy Platforms.
Drive Quality and Performance	While selecting the drives in our Enterprise portfolio, only those drives whose performance is suitable for an enterprise environment are selected through the Hewlett Packard Enterprise qualification process and are labeled "best-in-class." HPE Midline drives undergo a similar qualification process to ensure that you get the economical reliability and performance you need for your low workload (less than 40% I/O) environments.
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 one or three-year limited on-site warranty period for the system in which they are installed. The drive warranty is automatically uplifted when used in a server or MSA for which a Care Pack is purchased. Please see the Support Services section below for additional services.
Helium Drives	Although hard drives are sealed, they have air inside. Air can create turbulence-induced risk vibrations which can limit the storage density of HDDs. Newer helium-filled drives virtually eliminate turbulence because helium is 1/7th as dense as air. This lower density allows the read/write mechanism to spin more easily and precisely, with less drag. Less internal turbulence means the drive platters can be closer together, allowing more platters and increasing the capacity potential in the same space. Less turbulence also means helium drives tend to use less power, and run cooler and quieter.
Support Matrix	Please see the following URL for the latest list of supported servers and enclosures: **https://www.hpe.com/us/en/servers/server-options.html**
Warranty	Enterprise hard drives have a 3 year limited warranty regardless of the warranty period for the system in which they are installed. Midline hard drives have a 1 year limited warranty regardless of the warranty period for the system in which they are installed.

Service and Support

Service and Support	**NOTE:** HPE Hard drives are covered under the HPE Care Pack/Service Contract applied to the HPE ProLiant Server. No separate HPE Care Packs need to be purchased. **HPE Technology Services for Industry Standard Servers and Blade System** HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. 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 Care Pack Services** HPE Care Pack Services enable you to order the right service level, length of coverage and response time as you purchase your new server, giving you full entitlement for the term you select.
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	Midline and Entry 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.
For more information	To learn more on services for HPE Server Options, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Or visit: **https://www.hpe.com/us/en/servers/server-options.html** or **http://www.hpe.com/services**.

Technical Specifications

Enterprise (15K rpm)						
Form Factor	SFF (2.5")		**Carrier**	Smart Carrier (SC)		
Rotational Speed	15000 rpm		**Dimensions**			
Interface	SAS		**Height**	0.62 in (15.6 mm)		
Transfer Rate Synchronous (Max)	12Gb/sec		**Width**	2.98 in (75.7 mm)		
Bytes/Sector	512		**Depth**	4.67 in (118.7 mm)		
Operating Temperature	50° to 95° F (10° to 35°C)					
SKU Description	**SKU**	**Physical Configuration**		**Seek time**		
		Capacity	**Logical Blocks**	**Single track**	**Avg**	**Full Stroke**
HPE 146GB SAS 6G Enterprise 15K SFF (2.5in) SC 3yr Wty HDD**	652605-B21	146,815MB	286,749,488	0.4 ms	3.0 ms	7.0 ms
HPE 300GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty HDD	759208-B21	300,000MB	585,937,500	0.15 ms	2.9 ms	5.9 ms
HPE 300GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty DS HDD	870753-B21	300,000MB	585,937,500	0.22 ms	2.72 ms	5.36 ms
HPE 450GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty HDD	759210-B21	450,098MB	879,097,968	0.15 ms	2.9 ms	5.9 ms
HPE 600GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty HDD	759212-B21	600,127MB	1,172,123,568	0.15 ms	2.9 ms	5.9 ms
HPE 600GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty DS HDD	870757-B21	600,127MB	1,172,123,568	0.22 ms	2.72 ms	5.36 ms
HPE 600GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty 512e HDD	748387-B21	600,127MB	1,172,123,568	0.15 ms	2.9 ms	5.9 ms
HPE 600GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty 512e DS HDD	870763-B21	600,127MB	1,172,123,568	0.22 ms	2.72 ms	5.36 ms
HPE 900GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty DS HDD	870759-B21	900,185MB	1,758,174,768	0.22 ms	2.72 ms	5.36 ms
HPE 900GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty 512e DS HDD	870765-B21	900,185MB	1,758,174,768	0.22 ms	2.72 ms	5.36 ms

Enterprise (15K rpm)						
Form Factor	SFF (2.5")		**Carrier**	Standard Carrier (ST)		
Rotational Speed	15000 rpm		**Dimensions**			
Interface	SAS		**Height**	0.63 in (16.0 mm)		
Transfer Rate Synchronous (Max)	12Gb/sec		**Width**	3.10 in (78.7 mm)		
Bytes/Sector	512		**Depth**	5.45 in (138.4 mm)		
Operating Temperature	50° to 95° F (10° to 35°C)					
SKU Description	**SKU**	**Physical Configuration**		**Seek time**		
		Capacity	**Logical Blocks**	**Single track**	**Avg**	**Full Stroke**
HPE 146GB SAS 6G Enterprise15K SFF (2.5in) ST 3yr Wty HDD	512547-B21	146,815MB	286,749,488	0.4 ms	3.0 ms	7.0 ms
HPE 300GB SAS 12G Enterprise 15K SFF (2.5in) ST 3yr Wty HDD	785099-B21	300,000MB	585,937,500	0.15 ms	2.9 ms	5.9 ms
HPE 300GB SAS 12G Enterprise 15K SFF (2.5in) ST 3yr Wty DS HDD	872842-B21	300,000MB	585,937,500	0.22 ms	2.72 ms	5.36 ms
HPE 450GB SAS 12G Enterprise 15K SFF (2.5in) ST 3yr Wty HDD	785101-B21	450,098MB	879,097,968	0.15 ms	2.9 ms	5.9 ms
HPE 600GB SAS 12G Enterprise15K SFF	785103-B21	600,127MB	1,172,123,568	0.15 ms	2.9 ms	5.9 ms

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(2.5in) ST 3yr Wty HDD						
HPE 600GB SAS 12G Enterprise 15K SFF (2.5in) ST 3yr Wty DT HDD	872844-B21	600,127MB	1,172,123,568	0.22 ms	2.72 ms	5.36 ms
HPE 900GB SAS 12G Enterprise 15K SFF (2.5in) ST 3yr Wty DT HDD	872846-B21	900,185MB	1,758,174,768	0.22 ms	2.72 ms	5.36 ms

Enterprise (15K rpm)			
Form Factor	LFF (3.5")	**Carrier**	Smart Carrier Converter
Rotational Speed	15000 rpm	**Dimensions**	
Interface	SAS	**Height**	1.06 in (26.8 mm)
Transfer Rate Synchronous (Max)	12Gb/sec	**Width**	4.16 in (105.8 mm)
Bytes/Sector	512	**Depth**	6.69 in (170.0 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	**SKU**	**Physical Configuration**		**Seek time**		
		Capacity	**Logical Blocks**	**Single track**	**Avg**	**Full Stroke**
HPE 300GB SAS 12G Enterprise 15K LFF (3.5in) SCC 3Yr Wty HDD	737261-B21	300,000MB	585,937,500	0.15 ms	2.9 ms	5.9 ms
HPE 450GB SAS 12G Enterprise 15K LFF (3.5in) SCC 3Yr Wty HDD	737394-B21	450,098MB	879,097,968	0.15 ms	2.9 ms	5.9 ms
HPE 600GB SAS 12G Enterprise 15K LFF (3.5in) SCC 3yr Wty HDD	765424-B21	600,127MB	1,172,123,568	0.15 ms	2.9 ms	5.9 ms

Enterprise (15K rpm)			
Form Factor	LFF (3.5")	**Carrier**	Low Profile Converter
Rotational Speed	15000 rpm	**Dimensions**	
Interface	SAS	**Height**	1.028 in (26.1 mm)
Transfer Rate Synchronous (Max)	12Gb/sec	**Width**	4.15 in (105.5 mm)
Bytes/Sector	512	**Depth**	6.16 in (156.58 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	**SKU**	**Physical Configuration**		**Seek time**		
		Capacity	**Logical Blocks**	**Single track**	**Avg**	**Full Stroke**
HPE 300GB SAS 12G Enterprise 15K LFF (3.5in) LPC 3yr Wty HDD	797285-B21	300,000MB	585,937,500	0.15 ms	2.9 ms	5.9 ms
HPE 300GB SAS 12G Enterprise 15K LFF (3.5in) LPC 3yr Wty DS HDD	870755-B21	300,000MB	585,937,500	0.22 ms	2.72 ms	5.36 ms
HPE 450GB SAS 12G Enterprise 15K LFF (3.5in) LPC 3yr Wty HDD	797287-B21	450,098MB	879,097,968	0.15 ms	2.9 ms	5.9 ms
HPE 600GB SAS 12G Enterprise 15K LFF (3.5in) LPC 3yr Wty HDD	797283-B21	600,127MB	1,172,123,568	0.15 ms	2.9 ms	5.9 ms
HPE 900GB SAS 12G Enterprise 15K LFF (3.5in) LPC 3yr Wty DS HDD	870761-B21	900,185MB	1,758,174,768	0.22 ms	2.72 ms	5.36 ms

Enterprise (15K rpm)			
Form Factor	LFF (3.5")	**Carrier**	Standard Carrier Converter
Rotational Speed	15000 rpm	**Dimensions**	
Interface	SAS	**Height**	1.04 in (26.4 mm)

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Transfer Rate Synchronous (Max)	12Gb/sec	**Width**	4.36 in (110.7 mm)
Bytes/Sector	512	**Depth**	7.43 in (188.7 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	SKU	Physical Configuration		Seek time		
		Capacity	Logical Blocks	Single track	Avg	Full Stroke
HPE 300GB SAS 12G Enterprise 15K LFF (3.5in) STC 3Yr Wty HDD	737390-B21	300,000MB	585,937,500	0.15 ms	2.9 ms	5.9 ms
HPE 450GB SAS 12G Enterprise 15K LFF (3.5in) STC 3Yr Wty HDD	737392-B21	450,098MB	879,097,968	0.15 ms	2.9 ms	5.9 ms
HPE 600GB SAS 12G Enterprise 15K LFF (3.5in) STC 3yr Wty HDD	737396-B21	600,127MB	1,172,123,568	0.15 ms	2.9 ms	5.9 ms

Enterprise (10K rpm)			
Form Factor	SFF (2.5")	**Carrier**	Smart Carrier (SC)
Rotational Speed	10000 rpm	**Dimensions**	
Interface	SAS	**Height**	0.62 in (15.6 mm)
Transfer Rate Synchronous (Max)	12Gb/sec	**Width**	2.98 in (75.7 mm)
Bytes/Sector	512	**Depth**	4.67 in (118.7 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	SKU	Physical Configuration		Seek time		
		Capacity	Logical Blocks	Single track	Avg	Full Stroke
HPE 300GB SAS 12G Enterprise 10K SFF (2.5in) SC 3Yr Wty HDD	785067-B21	300,000MB	585,937,500	0.10 ms	3.3 ms	6.7 ms
HPE 300GB SAS 12G Enterprise 10K SFF (2.5in) SC 3Yr Wty DS HDD	872475-B21	300,000MB	585,937,500	0.32 ms	4.15 ms	7.61 ms
HPE 600GB SAS 12G Enterprise 10K SFF (2.5in) SC 1yr Wty HDD	781516-B21	600,127MB	1,172,123,568	0.11 ms	3.3 ms	6.6 ms
HPE 600GB SAS 12G Enterprise 10K SFF (2.5in) SC 1yr Wty DS HDD	872477-B21	600,127MB	1,172,123,568	0.32 ms	3.92 ms	8.33 ms
HPE 900GB SAS 12G Enterprise 10K SFF (2.5in) SC 3Yr Wty HDD	785069-B21	900,185MB	1,758,174,768	0.10 ms	3.5 ms	7.0 ms
HPE 1.2TB SAS 12G Enterprise 10K SFF (2.5in) SC 3Yr Wty HDD	781518-B21	1,200,243MB	2,344,225,968	0.10 ms	3.7 ms	7.3 ms
HPE 1.2TB SAS 12G Enterprise 10K SFF (2.5in) SC 3Yr Wty DS HDD	872479-B21	1,200,243MB	2,344,225,968	0.20 ms	4.12 ms	8.26 ms
HPE 1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty 512e HDD	791034-B21	1,800,360MB	3,516,328,368	0.10 ms	3.7 ms	7.3 ms
HPE 1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty 512e DS HDD	872481-B21	1,800,360MB	3,516,328,368	0.20 ms	3.97 ms	8.48 ms

Enterprise (10K rpm)			
Form Factor	SFF (2.5")	**Carrier**	Standard Carrier (ST)
Rotational Speed	10000 rpm	**Dimensions**	
Interface	SAS	**Height**	0.63 in (16.0 mm)
Transfer Rate Synchronous (Max)	12Gb/sec	**Width**	3.10 in (78.7 mm)
Bytes/Sector	512	**Depth**	5.45 in (138.4 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

Technical Specifications

SKU Description	SKU	Physical Configuration		Seek time		
		Capacity	Logical Blocks	Single track	Avg	Full Stroke
HPE 300GB SAS 12G Enterprise 10K SFF (2.5in) ST 3Yr Wty HDD	785071-B21	300,000MB	585,937,500	0.10 ms	3.3 ms	6.7 ms
HPE 300GB SAS 12G Enterprise 10K SFF (2.5in) ST 3yr Wty DS HDD	873008-B21	300,000MB	585,937,500	0.32 ms	4.15 ms	7.61 ms
HPE 600GB SAS 12G Enterprise 10K SFF (2.5in) ST 3Yr Wty HDD	785073-B21	600,127MB	1,172,123,568	0.11 ms	3.3 ms	6.6 ms
HPE 600GB SAS 12G Enterprise 10K SFF (2.5in) ST 3yr Wty DS HDD	873010-B21	600,127MB	1,172,123,568	0.32 ms	3.92 ms	8.33 ms
HPE 900GB SAS 12G Enterprise 10K SFF (2.5in) ST 3yr Wty HDD	785075-B21	900,185MB	1,758,174,768	0.10 ms	3.5 ms	7.0 ms
HPE 1.2TB SAS 12G Enterprise 10K SFF (2.5in) ST 3yr Wty HDD	785079-B21	1,200,243MB	2,344,225,968	0.10 ms	3.7 ms	7.3 ms
HPE 1.2TB SAS 12G Enterprise 10K SFF (2.5in) ST 3yr Wty DS HDD	873012-B21	1,200,243MB	2,344,225,968	0.20 ms	4.12 ms	8.26 ms

Midline (7.2K rpm)			
Form Factor	LFF (3.5")	**Carrier**	Smart Carrier (SC)
Rotational Speed	7200 rpm	**Dimensions**	
Interface	SAS	**Height**	1.06 in (26.8 mm)
Transfer Rate Synchronous (Max)	12Gb/sec	**Width**	4.16 in (105.8 mm)
Bytes/Sector	512	**Depth**	6.69 in (170.0 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	SKU	Physical Configuration		Seek time		
		Capacity	Logical Blocks	Single track	Avg	Full Stroke
HPE 1TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	846524-B21	1,000,204MB	1,953,525,168	0.32 ms	7.45 ms	14.2 ms
HPE 2TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	818365-B21	2,000,398MB	3,907,029,168	0.8 ms	8.5 ms	15.7 ms
HPE 3TB SAS 12G Mildine 7.2K LFF (3.5in) SC 1yr Wty HDD	846528-B21	3,000,592MB	5,860,533,168	0.32 ms	7.45 ms	14.2 ms
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	818367-B21	4,000,787MB	7,814,037,168	0.8 ms	8.5 ms	15.7 ms
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	765257-B21	4,000,787MB	7,814,037,168	0.7 ms	8.5 ms	15.7 ms
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	793669-B21	4,000,787MB	7,814,037,168	0.25 ms	7.6 ms	15.0 ms
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	861756-B21	4,000,787MB	7,814,037,168	0.32 ms	7.45 ms	14.2 ms
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	846514-B21	6,001,175MB	11,721,045,168	0.7 ms	8.5 ms	15.7 ms
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	765259-B21	6,001,175MB	11,721,045,168	0.7 ms	8.5 ms	15.7 ms
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	793671-B21	6,001,175MB	11,721,045,168	0.25 ms	7.6 ms	15.0 ms
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty He 512e HDD	793699-B21	6,001,175MB	11,721,045,168	0.25 ms	8.5 ms	16.0 ms
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	861754-B21	6,001,175MB	11,721,045,168	0.32 ms	7.45 ms	14.2 ms

Technical Specifications

HPE 8TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	819201-B21	8,001,563MB	15,628,053,168	0.7 ms	8.5 ms	15.7 ms
HPE 8TB SAS 12G Mildine 7.2K LFF (3.5in) SC 1yr Wty He 512e HDD	861590-B21	8,001,563MB	15,628,053,168	0.22 ms	8.0 ms	16.0 ms
HPE 10TB SAS 12G Midline 7.2K LFF (3.5in) SC 1yr Wty He 512e HDD	857644-B21	10,000,831MB	19,532,873,728	0.22 ms	8.0 ms	16.0 ms

Midline (7.2K rpm)			
Form Factor	LFF (3.5")	**Carrier**	Low Profile
Rotational Speed	7200 rpm	**Dimensions**	
Interface	SAS	**Height**	1.028 in (26.1 mm)
Transfer Rate Synchronous (Max)	12Gb/sec	**Width**	4.15 in (105.5 mm)
Bytes/Sector	512	**Depth**	6.16 in (156.58 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	**SKU**	**Physical Configuration**		**Seek time**		
		Capacity	**Logical Blocks**	**Single track**	**Avg**	**Full Stroke**
HPE 1TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	846526-B21	1,000,204MB	1,953,525,168	0.32 ms	7.45 ms	14.2 ms
HPE 2TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	833926-B21	2,000,398MB	3,907,029,168	0.8 ms	8.5 ms	15.7 ms
HPE 3TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	846530-B21	3,000,592MB	5,860,533,168	0.32 ms	7.45 ms	14.2 ms
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	833928-B21	4,000,787MB	7,814,037,168	0.8 ms	8.5 ms	15.7 ms
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	846996-B21	4,000,787MB	7,814,037,168	0.7 ms	8.5 ms	15.7 ms
HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	861748-B21	4,000,787MB	7,814,037,168	0.32 ms	7.45 ms	14.2 ms
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	846516-B21	6,001,175MB	11,721,045,168	0.7 ms	8.5 ms	15.7 ms
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	846998-B21	6,001,175MB	11,721,045,168	0.7 ms	8.5 ms	15.7 ms
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	861746-B21	6,001,175MB	11,721,045,168	0.32 ms	7.45 ms	14.2 ms
HPE 8TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	834031-B21	8,001,563MB	15,628,053,168	0.7 ms	8.5 ms	15.7 ms
HPE 8TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty He 512e HDD	861592-B21	8,001,563MB	15,628,053,168	0.22 ms	8.0 ms	16.0 ms
HPE 10TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty He 512e HDD	857646-B21	10,000,831MB	19,532,873,728	0.22 ms	8.0 ms	16.0 ms

Midline (7.2K rpm)			
Form Factor	LFF (3.5")	**Carrier**	Standard Carrier
Rotational Speed	7200 rpm	**Dimensions**	
Interface	SAS	**Height**	1.04 in (26.4 mm)
Transfer Rate Synchronous (Max)	12Gb/sec	**Width**	4.36 in (110.7 mm)
Bytes/Sector	512	**Depth**	7.43 in (188.7 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	**SKU**	**Physical Configuration**	**Seek time**

Technical Specifications

		Capacity	Logical Blocks	Single track	Avg	Full Stroke
HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty He 512e HDD	793697-B21	6,001,175MB	11,721,045,168	0.25 ms	8.5 ms	16.0 ms
HPE 8TB SAS 12G Midline 7.2K LFF (3.5in) ST 1yr Wty 512e HDD	858384-B21	8,001,563MB	15,628,053,168	.7 ms	8.5 ms	15.7 ms
HPE 10TB SAS 12G Midline 7.2K LFF (3.5in) ST 1Yr Wty He 512e HDD	869347-B21	10,000,831MB	19,532,873,728	0.22 ms	8.0 ms	16.0 ms

Midline (7.2K rpm)			
Form Factor	LFF (3.5")	**Carrier**	Smart Carrier (SC)
Rotational Speed	7200 rpm	**Dimensions**	
Interface	SATA	**Height**	1.06 in (26.8 mm)
Transfer Rate Synchronous (Max)	6Gb/sec	**Width**	4.16 in (105.8 mm)
Bytes/Sector	512	**Depth**	6.69 in (170.0 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	SKU	Physical Configuration		Seek time		
		Capacity	Logical Blocks	Single track	Avg	Full Stroke
HPE 1TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	861691-B21	1,000,204MB	1,953,525,168	0.32 ms	7.45 ms	14.2 ms
HPE 2TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	861676-B21	2,000,398MB	3,907,029,168	0.25 ms	7.6 ms	15 ms
HPE 3TB SATA 6G Mildine 7.2K LFF (3.5in) SC 1yr Wty HDD	861693-B21	3,000,592MB	5,860,533,168	0.32 ms	7.45 ms	14.2 ms
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	861678-B21	4,000,787MB	7,814,037,168	0.25 ms	7.6 ms	15 ms
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	765253-B21	4,000,787MB	7,814,037,168	0.7 ms	8.5 ms	15.7 ms
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	793665-B21	4,000,787MB	7,814,037,168	0.25 ms	7.6 ms	15 ms
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	861752-B21	4,000,787MB	7,814,037,168	0.32 ms	7.45 ms	14.2 ms
HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	846510-B21	6,001,175MB	11,721,045,168	0.8 ms	8.5 ms	15.7 ms
HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty HDD	765255-B21	6,001,175MB	11,721,045,168	0.7 ms	8.5 ms	15.7 ms
HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	793667-B21	6,001,175MB	11,721,045,168	0.25 ms	7.6 ms	15 ms
HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty He 512e HDD	793683-B21	6,001,175MB	11,721,045,168	0.25 ms	8.5 ms	16.0 ms
HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	861750-B21	6,001,175MB	11,721,045,168	0.32 ms	7.45 ms	14.2 ms
HPE 8TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty 512e HDD	819203-B21	8,001,563MB	15,628,053,168	0.7 ms	8.5 ms	15.7 ms
HPE 8TB SATA 6G Mildine 7.2K LFF (3.5in) SC 1yr Wty He 512e HDD	861594-B21	8,001,563MB	15,628,053,168	0.22 ms	8.0 ms	16.0 ms
HPE 10TB SATA 6G Midline 7.2K LFF (3.5in) SC 1yr Wty He 512e HDD	857648-B21	10,000,831MB	19,532,873,728	0.22 ms	8.0 ms	16.0 ms

Technical Specifications

Midline (7.2K rpm)			
Form Factor	LFF (3.5")	**Carrier**	Low Profile
Rotational Speed	7200 rpm	**Dimensions**	
Interface	SATA	**Height**	1.028 in (26.1 mm)
Transfer Rate Synchronous (Max)	6Gb/sec	**Width**	4.15 in (105.5 mm)
Bytes/Sector	512	**Depth**	6.16 in (156.58 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	SKU	Physical Configuration		Seek time		
		Capacity	Logical Blocks	Single track	Avg	Full Stroke
HPE 1TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	861686-B21	1,000,204MB	1,953,525,168	0.32 ms	7.45 ms	14.2 ms
HPE 2TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	861681-B21	2,000,398MB	3,907,029,168	0.32 ms	7.45 ms	14.2 ms
HPE 3TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	861688-B21	3,000,592MB	5,860,533,168	0.32 ms	7.45 ms	14.2 ms
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	861683-B21	4,000,787MB	7,814,037,168	0.32 ms	7.45 ms	14.2 ms
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	846783-B21	4,000,787MB	7,814,037,168	0.7 ms	8.5 ms	15.7 ms
HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	861744-B21	4,000,787MB	7,814,037,168	0.32 ms	7.45 ms	14.2 ms
HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty HDD	846512-B21	6,001,175MB	11,721,045,168	0.7 ms	8.5 ms	15.7 ms
HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	846785-B21	6,001,175MB	11,721,045,168	0.7 ms	8.5 ms	15.7 ms
HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	861742-B21	6,001,175MB	11,721,045,168	0.32 ms	7.45 ms	14.2 ms
HPE 8TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD	834028-B21	8,001,563MB	15,628,053,168	0.7 ms	8.5 ms	15.7 ms
HPE 8TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty He 512e HDD	861596-B21	8,001,563MB	15,628,053,168	0.22 ms	8.0 ms	16.0 ms
HPE 10TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty He 512e HDD	857650-B21	10,000,831MB	19,532,873,728	0.22 ms	8.0 ms	16.0 ms

Midline (7.2K rpm)			
Form Factor	SFF (2.5")	**Carrier**	Smart Carrier (SC)
Rotational Speed	7200 rpm	**Dimensions**	
Interface	SAS	**Height**	0.62 in (15.6 mm)
Transfer Rate Synchronous (Max)	12Gb/sec	**Width**	2.98 in (75.7 mm)
Bytes/Sector	512	**Depth**	4.67 in (118.7 mm)
Operating Temperature	50° to 95° F (10° to 35°C)		

SKU Description	SKU	Physical Configuration		Seek time		
		Capacity	Logical Blocks	Single track	Avg	Full Stroke
HPE 1TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty HDD	832514-B21	1,000,204MB	1,953,525,168	0.5 ms	6.8 ms	17.0 ms
HPE 1TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e HDD	765464-B21	1,000,204MB	1,953,525,168	0.7 ms	8.7 ms	17.16 ms
HPE 2TB SAS 12G Midline 7.2K SFF	765466-B21	2,000,398MB	3,907,029,168	0.7 ms	8.7 ms	17.16 ms

Technical Specifications

(2.5in) SC 1yr Wty 512e HDD						

Midline (7.2K rpm)						
Form Factor	SFF (2.5")		**Carrier**	Smart Carrier (SC)		
Rotational Speed	7200 rpm		**Dimensions**			
Interface	SATA		**Height**	0.62 in (15.6 mm)		
Transfer Rate Synchronous (Max)	6Gb/sec		**Width**	2.98 in (75.7 mm)		
Bytes/Sector	512		**Depth**	4.67 in (118.7 mm)		
Operating Temperature	50° to 95° F (10° to 35°C)					
SKU Description	**SKU**	**Physical Configuration**		**Seek time**		
		Capacity	**Logical Blocks**	**Single track**	**Avg**	**Full Stroke**
HPE 1TB SATA 6G Midline 7.2K SFF (2.5in) SC 1Yr Wty HDD	655710-B21	1,000,204MB	1,953,525,168	0.7 ms	<8.5 ms	16.96 ms
HPE 1TB SATA 6G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e HDD	765453-B21	1,000,204MB	1,953,525,168	0.5 ms	<7.2 ms	17 ms
HPE 2TB SATA 6G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e HDD	765455-B21	2,000,398MB	3,907,029,168	0.5 ms	<7.2 ms	17 ms

Entry (standard)						
Form Factor	LFF (3.5")		**Carrier**	Smart Carrier (SC)		
Rotational Speed	7200 rpm		**Dimensions**			
Interface	SATA		**Height**	1.06 in (26.8 mm)		
Transfer Rate Synchronous (Max)	6Gb/sec		**Width**	4.16 in (105.8 mm)		
Bytes/Sector	512		**Depth**	6.69 in (170.0 mm)		
Operating Temperature	50° to 95° F (10° to 35°C)					
SKU Description	**SKU**	**Physical Configuration**		**Seek time**		
		Capacity	**Logical Blocks**	**Single track**	**Avg**	**Full Stroke**
HPE 1TB SATA 6G Entry 7.2K LFF (3.5in) SC 1yr Wty HDD	858594-B21	1,000,204MB	1,953,525,168	0.8 ms	8.5 ms	15.7 ms
HPE 2TB SATA 6G Entry 7.2K LFF (3.5in) SC 1yr Wty HDD	858596-B21	2,000,398MB	3,907,029,168	0.8 ms	8.5 ms	15.7 ms

Entry						
Form Factor	LFF (3.5")		**Carrier**	Non Hot Plug Carrier		
Rotational Speed	7200 rpm		**Dimensions**			
Interface	SATA		**Height**	1.028 in (26.1 mm)		
Transfer Rate Synchronous (Max)	6Gb/sec		**Width**	4.00 in (101.6 mm)		
Bytes/Sector	512		**Depth**	5.75 in (146.0 mm)		
Operating Temperature	50° to 95° F (10° to 35°C)					
SKU Description	**SKU**	**Physical Configuration**		**Seek time**		
		Capacity	**Logical Blocks**	**Single track**	**Avg**	**Full Stroke**
HPE 500GB SATA 6G Entry 7.2k LFF (3.5in) RW 1yr Wty HDD	659341-B21	500,107MB	976,773,168	0.5 ms	<8.5 ms	17.55 ms
HPE 1TB SATA 6G Entry 7.2K LFF (3.5in)	801882-B21	1,000,204MB	1,953,525,168	0.8 ms	<8.5 ms	16.5 ms

Technical Specifications

RW 1yr Wty HDD						
HPE 2TB SATA 6G Entry 7.2K LFF (3.5in) RW 1yr Wty HDD	801884-B21	2,000,398MB	3,907,029,168	0.8 ms	<8.5 ms	16.2 ms
HPE 4TB SATA 6G Entry 7.2K LFF (3.5in) RW 1yr Wty HDD	801888-B21	4,000,787MB	7,814,037,168	0.8 ms	<8.5 ms	16.2 ms
HPE 500GB SATA 6G Entry 7.2K LFF 3.5in RW 1yr Wty 512e HDD	843264-B21	500,107MB	976,773,168	1.0 ms	<8.5 ms	18 ms
HPE 1TB SATA 6G Entry 7.2K LFF (3.5in) RW 1yr Wty 512e HDD	843266-B21	1,000,204MB	1,953,525,168	1.0 ms	<8.5 ms	18 ms
HPE 2TB SATA 6G Entry 7.2K LFF (3.5in) RW 1yr Wty 512e HDD	843268-B21	2,000,398MB	3,907,029,167	1.0 ms	<8.5 ms	18 ms
HPE 3TB SATA 6G Entry 7.2K LFF (3.5in) RW 1yr Wty 512e HDD	843270-B21	3,000,593MB	5,860,533,167	1.0 ms	<8.5 ms	18 ms
HPE 4TB SATA 6G Entry 5.9K LFF (3.5in) RW 1Yr Wty 512e HDD	815635-B21	4,000,787MB	7,814,037,168	1.2 ms	<12 ms	25 ms

Environment-friendly Products and Approach

End-of-life Management and Recycling

Hewlett Packard Enterprise offers end-of-life product return, trade-in, and recycling programs, in many geographic areas, for our products. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

http://www8.hp.com/us/en/hpe/hp-information/livingprogress/environmentalprogress/product-recycling.html#.V-lPA_krKiM

The EU WEEE directive (2002/95/EC) requires manufacturers to provide treatment information for each product type for use by treatment facilities. This information (product disassembly instructions) is posted on the Hewlett Packard Enterprise web site. These instructions may be used by recyclers and other WEEE treatment facilities as well as Hewlett Packard Enterprise OEM customers who integrate and re-sell Hewlett Packard Enterprise equipment.

http://www8.hp.com/us/en/hpe/hp-information/livingprogress/environmentalprogress/product-recycling.html#.V-lPA_krKiM

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

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.

Technical Specifications

HDD SKU Description Decoder

Long Name

HPE 10TB 12G SAS Midline 7.2K LFF (3.5in) SC 3yr Wty He 512e Digitally Signed Firmware HDD

Brand	Storage Capacity	Interface Type/ Interface Speed	Workload	Form Factor Type / Form Factor Size	Carriers	Wty	Special Features	Drive Type
HPE	300-900GB 1-12TB	SATA/SAS 6G/12G	Enterprise 15/10K Midline 7.2K Entry 7.2K	SFF (2.5IN) LFF (3.5IN)	SC Smart Carrier SCC Smart Carrier Converter ST Standard STC Standard Converter LP Low Profile LPC Low Profile Converter QR Quick Release RW Raw Drive	3Yr Wty 1Yr Wty	DS Digitally Signed Firmware 512e 512 emulation; No descriptor (512n) He Helium; No descriptor (Air) SMR Shingle Magnetic Recording; No descriptor (PMR) *In priority order, where 1st is closest to drive type*	HDD

Short Name

HPE 10TB SAS 7.2K LFF SC He 512e Digitally Signed Firmware HDD

Brand	Storage Capacity	Interface Type	Workload	Form Factor Type	Carriers	Special Features	Drive Type
HPE	300-900GB 1-12TB	SATA/SAS	15K 10K 7.2K	SFF LFF	SC Smart Carrier SCC Smart Carrier Converter ST Standard STC Standard Converter LP Low Profile LPC Low Profile Converter QR Quick Release RW Raw Drive	DS Digitally Signed Firmware 512e 512 emulation; No descriptor (512n) He Helium; No descriptor (Air) SMR Shingle Magnetic Recording; No descriptor (PMR) *In priority order, where 1st is closest to drive type*	HDD

Summary of Changes

Date	Version History	Action	Description of Change
13-Feb-2017	Version 1	Added	Combined SAS and SATA into one single QuickSpecs. Overview, Models, Compatibility, Standard Features, Service and Support, and Technical Specifications sections were updated. New part number descriptions have been added.



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

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