

Overview

HPE StoreEasy 1000 Storage

Whether you are a small, medium, or large business with a branch or remote offices, storage worries should be the last thing on your mind. As you work with your large number of users, you need to accommodate their demands to store and access growing volumes of files such as business documents, images, audio files, and videos. You need efficient file storage that is secure, yet easy to manage.

Hewlett Packard Enterprise is here to help. With HPE StoreEasy 1000 Storage—a new breed of optimized, efficient, secure, and highly available storage systems—you stand to gain a lot. The StoreEasy 1000 product family is designed for small businesses, branch offices, and workgroup environments.

The StoreEasy 1000 product family caters to your unique storage needs. They integrate easily into new and existing environments offering your storage administrators and IT generalists a straightforward, consistent management experience.

With built-in security, your data remains well protected and available to your users when and where they want to access it. It also enables you to install and run endpoint protection such as antivirus on the system itself, reducing the cost and complexity of connecting an external endpoint protection server. With features including constant health monitoring, mirrored OS disks, advanced memory protection, reliable software support, and more, you can provide users with a highly available solution that keeps their data ready and highly available. Not to mention the support and expertise our highly skilled Hewlett Packard Enterprise certified professionals can offer.

What's New

- Brand new models – HPE StoreEasy 1650 Expanded Storage

Models

HPE StoreEasy 1450 Storage

HPE StoreEasy 1450 Storage products are storage solutions that deliver multi-protocol file serving and application storage in a compact and affordable 1U rack-mount form factor. They're easy to install and manage, making them perfect for a small workgroup, small business or remote office. All StoreEasy 1450 models have Windows Storage Server 2012 R2, Standard Edition, pre-installed from the factory on the four internal LFF drives configured as RAID6. The StoreEasy 1450 is built on a ProLiant DL160 Gen 9 server and includes a rail kit and cable management arm.

HP StoreEasy 1450 Storage

K2R11A

NOTE: This model has no drives pre-configured - at least four drives of the same type/capacity, 100GB or greater, must be ordered for pre-installation of OS in the factory. The OS is not a field installable option.

HP StoreEasy 1450 4TB SATA Storage

K2R12A

(4 x 1TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

HP StoreEasy 1450 8TB SATA Storage

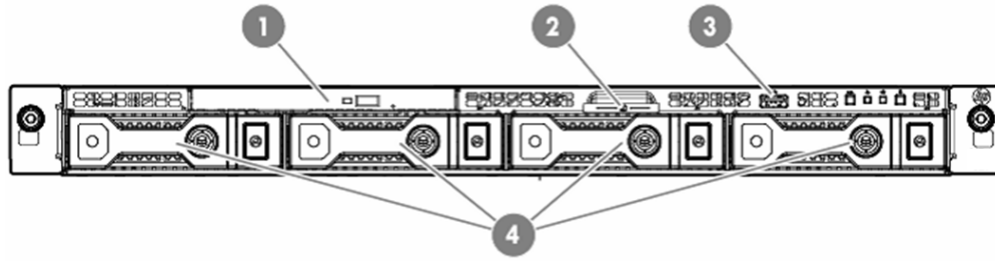
K2R13A

(4 x 2TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

HP StoreEasy 1450 16TB SATA Storage

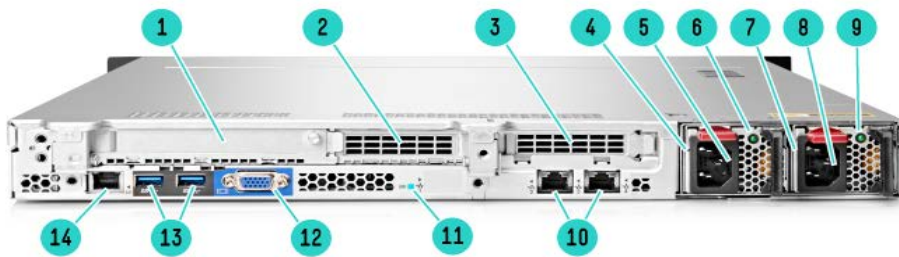
K2R14A

Overview



Front View

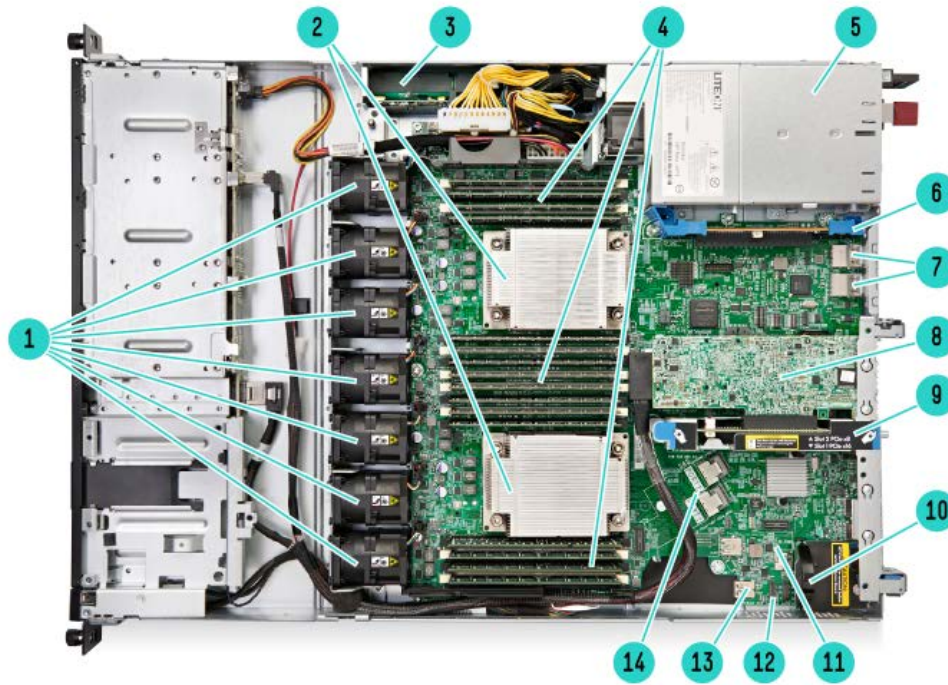
- 1. Optical Drive (optional)
- 2. Serial label pull tab
- 3. USB 2.0 connector
- 4. LFF Drive Bays



Rear view

- 1. PCIe3 slot 1 (primary, associated with processor 1)
- 2. PCIe3 slot 2 (primary, associated with processor 1 occupied by Smart Array P440)
- 3. PCIe3 slot 3 (secondary, associated with processor 2)
- 4. Power supply 1 bay
- 5. Power supply 1 Power Connector (Optional)
- 6. Power supply 1 LED (Optional)
- 7. Power supply 2 bay
- 8. Power supply 2 power connector
- 9. Power Supply 2 LED
- 10. Embedded 2x1GbE network adapter
- 11. Unit ID LED
- 12. Video Connector
- 13. USB3.0 connectors
- 14. Dedicated iLO connector

Overview



Internal View

- | | |
|---|---|
| 1. Hot Swappable fans (up to 7) | 8. HPE Smart Array P440 controller |
| 2. Processor heat sinks (processors with HPE Smart Sockets placed below heat sinks) | 9. Primary PCIe riser (2 PCIe3 slots associated with CPU1) |
| 3. HPE Smart Storage Battery | 10. Dedicated iLO module connector |
| 4. DDR4 DIMM slots (up to 16) | 11. MicroSD card slot |
| 5. Entry level power supply bay (1x900W shown) | 12. Internal SATA ports (one for ODD and another one reserved) |
| 6. Connector for secondary PCIe riser (associated with CPU2) | 13. Internal USB 3.0 connector |
| 7. Embedded 2x1GbE network adapter | 14. Embedded B140i SATA controller (not used in StoreEasy 1450) |

HPE StoreEasy 1550 Storage

HPE StoreEasy 1550 Storage products are storage solutions that deliver multi-protocol file serving and application storage in a compact and affordable tower form factor package. They're easy to install and manage, making them perfect for a small workgroup, small business or remote office. All StoreEasy 1550 models have Windows Storage Server 2012 R2, Standard Edition, pre-installed from the factory on the four internal LFF drives configured as RAID6. The StoreEasy 1550 is built on a ProLiant ML110 Gen 9 Server.

HP StoreEasy 1550 Storage

K2R62A

NOTE: This model has no drives pre-configured - at least four drives of the same type/capacity, 100GB or greater, must be ordered for pre-installation of OS in the factory. The OS is not a field installable option.

HP StoreEasy 1550 4TB SATA Storage

K2R63A

(4 x 1TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

HP StoreEasy 1550 8TB SATA Storage

K2R64A

(4 x 2TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

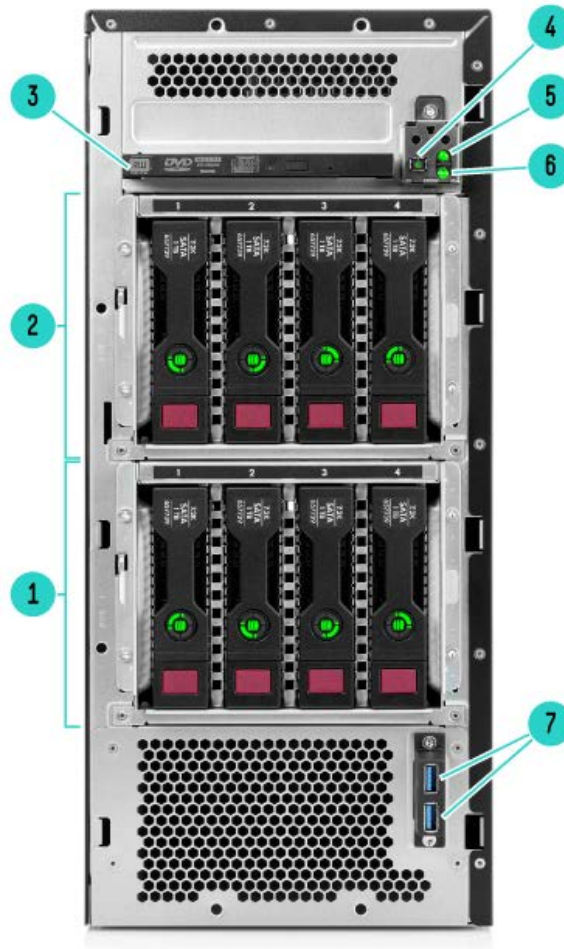
HP StoreEasy 1550 16TB SATA Storage

K2R65A

(4 x 4TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

Overview

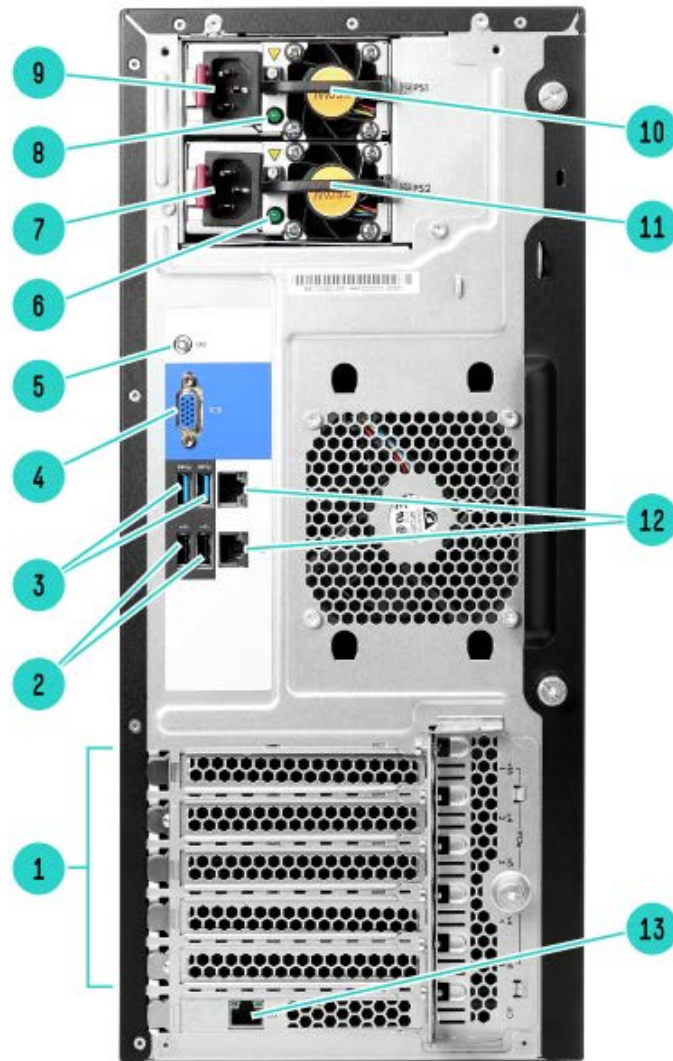
NOTE: StoreEasy 1550 product views shown below are for references purposes and do not reflect exact configuration of the product. Refer to the technical specifications section of the QuickSpecs for more details.



Front View

- | | |
|-----------------------------|---------------------------|
| 1. Drive cage | 5. Health LED |
| 2. Drive cage (optional) | 6. NIC status LED |
| 3. Optical drive (optional) | 7. USB 3.0 (2) connectors |
| 4. Power button/LED | |

Overview



Rear View

- | | | | |
|----|--|-----|---------------------------------|
| 1. | PCIe3 Slots (Slots 1-5) | 8. | Power supply 1 LED |
| 2. | USB 2.0 (2) connectors | 9. | Power supply 1 power connection |
| 3. | USB 3.0 (2) connectors | 10. | Power Supply 1 bay |
| 4. | Video connector | 11. | Power Supply 2 bay (optional) |
| 5. | UID button/LED | 12. | Network RJ-45 ports (2) |
| 6. | Power supply 2 LED | 13. | HPE ML Gen9 dedicated iLO port |
| 7. | Power supply 2 power connection (optional) | | |

Overview

HPE StoreEasy 1650 Storage

HPE StoreEasy 1650 Storage products deliver high capacity and drives down your cost per GB. Six-Core processing, up to 96TB internal storage capacity, and ready for external expandability enhance this ultra-dense 2U shared storage solution for small, medium, or large IT environments. All StoreEasy 1650 models have Windows Storage Server 2012 R2, Standard Edition, pre-installed from the factory on two rear internal 120B 6G Value Endurance SFF SSDs configured as RAID1. The StoreEasy 1650 is built on a ProLiant DL380 Gen 9 Server and includes a rail kit and cable management arm.

HP StoreEasy 1650 Storage

K2R15A

(12 open LFF HDD slots in front and 2 x 120GB 6G Value Endurance SFF SSDs in rear with pre-installed OS)

HP StoreEasy 1650 16TB SAS Storage

K2R16A

(8 x 2TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 4 open LFF slots and 2 x 120GB 6G Value Endurance SFF SSDs in rear with pre-installed OS)

HP StoreEasy 1650 32TB SAS Storage

K2R17A

(8 x 4TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 4 open LFF slots and 2 x 120GB 6G Value Endurance SFF SSDs in rear with pre-installed OS)

HP StoreEasy 1650 48TB SAS Storage

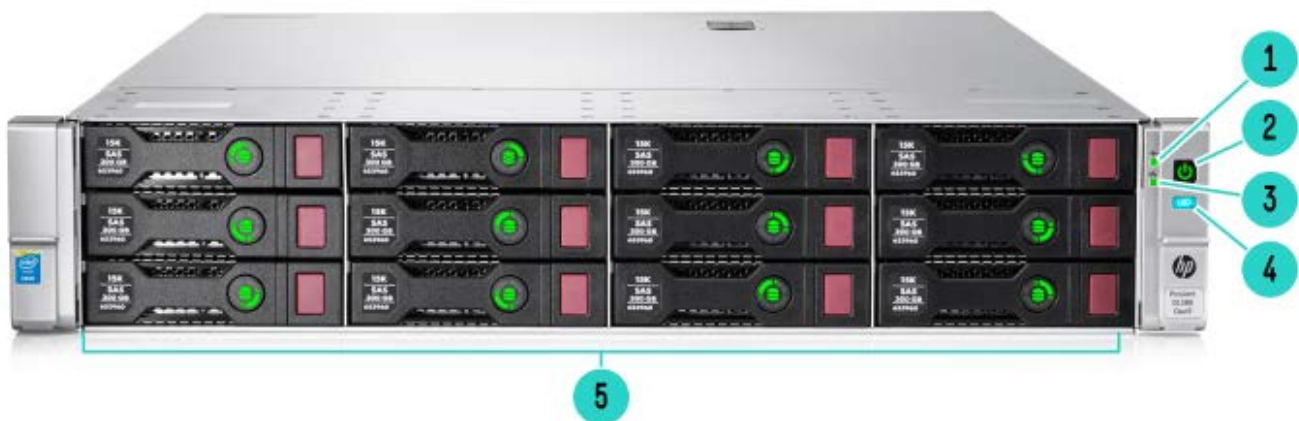
K2R18A

(8 x 6TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 4 open LFF slots and 2 x 120GB 6G Value Endurance SFF SSDs in rear with pre-installed OS)

HP StoreEasy 1650 90TB SATA Storage

M0S97A

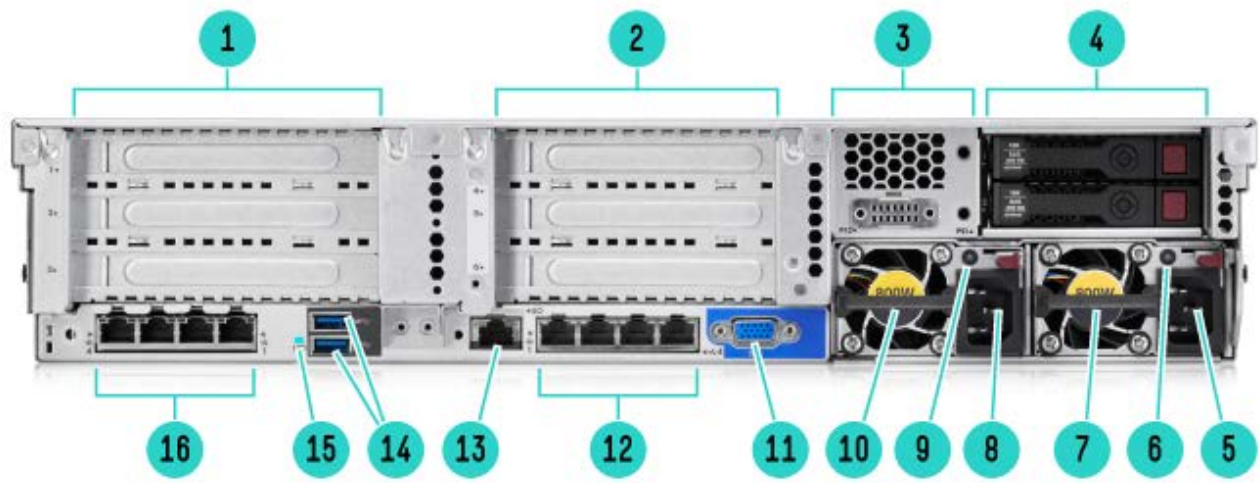
(15 x 6TB 6G 7.2K RPM LFF MDL SATA HDDs pre-installed, 12 HDDs in front slots, 3 HDDs in rear slots (with pre-installed OS on two of the rear HDDs in a RAID 1 configuration. This SKU also comes with 48GB of memory (3 x 16GB RDIMMS). All other specifications are the same as other StoreEasy 1650 SKUs



Front View

- | | |
|---|---------------------|
| 1. Health LED | 4. UID button/LED |
| 2. Power On/Standby button and system power LED | 5. 12 LFF Drive Bay |
| 3. NIC status LED | |

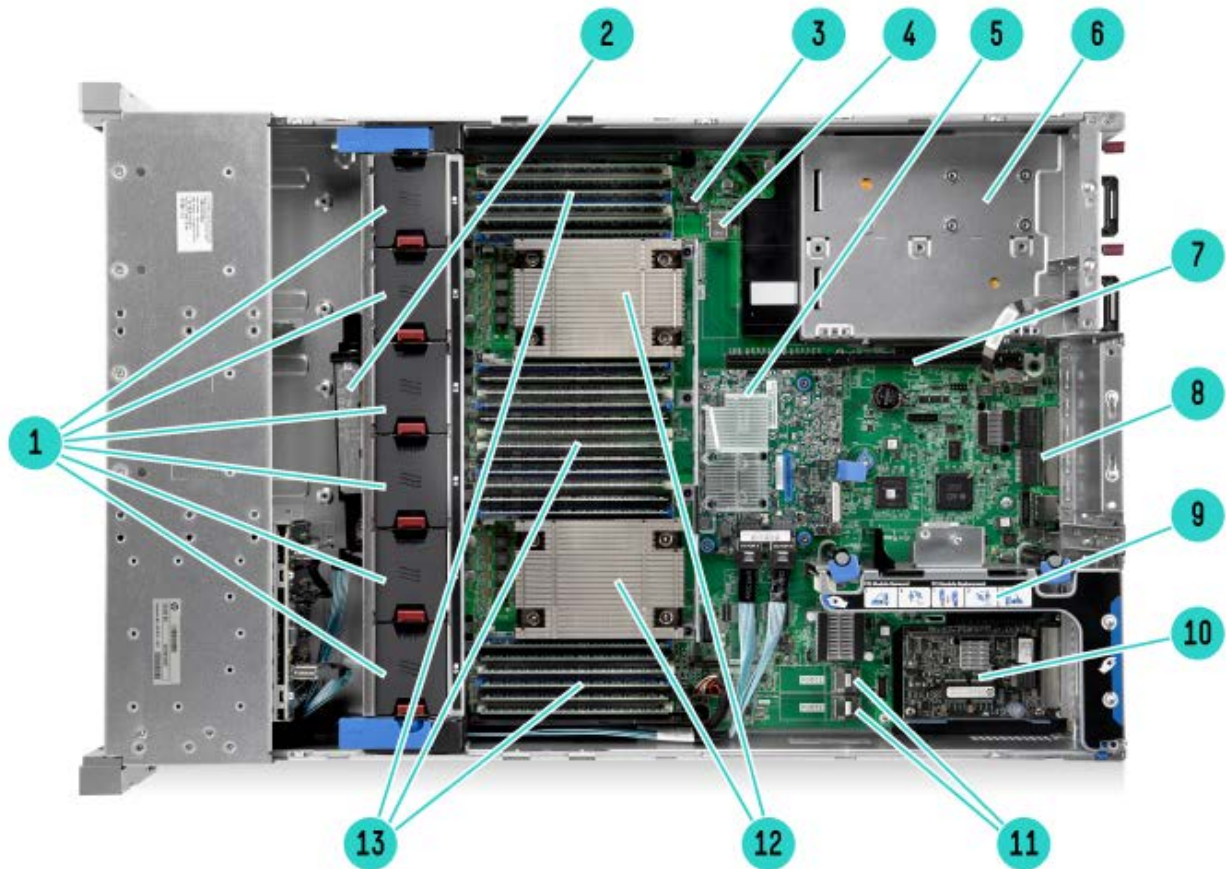
Overview



Rear view*

- | | |
|--|--|
| 1. PCI Slots (Slots 1-3 top to bottom, riser shipped standard) | 9. Power supply Power LED |
| 2. PCI Slots (Slots 4-6 top to bottom, requires optional second riser card and second processor; not available on SE1650 90TB SKU# MOS97A) | 10. Power supply Power connection |
| 3. Optional serial port | 11. VGA connector |
| 4. Rear 2 SFF drive slots (SE1650 90TB SKU# MOS97A has 3 LFF drives in rear – see Note below) | 12. Embedded 4x1GbE Network Adapter |
| 5. HPE Flexible Slot Power Supply bay 1 (800w shown) | 13. Dedicated iLO connector |
| 6. Power supply Power LED | 14. USB 3.0 connectors (2) |
| 7. Power supply Power connection | 15. Unit ID LED |
| 8. HPE Flexible Slot Power Supply bay 2 (800w shown) | 16. Optional FlexibleLOM ports (Shown: 4x1GbE) |

Overview



Internal View

- | | |
|--|---|
| 1. Fan cage shown with 6 standard Hot-plug fans (High Performance fans optional) | 8. Embedded 4x1Gbe NIC |
| 2. HPE Smart Storage Battery | 9. Primary PCIe riser, standard (Optional double wide GPU riser) |
| 3. MicroSD card slot | 10. Optional Flexible LOM slot |
| 4. Internal USB 3.0 connector | 11. X4 SATA ports (1 and 2) |
| 5. HPE Flexible Smart Array (P440ar) | 12. 2 Processors, heatsink showing, with HPE Smart Socket Guide |
| 6. (Under) Hot Plug redundant HPE Flexible Slot Power supplies | 13. DDR4 DIMM slots. Shown fully populated in 24 slots (12 per processor) |
| 7. Connection for second (optional) riser (Required second CPU) | |

HPE StoreEasy 1650 Expanded Storage

HPE StoreEasy 1650 Expanded Storage products offers revolutionary storage density, with more than double the storage capacity of competitors for addressing bulk file storage use cases in a 2U form factor. Six-Core processing, up to 224TB internal storage capacity, and ready for external expandability enhance this ultra-dense 2U shared storage solution for small, medium, or large IT environments.

Overview

All StoreEasy 1650 Expanded models have Windows Storage Server 2012 R2, Standard Edition, pre-installed from the factory on two 120B 6G Value Endurance SFF SSDs configured as RAID1. The StoreEasy 1650 Expanded Storage is built on a Apollo 4200 Gen9 Server and includes a rail kit and cable management arm.

HP StoreEasy 1650 Expanded Storage

N9Y08A

(28 open LFF HDD slots- 24 in Front , 4 in Rear and 2 x 120GB 6G Value Endurance SFF SSDs in PCIe slot with pre-installed OS)

HP StoreEasy 1650 Expanded 32TB SAS Storage

N9Y09A

(8 x 4TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 20 open LFF slots and 2 x 120GB 6G Value Endurance SFF SSDs in PCIe slot with pre-installed OS)

HP StoreEasy 1650 Expanded 48TB SAS Storage

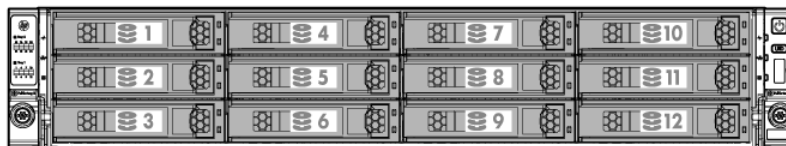
N9Y10A

(8 x 6TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 20 open LFF slots and 2 x 120GB 6G Value Endurance SFF SSDs in PCIe slot with pre-installed OS)

HP StoreEasy 1650 Expanded 64TB SAS Storage

N9Y11A

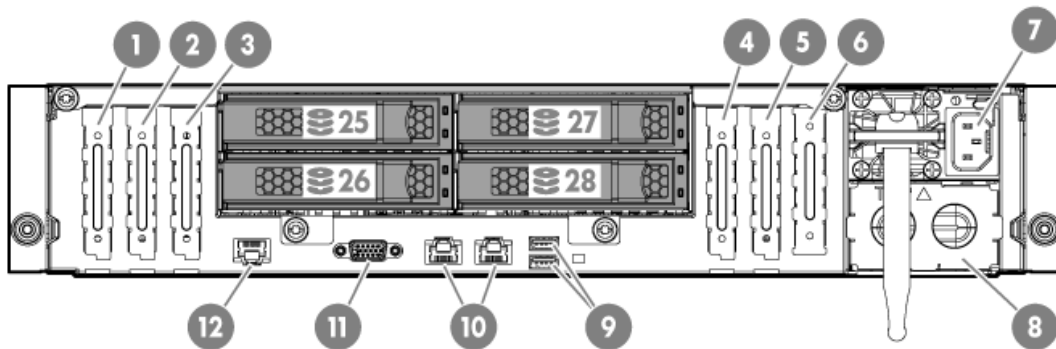
(8 x 8TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 20 open LFF slots and 2 x 120GB 6G Value Endurance SFF SSDs in PCIe slot with pre-installed OS)



Overview

Front View

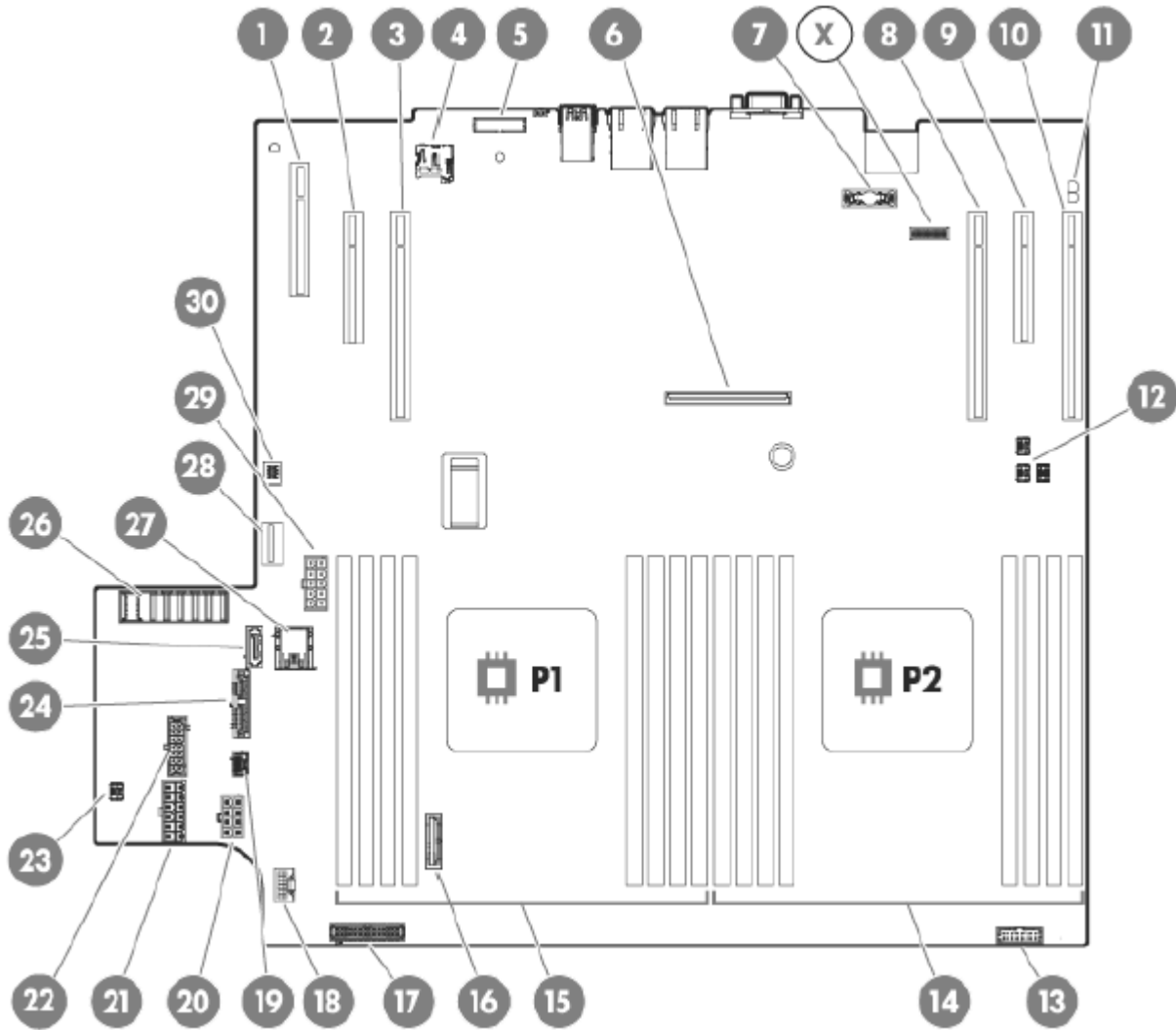
- 1-12. Front row of LFF drives
- 13-24. Second row of LFF Drives



Rear view

- | | |
|---|-----------------------------------|
| 1. PCI Slot 7 | 9. USB 3.0 Ports |
| 2. PCI Slot 6 | 10. Embedded 2x1GbE Ethernet |
| 3. PCI Slot 5 | 11. Rear VGA (Video) Port |
| 4. Dual 120GB Value Endurance Solid State M.2 | 12. Dedicated iLO Management Port |
| 5. PCI Slot 1 | 25. LFF Drive number 25 |
| 6. Flexible LOM Slot | 26. LFF Drive number 26 |
| 7. HPE Flexible Slot Power Supply bay 1 | 27. LFF Drive number 27 |
| 8. HPE Flexible Slot Power Supply bay 2 (blank shown) | 28. LFF Drive number 28 |

Overview



Internal View

- | | |
|--|--|
| 1. Flexible LOM Slot | 17. Fan signal connector |
| 2. PCIe3 x8 (8, 4, 1) slot 1 for low-profile, standup expansion board | 18. HPE Smart Storage Battery connector |
| 3. PCIe3 x16 (16, 8, 4, 1) slot 2 for low-profile, standup expansion board or riser cage options | 19. Rear SFF drive backplane detection connector |
| 4. microSD slot | 20. Fan power connector |
| 5. TPM connector | 21. Front drive cage 2 backplane power connector |
| 6. HPE Flexible Smart Array Controller slot | 22. Front drive cage 1 backplane power connector |
| 7. Dedicated iLO management module connector | 23. Storage backup power connector for expansion slots 1-2 |
| 8. PCIe3 x16 (16, 8, 4, 1) slot 5 for low-profile, standup expansion board | 24. SATA 6Gb/s connector 4 |
| 9. PCIe3 x8 (8, 4, 1) slot 6 for low-profile, standup expansion board | 25. SATA 6Gb/s connector 5 |
| 10. PCIe3 x16 (16, 8, 4, 1) slot 7 for low-profile, standup expansion board | 26. Power pass-through board connector |
| 11. NMI header | 27. Internal USB 3.0 connector |

Overview

HPE StoreEasy 1850 Storage

HPE StoreEasy 1850 Storage products deliver Enterprise-class performance, expandability, and flexibility. Six-Core processing, up to 24 internal SFF data drives for performance, and ready for external expandability enhance this ultra-dense 2U shared storage solution for small, medium, or large IT environments. All StoreEasy 1850 models have Windows Storage Server 2012 R2, Standard Edition, pre-installed from the factory on two rear internal 120B 6G Value Endurance SFF SSDs configured as RAID1. The StoreEasy 1850 is built on a ProLiant DL380 Gen 9 server and includes a rail kit and cable management arm.

HP StoreEasy 1850 Storage

K2R19A

(24 open SFF slots in front and 2 x 120GB 6G Value Endurance SFF SSDs in rear with pre-installed OS)

HP StoreEasy 1850 9.6TB SAS Storage

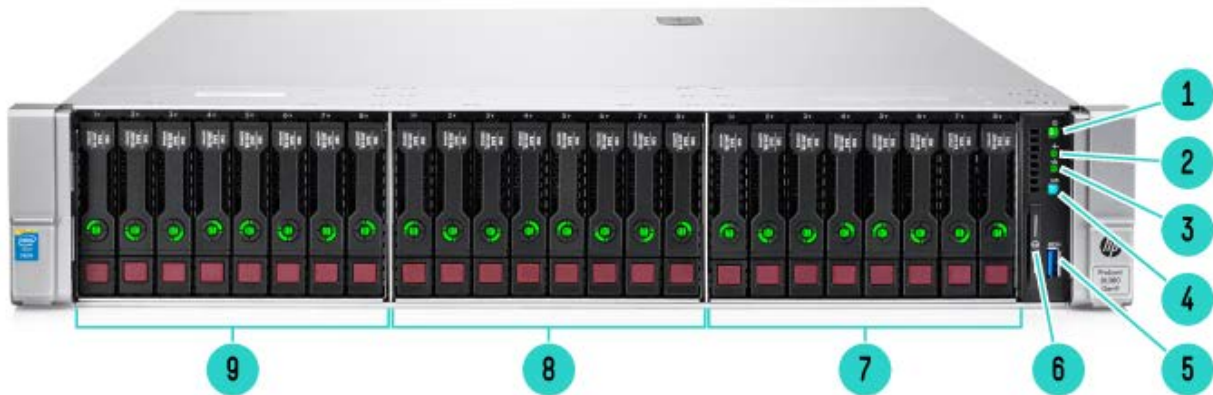
K2R20A

(8 x 1.2TB 12G 10K RPM ENT SAS SFF HDDs pre-installed, 16 open SFF slots and 2 x 120GB 6G Value Endurance SFF SSDs in rear with pre-installed OS)

HP StoreEasy 1850 14.4TB SAS Storage

K2R21A

8 x 1.8TB 12G 10K RPM 512e SAS SFF HDDs pre-installed, 16 open SFF slots and 2 x 120GB 6G Value Endurance SFF SSDs in rear with pre-installed OS



Front View

- | | | | |
|----|-------------------------|----|--|
| 1. | 8 SFF Drive Bay 1 | 6. | UID button/LED |
| 2. | 8 SFF Drive Bay 2 | 7. | NIC status LED |
| 3. | 8 SFF Drive Bay 3 | 8. | Health LED |
| 4. | Serial label pull tab | 9. | Power On/Standby button and system power LED |
| 5. | Front USB 3.0 connector | | |

Features and Benefits

Optimized: Tailored for file storage HPE StoreEasy 1000 Storage comes with pre-configured hardware with the latest generation storage OS for purpose-built file storage. StoreEasy installation and network configuration wizards simplify installation and prevent configuration errors for faster deployment.

The StoreEasy Dashboard consolidates all key status information such as capacity utilization, performance, and health in a single interface and reduces the need to navigate multiple tools and interfaces for system monitoring. Low capacity warning email alerts now available to minimize disruption.

Best practices driven storage provisioning tool discovers system storage and recommends the most efficient setup for optimum performance, optimum capacity, or a balanced configuration based on the available storage.

StoreEasy hard drive bundles make it easier for you to buy, deploy and provision additional storage capacity over the life of the product.

Efficient: Saves you money and time

Achieve an average of 50–60 percent space savings with granular data deduplication.

File sync and share feature enable mobile workers to access their files from anywhere. Provides corporate data controls including data encryption, data wipe, user lock screen password enforcement, file classification, and storage quotas.

Use advanced data management to automatically improve use of resources, comply with data retention policies, and enhance protection of sensitive files.

Consolidate multiple workloads and IT services in a single platform with included support for a broad range of file access protocols, Microsoft® Hyper-V and SQL Server application storage, iSCSI block access, and IT infrastructure services such as print, Domain Name System (DNS), and DHCP.

Reduce your branch office WAN usage with Hosted BranchCache, automatically caching frequently accessed corporate data center files.

Secure: Protect your data always

The StoreEasy 1000 Storage protects data while at rest with file system encryption and BitLocker Drive Encryption, and while it is being transferred with SMB encryption and signing.

Use File Classification Infrastructure to dynamically identify files based on sensitivity and implement sophisticated access controls using Active Directory Rights Management Services.

Install and run endpoint protection, such as an antivirus, on the system itself—reducing the cost and complexity of connecting to an external endpoint protection server. Prevent against data loss with Volume Shadow Copy Service online snapshots and support for agent-based backup software.

Opt to utilize the power of LiveVault from j2 Global for easy data backup to the cloud with 7-year retention. Also, enable simplified and cost efficient compliance archiving with iTernity Compliant Archive Solution (iCAS), now validated to meet the United States Securities and Exchange Commission (SEC) 17a-4(f) requirements.

Features and Benefits

**Highly Available:
Prevent business and
user disruption**

Increases uptime with such standard features as near continuous health monitoring with HPE Active Health System, mirrored OS drives, redundant fans (not available on all models) and power, and advanced memory protection.

Confidently deploy large file systems leveraging file system online self-healing, online verification, and precise and rapid repair that massively reduces downtime from file corruption.

Take advantage of Vision Solutions Double-Take Availability software for critical data protection with real-time byte-level replication. In the event of a failure, recover the data—with a minimum of loss—from the replicated data repository. Software installation files now included with free 14-day evaluation license.

Get support from file storage experts with 3-Year Parts, 3-Year Labor, and 3-Year Onsite support with next business day response (StoreEasy 1650, 1650 E and 1850) or 3-Year Parts, 1-Year Labor, and 1-Year Onsite support with next business day response (StoreEasy 1450 and 1550). All StoreEasy products also include one year of 24x7 software telephone support for the Windows Storage Server operating system.

Standard Features

Operating System

- Microsoft Windows Storage Server 2012 R2 Standard Edition, with Hewlett Packard Enterprise enhanced value and unique features
- Hewlett Packard Enterprise enhanced Initial Configuration Tasks Wizard: StoreEasy installation and network configuration wizards simplify installation and prevent network configuration errors for faster deployment.
- The StoreEasy Dashboard consolidates all key status information such as capacity utilization, performance, and health in a single interface and reduces the need to navigate multiple tools and interfaces for system monitoring. Low capacity warning email alerts now available to minimize disruption.
- The StoreEasy Pool Manager is a best practices driven storage provisioning tool that automatically discovers system storage and recommends the most efficient setup for optimum performance, optimum capacity, or a balanced configuration based on the available storage.
- The StoreEasy Tools menu within Windows Server manager to access the most commonly accessed tools and tasks that an administrator uses for day-to-day management of StoreEasy. The StoreEasy Tools menu provides direct access to management of storage pools, snapshots, emails and alerts, enclosure settings, and firmware updates. It also includes access to the Deduplication Evaluation tool, storage viewer and the initial configuration task wizard.
- Windows Storage Server 2012 R2 (WSS2012 R2) includes a robust range of file serving and storage capabilities. It addresses heterogeneous environments and it enables more efficient storage utilization. WSS2012 R2 delivers a similar level of performance and reliability as more expensive storage solutions and it offers support for both file (CIFS/SMB and NFS) and block (iSCSI) protocols, allows for a flexible mix of configurations and includes advanced data management tools. WSS2012 R2 leverages your Windows Server management skill sets and tools including Active Directory, PowerShell and System Center.
- Extensive protocol support: SMB (2.0, 2.1, 3.0, 3.02), NFS (v2, v3, v4.1), WebDAV, HTTP/HTTPS, FTP/FTPS, iSCSI
 - SMB3 protocol: Leverage high performance continually available file shares to deliver feature-rich storage for business-critical applications and virtual servers using advanced new functionality.
 - SMB3 Multi-channel: Enable aggregation of network bandwidth and network fault tolerance when multiple paths are available between SMB clients and file servers.
 - NFS v4.1: For Windows Storage Server 2012 R2, Server for NFS has been updated to support continuous availability. These improvements make it possible to reliably store and run VMware ESX on a virtual machine that is running Windows Server 2012 by using the NFS protocol to share files. Additional improvements in failover clustering take advantage of better resilience to hardware and software outages that may afflict individual cluster nodes. At the same time, failover clustering isolates VMware ESX hypervisor hosts from intermittent glitches during failovers.
 - iSCSI: Some applications require block storage. iSCSI Target Server can provide these applications with continuously available block storage. Since the storage is remotely accessible it can also consolidate block storage for central or branch office locations. By using boot-capable NICs or a software loader, you can deploy hundreds of diskless servers. This is ideal for large deployments of identical operating system images, such as a Hyper-V server farm or High Performance Computing (HPC) clusters.
- File Server Resource Manager (FSRM): File Server Resource Manager is a set of features within the WSS2012 R2 OS that allows you to manage and classify data that is stored on file servers. File Server Resource Manager includes the following features:
 - Storage Quotas: Quotas allow you to limit the space that is allowed for a volume or folder, and they can be automatically applied to new folders that are created on a volume. You can

Standard Features

- also define quota templates that can be applied to new volumes or folders.
- File screening: File screens help you control the types of files that user can store on a file server. You can limit the extension that can be stored on your shared files. For example, you can create a file screen that does not allow files with an MP3 extension to be stored in personal shared folders on a file server.
 - File Classification Infrastructure: File Classification Infrastructure provides insight into your data by automating classification processes so that you can manage your data more effectively. You can classify files and apply policies based on this classification. Example policies include dynamic access control for restricting access to files, file encryption, and file expiration. Files can be classified automatically by using file classification rules or manually by modifying the properties of a selected file or folder.
 - File Management Tasks: File Management Tasks enables you to apply a conditional policy or action to files based on their classification. The conditions of a file management task include the file location, the classification properties, the date the file was created, the last modified date of the file, or the last time the file was accessed. The actions that a file management task can take include the ability to expire files, encrypt files, or run a custom command.
 - Storage reports: Storage reports are used to help you identify trends in disk usage and how your data is classified. You can also monitor a selected group of users for attempts to save unauthorized files.
- Data Deduplication: Data deduplication enables Windows Storage Server 2012 R2 to store more data in less physical space for greater storage efficiency. Data deduplication uses variable size chunking and compression, which deliver optimization ratios of 2:1 for general file servers and up to 20:1 for virtualization data. Evaluate your deduplication savings with the included deduplication evaluation tool which allows you to determine the expected savings that you would get if deduplication is enabled on a particular volume. The Deduplication evaluation tool supports local drives and mapped or unmapped remote shares.
 - Work Folders: With Work Folders users can store and access work files on personal computers and devices, often referred to as bring-your-own device (BYOD), in addition to corporate PCs. Users gain a convenient location to store work files, and they can access them from anywhere. Organizations maintain control over corporate data by storing the files on centrally managed file servers, and optionally specifying user device policies such as encryption and lock-screen passwords. Work Folders can be deployed with existing deployments of Folder Redirection, Offline Files, and home folders. Work Folders stores user files in a folder on the server called a sync share. You can specify a folder that already contains user data, which enables you to adopt Work Folders without migrating servers and data or immediately phasing out your existing solution. Work folders is supported on Windows 7, Windows 8, Windows 10 and Apple iOS clients.
 - Hosted Branch Cache: Using client/server architecture, Windows 7, Windows 8 or Windows 10 client computers can cache content on the local network via the Hosted Cache running on the StoreEasy 1000 Storage. Other clients who need the same content retrieve it directly from the Hosted Cache.
 - Volume Shadow Copy Service: Creates point-in-time copies (snapshots) of files and folders at predetermined time intervals that can then be accessed from client computers.
 - VSS for Remote SMB File Shares: Leverage proven Volume Shadow Copy Service (VSS) to offload snapshot and backup operations to remote storage from VSS hardware providers within Hyper-V virtual machines.
 - DFS Namespaces: Enables you to group shared folders that are located on different servers into one or more logically structured namespaces. Each namespace appears to users as a single shared folder with a series of subfolders. However, the underlying structure of the namespace can consist of numerous file shares that are located on different servers and in multiple sites.
 - Distributed File System Replication (DFS-R): Enables you to efficiently replicate folders (including those referred to by a DFS namespace path) across multiple servers and sites. DFS Replication uses

Standard Features

a compression algorithm known as remote differential compression (RDC). RDC detects changes to the data in a file, and it enables DFS Replication to replicate only the changed file blocks instead of the entire file.

- New VHDX Standard: Deploy larger capacity virtual storage that can grow to 64 terabytes, is more resilient against corruption, and provides more efficient usage of new 4 KB sector hard disks with the new VHDX virtual storage standard.
- Live Storage Migration: Maintain maximized service-level availability even while moving virtual machine storage between host servers independent of the actual virtual machine.
- Unlimited Client Access Licenses (CALs) included
- **NOTE: Windows Storage Server 2012 R2 and Windows Server 2012 R2 are built on the same code base. Applications certified for Windows Server are expected to have the same application compatibility profile on Windows Storage Server. Windows Storage Server 2012 R2 and Windows Server 2012 have the same application frameworks, services and plumbing to support running the full breadth of Window-compatible applications. Applications that rely upon certain roles that are removed from Windows Storage Server 2012 R2, such as fax server, active directory domain controller or terminal services will not be able to leverage those roles. Independent Software Vendors (ISVs) ultimately decide what versions and editions of Windows are supported by their products and users should review ISV compatibility and support information before purchasing. StoreEasy customers should review the End User License Agreement (EULA) to see the types of applications that are permitted for installation. All versions of Windows Storage Server 2012 R2 can join Active Directory domains, but cannot be a domain controller.**
- More information on Windows Storage Server 2012 R2 Standard Edition can be found here: <http://technet.microsoft.com/en-us/library/jj643303.aspx>

Processor / Cache Memory	StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650 E	StoreEasy 1850	
	Intel® Xeon® E5-2603v3 (1.6GHz/6- core/15MB/85W) Processor	Intel® Xeon® E5-2603v3 (1.6GHz/6- core/15MB/85W) Processor	Intel® Xeon® E5-2609v3 (1.9GHz/6- core/15MB/85W)) Processor	Intel® Xeon® E5-2609v3 (1.9GHz/6- core/15MB/85W) Processor	Intel® Xeon® E5-2609v3 (1.9GHz/6- core/15MB/85W) Processor	
Memory	Type	DDR4 Registered (RDIMM)				
	Maximum (by O/S license)	2TB				
		StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650 E	StoreEasy 1850
Standard	8GB (1 x 8GB)	8GB (1 x 8GB)	16GB (2 x 8GB)	16GB (2 x 8GB)	16GB (2 x 8GB)	
DIMM Sockets	16	8	24	16	24	
Network Controller		StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650 E	StoreEasy 1850
	NIC Ports	2	2	4	2	4
Controller	HPE 361i	Broadcom 5717 2-	HPE 331i 4-Port	Embedded	HPE 331i 4-Port	

Standard Features

2-port 1GbE	port 1GbE	1GbE; optional Flex LOMs for 10GbE, 10Gb or 40Gb Infiniband	1GbEthernet 2-port 361i Adapter plus optional HPE Flexible LOM	1GbE; optional Flex LOMs for 10GbE, 10Gb or 40Gb Infiniband
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StoreEasy 1450 Expansion Slots

CPU1 PCIe riser slots	Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Form Factor	Notes
	1	PCIe 3.0	x16	x16		Full-height, half-length slot	Processor 1
	2	PCIe 3.0	x16	x16		Low profile slot	Smart Array P440

CPU2 riser PCIe slots	Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Form Factor	Notes
	3	PCIe 3.0	x16	x16		Low profile slot	Processor 2

StoreEasy 1550 Expansion Slots

Standard Features

Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Form Factor	Notes
5	PCIe 3.0	x8	x8		Full-height, half-length slot	For processor 1
4	PCIe 3.0	x4	x4		Full-height, half-length slot	For processor 1
3	PCIe 3.0	x8	x8		Full-height, half-length slot	Smart Array P440
2	PCIe 3.0	x4	x4		Full-height, half-length slot	For processor 1
1	PCIe 3.0	x16	x16		Full-height, ¾ length (up to 9.5") Slot	For processor 1

NOTE: Bus number - Default bus assignment (in decimal). Inserting cards with PCI bridges may alter the actual bus assignment number.

NOTE: Five total expansion PCIe 3.0 slots. One PCIe 3.0 x16 (x16 speed); Two PCIe 3.0 x 8 (x8 speed); Two PCIe 3.0 x 4 (x4 speed).

StoreEasy 1650 and 1850 Expansion Slots

Primary Riser (Standard)	Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Form Factor	Notes
	1	PCIe 3.0	x8	x16	7	Full-height, half-length slot	Proc 1
	2	PCIe 3.0	x8	x16	10	Full-height, half-length slot	Proc 1
	3	PCIe 3.0	x8	x8	13	Half length, full height slot	Proc 1

NOTE: * Default bus assignment (in decimal). Inserting cards with PCI bridges may alter the actual bus assignment number.

NOTE: ** Indicates the number of physical electrical lanes running to the connector.

NOTE: All slots support PCIe cards to 150W or more depending on card, but an additional Power Cord Option is required (PN 669777-B21). See Option Section below for offering.

Slot 2 PCIe Riser (Optional 3-slot) 719073-B21

Expansion Slots #	Technology	Bus Width	Connector Width	Bus Number	Device Number	Form Factor	Notes
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Standard Features

4	PCIe 3.0	x16	x16	16	Full height, full length slot	Proc 2
5	PCIe 3.0	x16	x16	20	Full height, full length slot	Proc 2
6	PCIe 3.0	x8	x8	23	Full-height, half-length slot	Proc 2

NOTE: * Default bus assignment (in decimal). Inserting cards with PCI bridges may alter the actual bus assignment number.

NOTE: ** Indicates the number of physical electrical lanes running to the connector.

NOTE: When populating the second optional riser slot, the second processor must be installed.

NOTE: All slots support PCIe cards to 150W or more depending on card but an additional Power Cord Option is required (PN 669777-B21). See Option Section below for offering.

NOTE: Slot 2 PCIe Riser cannot be added to StoreEasy 1650 SKU# MOS97A as the space is occupied by 2 LFF drive bays.

StoreEasy 1650 Expanded Storage Expansion Slots

Standard	Expansion Slots #	Technology	Bus Width	Connector Width	Form Factor	Notes
	1	PCIe 3.0	x8	X8	Low profile	Proc 1
	2	PCIe 3.0	x16	x16	Low profile	Proc 1
	5	PCIe 3.0	x16	x16	Low Profile	Proc 2
	6	PCIe 3.0	x8	x8	Low Profile	Proc 2
	7	PCIe 3.0	X16	X16	Low Profile	Proc 2

Storage Controller	StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650 E	StoreEasy 1850
Controller(s)	HPE Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller	HPE Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller	HPE Smart Array P440ar/2GB FBWC 12Gb 2-ports Int SAS Controller	HPE Flexible Smart Array P840ar/2G FIO Controller	HPE Smart Array P440ar/2GB FBWC 12Gb 2-ports Int SAS Controller
RAID	6, 60, 5, 50, 1, 10, 1 ADM, 10 ADM	6, 60, 5, 50, 1, 10, 1 ADM, 10 ADM	6, 60, 5, 50, 1, 10, 1 ADM, 10 ADM	6, 60, 5, 50, 1, 10, 1 ADM, 10 ADM	6, 60, 5, 50, 1, 10, 1 ADM, 10 ADM
Internal SAS connectors	1	1	2	2	2
External SAS connectors	None	None	None	None	None

Storage	StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650 E	StoreEasy
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Standard Features

Hard Drives

Internal

(4) Four 3.5" (Large Form Factor) hot-plug bays	(4) Four 3.5" (Large Form Factor) hot-plug bays standard, up to (4) Four additional 3.5" LFF bays as an option	(12) Twelve 3.5" (Large Form Factor) hot-plug bays in front and (2) Two 2.5" (Small Form Factor) hot-plug bays in rear	(28) Twenty eight 3.5" (Large Form Factor) hot-plug bays. 24 in front and 4 in rear.	(24) 2.5" (Small Form Factor) hot-plug bays in front and (2) Two 2.5" (Small Form Factor) hot-plug bays in rear
		(15) Fifteen 3.5" (Large Form Factor) hot-plug bays. 12 in front and 3 in rear - SKU# MOS97A only.		

1850

External

Support for D2000, D3000, D6000 enclosures (requires an additional Smart Array controller than the standard SA P440)	Support for D2000, D3000, D6000 enclosures (requires an additional Smart Array controller than the standard SA P440)	Support for D2000, D3000, D6000 enclosures (requires an additional Smart Array controller than the standard SA P440ar)	Support for D2000, D3000, D6000 enclosures (requires an additional Smart Array controller than the standard SA P840ar)	Support for D2000, D3000, D6000 enclosures (requires an additional Smart Array controller than the standard SA P440ar)
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Maximum Storage Capacity (raw)

	StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650E	StoreEasy 1850
Internal SATA	32TB	48TB	96TB	224TB	48TB
Internal SAS	32TB	48TB	96TB	224TB	43.2TB
Internal plus External	1.568PB P440 allows 4 x 8TB internal+ 192 x 8TB external using 16 D3600s(requires 2 P441s)	2.352PB P440 allows 8 x 6TB internal+ 384 x 6TB external using 16 D3600s(requires 4 P441s)	3.936PBs 15 x 8TB HDDs internal+480 x 8TB HDDs using 40 D3600s (requires 5 P441s)	3.296PBs 28 x 8TB HDDs internal+384 x 8TB HDDs using 40 D3600s (requires 4 P441s)	2.932PB 24 x 1.8TB HDDs internal+480 x 6TB HDDs using 40 D3600s (requires 5 P441s)

Power Supply

	StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650E	StoreEasy 1850
	900W Non-Redundant/800W Gold Redundant (redundant optional)	750W CS Gold Hot Plug Power Supply (redundant optional)	800 Watts Platinum, Hot Plug redundant	800 Watts Platinum, Hot Plug redundant	800 Watts Platinum, Hot Plug redundant

Standard Features

Power Cords	StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650E	StoreEasy 1850
	One high voltage power cord (IEC C13 to C14) standard	Regional or country specific power cord required.	Two high voltage power cords (IEC C13 to C14) standard	Two high voltage power cords (IEC C13 to C14) standard	Two high voltage power cords (IEC C13 to C14) standard

NOTE: All StoreEasy 1X50s ship with a standard 6-foot IEC C-13/C-14 jumper cord (A0K02A). This jumper cord is also included with each standard AC power supply option kit. If a different power cord is required, please check the [ProLiant Power Cables](#) web page.

NOTE: The HPE StoreEasy 1550 Storage product is a tower server that ships standard with a 6' country specific NEMA power cord that allows connection to wall outlets in a home or office. If customers require additional local power cords, they can check the power cord matrix for the appropriate country specific SKU. Please see the following power cord matrix:

<http://www.hp.com/go/powercordmatrix>

System Fans	StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650 E	StoreEasy 1850
	7 hot-plug redundant fans ship standard	2 hot-plug non redundant standard	6 hot-plug redundant fans ship standard	8 hot-plug redundant fans ship standard for 1 processor; 10 hot-plug redundant fans ship standard for 2 processors	6 hot-plug redundant fans ship standard

Form Factor	StoreEasy 1450	StoreEasy 1550	StoreEasy 1650	StoreEasy 1650 E	StoreEasy 1850
	1U rack mount (includes rail kit and cable management arm)	4.5U Tower	2U rack mount (includes rail kit and cable management arm))	2U rack mount (includes rail kit and cable management arm))	2U rack mount (includes rail kit and cable management arm))

Other Feature Specifications

See the corresponding ProLiant QuickSpecs for additional feature specifications.

StoreEasy 1450 (DL160 Gen 9):

<http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c04346224>

StoreEasy 1550 (ML110 Gen 9):

<http://h20195.www2.hp.com/v2/gethtml.aspx?docname=c04545452>

StoreEasy 1650 and 1850 (DL380 Gen 9):

<http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c04346247>

StoreEasy 1650 Expanded (Apollo Gen 9):

<http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c04616495>

NOTE: Options offered in the ProLiant servers listed above will work in the respective StoreEasy product if supported on Windows Server 2012 R2, Standard Edition.

Because StoreEasy is a storage product not every possible option available in the equivalent ProLiant server is listed in the StoreEasy 1X50 QuickSpecs. Options that are shown in this document are the most common ones needed for the primary StoreEasy use model as a file storage product.

Optional Software

HPE Data Protector software

HPE Data Protector Software is enterprise data protection and disaster recovery, ensuring recovery from any disruption. Data Protector integrates a variety of techniques to eliminate backup and recovery windows. The capabilities to eliminate planned downtime range from online backup and backup of open files to zero-downtime, zero-impact backup. The software provides industry-leading instant recovery as well as several disaster recovery alternatives to eliminate unplanned downtime, allowing recovery of entire data centers in minutes.

Data Protector is enabling organizations to reduce costs by automating routine tasks to maximize the effectiveness of the data protection staff. For the price of an entry-level product, it provides the enterprise functionality customers need. Data Protector scales from single server to distributed enterprise, covering an extensive range of heterogeneous applications, operating environments and storage configurations with a single solution. For more information on HPE Data Protector:

<http://www.hp.com/go/dataprotector>

LiveVault from j2 Global

HPE StoreEasy and LiveVault enables organizations to protect their critical application data and manage their long-term retention needs in the cloud. For a 30 day free trial of LiveVault go to:

<http://www.remotedatabackups.com/storeeasy>

Double-Take Availability from Vision Solutions

Protect your critical HPE StoreEasy data with Double-Take Availability's real-time byte-level replication. In the event of a failure, recover the data—with a minimum of loss—from the replicated data repository. For more information read the [Technical White Paper](#).

iCAS software from iTernity

Get open, flexible, and expandable long-term archiving with iTernity Compliant Archive Solution (iCAS). Together, HPE StoreEasy and iCAS are your key to legally compliant data archiving.

For more information on iTernity iCAS go to: http://www.iternity.com/hp-icas_en.html

New Models

These models come with factory-installed drives and the Microsoft Windows Storage Server 2012 R2 Standard Edition operating system pre-installed

Choose a Pre-configured Model

NOTE: All options ship separately and are not factory integrated.

NOTE: Model names are based on raw storage capacity, not available user storage.

HPE StoreEasy 1000 Storage products

Common Specifications	Operating System	Microsoft® Windows Storage Server 2012 R2, Standard Edition
	Licenses	Hewlett Packard Enterprise iLO Advanced including 1yr 24x7 Technical Support and Updates Single Server License
		NOTE: For more information, visit: http://www.hp.com/go/ilo

StoreEasy 1450 Models

Common Specifications	Processor	(1) Intel® Xeon® E5-2603v3 (1.6GHz/6-core/15MB/85W) Processor
	Memory	8GB (1 x 8GB Single Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory)
	Storage Controller	HPE Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller
	Internal Drive Support	Four 3.5" (Large Form Factor) hot-plug drive bays in front
	Network Ports	2 x Gigabit Ethernet
	Expansion Slots	2 x PCIe (one slot occupied by Smart Array P440)
	Power	1 x 900W Gold Non-Redundant
	Form Factor	1U Rack

HP StoreEasy 1450 4TB SATA Storage

(4 x 1TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

K2R12A

HP StoreEasy 1450 8TB SATA Storage

(4 x 2TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

K2R13A

HP StoreEasy 1450 16TB SATA Storage

(4 x 4TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

K2R14A

StoreEasy 1550 Models

Common Specifications	Processor	(1) Intel® Xeon® E5-2603v3 (1.6GHz/6-core/15MB/85W) Processor
	Memory	8GB (1 x 8GB Single Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory)
	Storage Controller	HPE Smart Array P440/4GB FBWC 12Gb 1-port Int SAS Controller
	Internal Drive Support	Four 3.5" (Large Form Factor) hot-plug drive bays in front standard, up to four additional LFF drive bays available as an option
	Network Ports	2 x Gigabit Ethernet

New Models

Expansion Slots	5 x PCIe (one slot occupied by Smart Array P440)
Power	1 x 750W Gold Non-Redundant
Form Factor	4.5U Tower

HP StoreEasy 1550 4TB SATA Storage

(4 x 1TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

K2R63A

HP StoreEasy 1550 8TB SATA Storage

(4 x 2TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

K2R64A

HP StoreEasy 1550 16TB SATA Storage

(4 x 4TB 6G 7.2K RPM MDL SATA LFF HDDs pre-installed)

K2R65A

StoreEasy 1650 Models

Common Specifications	
Processor	(1) Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) Processor
Memory	16GB (2 x 8GB Single Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory) SKU# MOS97A only - 48GB (3 x 16GB Dual Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory)
Storage Controller	HPE Smart Array P440ar/2GB FBWC 12Gb 2-ports Int SAS Controller
Internal Drive Support	Twelve 3.5" (Large Form Factor) hot-plug drive bays in front, Two 2.5" (Small Form Factor) hot-plug drive bays in rear occupied by OS drives SKU# MOS97A only- Twelve 3.5" (Large Form Factor) hot-plug drive bays in front, Three 3.5" (Large Form Factor) hot-plug drive bays in rear, two of which are used as OS drives
Network Ports	4 x Gigabit Ethernet
Expansion Slots	3 x PCIe
Power	2 x 800W Platinum Power Supply
Form Factor	2U rack

HP StoreEasy 1650 16TB SAS Storage

(8 x 2TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 4 open LFF slots)

K2R16A

HP StoreEasy 1650 32TB SAS Storage

(8 x 4TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 4 open LFF slots)

K2R17A

HP StoreEasy 1650 48TB SAS Storage

(8 x 6TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 4 open LFF slots)

K2R18A

NOTE: When adding drives to the any of the 4 open LFF slots for the models above, Hewlett Packard Enterprise recommends as a best practice to use all internal data drives of the same type and capacity.

HP StoreEasy 1650 90TB SATA Storage

(15 x 6TB 6G 7.2K RPM LFF MDL SATA HDDs pre-installed, 12 in front and 3 in rear)

MOS97A

StoreEasy 1650 E Models

New Models

Common Specifications	Processor	(1) Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) Processor
	Memory	16GB (2 x 8GB Single Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory)
	Storage Controller	HPE Flexible Smart Array P840ar/2G FIO Controller
	Internal Drive Support	Twenty eight 3.5" (Large Form Factor) hot-plug drive bays, Two 2.5" (Small Form Factor) hot-plug drive bays in PCIe slots occupied by OS drives
	Network Ports	2 x Gigabit Ethernet
	Expansion Slots	4 x PCIe
	Power	2 x 800W Platinum Power Supply
	Form Factor	2U rack

HP StoreEasy 1650 Expanded 32TB SAS Storage

(8 x 4TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 20 open LFF slots)

N9Y09A

HP StoreEasy 1650 Expanded 48TB SAS Storage

(8 x 6TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 20 open LFF slots)

N9Y10A

HP StoreEasy 1650 Expanded 64TB SAS Storage

(8 x 8TB 6G 7.2K RPM LFF MDL SAS HDDs pre-installed, 20 open LFF slots)

N9Y11A

NOTE: When adding drives to the any of the 4 open LFF slots for the models above, Hewlett Packard Enterprise recommends as best practice to use all internal data drives of the same type and capacity.

StoreEasy 1850 Models

Common Specifications	Processor	(1) Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) Processor
	Memory	16GB (2 x 8GB Single Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory)
	Storage Controller	HPE Smart Array P440ar/2GB FBWC 12Gb 2-ports Int SAS Controller
	Internal Drive Support	Twelve 3.5" (Large Form Factor) hot-plug drive bays in front, Two 2.5" (Small Form Factor) hot-plug drive bays in rear occupied by OS drives
	Network Ports	4 x Gigabit Ethernet
	Expansion Slots	3 x PCIe
	Power	2 x 800W Platinum Power Supply
	Form Factor	2U rack

HP StoreEasy 1850 9.6TB SAS Storage

(8 x 1.2TB 12G 10K RPM ENT SAS SFF HDDs pre-installed, 16 open SFF slots)

K2R20A

HP StoreEasy 1850 14.4TB SAS Storage

(8 x 1.8TB 12G 10K RPM ENT SAS 512e SFF HDDs pre-installed, 16 open SFF slots)

K2R21A

NOTE: When adding drives to the any of the 16 open SFF slots for these models, Hewlett Packard Enterprise recommends as a best practice to use all internal data drives of the same type and capacity.

The StoreEasy 1450 and 1550 models below have no internal drives pre-installed. These models require selection of drives for factory integration.

NOTE: 4 drives of the same type and capacity must be selected for the StoreEasy 1450 or 1550 model. This model cannot ship with less than 4 drives pre-configured so that the operating system can be pre-installed. The 4 drives will be configured as RAID 6 for OS installation. Other drive types and capacities can be used in external enclosures.

New Models

The StoreEasy 1650 and 1850 models come with 2 x120GB 6G SATA Value Endurance SFF (2.5-inch) SC Solid State Disk (SSD) drives factory configured as RAID 1 with OS pre-installed (OS drives are in the two rear bays). The StoreEasy 1650 Expanded comes with 2 x 120GB SSDs configured as RAID 1 with the OS pre-installed (OS drives are on M.2 PCIe in rear). The StoreEasy 1650, 1650 E and 1850 can ship with just the OS drives and no data drives. If data drives are needed select the drives for factory integration.

NOTE: Hewlett Packard Enterprise recommends that the internal data drives for these models be the same type and capacity. The data drives don't have to be the same as the OS drives.

New Models

Choose a Base Model, then Select Hard Drives

NOTE: Options (other than drives selected as part of the configure-to-order process) ship separately and are not factory integrated.

HPE StoreEasy 1000 Storage products (Base models)

Common Specifications	Operating System	Microsoft® Windows Storage Server 2012 R2, Standard Edition
	Licenses	HPE iLO Advanced including 1yr 24x7 Technical Support and Updates Single Server License
		NOTE: For more information, visit: http://www.hp.com/go/ilo

StoreEasy 1450 Storage

K2R11A

NOTE: This model does not include pre-configured HDDs. At least four drives of the same type/capacity, 100GB or greater, must be ordered for pre-installation of OS in the factory. This system cannot be shipped with less than 4 HDDs. The four drives will be factory configured as RAID 6 with the OS pre-installed.

Specifications	Same as the StoreEasy 1450 pre-configured models listed above	
Drive Options	Minimum Number of Drives Required	4
	Maximum Number of Drives Allowed	4

StoreEasy 1550 Storage

K2R62A

NOTE: This model does not include pre-configured HDDs. A minimum of 4 HDDs of the same type and a capacity greater than 100GB must be ordered for factory integration. This system cannot be shipped with less than 4 HDDs. The four drives will be factory configured as RAID 6 with the OS pre-installed.

Specifications	Same as the StoreEasy 1550 pre-configured models listed above	
Drive Options	Minimum Number of Drives Required	4
	Maximum Number of Drives Allowed	8 (requires optional LFF HDD card cage)

StoreEasy 1650 Storage

K2R15A

NOTE: This model does not include pre-configured data drives. It does include 2 x120GB 6G SATA Value Endurance SFF (2.5-inch) SC Solid State Disk (SSD) drives factory configured as RAID 1 with OS pre-installed (the OS drives are in the two rear SFF bays). Data drives can be added for factory integration.

Specifications	Same as the StoreEasy 1650 pre-configured models listed above	
Drive Options	Minimum Number of Drives Required	0
	Maximum Number of Drives Allowed	12

StoreEasy 1650 Expanded Storage

N9Y08A

NOTE: This model does not include pre-configured data drives. It does include 2 x120GB 6G SATA Value Endurance Solid State Disk (SSD) drives factory configured as RAID 1 with OS pre-installed (the OS drives are on the M.2 PCIe in rear). Data drives can be added for factory integration.

Specifications	Same as the StoreEasy 1650 E pre-configured models listed above	
Drive Options	Minimum Number of Drives Required	0
	Maximum Number of Drives Allowed	28

StoreEasy 1850 Storage

K2R19A

NOTE: This model does not include pre-configured data drives. It does include 2 x120GB 6G SATA Value Endurance SFF (2.5-inch) SC Solid State Disk (SSD) drives factory configured as RAID 1 with OS pre-installed (the OS drives are in the two rear SFF bays). Data drives can be added for factory integration.

Specifications Same as the StoreEasy 1850 pre-configured models listed above

Drive Options
Minimum Number of Drives Required 0
Maximum Number of Drives Allowed 24

Options

The following options are available for both StoreEasy Pre-configured and Drive Configure-to-Order models

NOTE: Options ship separately and are not factory integrated

NOTE: Carefully match options to your model to ensure compatibility

NOTE: When adding a second processor the memory of both the 1st processor and second processor must be the same type and capacity.

Add Another Processor

StoreEasy 1450	HP DL160 Gen9 Intel® Xeon® E5-2603v3 (1.6GHz/6-core/15MB/85W) Processor Kit	763235-B21
StoreEasy 1650/1850	HP DL380 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) Processor Kit	719052-B21
StoreEasy 1650 Expanded	HP Apollo 4200 Gen9 Intel® Xeon® E5-2609v3 (1.9GHz/6-core/15MB/85W) Processor Kit	803303-B21

NOTE: A second processor can only be added to the StoreEasy 1650 Expanded CTO model (sku N9Y08A) in the factory.

NOTE: When a second processor is ordered with the StoreEasy 1650 Expanded CTO model, a redundant fan kit (sku 806562-B21) will automatically be added to the order. This will increase the total number of fans in the CTO model from 8 to 10.

NOTE: An upgrade kit to add a second processor to the StoreEasy 1650 Expanded CTO or BTO models for field installation will be available at a later date.

Add More Memory

NOTE: Hewlett Packard Enterprise recommends that you add the same type memory to the product that is shipped standard with the product

NOTE: Number of available DIMM sockets varies by model. **NOTE:** Hewlett Packard Enterprise memory from previous generation servers are not fully compatible with Smart Memory features in Gen9 Servers.

StoreEasy 1450/1550/1650/1650 E/1850	Registered DIMMs (RDIMMs) for E5-2600v3 Series HP 8GB (1x8GB) Single Rank x4 DDR4-2133 CAS-15-15-15 Registered Memory Kit	726718-B21
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Add a Network Adapter

StoreEasy 1450/1650/1650 E/1850	1 Gigabit Ethernet adapters	
	HP Ethernet 1Gb 4-port 366T Adapter	811546-B21
	HP Ethernet 1Gb 2-port 361T Adapter	652497-B21
	HP Ethernet 1Gb 4-port 331T Adapter	647594-B21
	HP Ethernet 1Gb 2-port 332T Adapter	615732-B21
	10 Gigabit Ethernet adapters	
	HP Ethernet 10Gb 2-port 530SFP Adapter	652503-B21
	HP Ethernet 10Gb 2-port 530T Adapter	656596-B21
	HP Ethernet 10Gb 2-port 560SFP+ Adapter	665249-B21
	HP Ethernet 10Gb 2-port 561T Adapter	716591-B21
HP Ethernet 10Gb 2-port 546SFP+ Adapter	779793-B21	
HP Ethernet 10Gb 2-port 557SFP+ Adapter	788995-B21	
StoreEasy 1650/1650 E/1850	FlexibleLOM Adapters	
	HP Ethernet 1Gb 4-port 331FLR Adapter	629135-B22
	HP Ethernet 1Gb 4-port 366FLR Adapter	665240-B21

Options

HP FlexFabric 10Gb 2-port 533FLR-T Adapter	700759-B21
HP Ethernet 10Gb 2-port 560FLR-SFP+ Adapter	665243-B21

NOTE: Only one FlexibleLOM can be added to the server. These options are upgradeable and can be changed from the original configuration after the server is shipped.

StoreEasy 1450/1650/ 1650 E/1850

InfiniBand Adapters

QLogic InfiniBand 4X QDR PCI-E G2 Dual Port HCA	583211-B21
HP InfiniBand FDR 2-port 545QSFP Adapter	702211-B21
HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+QSFP Adapter	764284-B21
HP InfiniBand FDR/Ethernet 10Gb/40Gb 2-port 544+FLR-QSFP Adapter	764285-B21
HP InfiniBand QDR/Ethernet 10Gb 2-port 544+FLR-QSFP Adapter	764286-B21

NOTE: Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately. Please see the related NIC QuickSpecs for Technical Specifications and additional information:

<http://www.hp.com/go/ProLiantNICs>.

Add More Storage

HPE StoreEasy Storage products come standard with at least one Smart Array Controller that supports internal drives.

NOTE: Expansion slot availability varies by model.

2nd 4LFF Hot Plug Drive Cage Kit for StoreEasy 1540

HP ML110 Gen9 4LFF Hot Plug Drive Cage Kit	784584-B21
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SAS Controllers for 1450/1550/1650/1650 E /1850

HPE Smart Array Controllers

HP Smart Array P441/4GB FBWC 12Gb 2-ports Ext SAS Controller	726825-B21
HP Smart Array P841/4GB FBWC 12Gb 4-ports Ext SAS Controller	726903-B21

NOTE: Not available for the StoreEasy 1650 Expanded models.

HPE Smart Host Bus Adapters

HP H241 12Gb 2-ports Ext Smart Host Bus Adapter	726911-B21
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Fibre Channel HBAs and CNAs for StoreEasy 1450/1650/1850

NOTE: For the complete listing of Fibre Channel Host Bus Adapters for Windows please see:

<http://h18006.www1.hp.com/storage/saninfrastructure/hba.html>.

Emulex Fibre Channel HBAs

HP 81E 8Gb 1-port PCIe Fibre Channel Host Bus Adapter	AJ762B
HP 82E 8Gb 2-port PCIe Fibre Channel Host Bus Adapter	AJ763B
HP StoreFabric SN1100E 16Gb Single Port Fibre Channel Host Bus Adapter	C8R38A
HP StoreFabric SN1100E 16Gb Dual Port Fibre Channel Host Bus Adapter	C8R39A

QLogic Fibre Channel HBAs

Options

HP 81Q 8Gb 1-port PCIe Fibre Channel Host Bus Adapter	AK344A
HP 82Q 8Gb 2-port PCIe Fibre Channel Host Bus Adapter	AJ764A
HP StoreFabric SN1000Q 16GB 1-port PCIe Fibre Channel Host Bus Adapter	QW971A
HP StoreFabric SN1000Q 16GB 2-port PCIe Fibre Channel Host Bus Adapter	QW972A

Converged Network Adapter

HP StoreFabric CN1100R Dual Port Converged Network Adapter	QW990A
HP StoreFabric CN1200E 10Gb Converged Network Adapter	E7Y06A

**HPE Drives for
StoreEasy
1450/1550/1650**
StoreEasy LFF Drive Bundles

HP 32TB SAS LFF Smart Carrier 4-pack HDD Bundle	N9Y12A
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NOTE: Bundle contains 4 x 8TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive (SKU#793703-B21)

HP StoreEasy 24TB SAS LFF(3.5in) Smart Carrier 4-pack HDD Bundle	K2R22A
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NOTE: Bundle contains 4 x HPE 6TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive (SKU 761477-B21)

HP StoreEasy 16TB SAS LFF(3.5in) Smart Carrier 4-pack HDD Bundle	E7W91A
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NOTE: Bundle contains 4 x HPE 4TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive (SKU 695510-B21)

HP StoreEasy 12TB SAS LFF(3.5in) Smart Carrier 4-pack HDD Bundle	E7W90A
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NOTE: Bundle contains 4 x HPE 3TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive (SKU 652766-B21)

HP StoreEasy 8TB SAS LFF(3.5in) Smart Carrier 4-pack HDD Bundle	E7W89A
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NOTE: Bundle contains 4 x HPE 2TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive (SKU 652753-B21)

HP StoreEasy 4TB SAS LFF(3.5in) Smart Carrier 4-pack HDD Bundle	E7W88A
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NOTE: Bundle contains 4 x HPE 1TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive (SKU 652753-B21)

SAS Hot Plug LFF (3.5-inch) Enterprise (ENT) Drives

HP 600GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	765424-B21
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HP 450GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	737394-B21
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HP 300GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	737261-B21
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SAS Hot Plug LFF (3.5-inch) Midline (MDL) Drives

HP 8TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793703-B21
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NOTE: This drive is not available for the StoreEasy 1550

Options

HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive 793699-B21

NOTE: This drive is not available for the StoreEasy 1550

HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive 765259-B21

HP 6TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive 761477-B21

HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive 765257-B21

HP 4TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive 695510-B21

HP 3TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive 652766-B21

HP 2TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive 652757-B21

HP 1TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive 652753-B21

SAS Hot Plug LFF (3.5-inch) Performance Drives

HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive 793671-B21

NOTE: This drive is not available for the StoreEasy 1550

HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive 793669-B21

NOTE: This drive is not available for the StoreEasy 1550

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

HP 8TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive 793695-B21

NOTE: This drive is not available for the StoreEasy 1550

HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive 793683-B21

NOTE: This drive is not available for the StoreEasy 1550

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

HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive 753874-B21

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

HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive 658079-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

SATA Hot Plug LFF (3.5-inch) Performance Drives

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

NOTE: This drive is not available for the StoreEasy 1550

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

NOTE: This drive is not available for the StoreEasy 1550

12G SAS Hot Plug LFF (3.5-inch) Enterprise Value Solid State Drives

HP 1.6TB 12G SAS Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive 762272-B21

NOTE: This drive is not available for the StoreEasy 1550

HP 800GB 12G SAS Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive 762270-B21

6G SATA Hot Plug LFF (3.5-inch) Enterprise Mainstream Solid State Drives

Options

HP 800GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691860-B21
HP 400GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691856-B21
HP 200GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691854-B21
HP 100GB 6G SATA Mainstream Endurance LFF 3.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691852-B21
6G SATA Hot Plug LFF (3.5-inch) SC Read Intensive Solid State Drives	
HP 480GB 6G SATA Read Intensive LFF 3.5-in SC Converter 3yr Wty Solid State Drive	789147-B21
NOTE: This drive is not available for the StoreEasy 1450	
HP 240GB 6G SATA Read Intensive LFF 3.5-in SC Converter 3yr Wty Solid State Drive	789137-B21
NOTE: This drive is not available for the StoreEasy 1450	
6G SATA Hot Plug LFF Value Endurance (3.5-inch) Converter Enterprise Value G1 Solid State Drives	
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive	756660-B21
HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive	756639-B21
HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive	756624-B21
6G SATA Hot Plug LFF Value Endurance (3.5-inch) Converter Enterprise Value M1 Solid State Drives	
HP 800GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764945-B21
NOTE: This drive is not available for the StoreEasy 1550	
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764943-B21
HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764941-B21
HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty M1 Solid State Drive	764939-B21
6G SATA Hot Plug LFF (3.5-inch) Enterprise Value Solid State Drives	
HP 1.6TB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive	757342-B21
HP 800GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	718189-B21
HP 600GB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive	739900-B21
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	718183-B21
HP 300GB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive	739890-B21
HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty	718177-B21

Options

Solid State Drive

6G SATA Hot Plug LFF (3.5-inch) Enterprise Light G1 Solid State Drives

HP 960GB 6G SATA Light Endurance LFF 3.5-in SC Converter ENT Light 3yr Wty 756604-B21
G1 Solid State Drive

HPE Drives for StoreEasy 1650 Expanded

HP StoreEasy 8TB SAS LFF (3.5in) Low profile 4-pack HDD Bundle
NOTE: Bundle contains 4 x HPE 2TB 6G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive (SKU# 797279-B21) N9Y58A

HP StoreEasy 16TB SAS LFF (3.5in) Low profile 4-pack HDD Bundle
NOTE: Bundle contains 4 x HPE 4TB 6G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive (SKU# 797267-B21) N9Y43A

HP StoreEasy 24TB SAS LFF (3.5in) Low profile 4-pack HDD Bundle
NOTE: Bundle contains 4 x HPE 6TB 6G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive (SKU# 797263-B21) N9Y44A

HP StoreEasy 32TB SAS LFF (3.5in) Low profile 4-pack HDD Bundle
NOTE: Bundle contains 4 x HPE 8TB 6G SAS 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive (SKU# 805337-B21) N9Y45A

HP StoreEasy 32TB SATA LFF (3.5in) Low profile 4-pack HDD
NOTE: Bundle contains 4 x HPE 8TB 6G SATA 7.2K rpm LFF (3.5-inch) Low Profile Midline 1yr Warranty Hard Drive (SKU# 805334-B21) N9Y46A

HPE Drives for StoreEasy 1850**StoreEasy SFF Drive Bundles**

HP StoreEasy 7.2TB SAS SFF(2.5in) Smart Carrier 4-pack HDD Bundle K2R23A

NOTE: Bundle contains 4 x HPE 1.8TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 512e 3yr Warranty Hard Drive (SKU 791034-B21)

HP StoreEasy 4.8TB SAS SFF(2.5in) Smart Carrier 4-pack HDD Bundle E7W93A

NOTE: Bundle contains 4 x HPE 1.2TB 6G SAS 10K rpm SFF (2.5-inch) SC Dual Port Enterprise 3yr Warranty Hard Drive (SKU 718162-B21)

HP StoreEasy 3.6TB SAS SFF(2.5in) Smart Carrier 4-pack HDD Bundle E7W92A

NOTE: Bundle contains 4 x HPE 900GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive (SKU 652589-B21)

SAS Hot Plug SFF (2.5-inch) Enterprise (ENT) Drives

HP 1.8TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 512e 3yr Warranty Hard Drive 791034-B21

HP 1.2TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 781518-B21

HP 1.2TB 6G SAS 10K rpm SFF (2.5-inch) SC Dual Port Enterprise 3yr Warranty Hard Drive 718162-B21

HP 900GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 785069-B21

HP 900GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 652589-B21

HP 600GB 12G SAS 15K rpm SFF (2.5-inch) SC 512e Enterprise 3yr Warranty Hard Drive 748387-B21

HP 600GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive 759212-B21

Options

HP 600GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	781516-B21
HP 600GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652583-B21
HP 450GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759210-B21
HP 450GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652572-B21
HP 300GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759208-B21
HP 300GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	785067-B21
HP 300GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652611-B21
HP 300GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652564-B21
HP 146GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652605-B21

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

HP 2TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765466-B21
HP 1TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765464-B21
HP 1TB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	652749-B21
HP 500GB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	652745-B21

SATA Hot Plug SFF (2.5-inch) Midline (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
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

12G SAS Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives

HP 1.6TB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779176-B21
HP 800GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779172-B21
HP 400GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779168-B21
HP 200GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779164-B21
HP 200GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802578-B21
HP 400GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802582-B21
HP 800GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802586-B21
HP 1.92TB 12G SAS Read Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802891-B21

12G SAS Hot Plug SFF (2.5-inch) Enterprise Value Solid State Drives

HP 1.6TB 12G SAS Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	762263-B21
HP 800GB 12G SAS Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	762261-B21

6G SATA Hot Plug SFF (2.5-inch) Enterprise Mainstream Solid State Drives

HP 800GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691868-B21
HP 400GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691866-B21

Options

Wty Solid State Drive	
HP 200GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691864-B21
HP 100GB 6G SATA Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive	691862-B21
6G SATA Hot Plug SFF (2.5-inch) Enterprise Value Solid State Drives	
HP 1.6TB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	757339-B21
HP 800GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	717973-B21
HP 600GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	739898-B21
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	717971-B21
HP 300GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	739888-B21
HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	717969-B21
6G SATA Hot Plug SFF Value Endurance (2.5-inch) Enterprise Value G1 Solid State Drives	
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive	756657-B21
HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive	756636-B21
HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive	756621-B21
6G SATA Hot Plug SFF (2.5-inch) Enterprise Light G1 Solid State Drives	
HP 960GB 6G SATA Light Endurance SFF 2.5-in SC Enterprise Light 3yr Wty G1 Solid State Drive	756601-B21
6G SATA Hot Plug SFF Value Endurance (2.5-inch) Enterprise Value M1 Solid State Drives	
HP 800GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764929-B21
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764927-B21
HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764925-B21
HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764923-B21
6G SATA Hot Plug LFF (3.5-inch) SC Read Intensive Solid State Drives	
HP 240GB 6G SATA Read Intensive LFF 3.5-in SC Converter 3yr Wty Solid State Drive	789137-B21
HP 480GB 6G SATA Read Intensive LFF 3.5-in SC Converter 3yr Wty Solid State Drive	789147-B21

D3000 or D6000 Disk Enclosures

StoreEasy 1000 products support all of the D3000 or D6000 Disk Enclosure products for external capacity expansion. A Smart Array with external ports must be added to the StoreEasy 1450, 1550, 1650, 1650 E and 1850 to add external Disk Enclosures. (See the D3000 or D6000 Disk Enclosure QuickSpecs for more information)

Options

Add a Power Supply

The HPE StoreEasy 1450 come standard with one power supply. Add a second power supply for redundancy.

StoreEasy 1450	HP 800W Gold (Redundant)/900W (Non-Redundant) AC Power Input Module	744689-B21
StoreEasy 1550	HP 750W Common Slot Gold Hot Plug Power Supply Kit	512327-B21

StoreEasy 1450 I/O Expansion Option	HP DL160 Gen9 Low Profile PCIe CPU2 Riser Kit NOTE: CPU 2 is required if this riser is to be installed, enables one PCIe3 slot.	725586-B21
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StoreEasy 1650 and 1850 I/O Expansion Option	HP DL380 Gen9 Secondary 3 Slot GPU Ready Riser Kit NOTE: This is for slot 2 and supports double wide GPGPUs. Slot2: 2x Gen3 x16 FH/FL, 1xGen3 x8 FH/HL.	719073-B21
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StoreEasy System Recovery DVD	HP StoreEasy XX50 Recovery Software Media Kit	P4A92A
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The HPE StoreEasy XX50 Recovery Software Media Kit contains a System Recovery DVD that is used to re-install the factory operating system image. Booting the system from the System Recovery DVD will restore the operating system image and logical drive to the factory default state. This enables recovery of the system if all other means to boot the system fail. Refer to the StoreEasy 1000 Administrator Guide for more information on performing a System Recovery.

NOTE: If desired the StoreEasy XX50 Recovery Software can be downloaded from the Hewlett Packard Enterprise Software Depot at no charge, so that the user can create their own System Recovery DVD or System Recovery USB flash drive. The Recovery Software is available here:
<https://h20392.www2.hp.com/portal/swdepot/displayProductInfo.do?productNumber=P4A92-11001>

NOTE: For more information on how to perform a system recovery on a StoreEasy 1X50 refer to the StoreEasy 1000 Administrator's Guide. The guide can be downloaded from <http://www.hp.com/support>. Search for the StoreEasy product model in the drivers and download section.

NOTE: All data on the original operating system logical drive is erased during the System Recovery process. Back up any data on the operating system drives before performing the System Recovery if possible.

NOTE: While the System Recovery process makes every attempt to preserve the existing data volumes, you should have a backup of your data before recovering the system.

Add Optical Drives

StoreEasy 1450/1550	HP 9.5mm SATA DVD-ROM JackBlack Gen9 Optical Drive	726536-B21
	HP 9.5mm SATA DVD-RW JackBlack G9 Optical Drive	726537-B21

Options

HPE Security

HP Trusted Platform Module Option

488069-B21

NOTE: The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys. Windows® BitLocker™ Drive Encryption (BitLocker) is a data protection feature available in Windows Storage Server® 2012 R2. BitLocker leverages the enhanced security capabilities of a Trusted Platform Module (TPM) version 1.2. The TPM works with BitLocker to help protect user data and to ensure that a StoreEasy running Windows Storage Server 2012 R2 has not been tampered with while the system was offline. For more information about TPM, including a white paper, go to: <http://www.hp.com/go/TPM>.

NOTE: The TPM key is unique to every TPM deployed server and must be retained. Misplacing or losing the key could result in data loss.

Service and Support, HPE Care Pack, and Warranty Information (New Models)

Warranty

StoreEasy 1650, StoreEasy 1650 E and StoreEasy 1850 Storage products come with a standard 3-3-3 warranty (3 years parts exchange, 3 years labor and 3 years onsite, next business day response). StoreEasy 1450 and 1550 Storage products come with a standard 3-1-1 warranty (3 years parts exchange, 1 year labor and 1 year onsite, next business day response). Software media is warranted to be free of physical defect for a period of 90 days from delivery.

NOTE: Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

Services Included with the Product One year of Hewlett Packard Enterprise Software Support for the Windows Storage Server OS, standard 9x5 business hours (software advisory and remedial software telephone support, and media and documentation distribution service).

Service and Support **Services to accelerate time to results**

Hewlett Packard Enterprise Storage Services bring you a rich portfolio of consulting and support services designed to add value to our core storage products and solutions. We have the know-how and experience to put storage technology to work for you. We work closely with you as your strategic partner, leveraging our full services portfolio to make sure that everything works to optimize your enterprise.

Choose from services aligned to our storage product offerings and lifecycle. From mission-critical onsite services to innovative web-based remote support, you choose the precise level of attention and support your business demands.

Discover, plan, and design

Choose from a rich portfolio of services to make the most of HPE StoreEasy Storage, so you can efficiently and affordably consolidate, manage, and extract value from unstructured data.

Hewlett Packard Enterprise Services can help you discover needs and create a plan for simplifying the environment, reducing risk, and maximizing your storage investments

HPE Backup Recovery Efficiency Analysis - Assessment of how efficiently backup components are being used as the amount of data to be backed up continues to grow exponentially via analysis intelligence and a snapshot of your current backup environment.

<http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA3-8490ENW.pdf>

HPE Backup Recovery Impact Analysis - Focus placed on service requirements and design as the key to success for gaining a clear understanding of the role of increasingly diverse data protection strategies.

<http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA4-1175ENW.pdf>

HPE Backup Recovery Modernization - Initial discovery, interviews, reference architecture design, proposal content development, vendor grading, and final recommendations carried out so as to require minimal resources and locations on your part.

<http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA4-1199ENW.pdf>

HPE Storage Cloud Design Service - Build a scalable, low-cost enterprise storage environment with inherent cloud benefits to meet big data needs.

Deploy and integrate **We can help you configure, set up, and efficiently use your HPE StoreEasy Storage, as well as help**

Service and Support, HPE Care Pack, and Warranty Information (New Models)

migrate data, improve capacity utilization, and establish information management standards used across backup, replication, and archiving needs.

HPE StoreEasy 1000/3000 Storage S Installation and Startup Service -Expert system installation and setup by a Hewlett Packard Enterprise technical specialist designed to reduce implementation time and cost, with your basic questions about the service answered during the included orientation session.
http://h20195.www2.hp.com/v2/GetDocument.aspx?cc=us&doclang=EN_US&docname=4AA2-6112ENW&doctype=data%20sheet&lc=en&searchquery=&jumpid=reg_r1002_usen_c-001_title_r0004

HPE Storage Data Migration Services - End-to-end data migration service providing seamless discovery, assessment, planning, and design, completely customizable to your organization's storage area network or network attached storage environment and using innovative software to help you migrate to Hewlett Packard Enterprise storage quickly and efficiently.
<http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA3-0774ENW.pdf>

HPE Storage and Data Consultant Residency Service - Strategic augmentation of your current environment with Hewlett Packard Enterprise resources who become your trusted advisor to provide answers that are right for your storage and backup environment.
<http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA3-9481ENW.pdf>

HPE Proactive Select - A flexible way to purchase services to fit your environment with an extensive menu of Hewlett Packard Enterprise Proactive Select event and technical services, such as onsite firmware upgrades, health checks, assessments, and education.
<http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA2-3842ENW.pdf>

Operate and support

Choose the right support to maximize uptime, free up your resources, and achieve improved value-as you get the most out of the existing IT assets while accelerating time-to-revenue.

HPE Proactive Care 24x7 - Hardware and software support services designed specifically for your technology with rapid access to Advanced Solution Center Specialists plus firmware and software management and best practice advice
<http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA3-8855ENW.pdf>

HPE Proactive Care Personalized Support - An option-if you have HPE Proactive Care- to bring increased personalization of the Proactive Care support experience through the assignment of an Account Service Manager (ASM) who provides IT best practice advice to help address IT issues and projects. <http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA4-3446ENW.pdf>

HPE Support Plus 24 - Support for environments where proactive help from Hewlett Packard Enterprise is not required, with 24x7 hardware and software support onsite that includes third-party support with a maximum four-hour onsite response.
<http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-6638EN.pdf>

HPE Education Services - Comprehensive training for new, as well as experienced, storage administrators designed to expand your skills and keep you up to speed with the latest storage and virtualization technology from HPE Storage.
<http://education.hp.com/curr-storsan.htm>

Service and Support, HPE Care Pack, and Warranty Information (New Models)

<p>Optimized Care - Delivers the highest levels of performance and stability through deployment and proactive management practices</p>	<p>Choose from three levels of operate and support care HPE Proactive Care 24x7-Plus, 20 credits per year</p> <p>Additional options - HPE Proactive Care Personalized Support (once per Proactive Care support new environment), an additional day of Hewlett Packard Enterprise Personalized Support, and 10 additional HPE Proactive Select credits per year</p>
<p>Standard Care- maintains high level of uptime, along with expert help to cut the cost and complexity of implementation and support</p>	<p>HPE Proactive Care 24x7-Plus, 10 credits per year</p> <p>Additional options - HPE Proactive Care Personalized Support (once per Proactive Care support new environment), an additional day of HPE Personalized Support, and 10 additional HPE Proactive Select credits per year</p>
<p>Basic Care-Minimum recommended support</p>	<p>Support Plus 24- Plus, 10 credits per year</p> <p>Additional options - 10 HPE Proactive Select credits per year</p>
<p>Remote Support Automation</p>	<p>HPE Insight Remote Support-Available at no additional cost to all warranty, HPE Care Pack Service and service agreement customers, uses proven technology to deliver secure, reliable 24x7 remote monitoring, diagnosis and problem resolution.</p> <p>http://h20195.www2.hp.com/V2/GetPDF.aspx/4AA2-4676ENW.pdf</p> <p>http://h18004.www1.hp.com/products/servers/management/insight-remote-support/overview.html</p>
<p>For more information</p>	<p>http://www.hp.com/services/storage</p> <p>To learn more on HPE Storage Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner HPE Care Pack Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:</p> <ul style="list-style-type: none"> • Services for customers purchasing from Hewlett Packard Enterprise or an enterprise reseller are quoted using Hewlett Packard Enterprise order configuration tools. • Customers purchasing from a commercial reseller can find HPE Care Pack Services at http://www.hp.com/go/lookuptool

Memory

See the ProLiant Gen 9 QuickSpecs for information on memory configurations.

StoreEasy 1450 (DL160 Gen 9): <http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c04346224>

StoreEasy 1550 (ML110 Gen 9): <http://www8.hp.com/h20195/v2/GetDocument.aspx?docname=c04545445>

StoreEasy 1650 and 1850 (DL380 Gen 9): <http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c04346247>

StoreEasy 1650 Expanded (Apollo Gen 9): <http://h20195.www2.hp.com/v2/GetDocument.aspx?docname=c04616495>

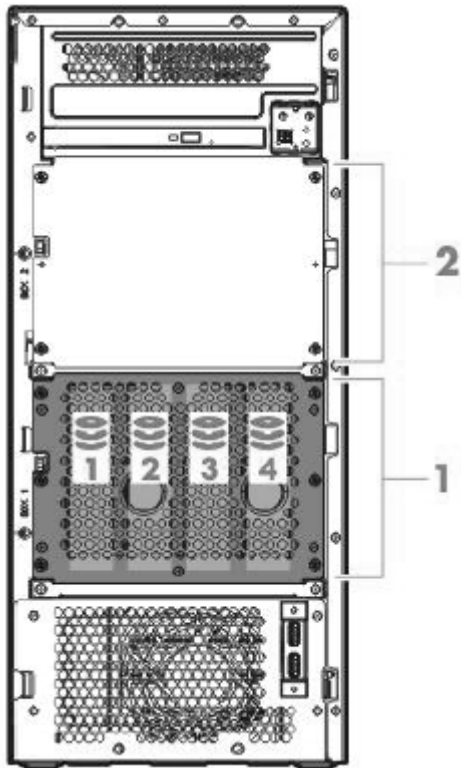
Storage

StoreEasy 1450



4 x LFF SATA/SAS/SSD Hot Pluggable Hard Drives Bays

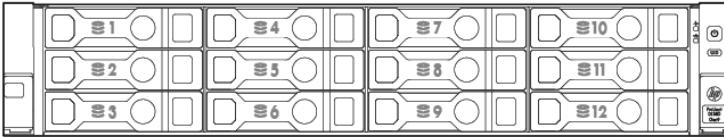
StoreEasy 1550



1-4 4 x LFF SATA/SAS/SSD Hot Pluggable Hard Drives Bays

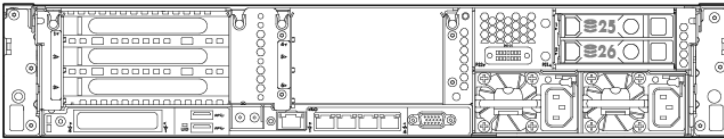
Storage

StoreEasy 1650 (12 LFF HDD in Front, 2 SFF in Rear)



1-12

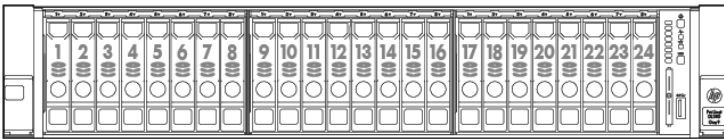
12 x LFF SATA/SAS/SDD Hot Pluggable Hard Drive Bays



25-26

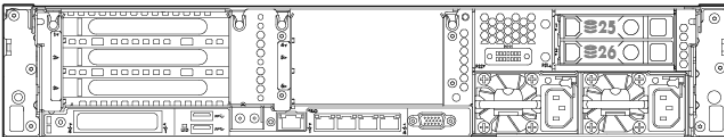
2 x SFF SATA/SAS/SSD Hot Pluggable Rear Hard Drive Bays (StoreEasy 1650 90TB SATA SKU# MOS97A has three LFF Hard Drive Bays in rear – not shown)

StoreEasy 1850



1-24

24 x SFF SATA/SAS/SDD Hot Pluggable Hard drive bays



25-26

2 x SFF SATA/SAS/SSD Hot Pluggable Rear Hard Drive Bays

Technical Specifications

StoreEasy 1450	Dimensions (H x W x D)	4 LFF - 1.7 x 17.1 x 23.9 inches (4.29 x 43.46 x 60.76 cm)	
	Weight (approximate)	Maximum:	33.04 lb (15kg)
		(all hard drives, power supplies, and processors installed)	
		Minimum:	22.03 lb (10kg)
		(one hard drive, power supply, and processor installed)	
	Input Requirements	Rated Line Voltage	100 to 240 VAC
	for Standard 460W PSU, see power specifications tables for detail on 460W, 750W and 1200W power supplies)	Rated Input Current	For 550W Power Supply: 6.7 A (at 100 VAC) 3.3 A (at 200 VAC)
		Rated Input Frequency	47 to 63 Hz
		Rated Input Power	For 550 W Power Supply: < 670 W (at 100 VAC), < 660 W (at 200 VAC),
	BTU Rating	Maximum	For 550 W Power Supply: 2201 BTU/hr (at 100 VAC), 2153 BTU/hr (at 200 VAC)
	Power Specifications	To review typical system power ratings use the Power Advisor which is available via the online tool located at URL: http://www.hp.com/go/proliant-energy-efficient or http://www.hp.com/go/hppoweradvisor - Click on the system of interest. Example: DL160 Gen9- Follow the instructions of the next screens.	
	Power Supply Output	Rated Steady-State Power	For 550 W Power Supply: 550 W (at 100 VAC), 550 W (at 200 VAC),
		Maximum Peak Power	For 550 W Power Supply: 550 W (at 100 VAC), 550 W (at 200 VAC),
	System Inlet Temperature	Standard Operating Support	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed. System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).
		Extended Ambient	For approved hardware configurations, the supported system inlet range is

Technical Specifications

Operating Support extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:

<http://www.hp.com/servers/ashrae>.

For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:

<http://www.hp.com/servers/ashrae>.

System performance may be reduced if operating in the extended ambient operating range or with a fan fault.

NOTE: Supports A3 and A4 extended ambient.

Relative Humidity	Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).
	Operating	Minimum to be the higher (more moisture) of -12°C (10.4°F) dew point or 8% relative humidity. Maximum to be the lower (less moisture) of 24°C (75.2°F) dew point or 90% relative humidity.
(non-condensing)	Non-operating	5% to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.
Altitude	Operating	3048 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
	Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
Acoustic Noise	Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109).	
	Idle	
	L WAd	Entry 5.1 B Base 5.2 B Performance 5.0 B
	L pAm	Entry 34.2 dBA Base 35.9 dBA Performance 34.9 dBA
Operating		
	L WAd	Entry 5.3 B Base 5.3 B Performance 5.6 B
	L pAm	Entry 36.3 dBA Base 36.2 dBA Performance 39.7 dBA

Technical Specifications

Emissions Classification (EMC)	FCC Rating Normative Standards	Class A CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22; K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1
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NOTE: Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.

HPE Dynamic Smart Array B140i Controller	Number of PCI links	Four
	PCI link rate	4Gb/s
	Storage protocol support	SATA
	SAS/SATA peak data transfer rate	6Gb/s
	Number of SAS/SATA links	10 links
	SAS/SATA connectivity	2x4 connectors; 2x1 connectors
	Expander support	No
	Drives supported (max)	Up to 10 Internal Drives
	RAID support	0, 1, 10, 5 SATA
	Software management	HPE SSA, SMH, SIM
	Warranty	Server warranty
	HPE Secure Encryption license	Not Supported
HPE SmartCache License	Not Supported	
HPE Smart Storage Administrator	Supported	

HPE Embedded Dual Port 361i Adapter	Network Interface	10Base-T/100Base-TX/1000Base-TX		
	Compatibility	IEEE 802.3 10Base-T		
		IEEE 802.3ab 1000Base-T		
		IEEE 802.3u 100Base-TX		
		IEEE 1588, IEEE 802.1AS		
		IEEE 802.3az - Energy Efficient Ethernet (EEE)		
	Data Transfer Method	PCI Express v 2.0, 5.0 GT/s, two lanes (x2)		
	Controller	Intel I350 Powerville		
	Network Transfer Rate	10Base-T (Half-Duplex)	10 Mb/s per port, 40 Mb/s combined	
		10Base-T (Full-Duplex)	20 Mb/s per port, 80 Mb/s combined	
		100Base-TX (Half-Duplex)	100 Mb/s per port, 400 Mb/s combined	
		100Base-TX (Full-Duplex)	200 Mb/s per port, 800 Mb/s combined	
1000Base-TX (Half and Full-Duplex)		1000Mb/s per port, 4000 Mb/s combined		
Connector	Two RJ-45			
Cable Support	10 Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)		
	10/100/1000 Base-TX	Category 5 or higher UTP; up to 328 ft (100 m)		

Technical Specifications

HPE Smart Array P440

Dimensions (excluding bracket)	Low Profile PCIe Form Factor 6.6 x 2.7 x 0.57 in (16.8 x 6.86 x 1.6 cm)	Low Profile PCIe Form Factor 19.05 cm x 24.13 cm x 5.72 cm (7.5 in x 9.5 in x 2.25 in)	Low Profile PCIe Form Factor 6.6 x 2.7 x 0.57 in (16.8 x 6.86 x 1.6 cm)
Disk Drive	12Gb/s SAS (Serial Attached SCSI) capable 12Gb/s SAS (Serial Attached SCSI) 6Gb/s SATA (Serial AT Attachment)		
SAS Port Link Rate	12Gb/s per physical link supported;		
PCIe Link Rate	PCIe3 x8		
Cache Memory	DDR3-1866MHz, 72-bit wide bus at 14.9GB/s (4GB cache module)		
Physical Drives Supported	Up to 8 drives without 12G SAS Expander card; up to 48 drives with 2 SAS Expander card (ML350 Gen9)		
Logical Drives Supported	Up to 64 logical drives		
Memory Addressing	64-bit, supporting servers with memory space greater than 4 GiB (4.4GB)		
RAID Support	RAID 6, 60 (Advanced Data Guarding) RAID 5, 50 (Distributed Data Guarding) RAID 1, 10 (Drive Mirroring) RAID 1 ADM, 10 ADM (Advanced Data Mirroring) RAID 0 (Striping)		
Upgradeable Firmware	Upgradeable firmware with recovery ROM feature		

StoreEasy 1550 Tower Dimensions	17.32(H) x 7.68(W) x 18.92(D) in (44 x 19.5 x 48.05 cm)	
Tower Weight	Minimum:	27.56lb (12.5kg)
	Maximum:	55lb (24.9g)
Input Requirements	Range Line Voltage Rated Input Current	100 to 240 VAC For 350W & 550W Power Supply:8A (at 100~240 VAC)
	Rated Input Frequency	50 to 60 Hz
	Rated Input Power	For 550 W Power Supply:< 639 W (at 100 VAC),< 605 W (at 200 VAC) For 350 W Power Supply:< 427 W (at 100 VAC),< 427 W (at 200 VAC)
BTU Rating	Maximum	For 550 W Power Supply:2204 BTU/hr (at 100 VAC),2113 BTU/hr (at 200 VAC) For 350 W Power Supply:1452 BTU/hr (at 100 VAC),1544 BTU/hr (at 200 VAC)

Technical Specifications

Power Specifications	To review typical system power ratings use the Power Advisor which is available via the online tool located at URL: http://www.hp.com/go/proliant-energy-efficient or http://www.hp.com/go/hppoweradvisor - Click on the system of interest.	
Power Supply Output	Rated Steady-State Power	For 550 W Power Supply:550 W (at 100 VAC),550 W (at 200 VAC),
	Maximum Peak Power	For 350 W Power Supply:350 W (at 100 VAC),350 W (at 200 VAC),
System Inlet Temperature	Standard Operating Support	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 304.8 m (1.8°F per every 1000 ft) above sea level to a maximum of 3048 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed. System performance during standard operating support may be reduced if operating with a fan fault or above 30°C(86°F).
	Extended Ambient Operating Support	For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of 3048 m (10,000 ft). The approved hardware configurations for this system are listed at the URL: http://www.hp.com/servers/ashrae .
		For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft) above 900 m (2953 ft) to a maximum of 3048 m (10,000 ft). The approved hardware configurations for this system are listed at the URL: http://www.hp.com/servers/ashrae .
		System performance may be reduced if operating in the extended ambient operating range or with a fan fault. NOTE: Supports A3 extended ambient.
Relative Humidity	Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr(36°F/hr).
	Operating	Minimum to be the higher (more moisture) of -12°C (10.4°F) dew point or 8% relative humidity. Maximum to be the lower (less moisture) of 24°C (75.2°F) dew point or 90% relative humidity.
	Non-operating	5% to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.
Altitude	Operating	3048 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457m/min (1500 ft/min).
	Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457m/min (1500 ft/min).
Acoustic Noise	Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109).	
	Idle	
	L WAd	3.6 Bels (LFF Non Hot-Plug Base)

Technical Specifications

	3.6 Bels (LFF Hot-plug Base)
	4.1 Bels (LFF Hot-plug Performance)
L pAm	21 dBA (LFF Non Hot-Plug Base)
	21 dBA (LFF Hot-plug Base)
	27 dBA (LFF Hot-plug Performance)

Operating

L WAd	3.6 Bels (LFF Non Hot-Plug Base)
	3.7 Bels (LFF Hot-plug Base)
	4.2 Bels (LFF Hot-plug Performance)
L pAm	21 dBA (LFF Non Hot-Plug Base)
	21 dBA (LFF Hot-plug Base)
	25 dBA (LFF Hot-plug Performance)

NOTE: Configurations tested for LFF non hot-plug based models included one (1) 1TB LFF SATA Midline HDD and Windows 2012 Enterprise 64-bit.

NOTE: Configurations tested for LFF hot-plug base models included one (1) 1TB LFF SATA Midline HDD and Windows 2012 Enterprise 64-bit.

NOTE: Configurations tested for LFF hot-plug performance models included four (4) 2TB LFF SATA Midline HDD and Windows 2012 Enterprise 64-bit.

NOTE: The Listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels.

Emissions Classification	FCC Rating	Class B
	Normative Standards	CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1

NOTE: Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.

HPE Dynamic Smart Array B140i Controller	Number of PCI links	Four
	PCI link rate	4Gb/s
	Storage protocol support	SATA
	SAS/SATA peak data transfer rate	6Gb/s
	Number of SAS/SATA links	10 links
	SAS/SATA connectivity	2x4 connectors; 2x1 connectors
	Expander support	No
	Drives supported (max)	Up to 10 Internal Drives
	RAID support	0, 1, 10, 5 SATA
	Software	HPE SSA, SMH, SIM

Technical Specifications

management

Warranty Server warranty

HPE Secure Not Supported

Encryption license

HPE SmartCache Not Supported

License

HPE Smart Storage Administrator Supported

HPE Ethernet 1Gb 2-port 330i Adapter	Network Interface	10Base-T/100Base-TX/1000Base-TX		
	Compatibility	IEEE 802.3 10Base-T IEEE 802.3ab 1000Base-T IEEE 802.3u 100Base-TX		
	Data Transfer Method	PCI Express, two lanes (x2)		
	Controller	BCM5717		
	Network Transfer Rate	10Base-T (Half-Duplex)	10 Mb/s per port, 40 Mb/s combined	
		10Base-T (Full-Duplex)	20 Mb/s per port, 80 Mb/s combined	
		100Base-TX (Half-Duplex)	100 Mb/s per port, 400 Mb/s combined	
		100Base-TX (Full-Duplex)	200 Mb/s per port, 800 Mb/s combined	
		100Base-TX (Half-Duplex)	1000Mb/s per port, 4000 Mb/s combined	
	100Base-TX (Full-Duplex)	2000Mb/s per port, 8000 Mb/s combined		
Connector	RJ-45			
Cable Support	10 Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)		
	10/100/1000 Base-TX	Category 5 or higher UTP; up to 328 ft (100 m)		

StoreEasy 1650/1850	Dimensions	SFF Drives: 3.44 x 17.54 x 26.75 in (8.73 x 44.55 x 67.94 cm) LFF Drives: 3.44 x 17.54 x 28.75 in (8.73 x 44.55 x 73.02 cm)	
	NOTE: Dimensions without Bezel.		
(approximate)	Weight	Minimum:	32.6 lb (14.759 kg)
		(Minimum - 8SFF chassis with 1xSFF HDD and 7 HDD blanks, 1x processor, 1x power supply (plus blank), 1x Flexible Smart Array, 1x Riser installed)	
		Maximum:	51.5 lb (23.6 kg)
	(Maximum - 12 LFF hard drives (No		

Technical Specifications

rear drives), 2x processors, 2x power supplies, 1x Flexible Smart Array, 2x Risers installed)

Input Requirements
(per power supply)

Range Line 100 to 120 VAC
Voltage 200 to 240 VAC

BTU Rating

Maximum For 800W Power Supply: 3207 BTU/hr (at 100 VAC), 3071 BTU/hr (at 200 VAC), 3112 BTU/hr (at 240 VAC) for China Only

For 500W Power Supply: 1979 BTU/hr (at 100 VAC), 1911 BTU/hr (at 200 VAC), 1965 BTU/hr (at 240 VAC) for China Only

Power Supply Output
(per power supply)

Rated Steady-State Power For 1400W Power Supply: 1400W (at 100 VAC), 1400W (at 240 VAC), 1400W (at 240 VAC)
For 800W Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VAC) input for China only
For 500W Power Supply: 500W (at 100 VAC), 500W (at 240 VAC), 500W (at 240 VAC) input for China only

Maximum Peak Power For 1400W Power Supply: 1400W (at 100 to 127 VAC), 1400W (at 200 to 240 1VAC), 1400W (at 240 VAC) input for China only
For 800W Power Supply: 800W (at 100 to 127 VAC), 800W (at 200 to 240 1VAC), 800W (at 240 VAC) input for China only
For 500W Power Supply: 500W (at 100 to 127 VAC), 500W (at 200 to 240 VAC), 500W (at 240 VAC) input for China only

System Inlet Temperature

Standard Operating Support 10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every 1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed. System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).

Extended Ambient Operating Support For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:
<http://www.hp.com/servers/Ashrae>

For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:
<http://www.hp.com/servers/Ashrae>

System performance may be reduced if operating in the extended ambient

Technical Specifications

		operating range or with a fan fault.
Relative Humidity	Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).
	Operating	Minimum to be the higher (more moisture) of -12°C (10.4°F) dew point or 8% relative humidity. Maximum to be the lower (less moisture) of 24°C (75.2°F) dew point or 90% relative humidity.
(non-condensing)	Non-operating	5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.
Altitude	Operating	3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
	Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
Acoustic Noise	Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109).	
	Idle	
	L WAd	4.0 B Entry LFF 4.1 B Entry 4.2 B Base 5.7 B Base LFF 4.3 B Perf
	L pAm	23 dBA Entry LFF 24 dBA Entry 24 dBA Base 39 dBA Base LFF 25 dBA Perf
	Operating	
	L WAd	4.3 B Entry LFF 4.6 B Entry 4.8 B Base 5.9 B Base LFF 5.6 B Perf
	L pAm	25 dBA Entry LFF 29 dBA Entry 30 dBA Base 31 dBA Base LFF 39 dBA Perf
	NOTE: The Listed sound levels apply to standard shipping configurations (Entry LFF, Entry, Base, Base LFF and Performance models) additional options may result in increased sound levels. The Base LFF model leverages our High Efficiency Fans, other models are shipping with standard fan options.	
Emissions Classification	FCC Rating	Class A
	Normative	CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438;

Technical Specifications

(EMC)	Standards	GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1
		NOTE: Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.
		NOTE: The Listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels.

HPE Dynamic Smart Array B140i Controller	Number of PCI links	Four
	PCI link rate	4Gb/s
	Storage protocol support	SATA
	SAS/SATA peak data transfer rate	6Gb/s
	Number of SAS/SATA links	10 links
	SAS/SATA connectivity	2x4 connectors; 2x1 connectors
	Expander support	No
	Drives supported (max)	Up to 10 Internal Drives
	RAID support	0, 1, 10, 5 SATA
	Software management	HPE SSA, SMH, SIM
	Warranty	Server warranty
	HPE Secure Encryption license	Not Supported
	HPE SmartCache License	Not Supported
HPE Smart Storage Administrator	Supported	

HPE Ethernet 1Gb 4-port 331i Adapter	Network Interface	10Base-T/100Base-TX/1000Base-TX
	Compatibility	IEEE 802.3 10Base-T IEEE 802.3ab 1000Base-T IEEE 802.3u 100Base-TX
	Data Transfer Method	PCI Express, two lanes (x2)

Technical Specifications

Controller	BCM5719	
	10Base-T (Half-Duplex)	10 Mb/s per port, 40 Mb/s combined
	10Base-T (Full-Duplex)	20 Mb/s per port, 80 Mb/s combined
Network Transfer Rate	100Base-TX (Half-Duplex)	100 Mb/s per port, 400 Mb/s combined
	100Base-TX (Full-Duplex)	200 Mb/s per port, 800 Mb/s combined
	1000Base-TX (Half and Full-Duplex)	1000Mb/s per port, 4000 Mb/s combined
	1000Base-TX (Full-Duplex)	2000Mb/s per port, 8000 Mb/s combined
Connector	Four RJ-45	
Cable Support	10 Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)
	10/100/1000 Base-TX	Category 5 or higher UTP; up to 328 ft (100 m)

HPE Smart Array P440ar

Dimensions (excluding bracket)	Flexible Smart Array Form Factor 5.3 x 4.1 x 1.2 in	Low Profile PCIe Form Factor 6.6 x 2.7 x 0.57 in (16.8 x 6.86 x 1.6 cm)
Disk Drive	12Gb/s SAS (Serial Attached SCSI) 6Gb/s SATA (Serial AT Attachment)	
SAS Port Link Rate	12Gb/s per physical link supported	
PCIe Link Rate	PCIe3 x8	
Cache Memory	DDR3-1866MHz, 72-bit wide bus at 14.9GB/s (2GB cache module)	
Physical Drives Supported	Up to 26 drives	
Logical Drives Supported	Up to 64 logical drives	
Memory Addressing	64-bit, supporting servers with memory space greater than 4 GiB (4.4GB)	
RAID Support	RAID 6, 60 (Advanced Data Guarding) RAID 5, 50 (Distributed Data Guarding) RAID 1, 10 (Drive Mirroring) RAID 1 ADM, 10 ADM (Advanced Data Mirroring) RAID 0 (Striping)	
Upgradeable Firmware	Upgradeable firmware with recovery ROM feature	

Technical Specifications

StoreEasy 1650 Expanded	Dimensions	LFF Drives: 3.44 x 17.54 x 28.75 in (8.73 x 44.55 x 73.02 cm)	
		NOTE: Dimensions without Bezel.	
	Input Requirements	Range Line Voltage	100 to 120 VAC 200 to 240 VAC
	(per power supply)		
	BTU Rating	Maximum	For 800W Power Supply: 3207 BTU/hr (at 100 VAC), 3071 BTU/hr (at 200 VAC), 3112 BTU/hr (at 240 VAC) for China Only
	Power Supply Output	Rated Steady-State Power	For 800W Power Supply: 800W (at 100 VAC), 800W (at 240 VAC), 800W (at 240 VAC) input for China only
	(per power supply)		
		Maximum Peak Power	For 800W Power Supply: 800W (at 100 to 127 VAC), 800W (at 200 to 240 1VAC), 800W (at 240 VAC) input for China only
	System Inlet Temperature	Standard Operating Support	10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (10,000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and number of options installed. System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).

Extended Ambient Operating Support For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (574 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:

<http://www.hp.com/servers/Ashrae>

For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (410 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL:

<http://www.hp.com/servers/Ashrae>

System performance may be reduced if operating in the extended ambient operating range or with a fan fault.

Technical Specifications

	Non-operating	-30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr).
Relative Humidity (non-condensing)	Operating	Minimum to be the higher (more moisture) of -12°C (10.4°F) dew point or 8% relative humidity. Maximum to be the lower (less moisture) of 24°C (75.2°F) dew point or 90% relative humidity.
	Non-operating	5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.
Altitude	Operating	3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
	Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
Acoustic Noise	Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109).	
	Idle	
	L WAd	4.0 B Entry LFF 4.1 B Entry 4.2 B Base 5.7 B Base LFF 4.3 B Perf
	L pAm	23 dBA Entry LFF 24 dBA Entry 24 dBA Base 39 dBA Base LFF 25 dBA Perf
	Operating	
	L WAd	4.3 B Entry LFF 4.6 B Entry 4.8 B Base 5.9 B Base LFF 5.6 B Perf

Technical Specifications

L pAm	25 dBA Entry LFF
	29 dBA Entry
	30 dBA Base
	31 dBA Base LFF
	39 dBA Perf

NOTE: The Listed sound levels apply to standard shipping configurations (Entry LFF, Entry, Base, Base LFF and Performance models) additional options may result in increased sound levels. The Base LFF model leverages our High Efficiency Fans, other models are shipping with standard fan options.

Emissions Classification (EMC)	FCC Rating	Class A
	Normative Standards	CISPR 22; EN55022; EN55024; FCC CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22;K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1

NOTE: Product conformance to cited product specifications is based on sample (type) testing, evaluation, or assessment. This product or family of products is eligible to bear the appropriate compliance logos and statements.

NOTE: The Listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels.

HPE Dynamic Smart Array B140i Controller	Number of PCI links	Four
	PCI link rate	4Gb/s
	Storage protocol support	SATA
	SAS/SATA peak data transfer rate	6Gb/s
	Number of SAS/SATA links	10 links
	SAS/SATA connectivity	2x4 connectors; 2x1 connectors
	Expander support	No
	Drives supported (max)	Up to 10 Internal Drives
	RAID support	0, 1, 10, 5 SATA
	Software management	HPE SSA, SMH, SIM
	Warranty	Server warranty
	HPE Secure Encryption license	Not Supported
	HPE SmartCache License	Not Supported

Technical Specifications

HPE Smart Storage Administrator Supported

HPE Ethernet 1Gb 2-port 36li Adapter	Network Interface	10Base-T/100Base-TX/1000Base-TX		
	Compatibility	IEEE 802.3 10Base-T		
		IEEE 802.3ab 1000Base-T		
		IEEE 802.3u 100Base-TX		
	Data Transfer Method	PCI Express, two lanes (x2)		
	Controller	BCM5719		
	Network Transfer Rate	10Base-T (Half-Duplex)	10 Mb/s per port, 40 Mb/s combined	
		10Base-T (Full-Duplex)	20 Mb/s per port, 80 Mb/s combined	
		100Base-TX (Half-Duplex)	100 Mb/s per port, 400 Mb/s combined	
		100Base-TX (Full-Duplex)	200 Mb/s per port, 800 Mb/s combined	
1000Base-TX (Half and Full-Duplex)		1000Mb/s per port, 4000 Mb/s combined		
Connector	1000Base-TX (Full-Duplex)	2000Mb/s per port, 8000 Mb/s combined		
	Four RJ-45			
Cable Support	10 Base-T	Categories 3, 4 or 5 UTP; up to 328 ft (100 m)		
	10/100/1000 Base-TX	Category 5 or higher UTP; up to 328 ft (100 m)		

Summary of Changes

Date	Version History	Action	Description of Change
29-Jan-2016	From Version 24 to 25	Changed	Content edition on the configuration section
11-Dec-2015	From Version 23 to 24	Changed	Changes made to the Standard Features and Options Sections
01-Dec-2015	From Version 22 to 23	Changed	Changes were made throughout the entire document
28-Sept-2015	From Version 21 to 22	Changed	Added the StoreEasy System Recovery DVD, changes in the What 's New Sections
19-Jun-2015	From Version 20 to 21	Changes	Changes made on the following sections: Overview, Features and Benefits, Standard Features, Options and Service and Support
01-Jun-2015	From Version 19 to 20	Changed	Added the StoreEasy 1550 Storage model
30-Mar-2015	From Version 18 to 19	Changed	Added new models, changes were made on the entire document.
18-Dec-2014	From Version 17 to 18	Changed	Added SCSI HBA to StoreEasy 1640 options and other minor edits.
17-Oct-2014	From Version 16 to 17	Changed	Changed in the Options Section of the QS.
		Removed	Removed the HPE StoreEasy 1X30 Storage from the document.
18-Jul-2014	From Version 15 to 16	Added	Added HPE StoreEasy Windows Storage Server 2012 R2 Upgrade section
03-Jul-2014	From Version 13 to 15	Changed	Standard Features – Memory – StoreEasy 1640 Standard changed 12GB to 16GB and 3 x 4GB to 4 x 4GB; Standard Features – Storage External – added D3000 to supported products; Optional Software – HPE LiveVault section – replaced URL; Models – Pre-Configured – StoreEasy 1640 Models – memory - changed 12GB to 16GB and 3 x 4GB to 4 x 4GB; Options – added HPE D3000 Enclosures section
09-May-2014	From Version 12 to 13	Changed	Storage Controllers and Service and Support were revised.
11-Apr-2014	From Version 11 to 12	Changed	Changes were to Storage Controllers, Hard Drives, and Optional Software.
31-Mar-2014	From Version 10 to 11	Changed	Changes were made throughout.
31-Jan-2014	From Version 9 to 10	Changed	Updated the following: Standard Features - Windows Storage Server 2012 Note updated; Optional Software - HPE Autonomy LiveVault updated; Configuration Information - Add a Network Adapter - 656596-B21 added "(StoreEasy 1430 only)" to the description; added 718904-B21 and 728987-B21 to the supported adapters; Add More Storage- StoreEasy 1430/1530 - removed BC377A and BC390AAE, added D7526A, D7527A and D7527AAE and removed link to DA14228 and added 729552-B21 and 650926-B21 and QW990A; StoreEasy 1630/1830 - added 698531-B21, D7526A, D7527A, removed BC377A and BC390AAE - removed links to DA14227, DA14228, DA13200 DA14336 and DA14343, added 729552-B21 and 650926-B21 added C8R38A and C8R39A and QW990A; Hard Drives for the StoreEasy 1430/1530 - added 652753-B21, 718171-B21; 734362-B21, 718189-B21, 739900-B21, 718183-B21, 739890-B21, 718177-B21, 691860-B21, 691856-B21, 691854-B21, and 691852-B21; Hard Drives for StoreEasy 1630 - - added 718171-B21; 734362-

Summary of Changes

			B21, 718189-B21, 739900-B21, 718183-B21, 739890-B21, 718177-B21, 691860-B21, 691856-B21, 691854-B21, and 691852-B21; removed 653124-B21 and 653122-B21. Hard Drives for StoreEasy 1830 - added 718162-B21, 717965-B21, 734360-B21, 717973.B21, 717971-B21, 739898-B21, 739888-B21, 717969-B21, 653078-B21
04-Oct-2013	From Version 8 to 9	Changed	Updated the following sections Standard Features - Storage Controller Options - HPE Hard Drives for StoreEasy 1830
20-Sep-2013	From Version 7 to 8	Changed	Updated the following: Options - StoreEasy Disk Enclosures - Updated existing NOTE and added new NOTE for the 25 SFF Disk Enclosure; Options - Drives for StoreEasy Enclosures - added 1.2TB SAS HDD - 693648-B21
19-Aug-2013	From Version 6 to 7	Changed	Changed What's New to read: New StoreEasy 1630 with 2 SFF rear drives with pre-installed OS. 12 LFF slots open for data drives. Changes made to update the HPE StoreEasy 1630 Storage throughout the QuickSpecs.
28-Jun-2013	From Version 5 to 6	Changed	Drives for StoreEasy Enclosures was revised in Options Note was added to Operating System in Standard Features HPE 10 GbE PCI-e Dual Port Network Interface Card was added to StoreEasy 1830 in Options HPE StoreFabric SN1000Q 16GB 1-port and 2-port PCIe Fibre Channel Host Bus Adapters were added to QLogic Fibre Channel HBAs in Options
10-Jun-2013	From Version 4 to 5	Changed	Overview: Updated What's New, HPE StoreEasy 1430 Storage, HPE StoreEasy 1530 Storage, HPE StoreEasy 1630 Storage and HPE StoreEasy 1830 Storage. Features and Benefits: Updated Efficiently Save money and time, Secure: Protect your data and organization always and Highly Available, Prevent User and Organization disruption sections. Optional Software: Update HPE Data Protector software hyperlink. Options: Updated HPE Hard Drives for StoreEasy 1430/1530, HPE Hard Drives for StoreEasy 1630, StoreEasy Disk Enclosures, Drives for StoreEasy Enclosures, Add a Power Cord StoreEasy 1530 and StoreEasy 1830 I/O Expansion Options sections.
19-Apr-2013	From Version 3 to 4	Changed	Standard Features: Updated Maximum Storage Capacity(raw) Models (Drives Configure-to-Order): Updated StoreEasy 1830 Storage Options: Updated Add a Network Adapter section StoreEasy 1430/1530, StoreEasy 1630 and StoreEasy 1830 Service and Support, Hp Care Pack, and Warranty Information: Updated Warranty section
08-Mar-2013	From Version 2 to 3	Changed	Changes were made in the following sections: Standard Features: Updated Operating System section Options: in all sections updated parts and part numbers.

Summary of Changes

21-Dec-2012	From Version 1 to 2	Changed	Changes were made in the following sections: Overview: update Models Models (Drives Configure to Order): in Step 1 update hyperlink Options: in all sections updated parts and part numbers.
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For hard drives, 1 GB = 1 billion bytes. Actual formatted capacity is less.

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