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

Overview

HPE StoreEasy 1000 Storage with the HPE StoreEasy Management Console

Seventh generation (1470, 1570, 1670, 1670 Expanded, 1870)

Whether you are a small, medium, or large distributed organization with remote offices, you need reliable, cost-efficient storage that can keep pace with users and growing volumes of file data without getting in the way of how your organization operates.

If you need an easy-to-manage centralized space for securely storing documents, images, audio, and video files, look no further than HPE StoreEasy 1000 Storage: flexible, efficient, and reliable network-attached storage, right-sized for your organization's needs and budget, without compromising on quality or capabilities.

Built from the foundation of the most secure industry-standard servers and running Microsoft's Windows Server IoT 2022 for Storage Standard Edition operating system, HPE StoreEasy 1000 Storage appliances deliver a radically simplified administration experience through HPE StoreEasy management console, lower-cost internal capacity expansion, and better performance options for resource-intensive workloads. More security protections built-in and included as standard help you better protect your customers, employees, and organization against loss, corruption, and breaches.

Start by choosing which operating system is the best fit for your IT environment. Then pick from a variety of pre-configured models that include the compute, capacity, and connectivity options most organizations need in a NAS solution, or tailor your performance and options with one of the configure-to-order models.

What's New

- All new seventh generation HPE StoreEasy 1000 Storage models featuring Microsoft Windows Server IoT 2022 for Storage Standard Edition preinstalled. The Windows Server IoT 2022 for Storage Standard Edition offers several of the security improvement features such as secured-core server, hardware root-of-trust, UEFI secure boot, or firmware protection. SMB AES-256 encryption and SMB compression is now part of Windows Server IoT 2022. Available to order today.
- The new HPE Storage 1470, 1570, 1670, and 1870 Storage models are built from HPE ProLiant Gen11 technologies including iLO 6, 4th Gen Intel Xeon Scalable processors, DDR5 memory, and PCIe 5.0.
- The new HPE StoreEasy 1670 Expanded Storage model is built from the ultra-dense HPE Apollo 4200 Gen10 Plus System for up to 28 LFF in just 2U of rack space.
- Microsoft Windows Server IoT 2022 for Storage Standard Edition software kit to upgrade the operating system of prior sixth generation HPE StoreEasy 1000 Storage models. Available to order today.
- HPE StoreEasy management console enhancements to simplify storage provisioning and snapshot scheduling. Update available to download today.

Notes: To know more about, the sixth generation StoreEasy 1000 Storage models 1460, 1560, 1660, 1660 Expanded, and 1860, please click **here**.

Overview

HPE StoreEasy 1470 Storage

HPE StoreEasy 1470 Storage solutions deliver multi-protocol file serving and application storage in a compact and affordable 1U rack-mount form factor that's perfect for a small workgroup, small business, or remote office. All HPE StoreEasy 1470 models come with the operating system pre-installed on the four internal LFF drives.

HPE StoreEasy 1470 Storage

Models

Description	SKU
HPE StoreEasy 1470 8TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A19A
HPE StoreEasy 1470 16TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A20A
HPE StoreEasy 1470 32TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A21A
HPE StoreEasy 1470 48TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A22A
HPE StoreEasy 1470 8TB SATA Storage with Microsoft Windows Server IoT 2022	S2A23A
HPE StoreEasy 1470 16TB SATA Storage with Microsoft Windows Server IoT 2022	S2A24A

Overview

HPE StoreEasy 1570 Storage

HPE StoreEasy 1570 Storage solutions are built on a compact and affordable tower form factor package and deliver multi-protocol file serving and application storage to environments that don't have rack space, including small workgroups, small businesses, and remote offices. All HPE StoreEasy 1570 models come with the operating system pre-installed on the four internal LFF drives.

HPE StoreEasy 1570 Storage

Models

Description	SKU
HPE StoreEasy 1570 8TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A25A
HPE StoreEasy 1570 16TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A26A
HPE StoreEasy 1570 32TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A27A
HPE StoreEasy 1570 8TB SATA Storage with Microsoft Windows Server IoT 2022	S2A28A
HPE StoreEasy 1570 16TB SATA Storage with Microsoft Windows Server IoT 2022	S2A29A

Overview

HPE StoreEasy 1670 Storage

HPE StoreEasy 1670 Storage solutions deliver high internal capacity (with up to 16 LFF hot-plug drive slots) and external expandability in a 2U rack-mount form factor for small, medium, or large IT environments. All HPE StoreEasy 1670 models come with the operating system pre-installed on mirrored NVMe boot device.

HPE StoreEasy 1670 Storage

Models

Description	SKU
HPE StoreEasy 1670 32TB SAS Storage with Microsoft Windows Server IoT 2022	S2A30A
HPE StoreEasy 1670 64TB SAS Storage with Microsoft Windows Server IoT 2022	S2A31A
HPE StoreEasy 1670 Storage with Microsoft Windows Server IoT 2022	S2A32A
HPE StoreEasy 1670 Performance Storage with Microsoft Windows Server IoT 2022	S2A34A

Overview

HPE StoreEasy 1670 Expanded Storage

The HPE StoreEasy 1670 Expanded Storage is a density-optimized (with 28 LFF hot-plug drive slots) 2U rack-mount form factor platform ideal for bulk file and secondary storage workloads. The StoreEasy 1670 Expanded model comes with the operating system pre-installed on mirrored NVMe boot device.

HPE StoreEasy 1670 Expanded Storage

Model

Description	SKU
HPE StoreEasy 1670 Expanded Storage with Microsoft Windows Server IoT 2022	S2A35A

Overview

HPE StoreEasy 1870 Storage

HPE StoreEasy 1870 Storage solutions deliver enterprise-class performance (with up to 32 SFF hot-plug drive slots in a 2U rack-mount form factor) for hybrid flash configurations and latency-sensitive file share or application workloads. All HPE StoreEasy 1870 models come with the operating system pre-installed on mirrored NVMe boot device.

HPE StoreEasy 1870 Storage

Models

Description	SKU
HPE StoreEasy 1870 Storage with Microsoft Windows Server IoT 2022	S2A36A
HPE StoreEasy 1870 Performance Storage with Microsoft Windows Server IoT 2022	S2A37A

Notes: To know more about, the seventh generation StoreEasy 1000 Storage models 1470, 1570, 1670, 1670 Expanded, and 1870, please below

Overview

HPE StoreEasy 1000 Storage Sixth generation (1460, 1560, 1660, 1660 Expanded, and 1860)

HPE StoreEasy 1000 Storage Seventh generation is now available. Please refer to StoreEasy 1000 Storage seventh generation if you are looking for the above. This section describes the existing StoreEasy Sixth generation models.

- All the StoreEasy 1460, 1560, 1660, 1660 Expanded, and 1860 that are installed with either Microsoft Windows Storage Server 2016 Standard Edition or Microsoft Windows Server IoT 2019 for Storage Standard Edition can now be upgraded to the Microsoft Windows Server IoT 2022 for Storage Standard Edition operating system by purchasing an upgrade kit.

HPE StoreEasy 1460 Storage

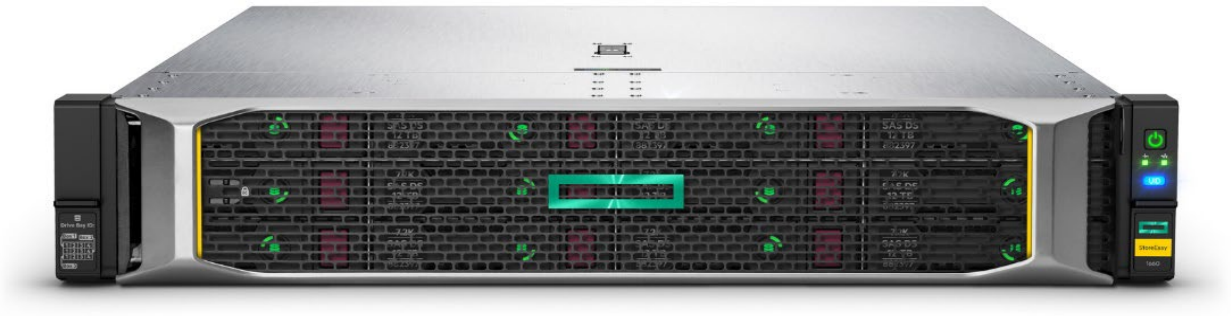
HPE StoreEasy 1460 Storage solutions deliver multi-protocol file serving and application storage in a compact and affordable 1U rack-mount form factor that's perfect for a small workgroup, small business, or remote office. All HPE StoreEasy 1460 models come with the operating system pre-installed on the four internal LFF drives.

HPE StoreEasy 1460 Storage

Overview

HPE StoreEasy 1660 Storage

HPE StoreEasy 1660 Storage solutions deliver high internal capacity (with up to 16 LFF hot-plug drive slots) and external expandability in a 2U rack-mount form factor for small, medium, or large IT environments. All HPE StoreEasy 1660 models come with the operating system pre-installed on mirrored solid state drives.



HPE StoreEasy 1660 Storage

Models

Description	SKU
HPE StoreEasy 1660 32TB SAS Storage with Microsoft Windows Server IoT 2019	R7G22B
HPE StoreEasy 1660 64TB SAS Storage with Microsoft Windows Server IoT 2019	R7G23B
HPE StoreEasy 1660 Storage with Microsoft Windows Server IoT 2019	S0E00A
HPE StoreEasy 1660 Storage with Microsoft Windows Server IoT 2019	R7G24B
HPE StoreEasy 1660 32TB SAS Storage with Microsoft Windows Server IoT 2019	R7G22B
HPE StoreEasy 1660 64TB SAS Storage with Microsoft Windows Server IoT 2019	R7G23B

Overview

HPE StoreEasy 1860 Storage

HPE StoreEasy 1860 Storage solutions deliver enterprise-class performance (with up to 26 SFF hot-plug drive slots in a 2U rack-mount form factor) for hybrid flash configurations and latency-sensitive file share or application workloads. All HPE StoreEasy 1860 models come with the operating system pre-installed on mirrored solid state drives.

HPE StoreEasy 1860 Storage

Models

Description	SKU
HPE StoreEasy 1860 Storage with Microsoft Windows Server IoT 2019	R7G28B

Notes: To know more about, the sixth generation StoreEasy 1000 Storage models 1460, 1560, 1660, 1660 Expanded, and 1860, below

Standard Features

HPE StoreEasy 1000 Storage lets you focus on your business, not your file storage

- HPE StoreEasy 1000 Storage systems come with pre-configured hardware and Microsoft Windows Server IoT 2022 for Storage Standard Edition operating system for purpose-built file serving.
- All HPE StoreEasy 1000 Storage models feature HPE StoreEasy management console, which centralizes management workflows and helps you save time and effort.
  - HPE StoreEasy management console enables IT administrators to monitor and manage their HPE StoreEasy 1000 appliance quickly and easily, regardless of their familiarity with the underlying Windows Server operating system.
  - Use the web-based interface to manage and monitor system health, capacity, performance, hardware events, quotas, snapshots, authentication, network services, and more.
  - Easily identify maintenance windows with both point-in-time and historical utilization views of throughput and traffic.
  - Simplify capacity planning with a granular historical utilization dashboard that helps predict when expansion is needed and provides a clear view of growth rate and usage trends.
  - Updates to the latest version through the HPE Support Center at any time during the warranty period of your HPE StoreEasy 1000 Storage system. You can leverage automatic updates within the application to take advantage of new features as soon as they are available, or you can stage updates for your next system maintenance window.
- The HPE-enhanced Initial Configuration Tasks Wizard simplifies installation and helps prevent network configuration errors for even faster deployment.
- HPE StoreEasy 1000 Storage accessories and adapters are industry-standard and are often the same as those in the HPE servers in your environment, and HPE StoreEasy hard drive bundles are the most efficient way to buy, deploy, and provision additional storage capacity over the life of the system.

The pre-installed operating system is tailored for file storage

HPE StoreEasy 1000 Storage comes with a specially licensed Microsoft Windows Server operating system: Microsoft Windows Server IoT 2022 Standard Edition. It includes a robust range of file serving and storage capabilities while leveraging your Windows Server management skill set and tools, including AdminCenter, PowerShell and System Center. It addresses heterogeneous environments with support for CIFS/SMB (2.0, 2.1, 3.0, 3.02 and 3.1.1), NFS (v2, v3, v4.1), WebDAV, HTTP/HTTPS, FTP/FTPS, and iSCSI protocols. And it enables more efficient storage utilization and protection with support for file quotas, screening, and classification, plus built-in deduplication and replication engines.

New features introduced in Microsoft Windows Server IoT 2022 for Storage are focused on security and bridging on-premises environments with Azure services, enabling HPE StoreEasy 1000 Storage to complement cloud applications and storage. With Windows Server IoT 2022 for Storage, you can integrate Azure services such as Azure Backup, Azure File Sync, disaster recovery, and much more. Windows Server IoT 2022 for Storage also introduces new storage migration and analytics tools, updated threat protection, and enhanced security capabilities. The SMB protocol in Windows Server IoT has enhanced to support AES-256 encryption and SMB compression to improve the security and efficiently transfer the data. Finally, HPE StoreEasy 1000 Storage systems with Windows Server IoT 2022 for Storage can host DNS and DHCP services, increasing the number of roles the system can perform vs. previous operating system editions and adding even more solution value to small / remote and medium business environments.

When installed on HPE StoreEasy 1000 Storage systems, Microsoft Windows Server IoT 2022 Standard Edition includes an unlimited Client Access License (CAL) but does come with some restrictions vs. mainstream Microsoft Windows Server versions.

Standard Features

The following summarizes HPE StoreEasy 1000 Storage supported features and roles:

Microsoft Windows Server IoT 2022 for Storage Standard Edition	
Maximum CPU cores and VM* Rights	16 cores per system + 2 VM
# Disks per controller (see HPE Product Specifications for Specific constraints for each controller)	238
Maximum SMB Connections	16,777,216
File Server Resource Manager (FSRM)	Yes
Domain Join	Yes
File Classification Infrastructure (FCI)	Yes
Windows Server Backup	Yes
DFS-Replication	Yes (100TB maximum)
Storage Replica	Yes (limited to 1 x 2TB volume, 1 partnership, 1 resource group)
Azure File Sync	Yes
Azure Backup	Yes
Shared block storage (iSCSI Target Server / Storage Provider)	Yes
Storage Spaces, Storage Spaces Direct, and Volume Replication	No
Deduplication	Yes
Deduplication for ReFS	Yes
BranchCache - Hosted Cache	Yes
Hyper-V Virtualization	Host + 2VM* (Shielded VMs not included)
Clustering (including AD/DNS)	Not supported on StoreEasy 1000 Storage
Networking Infrastructure Roles (DHCP & DNS)	Yes
Active Directory roles including Domain Controller (RODC)	No
Active Directory (Domain Controller, Certificate Services, Federation services, Rights Management)	No
Application Server, Network Policy, Remote Desktop Broker, WDS and Fax Server	No
Windows Server Migration Tools	Yes
Windows Storage Migration Service	Yes
Windows Server System Insights	Yes
Enhanced Windows Defender Advanced Threat Protection (ATP)	Yes
Secured-Core server	Yes
Azure Arc	Yes
SMB Compression (requires server communicating to be Windows Server 2022 or client to be Windows 11 for Business and Windows Admin Center)	Yes
AES-256 encryption with support for SMB	Yes
Windows Admin Center (with auto updates)	Yes
Hardware Root of Trust (requires TPM 2.0)	Yes
HTTPS and TLS 1.3 Enabled by Default	Yes
Notes: *Requires separate software license for each VM	

Standard Features

Notes:

- Microsoft Windows Server 2022 and Microsoft Windows Server IoT 2022 for Storage are built on the same code base. Storage-centric (backup, replication, antivirus, etc.) applications certified for Windows Server 2022 are expected to have the same application compatibility profile on Windows Server IoT 2022 for Storage. Windows Server IoT for Storage and Windows Server have the same application frameworks, services, and plumbing to support running the full breadth of Windows-compatible applications but do have unique licensing features and restrictions. Customers should review the End User License Agreement (EULA) to see what server roles are listed as unsupported and the types of applications that are permitted for installation on HPE StoreEasy 1000 Storage systems. Applications that rely upon certain roles that are removed from (or are listed in the EULA as unsupported on) Windows Server IoT 2019 for Storage, such as fax server, terminal services, Application Server, Network Policy Server, Remote Desktop Broker, Windows Deployment Services, and Active Directory domain controller (all HPE StoreEasy 1000 Storage systems can join an Active Directory domain, but they cannot be a domain controller or perform Certificate Services, Federation Services, or Rights Management) 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.
- Microsoft Windows Server IoT 2022 for Storage is currently scheduled to remain under Microsoft Mainstream Support (which includes incident support, security update support, and the ability to request non-security updates) until January 2027. Learn more about Microsoft's Fixed Lifecycle and support policy at: **https://docs.microsoft.com/en-us/lifecycle/policies/fixed**

More Information on Microsoft Windows Server IoT 2022 for Storage can be found here:
https://learn.microsoft.com/en-us/windows/iot/server/windows-server

Protect your data and your investment

- HPE 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 built-on file classification, Volume Shadow Copy Service snapshots, and Distributed File System Replication (DFS-R) to keep your files safe and accessible.
- 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.
- Increase uptime with standard features such as near-continuous health monitoring with HPE Active Health System, redundant 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.
- Get support from file storage experts with 3-Year Parts, 3-Year Labor, and 3-Year Onsite support with next business day response. All HPE StoreEasy Storage systems also include one year of 9x5 software telephone support for the Windows Server for Storage operating system.

Expansion with HPE MSA SAN Storage or D3X10 Disk Enclosures

All HPE StoreEasy models support external storage using HPE MSA SAN Storage or D3X10 Disk Enclosure product families. A Fibre Channel, SAS, or iSCSI connection must be added to support MSA SAN Storage (note that high-availability clustering is not supported) while a Smart Array controller with external ports must be added to support external Disk Enclosures. The maximum number of disk enclosures supported is 8, a limit imposed by the disk enclosures and controllers. See the MSA SAN Storage and D3X10 Disk Enclosure, **QuickSpecs** for more information.

Standard Features

Archiving with iTernity Compliant Archive Software

Get open, flexible, and expandable long-term archiving with iTernity Compliant Archive Solution (iCAS). iTernity iCAS is validated to meet the United States Securities and Exchange Commission (SEC) 17a-4(f) requirements. Together, HPE StoreEasy 1000 Storage and iCAS are your key to legally-compliant data archiving.

For more information on how to obtain the iCAS for archiving visit the **HPE Complete iTernity iCAS** product page.

Expansion with HPE MSA SAN Storage or D3X10 Disk Enclosure

All HPE StoreEasy models support external storage using HPE MSA SAN Storage or D3X10 / D6020 Disk Enclosure product families. A Fibre Channel, SAS, or iSCSI connection must be added to support MSA SAN Storage (note that high-availability clustering is not supported) while a Smart Array controller with external ports must be added to support external Disk Enclosures. The maximum number of disk enclosures supported is 8, a limit imposed by the disk enclosures and controllers. See the MSA SAN Storage, D3X10 Disk Enclosure, and D6020 Disk Enclosure, **QuickSpecs** for more information.

Service and Support

Warranty

HPE StoreEasy 1470, 1570, 1670, 1670 Expanded, and 1870 Storage systems come with a standard 3-3-3 warranty (3 years parts exchange, 3 years labor and 3 years onsite, next business day response). Software media is warranted to be free of physical defects for a period of 90 days from delivery.

Services Included with the Product

One year of Hewlett Packard Enterprise Software Support for the Microsoft Windows Server IoT 2022 for Storage Standard Edition operating system, standard 9x5 business hours (software advisory and remedial software telephone support, and media and documentation distribution service).

Microsoft Operating System Support Statement

Standard support for the Microsoft Windows Server IoT 2022 for Storage Standard Edition operating system installed on HPE StoreEasy 1000 Storage includes (but is not limited to) initial configuration, troubleshooting of operating system installation and/or recovery issues, hardware and driver problems, and system-specific / storage-centric features (Volume / File system creation; File/Folder/Share Permissions; Active Directory integration.; DFS-R; DFS-N; quotas; deduplication; NFS, SMB, iSCSI protocols; performance tuning; etc.). Microsoft Clustering Services is not supported on HPE StoreEasy 1000 Storage. HPE Support Services will also not troubleshoot a Microsoft Operating System feature that has been deprecated or has limited functionality as per design by Microsoft. HPE Support Services will not troubleshoot third-party software or issues related to Microsoft Active Directory Services that are external to the HPE StoreEasy system that may be hindering implementation of Active Directory integration. In those cases, customers should resolve issues with their third-party software vendor and/or by opening a support case with Microsoft directly.

HPE Services

No matter where you are in your digital transformation journey, you can count on HPE Services to deliver the expertise you need when, where and how you need it. From planning to deployment, ongoing operations and beyond, our experts can help you realize your digital ambitions.
https://www.hpe.com/services

Consulting Services

No matter where you are in your journey to hybrid cloud, experts can help you map out your next steps. From determining what workloads should live where, to handling governance and compliance, to managing costs, our experts can help you optimize your operations.
https://www.hpe.com/services/consulting

HPE Managed Services

HPE runs your IT operations, providing services that monitor, operate, and optimize your infrastructure and applications, delivered consistently and globally to give you unified control and let you focus on innovation.
HPE Managed Services | HPE

Operational services

Optimize your entire IT environment and drive innovation. Manage day-to-day IT operational tasks while freeing up valuable time and resources. Meet service-level targets and business objectives with features designed to drive better business outcomes.
https://www.hpe.com/services/operational

Service and Support

HPE Complete Care Service

HPE Complete Care Service is a modular, edge-to-cloud IT environment service designed to help optimize your entire IT environment and achieve agreed upon IT outcomes and business goals through a personalized experience. All delivered by an assigned team of HPE Services experts. HPE Complete Care Service provides:

- A complete coverage approach -- edge to cloud
- An assigned HPE team
- Modular and fully personalized engagement
- Enhanced Incident Management experience with priority access
- Digitally enabled and AI driven customer experience

https://www.hpe.com/services/completecare

HPE Tech Care Service

HPE Tech Care Service is the operational support service experience for HPE products. The service goes beyond traditional support by providing access to product specific experts, an AI driven digital experience, and general technical guidance to not only reduce risk but constantly search for ways to do things better. HPE Tech Care Service delivers a customer-centric, AI driven, and digitally enabled customer experience to move your business forward. HPE Tech Care Service is available in three response levels. Basic, which provides 9x5 business hour availability and a 2-hour response time. Essential which provides a 15-minute response time 24x7 for most enterprise level customers, and Critical which includes a 6-hour repair commitment where available and outage management response for severity 1 incidents.
https://www.hpe.com/services/techcare

HPE Lifecycle Services

HPE Lifecycle Services provide a variety of options to help maintain your HPE systems and solutions at all stages of the product lifecycle. A few popular examples include:

- Lifecycle Install and Startup Services: Various levels for physical installation and power on, remote access setup, installation and startup, and enhanced installation services with the operating system.
- HPE Firmware Update Analysis Service: Recommendations for firmware revision levels for selected HPE products, taking into account the relevant revision dependencies within your IT environment.
- HPE Firmware Update Implementation Service: Implementation of firmware updates for selected HPE server, storage, and solution products, taking into account the relevant revision dependencies within your IT environment.
- Implementation assistance services: Highly trained technical service specialists to assist you with a variety of activities, ranging from design, implementation, and platform deployment to consolidation, migration, project management, and onsite technical forums.
- HPE Service Credits: Access to prepaid services for flexibility to choose from a variety of specialized service activities, including assessments, performance maintenance reviews, firmware management, professional services, and operational best practices.

Notes: To review the list of Lifecycle Services available for your product go to:
https://www.hpe.com/services/lifecycle

For a list of the most frequently purchased services using service credits, see the **HPE Service Credits Menu**

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

Service and Support

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.

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

HPE StoreEasy 1000 Storage 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.
https://h20195.www2.hpe.com/v2/Getdocument.aspx?docname=4AA2-6112ENW

HPE File Data Migration Services
Available in convenient packaged offerings, HPE File Data Migration Service is designed to help facilitate the file migration process when migrating data to eligible HPE File Storage solutions and provide a flexible way to migrate your organization's critical data and minimize impact on your operations.
https://www.hpe.com/psnow/doc/4aa6-7249enw?jumpid=in_hpesitesearch

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HPE Service Credits
Offer flexible services and technical skills to meet your IT demands as your business evolves. With a menu of services, you can access additional resources and specialist skills to help you maintain peak performance of your IT. HPE Service Credits help you proactively respond to your dynamic IT and business needs.

Other Related Services from HPE Services:
HPE Education Services
Training and certification designed for IT and business professionals across all industries. Broad catalogue of course offerings to expand skills and proficiencies in topics ranging from cloud and cybersecurity to AI and DevOps. Create learning paths to expand proficiency in a specific subject. Schedule training in a way that works best for your business with flexible continuous learning options.
https://www.hpe.com/services/training

Defective Media Retention
An option available with HPE Complete Care Service and HPE Tech Care Service and applies only to Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

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

Parts and Materials
HPE will provide HPE-supported replacement parts and materials necessary to maintain the covered hardware product in operating condition, including parts and materials for available and recommended engineering improvements.

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

Service and Support

How to Purchase Services

Services are sold by Hewlett Packard Enterprise and Hewlett Packard Enterprise Authorized Service Partners:

- Services for customers purchasing from HPE or an enterprise reseller are quoted using HPE order configuration tools.
- Customers purchasing from a commercial reseller can find services at **https://ssc.hpe.com/portal/site/ssc/**

AI Powered and Digitally Enabled Support Experience

Achieve faster time to resolution with access to product-specific resources and expertise through a digital and data driven customer experience

Sign into the HPE Support Center experience, featuring streamlined self-serve case creation and management capabilities with inline knowledge recommendations. You will also find personalized task alerts and powerful troubleshooting support through an intelligent virtual agent with seamless transition when needed to a live support agent.
https://support.hpe.com/hpesc/public/home/signin

Consume IT On Your Terms

HPE GreenLake edge-to-cloud platform brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, HPE GreenLake edge-to-cloud platform accelerates digital transformation in a distributed, edge-to-cloud world.

- Get faster time to market
- Save on TCO, align costs to business
- Scale quickly, meet unpredictable demand
- Simplify IT operations across your data centers and clouds

To learn more about HPE Services, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Contact information for a representative in your area can be found at "Contact HPE"
https://www.hpe.com/us/en/contact-hpe.html

For more information
http://www.hpe.com/services

Configuration Information

HPE StoreEasy 1470 Storage

Specifications (all HPE StoreEasy 1470 Storage models)	
Operating System	Microsoft® Windows Server IoT 2022 for Storage Standard Edition with HPE StoreEasy Management Console
Processor	1 x Intel® Xeon-Bronze 3408U (1.8GHz/8-core/125W) Processor
Memory Standard	16GB
Memory Type	1 x HPE 16GB Single Rank x8 DDR5-4800 CAS-40-39-39 Registered Smart Memory
Internal Drive Support	4 x LFF (3.5") hot-plug front drive bays standard
Network Ports Standard	2 x 1GbE
Network Adapter	Embedded Broadcom BCM5720 Ethernet 1Gb 2-port BASE-T Adapter; PCIe NIC optional
Expansion Slots	1 x PCIe; optional 1 x PCIe (secondary riser)
Power	1 x 500W Platinum standard; optional 2nd redundant power supply
Cooling	7 hot-plug redundant fans
Form Factor	1U rackmount
Security	Embedded Trusted Platform Module; 1U lockable security bezel optional
Additional Licenses	HPE iLO Advanced Premium Security Edition License with 1yr Support on Licensed Features **Notes:** For more information, visit: **iLO Supported Servers and Features**

S2A19A, S2A20A, S2A21A, and S2A22A (Performance model)	
Storage Controller	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller
S2A23A, and S2A24A	
Storage Controller	Intel® Virtual RAID on CPU (Intel® VROC) Standard Software FIO for HPE

Notes: Options listed in the steps below are limited to those recommended for use with StoreEasy 1470 Storage models.

For more information on the complete set of compatible options, please reference the ProLiant DL320 Gen11 QuickSpecs at: **https://www.hpe.com/psnow/doc/a50004315enw.pdf**

Step 1: Choose your HPE StoreEasy 1470 Storage model

All HPE StoreEasy 1470 SKUs are pre-configured Build-to-Order (BTO) models with a small RAID10 partition across the four factory-installed drives for the pre-installed operating system (remaining space is available to be configured as file storage capacity). All models can be factory-racked, but all options in the configuration steps below are not factory integrated and are shipped separately.

Notes:
- All SKU descriptions are based on raw storage capacity, not available user storage.
- As a best practice, HPE recommends only RAID10 or RAID6 for data partitions.
- The StoreEasy 1470 Storage performance models (S2A19A, S2A20A, S2A21A, and S2A22A) use hardware RAID for higher performance
- The StoreEasy 1470 Storage models (S2A23A and S2A24A) feature software RAID for better economics.

Description	SKU
HPE StoreEasy 1470 8TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A19A
Notes: (4 x 2TB SATA 6G Midline 7.2K LFF HDDs)	
HPE StoreEasy 1470 16TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A20A
Notes: (4 x 4TB SATA 6G Midline 7.2K LFF HDDs)	
HPE StoreEasy 1470 32TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A21A
Notes: (4 x 8TB SATA 6G Midline 7.2K LFF HDDs)	

Configuration Information

Description	SKU
HPE StoreEasy 1470 48TB SATA Performance Storage with Microsoft Windows Server IoT 2022	S2A22A
Notes: (4 x 12TB SATA 6G Midline 7.2K LFF HDDs)	
HPE StoreEasy 1470 8TB SATA Storage with Microsoft Windows Server IoT 2022	S2A23A
Notes: (4 x 2TB SATA 6G Midline 7.2K LFF HDDs)	
HPE StoreEasy 1470 16TB SATA Storage with Microsoft Windows Server IoT 2022	S2A24A
Notes: (4 x 4TB SATA 6G Midline 7.2K LFF HDDs)	

Step 2: Choose additional memory kit(s) (optional)

HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43322-K21
Notes: There are a total maximum of 16 DIMM slots. All HPE StoreEasy 1470 models come with one 16GB DIMM standard	

Step 3: Choose a riser kit to add a PCIe slot (optional)

HPE ProLiant DL320 Gen11 x16 FHHL Riser Kit	P52753-B21
Notes: Expands the number of available PCIe slots from 1 to 2.	

Step 4: Choose an external storage controller to connect to external enclosures (optional)

HPE Smart Array SAS Controllers

HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21

Step 5: Choose additional network adapter(s) (optional)

Notes: SFP and SFP+ Adapters do not include a transceiver by default.
SFP transceiver(s) or direct connect cable(s) should be ordered according to the transceiver and cable compatibility matrix found at:
https://www.hpe.com/psnow/doc/A00002507ENW.pdf?jumpid=in_lit-psnow-getpdf

PCIe Network Adapters

Description	SKU
Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P26264-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P26262-B21
Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P42044-B21
Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P51178-B21

Step 6: Choose second power supply (optional)

Description	SKU
HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865408-B21

Configuration Information

Step 7: Choose a System Recovery Media Kit (optional)

Description	SKU
HPE StoreEasy 1X70 Recovery Software Media Kit with Microsoft Windows Server IoT 2022	S2A09A

Notes:

- HPE StoreEasy 1X70 Recovery Software Media Kits contain a System Recovery USB key that is used to re-install the factory operating system image. Booting the system from the System Recovery media 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 HPE StoreEasy 1X70 Administrator Guide for more information on performing a System Recovery.
- Alternatively, the HPE StoreEasy 1X70 Recovery Software image can be downloaded from the HPE's Software Depot at no charge. More information is available here: **https://myenterpriselicense.hpe.com/cwp-ui/free-software/.**
- For more information on how to perform a system recovery on a HPE StoreEasy 1470 refer to the HPE StoreEasy 1X70 Administrator's Guide. The guide can be downloaded from **http://www.hpe.com/support**. Select HPE Support Center and search for the HPE StoreEasy system model in the drivers and download section.
- 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. 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.

Configuration Information

HPE StoreEasy 1570 Storage

Common Specifications (all HPE StoreEasy 1570 Storage models)	
Operating System	Microsoft® Windows Server IoT 2022 for Storage Standard Edition with HPE StoreEasy Management Console
Processor	1 x Intel® Xeon-Bronze 3408U (1.8GHz/8-core/125W) Processor
Memory Standard	16GB
Memory Type	1 x HPE 16GB Single Rank x8 DDR5-4800 CAS-40-39-39 Registered Smart Memory
Internal Drive Support	4 x LFF (3.5") hot-plug drive bays standard 4 x LFF second drive cage (optional)
Network Ports Standard	2 x 1GbE
Network Adapter	Embedded 2-Port 1GbE BCM5720 Ethernet Adapter; PCIe NICs optional
Expansion Slots	2 x PCIe
Power	1 x 500W Platinum standard; optional 2nd redundant power supply
Cooling	2 non-hot-plug redundant fans
Form Factor	4.5U tower
Security	Embedded Trusted Platform Module embedded; Lockable security bezel optional;
Additional Licenses	HPE iLO Advanced Premium Security Edition License with 1yr Support on Licensed Features **Notes:** For more information, visit: **iLO Supported Servers and Features**

S2A25A, S2A26A, and S2A27A	
Storage Controller	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller
S2A28A, and S2A29A	
Storage Controller	Intel® Virtual RAID on CPU (Intel® VROC) Standard Software FIO for HPE

Notes: Options listed in the steps below are limited to those recommended for use with StoreEasy 1570 Storage models.

For more information on the complete set of compatible options, please reference the ProLiant ML110 Gen11 QuickSpecs at: **https://www.hpe.com/psnow/doc/a00054055enw.pdf**

Step 1: Choose your HPE StoreEasy 1570 Storage model

All HPE StoreEasy 1570 SKUs are pre-configured Build-to-Order (BTO) models with a small RAID10 partition across the four factory-installed drives for the pre-installed operating system (remaining space is available to be configured as file storage capacity). All options in the configuration steps below are not factory integrated and are shipped separately.

Notes:

- All SKU descriptions are based on raw storage capacity, not available user storage.
- The StoreEasy 1570 Storage performance models (S2A25A, S2A26A, and S2A27A) use hardware RAID for higher performance
- The StoreEasy 1570 Storage models (S2A28A and S2A29A) feature software RAID for better economics.
- As a best practice, HPE recommends only RAID10 or RAID6 for data partitions.

Description	SKU
HPE StoreEasy 1570 8TB SATA Performance Storage with Microsoft Windows Server IoT 2022 **Notes:** (4 x 2TB SATA 6G Midline 7.2K LFF HDDs)	S2A25A
HPE StoreEasy 1570 16TB SATA Performance Storage with Microsoft Windows Server IoT 2022 **Notes:** (4 x 4TB SATA 6G Midline 7.2K LFF HDDs)	S2A26A
HPE StoreEasy 1570 32TB SATA Performance Storage with Microsoft Windows Server IoT 2022 **Notes:** (4 x 8TB SATA 6G Midline 7.2K LFF HDDs)	S2A27A

Configuration Information

Description	SKU
HPE StoreEasy 1570 8TB SATA Storage with Microsoft Windows Server IoT 2022	S2A28A
Notes: (4 x 2TB SATA 6G Midline 7.2K LFF HDDs)	
HPE StoreEasy 1570 16TB SATA Storage with Microsoft Windows Server IoT 2022	S2A29A
Notes: (4 x 4TB SATA 6G Midline 7.2K LFF HDDs)	

Step 2: Choose additional memory kit(s) (optional)

Description	SKU
HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43322-K21
Notes: There are 6 DIMM slots available on the HPE StoreEasy 1570. All HPE StoreEasy 1570 models come with one processor and one 16GB DIMM standard.	

Step 3: Choose a second drive cage (optional)

Description	SKU
HPE ProLiant ML110 Gen11 4LFF Drive Cage Kit	P53482-B21
Notes: Adding the 2nd LFF drive cage requires adding the 2nd power supply (865408-B21).	

Step 4: Choose drives for the second drive cage (optional)

HPE single drive options

Description	SKU
HPE 1TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861686-K21
HPE 2TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861681-K21
HPE 4TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861683-K21
HPE 6TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861742-K21
HPE 8TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834028-K21
HPE 10TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e ISE Multi Vendor HDD	P53557-K21
HPE 12TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881787-K21
HPE 14TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09165-K21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23449-K21
HPE 18TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37678-K21
HPE 20TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53554-K21

Notes: As a best practice, HPE recommends ordering and installing 4 LFF drives for the 2nd drive cage that match the same capacity and type already installed in the first drive cage.

Step 5: Choose additional network adapter(s) (optional)

Notes: SFP and SFP+ Adapters do not include a transceiver by default.
SFP transceiver(s) or direct connect cable(s) should be ordered according to the transceiver and cable compatibility matrix found at: **https://www.hpe.com/psnow/doc/A00002507ENW.pdf?jumpid=in_lit-psnow-getpdf**

Configuration Information

PCIe Network Adapters

Description	SKU
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P26262-B21
Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P42044-B21
Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P51178-B21

Step 6: Choose a second power supply (optional)

Description	SKU
HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865408-B21

Step 7: Choose a System Recovery Media Kit (optional)

Description	SKU
HPE StoreEasy 1X70 Recovery Software Media Kit with Microsoft Windows Server IoT 2022	S2A09A

Notes:

- HPE StoreEasy 1X70 Recovery Software Media Kits contain a System Recovery USB key that is used to re-install the factory operating system image. Booting the system from the System Recovery media 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 HPE StoreEasy 1X70 Administrator Guide for more information on performing a System Recovery.
- Alternatively, the HPE StoreEasy 1X70 Recovery Software image can be downloaded from the HPE's Software Depot at no charge. More information is available here: **https://myenterpriselicense.hpe.com/cwp-ui/free-software/**.
- For more information on how to perform a system recovery on a HPE StoreEasy 1570 refer to the HPE StoreEasy 1X70 Administrator's Guide. The guide can be downloaded from **http://www.hpe.com/support** . Select HPE Support Center and search for the HPE StoreEasy system model in the drivers and download section.
- 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. 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.

Configuration Information

HPE StoreEasy 1670 Storage

Common Specifications of S2A30A, S2A31A, S2A32A, and S2A34A.	
Operating System	Microsoft® Windows Server IoT 2022 for Storage Standard Edition with HPE StoreEasy management console
Memory	1x HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit
Storage Controllers	HPE MR416i-o Gen11 x16 Lanes 8GB Cache OCP SPDM Storage Controller (16 Internal Lanes/8GB Cache) 12G SAS Modular Controller (for data drives); HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device (for mirrored OS drives only)
Internal Drive Support	12 x LFF (3.5") hot-plug front drive bays standard; 4 x LFF hot-plug mid-chassis drive cage optional
Network Ports Standard	4 x 1GbE
Network Adapter	Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE; PCIe NIC(s) optional
Expansion Slots	3 x PCIe (available); 2 x OCP (two slots occupied) **Notes:** One OCP slot occupied by the HPE MR416i-o Storage controller One OCP slot is occupied by BCM5719 Ethernet 1GB 4-port OCP3 Adapter
Power	2 x 800W Platinum hot-plug redundant
Cooling	6 high performance fans
Form Factor	2U rackmount
Security	Embedded Trusted Platform Module, 2U lockable security bezel optional;
Additional Licenses	HPE iLO Advanced Premium Security Edition License with 1yr Support on Licensed Features **Notes:** For more information, visit: **iLO Supported Servers and Features**

S2A30A, S2A31A, and S2A32A	
Processor	1 x Intel Xeon-Bronze 3408U 1.8GHz 8-core 125W Processor for HPE

S2A34A (Performance model)	
Processor	1 x Intel Xeon-Gold 5416S 2.0GHz 16-core 150W Processor for HPE

Notes: Options listed in the steps below are limited to those recommended for use with StoreEasy 1670 Storage models.

For more information on the complete set of compatible options, please reference the ProLiant DL380 Gen11 QuickSpecs at: **https://www.hpe.com/psnow/doc/a50004307enw.pdf**

Step 1: Choose your HPE StoreEasy 1670 Storage model

Fixed configuration models

These HPE StoreEasy 1670 SKUs are pre-configured Build-to-Order (BTO) models with the operating system pre-installed on mirrored solid-state drives and include eight data drives factory-installed in front slots (leaving four open front LFF slots for expansion). These models can be factory-racked, but all options in the configuration steps below (including additional data drives) are not factory integrated and are shipped separately.

Notes:
- All SKUs descriptions are based on raw storage capacity, not available user storage.
- Hewlett Packard Enterprise recommends as a best practice that data drives added to LFF slots be the same type and capacity.
- The operating system is mirrored on NS204i-u NVMe boot device

Description	SKU
HPE StoreEasy 1670 32TB SAS Storage with Microsoft Windows Server IoT 2022 **Notes:** (8 x 4TB SAS 12G Midline 7.2K LFF HDDs)	S2A30A

Configuration Information

Description	SKU
HPE StoreEasy 1670 64TB SAS Storage with Microsoft Windows Server IoT 2022	S2A31A

Notes: (8 x 8TB SAS 12G Midline 7.2K LFF HDDs)

Configurable models

These HPE StoreEasy 1670 SKUs are Configure-to-Order (CTO) models with the operating system pre-installed on mirrored solid-state drives and do not include data drives standard. These models can be factory-racked, and most added options (including data drives) can be factory integrated.

Notes: Hewlett Packard Enterprise recommends as a best practice that the internal data drives for the CTO models be the same type and capacity.

Description	SKU
HPE StoreEasy 1670 Storage with Microsoft Windows Server IoT 2022	S2A32A
HPE StoreEasy 1670 Performance Storage with Microsoft Windows Server IoT 2022	S2A34A

Notes: The operating system is mirrored on NS204i-u NVMe boot device

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Step 1: Choose additional memory kit(s) (optional)

Description	SKU
HPE 16GB (1x16GB) Single Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43322-K21

Notes:

- All the HPE StoreEasy 1670 models come with one processor standard. The maximum total number of DIMMS for StoreEasy 1670 is 16 DIMMs, and all StoreEasy 1670 are shipped with 1x 16GB DIMM from factory standard.
- StoreEasy 1670 does not offer second processor. Addition of second processor will violate the Microsoft Windows Server IoT 2022 license as maximum number of license core is 16.
- Please refer **memory population** for more detail

Step 2: Choose a drive cage to add LFF slots (optional)

Description	SKU
HPE ProLiant DL380 Gen11 4LFF SAS/SATA 12G LP Midplane Drive Cage Kit	P48809-B21

Notes: Expands the total number of Large Form Factor (3.5") drive slots from 12 to 16.

Step 3: Choose internal storage drives (optional)

Drive Options

Maximum number of internal LFF drives supported

- 12 (in standard configuration)
- 16 (with optional mid-chassis 4LFF drive cage in step 5)

HPE StoreEasy 1670 LFF Drive Bundles

Business Critical (Midline) - 12G SAS

Description	SKU
HPE StoreEasy 8TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E04A

Notes: Contains 4 x HPE 2TB SAS 12G 7.2K LFF LP HDDs (reference SKU 833926-K21)

Configuration Information

Description	SKU
HPE StoreEasy 16TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E05A
Notes: Contains 4 x HPE 4TB SAS 12G 7.2K LFF LP HDDs (reference SKU 833928-K21)	
HPE StoreEasy 24TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E06A
Notes: Contains 4 x HPE 6TB SAS 12G 7.2K LFF LP HDDs (reference SKU 861746-K21)	
HPE StoreEasy 48TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E07A
Notes: Contains 4 x HPE 12TB SAS 12G 7.2K LFF LP HDDs (reference SKU 881781-K21)	
HPE StoreEasy 64TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E08A
Notes: Contains 4 x HPE 16TB SAS 12G 7.2K LFF LP HDDs (reference SKU P23608-K21)	

HDDs

Low Profile Carrier Business Critical (Midline) - 12G SAS

Description	SKU
HPE 2TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833926-K21
HPE 4TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833928-K21
HPE 8TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834031-K21
HPE 6TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861746-K21
HPE 10TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e ISE Multi Vendor HDD	P53556-K21
HPE 12TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881781-K21
HPE 14TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09155-K21
HPE 16TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23608-K21
HPE 18TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37669-K21
HPE 20TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53553-K21

Low Profile Carrier Business Critical (Midline) - 6G SATA

Description	SKU
HPE 1TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861686-K21
HPE 4TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861683-K21
HPE 6TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861742-K21
HPE 8TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834028-K21
HPE 10TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty 512e ISE Multi Vendor HDD	P53557-K21
HPE 12TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881787-K21
HPE 14TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09165-K21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23449-K21
HPE 18TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37678-K21

SSDs

Read Intensive – 24G SAS – LFF Solid State Drives

Description	SKU
HPE 7.68TB SAS 24G Read Intensive LFF LPC Multi Vendor SSD	P49040-K21

Notes: The recommended maximum number of data SSDs for the HPE StoreEasy 1670 is 8; however, there is nothing architecturally that prevents the use of more than 16 SSDs.

Configuration Information

Step 4: Choose an external storage controller to connect to external enclosures (optional)

HPE Smart Array SAS Controllers

Description	SKU
HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21

Step 5: Choose additional network adapter(s) (optional)

Notes: SFP and SFP+ Adapters do not include a transceiver by default.
SFP transceiver(s) or direct connect cable(s) should be ordered according to the transceiver and cable compatibility matrix found at: **https://www.hpe.com/psnow/doc/A00002507ENW.pdf?jumpid=in_lit-psnow-getpdf**

PCIe Network Adapters

Description	SKU
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21
Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P26264-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21
Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P42044-B21
Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P51178-B21

Step 6: Choose a System Recovery Media Kit (optional)

Description	SKU
HPE StoreEasy 1X70 Recovery Software Media Kit with Microsoft Windows Server IoT 2022	S2A09A

Notes:

- HPE StoreEasy 1X70 Recovery Software Media Kits contain a System Recovery USB key that is used to re-install the factory operating system image. Booting the system from the System Recovery media 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 HPE StoreEasy 1X70 Administrator Guide for more information on performing a System Recovery.
- Alternatively, the HPE StoreEasy 1X70 Recovery Software image can be downloaded from the HPE's Software Depot at no charge. More information is available here: **https://myenterpriselicense.hpe.com/cwp-ui/free-software/**.
- For more information on how to perform a system recovery on a HPE StoreEasy 1670 refer to the HPE StoreEasy 1X70 Administrator's Guide. The guide can be downloaded from **http://www.hpe.com/support**. Select HPE Support Center and search for the HPE StoreEasy system model in the drivers and download section.
- 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. 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.

Configuration Information

HPE StoreEasy 1670 Expanded Storage

Specifications (single HPE StoreEasy 1670 Expanded Storage model)	
Operating System	Microsoft® Windows Server IoT 2022 for Storage Standard Edition with HPE StoreEasy Management Console
Processor	1 x Intel® Xeon-Silver 4309Y (2.8GHz/8-core/105W); 2nd processor optional
Memory Standard	32GB
Memory Type	2 x HPE 16GB Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory
Storage Controllers	HPE Smart Array P816i-a SR Gen10 (16 Internal Lanes/4GB Cache/SmartCache) 12G SAS Modular Controller (for data drives) HPE NS204i-p x2 Lanes NVMe PCIe3 boot Device (for mirrored OS drives only)
Internal Drive Support	24 x LFF (3.5") hot-plug front drive bays standard 4 x LFF hot-plug rear drive cage standard
Network Ports Standard	2 x 10GbE
Network Adapter	Included Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE ; PCIe NIC(s) optional
Expansion Slots	6 x PCIe (two available in 1P configuration; four available in 2P configuration) **Notes:** One PCIe slot occupied by HPE NS204i-p for boot device (full-height, half-length riser).
Power	2 x 1600W Platinum hot-plug redundant **Notes:** 1600W Flex Slot Platinum power supplies must be used with high-line input (200V - 240V AC).
Cooling	5 dual-rotor fan modules
Form Factor	2U rackmount
Security	Included Trusted Platform Module; 2U lockable security bezel optional
Additional Licenses	HPE iLO Advanced Premium Security Edition License with 1yr Support on Licensed Features **Notes:** For more information, visit: **iLO Supported Servers and Features**

Notes: Options listed in the steps below are limited to those recommended for use with StoreEasy 1670 Expanded Storage models.
For more information on the complete set of compatible options, please reference the Apollo 4200 Gen10 Plus QuickSpecs at: **https://www.hpe.com/psnow/doc/a50002573enw.pdf**

Step 1: Choose your HPE StoreEasy 1670 Expanded Storage model

HPE StoreEasy 1670 Expanded Storage SKUs are Configure-to-Order (CTO) models with the operating system pre-installed on mirrored solid state drives and do not include data drives standard. They can be factory-racked, and most added options (including data drives) can be factory integrated.
Notes: Hewlett Packard Enterprise recommends as a best practice that data drives added to the LFF slots be of same type and capacity.

Description	SKU
HPE StoreEasy 1670 Expanded Storage with Microsoft Windows Server IoT 2022	S2A35A

Step 2: Choose a second processor (optional)

Description	SKU
Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor Kit for HPE Apollo 4200 Gen10 Plus	P42908-B21

Configuration Information

Step 3: Choose additional memory kit(s) (optional)

Description	SKU
HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06031-K21

Notes: There are 12 DIMM slots per processor for a total maximum of 24 DIMM slots. HPE StoreEasy 1670 Expanded models come with one processor and two 16GB DIMMs standard.

Step 4: Choose internal storage drives (optional)

Drive Options
Maximum number of internal LFF drives supported: 28

HPE single drive options

HDDs

Low Profile Carrier Business Critical (Midline) - 12G SAS

Description	SKU
HPE 14TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09155-K21
HPE 16TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23608-K21
HPE 18TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37669-K21
HPE 20TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53553-K21

Low Profile Carrier Business Critical (Midline) - 6G SATA

Description	SKU
HPE 14TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09165-K21
HPE 16TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23449-K21
HPE 18TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37678-K21
HPE 20TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53554-K21

SSDs

Mixed Use - SAS

Description	SKU
HPE 960GB SAS 12G Mixed Use LFF LPC Value SAS Multi Vendor SSD	P37009-K21

Read Intensive - 6G SATA

HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD	P47808-K21

Notes:

- HPE Smart Array SR SmartCache is included with the standard HPE Smart Array P816i-a SR Gen10 Storage Controller. With the addition of at least one SSD (HPE recommends two 12G SAS Mixed Use SSDs), it can add a flash acceleration tier to the HPE StoreEasy 1670 Expanded to help increase performance for the most frequently accessed files. For more detailed information about HPE Smart Array SR SmartCache go to: **https://www.hpe.com/us/en/product-catalog/detail/pip.5364342.html**
- For options outside of those listed above, carefully select LFF low profile carrier (LP) hard disk drives and Low Profile Converter (LPC) solid state drives.

Configuration Information

Step 5: Choose an external storage controller to connect to external enclosures (optional)

HPE Smart Array SAS Controllers

Description	SKU
HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21
HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe Plug-in Controller	804405-B21
HPE Smart Array SR Secure Encryption (Data at Rest Encryption/per Server Entitlement) E-LTU	Q2F26AAE

Notes:

- If you wish to enable Data at Rest Encryption on the HPE StoreEasy 1670 Expanded using the included Smart Array P816i-a or with an optional Smart Array P408e-p listed above, you must order the optional HPE Smart Array SR Secure Encryption E-LTU (SKU Q2F26AAE).
- HPE Smart Array SR SmartCache is included with the standard HPE Smart Array P816i-a SR Gen10 Storage Controller (no licensing is required). For more detailed information about HPE Smart Array SR SmartCache go to: **https://www.hpe.com/us/en/product-catalog/detail/pip.5364342.html**

HPE Special Reminder

Before enabling encryption on the Smart Array controller module on this system, you must ensure that your intended use of the encryption complies with relevant local laws, regulations and policies, and approvals or licenses must be obtained if applicable.

For any compliance issues arising from your operation/usage of encryption within the Smart Array controller module which violates the above-mentioned requirement, you shall bear all the liabilities wholly and solely. Hewlett Packard Enterprise will not be responsible for any related liabilities. For more information see the **HPE Smart Array SR Secure Encryption QuickSpecs**.
Notes: For additional details and Smart Array controller options, please see **HPE Smart Array Gen10 Controllers Data Sheet**.

Step 6: Choose additional network adapter(s) (optional)

Notes: SFP and SFP+ Adapters do not include a transceiver by default.
SFP transceiver(s) or direct connect cable(s) should be ordered according to the transceiver and cable compatibility matrix found at: **https://www.hpe.com/psnow/doc/A00002507ENW.pdf?jumpid=in_lit-psnow-getpdf**

PCIe Network Adapters

Description	SKU
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21
Broadcom BCM57504 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P26264-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21
Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P42044-B21
Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P51178-B21
Intel I350-T4 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P21106-B21

Notes: If more than one PCIe card is added, a second processor is required to provide access to the remaining PCIe slots.

Configuration Information

Step 7: Choose a System Recovery Media Kit (optional)

HPE StoreEasy 1X70 Recovery Software Media Kit with Microsoft Windows Server IoT 2022	S2A09A

Notes:

- HPE StoreEasy 1X70 Recovery Software Media Kits contain a System Recovery USB key that is used to re-install the factory operating system image. Booting the system from the System Recovery media 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 HPE StoreEasy 1X70 Administrator Guide for more information on performing a System Recovery.
- Alternatively, the HPE StoreEasy 1X70 Recovery Software image can be downloaded from the HPE's Software Depot at no charge. More information is available here: **https://myenterpriselicense.hpe.com/cwp-ui/free-software/**.
- For more information on how to perform a system recovery on a StoreEasy 1670 Expanded refer to the HPE StoreEasy 1X70 Administrator's Guide. The guide can be downloaded from **http://www.hpe.com/support** . Select HPE Support Center and search for the HPE StoreEasy system model in the drivers and download section.
- 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. 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.

Configuration Information

HPE StoreEasy 1870 Storage

Common Specifications for S2A36A and S2A37A	
Operating System	Microsoft® Windows Server IoT 2022 for Storage Standard Edition with HPE StoreEasy Management Console
Storage Controllers	HPE SR932i--p Gen11 (32 Internal Lanes/8GB Cache/SmartCache) SPDM Plug-in Storage Controller (for data drives); HPE NS204i-u Gen11 NVMe Hot Plug Boot Optimized Storage Device (for mirrored OS drives only)
Internal Drive Support	24 x SFF (2.5") hot-plug front drive bays standard; 8 x SFF hot-plug rear-chassis drive cage optional
Network Ports Standard	2 x 10GbE
Memory Standard	32GB
Memory Type	1 x HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit
Network Adapter	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE; PCIe NIC(s) optional
Expansion Slots	3 x PCIe (two available); 2 OCP slot (one available) **Notes:** One PCIe slot is occupied by a SR932i-p. One OCP slot is occupied by a BCM57416 Ethernet 10Gb 2-port OCP3 adapter
Power	2 x 800W Platinum hot-plug redundant
Cooling	6 high-performance redundant fans
Form Factor	2U rackmount
Security	Embedded Trusted Platform Module ;2U lockable security bezel optional
Additional Licenses	HPE iLO Advanced Premium Security Edition License with 1yr Support on Licensed Features **Notes:** For more information, visit: **iLO Supported Servers and Features**

S2A36A (Standard model)	
Processor	1 x Intel® Xeon-Bronze 3408U (1.8 GHz/8-core/125W) Processor;

S2A37A(Performance Model)	
Processor	1 x Intel® Xeon-Gold 5416S(2.0GHz/16-core/150W) Processor;

Notes: Options listed in the steps below are limited to those recommended for use with StoreEasy 1870 Storage models.

For more information on the complete set of compatible options, please reference the ProLiant DL380 Gen11 QuickSpecs at: **https://www.hpe.com/psnow/doc/a50004307enw.pdf**

Step 1: Choose your HPE StoreEasy 1870 Storage model

Configurable models

These HPE StoreEasy 1870 SKUs are Configure-to-Order (CTO) models with the operating system pre-installed on mirrored solid state drives and do not include data drives standard. These models can be factory-racked, and most added options (including data drives) can be factory integrated.

Notes: Hewlett Packard Enterprise recommends as a best practice that the internal data drives for the CTO models be the same type and capacity.

Description	SKU
HPE StoreEasy 1870 Storage with Microsoft Windows Server IoT 2022	S2A36A
HPE StoreEasy 1870 Performance Storage with Microsoft Windows Server IoT 2022	S2A37A

Configuration Information

Step 2: Choose additional memory kit(s) (optional)

Description	SKU
HPE 32GB (1x32GB) Dual Rank x8 DDR5-4800 CAS-40-39-39 EC8 Registered Smart Memory Kit	P43328-K21

Notes:

- All HPE StoreEasy 1870 models come with one processor standard. The maximum total number of DIMMS for StoreEasy 1870 is 16 DIMMs, and all StoreEasy 1870 are shipped with 1x 32GB DIMM from factory.
- StoreEasy 1870 does not offer second processor. Additional of second processor will violate the Microsoft Windows Server IoT 2022 license as maximum number of license core is 16.
- Please refer **memory population** for more detail

Step 3: Choose a drive cage to add SFF slots (optional)

Description	SKU
HPE ProLiant DL380 Gen11 8SFF x1 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit	P48815-B21

Notes: If the optional drive cages are selected, the total 32 drives can be selected

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Step 4: Choose internal storage drives (optional)

HPE StoreEasy 1870 SFF Drive Bundles

Basic Carrier Mission Critical (Enterprise) - 12G SAS

Description	SKU
HPE StoreEasy 4.8TB SAS Mission Critical SFF (2.5in) BC 3yr Wty 4-pack Multi Vendor HDD Bundle	S0E01A
Notes: Contains 4 x HPE 1.2TB SAS 12G Enterprise 10K SFF HDDs (reference SKU P28586-K21)	
HPE StoreEasy 9.6TB SAS Mission Critical SFF (2.5in) BC 3yr Wty 4-pack Multi Vendor HDD Bundle	S0E02A
Notes: Contains 4 x HPE 2.4TB SAS 12G Enterprise 10K SFF HDDs (reference SKU P28352-K21)	
HPE StoreEasy 8TB SAS Business Critical SFF (2.5in) BC 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E03A
Notes: Contains 4 x HPE 2TB SAS 12G Business Critical 7.2K SFF 512e HDD (reference SKU P28505-K21)	

HDDs

Basic Carrier Mission Critical (Enterprise) - 12G SAS

Description	SKU
HPE 300GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P28028-K21
HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P28352-K21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P28586-K21
HPE 300GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P40430-K21
HPE 900GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P40432-K21

SSDs

Basic Carrier Mixed Use - SATA (max 24)

Description	SKU
HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40502-K21

Configuration Information

Description	SKU
HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40503-K21
HPE 1.92TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40504-K21
HPE 3.84TB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40505-K21
HPE 960GB SATA 6G Mixed Use SFF BC Self-encrypting 5400M SSD	P58244-K21

SSDs

Basic Carrier Mixed Use -SAS (max 24)

Description	SKU
HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40511-K21
HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40510-K21

Notes:

- HPE Smart Array SR SmartCache is included with the standard HPE Smart Array SR932i-p SR Gen11 Storage Controller. With the addition of at least one SSD (HPE recommends two 12G SAS Mixed Use SSDs), it can add a flash acceleration tier to the HPE StoreEasy 1870 to help increase performance for the most frequently accessed files. For more detailed information about HPE Smart Array SR SmartCache go to: **https://www.hpe.com/us/en/product-catalog/detail/pip.5364342.html**
- The recommended maximum number of SAS SSDs for the HPE StoreEasy 1870 is 24.

Step 5: Choose an external storage controller to connect to external enclosures (optional)

HPE Smart Array SAS Controllers

Description	SKU
HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21
HPE Smart Array SR Secure Encryption (Data at Rest Encryption/per Server Entitlement) E-LTU	Q2F26AAE

Notes: If you wish to enable Data at Rest Encryption on the HPE StoreEasy 1870 using the included Smart Array P816i-a or with an optional Smart Array P408e-p listed above, you must order the optional HPE Smart Array SR Secure Encryption E-LTU (SKU Q2F26AAE).

HPE Special Reminder

Before enabling encryption on the Smart Array controller module on this system, you must ensure that your intended use of the encryption complies with relevant local laws, regulations and policies, and approvals or licenses must be obtained if applicable. For any compliance issues arising from your operation/usage of encryption within the Smart Array controller module which violates the above-mentioned requirement, you shall bear all the liabilities wholly and solely. Hewlett Packard Enterprise will not be responsible for any related liabilities.

For more information see the **HPE Smart Array SR Secure Encryption QuickSpecs.**

Step 6: Choose additional network adapter(s) (optional)

Notes: SFP and SFP+ Adapters do not include a transceiver by default.

SFP transceiver(s) or direct connect cable(s) should be ordered according to the transceiver and cable compatibility matrix found at:

https://www.hpe.com/psnow/doc/A00002507ENW.pdf?jumpid=in_lit-psnow-getpdf

Configuration Information

PCIe Network Adapters

Description	SKU
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P26262-B21
Mellanox MCX631102AS-ADAT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P42044-B21
Broadcom BCM5719 Ethernet 1Gb 4-port BASE-T Adapter for HPE	P51178-B21

Step 7: Choose a System Recovery Media Kit (optional)

Description	SKU
HPE StoreEasy 1X70 Recovery Software Media Kit with Microsoft Windows Server IoT 2022	S2A09A

Notes:

- HPE StoreEasy 1X70 Recovery Software Media Kits contain a System Recovery USB key that is used to re-install the factory operating system image. Booting the system from the System Recovery media 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 HPE StoreEasy 1X70 Administrator Guide for more information on performing a System Recovery.
- Alternatively, the HPE StoreEasy 1X70 Recovery Software image can be downloaded from the HPE's Software Depot at no charge. More information is available here: **https://myenterpriselicense.hpe.com/cwp-ui/free-software/**.
- For more information on how to perform a system recovery on a HPE StoreEasy 1870 refer to the HPE StoreEasy 1X70 Administrator's Guide. The guide can be downloaded from **http://www.hpe.com/support** . Select HPE Support Center and search for the HPE StoreEasy system model in the drivers and download section.
- 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. 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.

Configuration Information

HPE StoreEasy 1000 Storage with the HPE StoreEasy Management Console
Sixth generation (1460, 1560, 1660, 1660 Expanded, and 1860)

The following summarizes HPE StoreEasy 1000 Storage supported features and roles:

Microsoft Windows Server IoT 2019 for Storage Standard Edition	
Maximum CPU cores and VM* Rights	16 cores per system + 2 VM
# Disks per controller (see HPE Product Specifications for Specific constraints for each controller)	238
Maximum SMB Connections	16,777,216
File Server Resource Manager (FSRM)	Yes
Domain Join	Yes
File Classification Infrastructure (FCI)	Yes
Windows Server Backup	Yes
DFS-Replication	Yes (100TB maximum)
Storage Replica	Yes (limited to 1 x 2TB volume, 1 partnership, 1 resource group)
Azure File Sync	Yes
Azure Backup	Yes
Shared block storage (iSCSI Target Server / Storage Provider)	Yes
Storage Spaces, Storage Spaces Direct, and Volume Replication	No
Deduplication	Yes
Deduplication for ReFS	Yes
BranchCache - Hosted Cache	Yes
Hyper-V Virtualization	Host + 2VM* (Shielded VMs not included)
Clustering (including AD/DNS)	Not supported on StoreEasy 1000 Storage
Networking Infrastructure Roles (DHCP & DNS)	Yes
Active Directory roles including Domain Controller (RODC)	No
Active Directory (Domain Controller, Certificate Services, Federation services, Rights Management)	No
Application Server, Network Policy, Remote Desktop Broker, WDS and Fax Server	No
Windows Server Migration Tools	Yes
Windows Storage Migration Service	Yes
Windows Server System Insights	Yes
Enhanced Windows Defender Advanced Threat Protection (ATP)	Yes
Notes: *Requires separate software license for each VM	

Configuration Information

Notes:

- Microsoft Windows Server 2019 and Microsoft Windows Server IoT 2019 for Storage are built on the same code base. Storage-centric (backup, replication, antivirus, etc.) applications certified for Windows Server 2019 are expected to have the same application compatibility profile on Windows Server IoT 2019 for Storage. Windows Server IoT for Storage and Windows Server have the same application frameworks, services, and plumbing to support running the full breadth of Windows-compatible applications but do have unique licensing features and restrictions. Customers should review the End User License Agreement (EULA) to see what server roles are listed as unsupported and the types of applications that are permitted for installation on HPE StoreEasy 1000 Storage systems. Applications that rely upon certain roles that are removed from (or are listed in the EULA as unsupported on) Windows Server IoT 2019 for Storage, such as fax server, terminal services, Application Server, Network Policy Server, Remote Desktop Broker, Windows Deployment Services, and Active Directory domain controller (all HPE StoreEasy 1000 Storage systems can join an Active Directory domain, but they cannot be a domain controller or perform Certificate Services, Federation Services, or Rights Management) 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.
- Microsoft Windows Server IoT 2019 for Storage is currently scheduled to remain under Microsoft Mainstream Support (which includes incident support, security update support, and the ability to request non-security updates) until January 2024. Learn more about Microsoft's Fixed Lifecycle and support policy at **https://docs.microsoft.com/en-us/lifecycle/policies/fixed**

More Information on Microsoft Windows Server IoT 2019 for Storage can be found here:
https://docs.microsoft.com/en-us/windows/iot-core/windows-server

Protect your data and your investment

- HPE 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 built-on file classification, Volume Shadow Copy Service snapshots, and Distributed File System Replication (DFS-R) to keep your files safe and accessible.
- 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.
- Increase uptime with standard features such as near-continuous health monitoring with HPE Active Health System, redundant 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.
- Get support from file storage experts with 3-Year Parts, 3-Year Labor, and 3-Year Onsite support with next business day response. All HPE StoreEasy Storage systems also include one year of 9x5 software telephone support for the Windows Server for Storage operating system.

Configuration Information

HPE StoreEasy 1460 Storage

Common Specifications (all HPE StoreEasy 1460 Storage models)	
Operating System	Microsoft® Windows Server IoT 2019 for Storage Standard Edition with HPE StoreEasy Management Console
Processor	1 x Intel® Xeon-Bronze 3204 (1.9GHz/6-core/85W) Processor; 2nd processor optional
Memory Standard	16GB
Memory Type	1 x HPE 16GB Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory
Internal Drive Support	4 x LFF (3.5") hot-plug front drive bays standard
Network Ports Standard	4 x 1GbE
Network Adapter	HPE Ethernet 1Gb 4-port 366FLR FlexLOM Adapter; PCIe NIC optional
Expansion Slots	2 x PCIe; secondary riser with one additional PCIe slot optional
Power	1 x 500W Platinum standard; optional 2nd redundant power supply
Cooling	5 hot-plug redundant fans (single processor), 7 hot-plug redundant fans (dual processors)
Form Factor	1U rackmount
Security	1U lockable security bezel; Trusted Platform Module 2.0 optional
Additional Licenses	HPE iLO Advanced Premium Security Edition License with 1yr Support on Licensed Features **Notes:** For more information, visit: **iLO Supported Servers and Features**

R7G16B, R7G17B, and R7G18B	
Storage Controller	HPE Smart Array S100i SR Gen10 SW RAID
R7G16A, R7G17A, and R7G18A	
Storage Controller	HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller

Notes: Options listed in the steps below are limited to those recommended for use with StoreEasy 1460 Storage models.
For more information on the complete set of compatible options, please reference the ProLiant DL360 Gen10 QuickSpecs at:
https://www.hpe.com/psnow/doc/a00008159enw.pdf

Step 1: Choose your HPE StoreEasy 1460 Storage model

All HPE StoreEasy 1460 SKUs are pre-configured Build-to-Order (BTO) models with a small RAID10 partition across the four factory-installed drives for the pre-installed operating system (remaining space is available to be configured as file storage capacity). All models can be factory-racked, but all options in the configuration steps below are not factory integrated and are shipped separately.

Notes:

- All SKU descriptions are based on raw storage capacity, not available user storage.
- The new StoreEasy 1460 Storage models (R7G16B, R7G17B, and R7G18B) feature software RAID for better economics.
- The existing StoreEasy 1460 Storage models (R7G16A, R7G17A, and R7G18A) now described as Performance models, use hardware RAID for higher performance.
- As a best practice, HPE recommends only RAID10 or RAID6 for data partitions.

Step 2: Choose a second processor (optional)

Intel Xeon-Bronze 3204 (1.9GHz/6-core/85W) Processor Kit for HPE ProLiant DL360 Gen10 — P02565-B21

Step 3: Choose additional memory kit(s) (optional)

HPE 16GB (1x16GB) Dual Rank x8 DDR4-2933 CAS-21-21-21 Registered Smart Memory Kit — P00922-K21

Notes:

- There are 12 DIMM slots per processor for a total maximum of 24 DIMM slots. All HPE StoreEasy 1460 models come with one processor and one 16GB DIMM standard.
- Dual-processor HPE StoreEasy 1460 systems must have the same number and type of memory DIMMs installed for each processor.

Configuration Information

Step 4: Choose a riser kit to add a PCIe slot (optional)

HPE DL360 Gen10 Low Profile Riser Kit	867982-B21

Notes: Expands the number of available PCIe slots from 2 to 3, and also requires addition of a second processor.

Step 5: Choose an external storage controller to connect to external enclosures (optional)

HPE Smart Array SAS Controllers

HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21
HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe Plug-in Controller	804405-B21
HPE Smart Array SR Secure Encryption (Data at Rest Encryption/per Server Entitlement) E-LTU	Q2F26AAE

Notes:

- If you wish to enable Data at Rest Encryption on the HPE StoreEasy 1460 using with an optional Smart Array P408e-p listed above, you must order the optional HPE Smart Array SR Secure Encryption E-LTU (SKU Q2F26AAE).
- HPE Smart Array SR SmartCache is optional and must be licensed separately. Since it requires at least one SSD (and HPE recommends at least two SSDs), an external storage controller plus external storage would also be required to enable it on StoreEasy 1460 Storage. For more detailed information about HPE Smart Array SR SmartCache go to: **https://www.hpe.com/us/en/product-catalog/detail/pip.5364342.html**

HPE Special Reminder

Before enabling encryption on the Smart Array controller module on this system, you must ensure that your intended use of the encryption complies with relevant local laws, regulations and policies, and approvals or licenses must be obtained if applicable.

For any compliance issues arising from your operation/usage of encryption within the Smart Array controller module which violates the above-mentioned requirement, you shall bear all the liabilities wholly and solely. Hewlett Packard Enterprise will not be responsible for any related liabilities.

For more information see the **HPE Smart Array SR Secure Encryption QuickSpecs**.

Step 6: Choose additional network adapter(s) (optional)

Notes: SFP and SFP+ Adapters do not include a transceiver by default.
SFP transceiver(s) or direct connect cable(s) should be ordered according to the transceiver and cable compatibility matrix found at:
https://www.hpe.com/psnow/doc/A00002507ENW.pdf?jumpid=in_lit-psnow-getpdf

PCIe Network Adapters

Description	SKU
HPE Ethernet 10Gb 2-port BASE-T BCM57416 Adapter	813661-B21
HPE Ethernet 10Gb 2-port SFP+ BCM57414 Adapter	P08421-B21
HPE Ethernet 10Gb 2-port BASE-T X550-AT2 Adapter	817738-B21
HPE Ethernet 1Gb 2-port BASE-T BCM5720 Adapter	615732-B21
HPE Ethernet 1Gb 4-port BASE-T BCM5719 Adapter	647594-B21

Step 7: Choose the HPE Trusted Platform Module (optional)

Description	SKU
HPE Trusted Platform Module 2.0 Gen10 Option	864279-B21

Notes: HPE StoreEasy systems can have a TPM module (of any type) installed only once. It cannot be replaced with any other TPM module.

Configuration Information

Step 8: Choose second power supply (optional)

Description	SKU
HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit	865408-B21

Step 9: Choose a System Recovery Media Kit (optional)

Description	SKU
HPE StoreEasy 1X60 Recovery Software Media Kit with Microsoft Windows Server IoT 2019	R7G47D

Notes:

- HPE StoreEasy 1X60 Recovery Software Media Kits contain a System Recovery USB key that is used to re-install the factory operating system image. Booting the system from the System Recovery media 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 HPE StoreEasy 1X60 Administrator Guide for more information on performing a System Recovery.
- Alternatively, the HPE StoreEasy 1X60 Recovery Software image can be downloaded from the HPE's Software Depot at no charge. More information is available here: **https://myenterpriselicense.hpe.com/cwp-ui/free-software/**.
- For more information on how to perform a system recovery on a HPE StoreEasy 1460 refer to the HPE StoreEasy 1X60 Administrator's Guide. The guide can be downloaded from **http://www.hpe.com/support** . Select HPE Support Center and search for the HPE StoreEasy system model in the drivers and download section.
- 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. 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.

Configuration Information

HPE StoreEasy 1660 Storage

Common Specifications for R7G22B, R7G23B, R7G24B, and S0E00A	
Operating System	Microsoft® Windows Server IoT 2019 for Storage Standard Edition with HPE StoreEasy Management Console
Processor	Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE; 2nd processor optional
Memory Standard	16GB
Memory Type	1 x HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart
Storage Controllers	HPE Broadcom MegaRAID MR416i-a/p x16 lanes 4 GB Cache NVMe/SAS 12G Controller for data drives; HPE Smart Array S100i SR Gen10 Plus SW RAID for mirrored OS drives only
Internal Drive Support	12 x LFF (3.5") hot-plug front drive bays standard; 2 x SFF hot-plug rear-chassis drive cage standard; 4 x LFF hot-plug drive cage optional
Expansion Slots	3 x PCIe; 3-slot secondary riser optional
Power	2 x 800W Platinum hot-plug redundant
Cooling	6 hot-plug, high-performance redundant fans
Form Factor	2U rackmount
Security	2U lockable security bezel; Trusted Platform Module 2.0 optional
Additional Licenses	HPE iLO Advanced Premium Security Edition License with 1yr Support on Licensed Features **Notes:** For more information, visit: iLO Supported Servers and Features

Notes: R7G24B provides option to select the boot drives and OCP network card, whereas S0E00A comes with preconfigured boot drives and OCP network card.

R7G22B and R7G23B	
Network Ports Standard	4 x 1GbE
Network Adapter	HPE Ethernet 1Gb 4 port I350 Base-T OCP3 Adapter; PCIe NIC(s) optional

S0E00A (only)	
Network Ports Standard	2x10GbE
Network Adapter	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE; PCIe NIC(s) optional

Notes: R7G24B requires to purchase mandatory option network card. Please refer network card for R7G24B.

Notes: Options listed in the steps below are limited to those recommended for use with StoreEasy 1660 Storage models.

For more information on the complete set of compatible options, please reference the ProLiant DL380 Gen10 Plus QuickSpecs at: **https://www.hpe.com/psnow/doc/a50002553enw.pdf** OR the ProLiant DL380 Gen10 QuickSpecs at: **https://www.hpe.com/psnow/doc/a00008180enw.pdf**

Step 1: Choose your HPE StoreEasy 1660 Storage model

Fixed configuration models

These HPE StoreEasy 1660 SKUs are pre-configured Build-to-Order (BTO) models with the operating system pre-installed on mirrored solid state drives and include eight data drives factory-installed in front slots (leaving four open front LFF slots for expansion). These models can be factory-racked, but all options in the configuration steps below (including additional data drives) are not factory integrated and are shipped separately.

Notes:

- All SKUs descriptions are based on raw storage capacity, not available user storage.
- The StoreEasy 1660 models R7G22B, R7G23B, and R7G24B are built from HPE ProLiant DL380 Gen10 Plus technologies including the HPE MegaRAID Gen10 Plus Controller.

Configuration Information

- The prior StoreEasy 1660 models R7G21A, R7G22A, R7G23A, R7G24A, and R7G25A were built from HPE ProLiant DL380 Gen10 technologies including the HPE Smart Array SR Gen10 Controller.
- Hewlett Packard Enterprise recommends as a best practice that data drives added to LFF slots be the same type and capacity.
- The operating system is mirrored on two SFF (2.5") solid state drives in a rear drive cage, leaving all three standard PCIe slots available for expansion.

Description	SKU
HPE StoreEasy 1660 32TB SAS Storage with Microsoft Windows Server IoT 2019	R7G22B
Notes: (8 x 4TB SAS 12G Midline 7.2K LFF HDDs)	
HPE StoreEasy 1660 64TB SAS Storage with Microsoft Windows Server IoT 2019	R7G23B
Notes: (8 x 8TB SAS 12G Midline 7.2K LFF HDDs)	

Configurable models

These HPE StoreEasy 1660 SKUs are Configure-to-Order (CTO) models with the operating system pre-installed on mirrored solid state drives and do not include data drives standard. These models can be factory-racked, and most added options (including data drives) can be factory integrated.
Notes: Hewlett Packard Enterprise recommends as a best practice that the internal data drives for the CTO models be the same type and capacity.

Description	SKU
HPE StoreEasy 1660 Storage with Microsoft Windows Server IoT 2019	S0E00A
HPE StoreEasy 1660 Storage with Microsoft Windows Server IoT 2019	R7G24B
Notes: The operating system is mirrored on two SFF (2.5") solid state drives in a rear drive cage, leaving all three standard PCIe slots available for expansion.	

Step 1A: Choose boot drives (only for R7G24B)

Description	SKU
HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40502-K21
HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40503-K21

Step 1B: Choose a network card (only for R7G24B)

Description	SKU
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE	P10097-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P10115-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE	P26256-B21
Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE	P08449-B21
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE	P10097-B21

Step 2: Choose a second processor (optional)

Description	SKU
R7G22B, R7G23B, R7G24B, and S0E00A only	
Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE	P36920-B21

Configuration Information

Step 3: Choose additional memory kit(s) (optional)

Description	SKU
R7G22B, R7G23B, R7G24B, and S0E00A only	
HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06031-K21

Notes:

- All HPE StoreEasy 1660 models come with one processor standard. R7G22B, R7G23B, R7G24B, and S0E00A come with 16 DIMM slot per processor for a total maximum of 32 DIMM slots, while all other StoreEasy 1660 SKUs come with 12 DIMM slots per processor for a total maximum of 24 DIMM.
- Dual-processor HPE StoreEasy 1660 systems must have the same number and type of memory DIMMs installed for each processor.
- Please refer to the **memory population** specification for R7G22B, R7G23B, R7G24B, S0E00A, and R7G28B

Step 4: Choose a riser kit to add PCIe slots (optional)

Description	SKU
R7G22B, R7G23B, and R7G24B only	
HPE DL38X Gen10 Plus x8/x16/x8 Secondary Riser Kit	P14587-B21

Notes: Adds three PCIe slots; also requires addition of a second processor.

Step 5: Choose a drive cage to add LFF slots (optional)

Description	SKU
R7G22B, R7G23B, R7G24B, and S0E00A only	
HPE ProLiant DL38X Gen10 Plus 4LFF SAS/SATA 12G LP Midplane Drive Cage Kit	P26919-B21

Notes: Expands the total number of Large Form Factor (3.5") drive slots from 12 to 16.

Step 6: Choose internal storage drives (optional)

Note: The drives below are only compatible with R7G22B, R7G23B, R7G24B, and S0E00A. They are not compatible with any other StoreEasy 1660 Storage SKUs which all uses Smart Carrier drives listed on page 67.

Drive Options

Maximum number of internal LFF drives supported

- 12 (in standard configuration)
- 16 (with optional mid-chassis 4LFF drivfe cage in step 5)

HPE StoreEasy 1660 LFF Drive Bundles

Low Profile Carrier Business Critical (Midline) - 12G SAS

Description	SKU
R7G22B, R7G23B, R7G24B, and S0E00A only	
HPE StoreEasy 8TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E04A
Notes: Contains 4 x HPE 2TB SAS 12G 7.2K LFF LP HDDs (reference SKU 833926-K21)	
HPE StoreEasy 16TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E05A
Notes: Contains 4 x HPE 4TB SAS 12G 7.2K LFF LP HDDs (reference SKU 833928-K21)	
HPE StoreEasy 24TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E06A
Notes: Contains 4 x HPE 6TB SAS 12G 7.2K LFF LP HDDs (reference SKU 861746-K21)	

Configuration Information

Description	SKU
HPE StoreEasy 48TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E07A
Notes: Contains 4 x HPE 12TB SAS 12G 7.2K LFF LP HDDs (reference SKU 881781-K21)	
HPE StoreEasy 64TB SAS Business Critical LFF (3.5in) LP 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E08A
Notes: Contains 4 x HPE 16TB SAS 12G 7.2K LFF LP HDDs (reference SKU P23608-K21)	

HDDs

Low Profile Carrier Business Critical (Midline) - 12G SAS

Description	SKU
R7G22B, R7G23B, R7G24B, and S0E00A only	
HPE 2TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833926-K21
HPE 4TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	833928-K21
HPE 8TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	834031-K21
HPE 6TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty 512e Multi Vendor HDD	861746-K21
HPE 12TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	881781-K21
HPE 14TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e Multi Vendor HDD	P09155-K21
HPE 16TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P23608-K21
HPE 18TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P37669-K21
HPE 20TB SAS 12G Business Critical 7.2K LFF LP 1-year Warranty Helium 512e ISE Multi Vendor HDD	P53553-K21

Low Profile Carrier Business Critical (Midline) - 6G SATA

Description	SKU
R7G22B, R7G23B, R7G24B, and S0E00A only	
HPE 1TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861686-K21
HPE 4TB SATA 6G Business Critical 7.2K LFF LP 1-year Warranty Multi Vendor HDD	861683-K21

SSDs

Description	SKU
R7G22B, R7G23B, R7G24B, and S0E00A only	
HPE 960GB SATA 6G Read Intensive LFF LPC Multi Vendor SSD	P47808-K21
HPE 7.68TB SAS 24G Read Intensive LFF LPC Multi Vendor SSD	P49040-K21

Notes: The recommended maximum number of data SSDs for the HPE StoreEasy 1660 is 8; however, there is nothing architecturally that prevents the use of more than 8 SSDs.

Step 7: Choose an external storage controller to connect to external enclosures (optional)

HPE Smart Array SAS Controllers

Description	SKU
HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21
HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe Plug-in Controller	804405-B21
HPE Smart Array SR Secure Encryption (Data at Rest Encryption/per Server Entitlement) E-LTU	Q2F26AAE

Configuration Information

Notes:

- If you wish to enable Data at Rest Encryption on the HPE StoreEasy 1660 using the included Smart Array P816i-a or with an optional Smart Array P408e-p listed above, you must order the optional HPE Smart Array SR Secure Encryption E-LTU (SKU Q2F26AAE).
- While HPE Smart Array SR SmartCache is included with the standard HPE Smart Array P816i-a SR Gen10 Storage Controller, it must be licensed separately for additional controllers. For more detailed information about HPE Smart Array SR SmartCache go to: **https://www.hpe.com/us/en/product-catalog/detail/pip.5364342.html**

HPE Special Reminder: Before enabling encryption on the Smart Array controller module on this system, you must ensure that your intended use of the encryption complies with relevant local laws, regulations and policies, and approvals or licenses must be obtained if applicable.

For any compliance issues arising from your operation/usage of encryption within the Smart Array controller module which violates the above-mentioned requirement, you shall bear all the liabilities wholly and solely. Hewlett Packard Enterprise will not be responsible for any related liabilities.

For more information see the **HPE Smart Array SR Secure Encryption QuickSpecs**.

Step 8: Choose additional network adapter(s) (optional)

Notes: SFP and SFP+ Adapters do not include a transceiver by default.
SFP transceiver(s) or direct connect cable(s) should be ordered according to the transceiver and cable compatibility matrix found at: **https://www.hpe.com/psnow/doc/A00002507ENW.pdf?jumpid=in_lit-psnow-getpdf**

PCIe Network Adapters

Description	SKU
R7G22B, R7G23B, R7G24B, and S0E00A only	
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21

Step 9: Choose the HPE Trusted Platform Module (optional)

Description	SKU
R7G22B, R7G23B, R7G24B, and S0E00A only	
HPE Trusted Platform Module 2.0 Gen10 Plus Black Rivets Kit	P13771-B21

Notes: HPE StoreEasy systems can have a TPM module (of any type) installed only once. It cannot be replaced with any other TPM module.

Step 10: Choose a System Recovery Media Kit (optional)

Description	SKU
HPE StoreEasy 1X60 Recovery Software Media Kit with Microsoft Windows Server IoT 2019	R7G47D

Notes:

- HPE StoreEasy 1X60 Recovery Software Media Kits contain a System Recovery USB key that is used to re-install the factory operating system image. Booting the system from the System Recovery media 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 HPE StoreEasy 1X60 Administrator Guide for more information on performing a System Recovery.

Configuration Information

- Alternatively, the HPE StoreEasy 1X60 Recovery Software image can be downloaded from the HPE's Software Depot at no charge. More information is available here: **https://myenterpriselicense.hpe.com/cwp-ui/free-software/**.
- For more information on how to perform a system recovery on a HPE StoreEasy 1660 refer to the HPE StoreEasy 1X60 Administrator's Guide. The guide can be downloaded from **http://www.hpe.com/support** . Select HPE Support Center and search for the HPE StoreEasy system model in the drivers and download section.
- 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. 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

Configuration Information

HPE StoreEasy 1860 Storage

Specifications of R7G28B	
Operating System	Microsoft® Windows Server IoT 2019 for Storage Standard Edition with HPE StoreEasy Management Console
Processor	Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE; 2nd processor optional
Memory Standard	32GB
Memory Type	1 x HPE 32GB Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit
Storage Controllers	HPE Broadcom MegaRAID MR416i-a/p x16 lanes 4 GB Cache NVMe/SAS 12G Controller for data drives; HPE Smart Array S100i SR Gen10 Plus SW RAID for mirrored OS drives only
Internal Drive Support	16 x SFF (2.5") hot-plug front drive bays standard; up to 32 x SFF (2.5") hot-plug drive bays with the optional drive cages; standard 2 x SFF hot-plug rear-chassis drive cage standard
Network Ports Standard	2 x 10GbE
Network Adapter	Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE (option to change); PCIe NIC(s) optional
Expansion Slots	3 x PCIe; 3-slot secondary riser optional
Power	2 x 800W Platinum hot-plug redundant
Cooling	6 hot-plug, high-performance redundant fans
Form Factor	2U rackmount
Security	2U lockable security bezel; Trusted Platform Module 2.0 optional
Additional Licenses	HPE iLO Advanced Premium Security Edition License with 1yr Support on Licensed Features **Notes:** For more information, visit: **iLO Supported Servers and Features**

Step 1: Choose your HPE StoreEasy 1860 Storage model

Configurable models

These HPE StoreEasy 1860 SKUs are Configure-to-Order (CTO) models with the operating system pre-installed on mirrored solid state drives and do not include data drives standard. These models can be factory-racked, and most added options (including data drives) can be factory integrated.

Notes:

- Hewlett Packard Enterprise recommends as a best practice that the internal data drives for the CTO models be the same type and capacity.
- The new StoreEasy 1860 model R7G28B is built from ProLiant DL380 Gen10 Plus technologies including the HPE MegaRAID Gen10 Plus Controller
- The prior StoreEasy 1860 models R7G28A and R7G29A were built from ProLiant DL380 Gen10 technologies including the HPE Smart Array SR Gen10 Controller

Description	SKU
HPE StoreEasy 1860 Storage with Microsoft Windows Server IoT 2019	R7G28B

Step 1A: Choose boot drives (only for R7G28B)

Description	SKU
HPE 480GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40502-K21
HPE 960GB SATA 6G Mixed Use SFF BC Multi Vendor SSD	P40503-K21

Configuration Information

Step 1B: Choose a network card (only for R7G28B)

Description	SKU
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE	P10097-B21
Broadcom BCM57414 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P10115-B21
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ OCP3 Adapter for HPE	P26256-B21
Intel I350-T4 Ethernet 1Gb 4-port BASE-T OCP3 Adapter for HPE	P08449-B21

Notes:

- The operating system is mirrored on two SFF (2.5") solid state drives in a rear drive cage
- R7G28B all three standard PCIe slots are available for expansion

Step 2: Choose a second processor (optional)

Description	SKU
R7G28B only	
Intel Xeon-Silver 4309Y 2.8GHz 8-core 105W Processor for HPE	P36920-B21

Step 3: Choose additional memory kit(s) (optional)

Description	SKU
R7G28B only	
HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06033-K21

Notes:

- All HPE StoreEasy 1860 models come with one processor standard. R7G28B comes with 16 DIMM slots per processor for a total maximum of 32 DIMM slots.
- R7G28B comes with 1 x 32GB DIMM standard.
- Please refer **memory population** for R7G28B

Step 4: Choose a riser kit to add PCIe slots (optional)

Description	SKU
HPE DL38X Gen10 Plus x8/x16/x8 Secondary Riser Kit	P14587-B21

Step 5: Choose a drive cage to add SFF slots (optional)

Description	SKU
R7G28B only	
HPE ProLiant DL300 Gen10 Plus 2U 8SFF x1 Tri-Mode 24G U.3 BC Front Drive Cage Kit	P27194-B21
HPE ProLiant DL38X Gen10 Plus 8SFF x1 Tri-Mode 24G U.3 BC Midplane Drive Cage Kit	P27193-B21

Notes: If the optional drive cages are selected, the optional MegaRAID MR416-i-p controller is required

Step 6: Choose internal storage drives (optional)

Drive Options

Maximum number of internal SFF drives supported

- 16 (in standard configuration)
- 32 (with optional 1xSFF front drive cage and 1xSFF mid drive cage in step 5)

Configuration Information

HPE StoreEasy 1860 SFF Drive Bundles

Basic Carrier Mission Critical (Enterprise) - 12G SAS

Description	SKU
R7G28B only	
HPE StoreEasy 4.8TB SAS Mission Critical SFF (2.5in) BC 3yr Wty 4-pack Multi Vendor HDD Bundle	S0E01A
Notes: Contains 4 x HPE 1.2TB SAS 12G Enterprise 10K SFF HDDs (reference SKU P28586-K21)	
HPE StoreEasy 9.6TB SAS Mission Critical SFF (2.5in) BC 3yr Wty 4-pack Multi Vendor HDD Bundle	S0E02A
Notes: Contains 4 x HPE 2.4TB SAS 12G Enterprise 10K SFF HDDs (reference SKU P28352-K21)	
HPE StoreEasy 8TB SAS Business Critical SFF (2.5in) BC 1yr Wty 4-pack Multi Vendor HDD Bundle	S0E03A
Notes: Contains 4 x HPE 2TB SAS 12G Business Critical 7.2K SFF 512e HDD (reference SKU P28505-K21)	

HDDs

Basic Carrier Mission Critical (Enterprise) - 12G SAS

Description	SKU
R7G28B only	
HPE 300GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P28028-K21
HPE 2.4TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty 512e Multi Vendor HDD	P28352-K21
HPE 1.2TB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P28586-K21
HPE 300GB SAS 12G Mission Critical 10K SFF BC 3-year Warranty Multi Vendor HDD	P40430-K21
HPE 900GB SAS 12G Mission Critical 15K SFF BC 3-year Warranty Multi Vendor HDD	P40432-K21

SSDs

Description	SKU
Basic Carrier Mixed Use - 12G SAS	
HPE 1.92TB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40511-K21
HPE 960GB SAS 12G Mixed Use SFF BC Value SAS Multi Vendor SSD	P40510-K21
Basic Carrier Read Intensive – 12G SAS	
HPE 1.92TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40507-K21
HPE 3.84TB SAS 12G Read Intensive SFF BC Value SAS Multi Vendor SSD	P40508-K21

Step 7: Choose an external storage controller to connect to external enclosures (optional)

HPE Smart Array SAS Controllers

Description	SKU
HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller	804398-B21
HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe Plug-in Controller	804405-B21

Step 8: Choose additional network adapter(s) (optional)

Notes: SFP and SFP+ Adapters do not include a transceiver by default.

SFP transceiver(s) or direct connect cable(s) should be ordered according to the transceiver and cable compatibility matrix found at:

https://www.hpe.com/psnow/doc/A00002507ENW.pdf?jumpid=in_lit-psnow-getpdf

Configuration Information

PCIe Network Adapters

Description	SKU
R7G28B	
Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T Adapter for HPE	P26253-B21
Description	**SKU**
Broadcom BCM57412 Ethernet 10Gb 2-port SFP+ Adapter for HPE	P26259-B21

Step 9: Choose the HPE Trusted Platform Module (optional)

Description	SKU
R7G28B only	
HPE Trusted Platform Module 2.0 Gen10 Plus Black Rivets Kit	P13771-B21

Notes: HPE StoreEasy systems can have a TPM module (of any type) installed only once. It cannot be replaced with any other TPM module.

Step 10: Choose a System Recovery Media Kit (optional)

Description	SKU
HPE StoreEasy 1X60 Recovery Software Media Kit with Microsoft Windows Server IoT 2019	R7G47D

Notes:

- HPE StoreEasy 1X60 Recovery Software Media Kits contain a System Recovery USB key that is used to re-install the factory operating system image. Booting the system from the System Recovery media 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 HPE StoreEasy 1X60 Administrator Guide for more information on performing a System Recovery.
- Alternatively, the HPE StoreEasy 1X60 Recovery Software image can be downloaded from the HPE's Software Depot at no charge. More information is available here: **https://myenterpriselicense.hpe.com/cwp-ui/free-software/**.
- For more information on how to perform a system recovery on a HPE StoreEasy 1860 refer to the HPE StoreEasy 1X60 Administrator's Guide. The guide can be downloaded from **http://www.hpe.com/support** . Select HPE Support Center and search for the HPE StoreEasy system model in the drivers and download section.
- 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. 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.

Configuration Information

HPE StoreEasy 1X60 Storage Upgrade Kit to Microsoft Windows Server IoT 2022 for Storage Standard Edition Operating System

Specifications	
Contents	New Microsoft Certificate of Authenticity (COA) sticker plus the bootable image for installing Microsoft Windows Server IoT 2022 for Storage Standard Edition.
Compatibility	Sixth generation StoreEasy 1000 Storage models (1460, 1560, 1660, 1660 Expanded, and 1860) that shipped with Microsoft Windows Storage Server 2016 Standard Edition or Microsoft Windows Server IoT 2019 for Storage Standard Edition Operating System are eligible for upgrade. **Notes:** Since the kit includes a new COA sticker and requires its application to the StoreEasy model being upgraded, only one StoreEasy unit may be upgraded with the kit.

List of HPE StoreEasy 1X60 Storage System Products Compatible with the Upgrade Kit

Obsolete Products*

Notes: *No longer available for purchase, informational only

- HPE StoreEasy 1460 8TB SATA Storage (Q2R92B*, Q2R92A*, R7G16A, and R7G16B)
- HPE StoreEasy 1460 16TB SATA Storage (Q2R93B*, Q2R93A*, R7G17A, and R7G17B)
- HPE StoreEasy 1460 32TB SATA Storage (Q2R94B*, Q2R94A* R7G18A and R7G18B)
- HPE StoreEasy 1560 8TB SATA Storage (Q2R96B*, Q2R96A*, R7G19A, and R7G19B)
- HPE StoreEasy 1560 16TB SATA Storage (Q2R97B*, Q2R97A*, R7G20A, and R7G20B)
- HPE StoreEasy 1660 Performance Storage (Q2P71B*, Q2P71A*, and R7G25A*)
- HPE StoreEasy 1660 Storage (Q2P72B*, Q2P72A*, R7G24A*, R7G24B, and S0E00A)
- HPE StoreEasy 1660 16TB SAS Storage (Q2P73B*, Q2P73A*, R7G21A*)
- HPE StoreEasy 1660 32TB SAS Storage (Q2P74B*, Q2P74A*, R7G22A*, and R7G22B)
- HPE StoreEasy 1660 64TB SAS Storage (Q2P75B*, Q2P75A*, R7G23A*, and R7G23B)
- HPE StoreEasy 1660 Expanded Storage (R7L72A*, R0R67A*, and R7G46A)
- HPE StoreEasy 1860 Performance Storage (Q2P76B*, Q2P76A*, and R7G29A*)
- HPE StoreEasy 1860 Storage (Q2P77B*, Q2P77A*, R7G28A*, R7G28B)
- HPE StoreEasy 1860 9.6TB SAS Storage (Q2P78B* and Q2P78A*)
- HPE StoreEasy 1860 14.4TB SAS Storage (Q2P79B* and Q2P79A*)

Notes:

– The Microsoft Windows Server IoT 2022 for Storage Standard Edition upgrade kit (physical media is included) will re-image the operating system and revert the StoreEasy system to a factory default state. User data on the operating system partition will be destroyed in the upgrade process, so backup / migration / restore planning should be executed manually.

– The Microsoft Windows Server IoT 2022 for Storage Standard Edition upgrade kit also contains a new Microsoft Certificate of Authenticity (COA) sticker that must be physically applied to the StoreEasy system as part of the upgrade process (limit one system per upgrade kit).

Description	SKU
HPE StoreEasy 1X60 Standard Edition Upgrade Kit with Windows Server IoT 2022	S1U90A

Configuration Information

The following summarizes HPE StoreEasy 1000 Storage supported features and roles with Microsoft Windows Server 2022 IoT for Storage standard Edition

Microsoft Windows Server IoT 2022 for Storage Standard Edition	
Maximum # CPU cores and VM Rights	16 cores per system + 2 VM
Maximum Memory	48TB (24TB in 2019)
# Disks per controller (see HPE Product Specifications for Specific constraints for each controller)	238
Maximum SMB Connections	16,777,216
#Users (CALS)	Unlimited
Embedded OS installed in-factory required	Yes
File Sharing (SMB & NFS)	Yes
Windows Server Backup	Yes
DFS-Replication	Yes
File Classification Infrastructure (FCI)	Yes
File Server Resource Manager (FSRM)	Yes
Domain Join	Yes
Shared block storage (iSCSI Target Server / Storage Provider)	Yes
OEM Customizable Out of Box Experience	Yes
Storage Spaces (requires HBA controller)	Not Supported on HPE StoreEasy 1000
Deduplication	Yes
BranchCache - Hosted Cache	Yes
Hyper-V Virtualization	Host + 2VM* (Shielded VMs not included)
Clustering (including AD/DNS)	Not supported on HPE StoreEasy 1000
Simplified Cluster Setup	Not supported on HPE StoreEasy 1000
Networking Infra (DHCP & DNS)	Yes
Storage Spaces Direct and Volume Replication	No
Storage Replica	Limited to 1 x 2TB volume, 1 partnership, 1 resource group
AD Roles including Domain Controller (RODC)	No
Active Directory (Domain Controller, Certificate Services, Federation services, Rights Management)	No
Application Server, Network Policy, Remote Desktop Broker, WDS and Fax Server	No
Windows Server Migration Tools	Yes
Windows Storage Migration Service	Yes
Windows Server Insight Tools	Yes
Enhanced Windows Defender Advanced Threat Protection (ATP)	Yes
Azure File Sync	Yes
Azure Backup	Yes
New features in Windows Server IoT 2022	
Secured-Core server	Yes
Azure Arc*	Yes
SMB Compression (requires server communicating to be Windows Server 2022 or client to be Windows 11 for Business and Windows Admin Center)	Yes
AES-256 encryption with support for SMB	Yes
Windows Admin Center (with auto updates)	Yes
Hardware Root of Trust (requires TPM 2.0)	Yes
HTTPS and TLS 1.3 Enabled by Default	Yes
Notes: *Requires separate software license for each VM	

Configuration Information

Notes:

- Microsoft Windows Server 2022 and Microsoft Windows Server IoT 2022 for Storage are built on the same code base. Storage-centric (backup, replication, antivirus, etc.) applications certified for Windows Server 2022 are expected to have the same application compatibility profile on Windows Server IoT 2022 for Storage. Windows Server IoT for Storage and Windows Server have the same application frameworks, services, and plumbing to support running the full breadth of Windows-compatible applications but do have unique licensing features and restrictions. Customers should review the End User License Agreement (EULA) to see what server roles are listed as unsupported and the types of applications that are permitted for installation on HPE StoreEasy 1000 Storage systems. Applications that rely upon certain roles that are removed from (or are listed in the EULA as unsupported on) Windows Server IoT 2022 for Storage, such as fax server, terminal services, Application Server, Network Policy Server, Remote Desktop Broker, Windows Deployment Services, and Active Directory domain controller (all HPE StoreEasy 1000 Storage systems can join an Active Directory domain, but they cannot be a domain controller or perform Certificate Services, Federation Services, or Rights Management) 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.
- Microsoft Windows Server IoT 2022 for Storage is currently scheduled to remain under Microsoft Mainstream Support (which includes incident support, security update support, and the ability to request non-security updates) until January 2027. Learn more about Microsoft's Fixed Lifecycle and support policy at **https://docs.microsoft.com/en-us/lifecycle/policies/fixed**

More Information on Microsoft Windows Server IoT 2022 for Storage can be found here:
https://learn.microsoft.com/en-us/windows/iot/server/windows-server

Configuration Information

HPE StoreEasy 1X60 Storage Upgrade Kit to Microsoft Windows Server IoT 2019 for Storage Standard Edition Operating System

Specifications	
Contents	New Microsoft Certificate of Authenticity (COA) sticker plus documentation containing directions for downloading the bootable image for installing Microsoft Windows Server IoT 2019 for Storage Standard Edition. **Notes:** Physical media is not included.
Compatibility	Sixth generation StoreEasy 1000 Storage models (1460, 1560, 1660, 1660 Expanded, and 1860) that shipped with Microsoft Windows Storage Server 2016 Standard Edition are eligible for upgrade. **Notes:** Since the kit includes a new COA sticker and requires its application to the StoreEasy model being upgraded, only one StoreEasy unit may be upgraded with the kit.

List of HPE StoreEasy 1X60 Storage System Products Compatible with the Upgrade Kit

Obsolete Products*

Notes: *No longer available for purchase, informational only

- HPE StoreEasy 1460 8TB SATA Storage (Q2R92B and Q2R92A)
- HPE StoreEasy 1460 16TB SATA Storage (Q2R93B and Q2R93A)
- HPE StoreEasy 1460 32TB SATA Storage (Q2R94B and Q2R94A)
- HPE StoreEasy 1560 8TB SATA Storage (Q2R96B and Q2R96A)
- HPE StoreEasy 1560 16TB SATA Storage (Q2R97B and Q2R97A)
- HPE StoreEasy 1660 Performance Storage (Q2P71B and Q2P71A)
- HPE StoreEasy 1660 Storage (Q2P72B and Q2P72A)
- HPE StoreEasy 1660 16TB SAS Storage (Q2P73B and Q2P73A)
- HPE StoreEasy 1660 32TB SAS Storage (Q2P74B and Q2P74A)
- HPE StoreEasy 1660 64TB SAS Storage (Q2P75B and Q2P75A)
- HPE StoreEasy 1660 Expanded Storage (R7L72A and R0R67A)
- HPE StoreEasy 1860 Performance Storage (Q2P76B and Q2P76A)
- HPE StoreEasy 1860 Storage (Q2P77B and Q2P77A)
- HPE StoreEasy 1860 9.6TB SAS Storage (Q2P78B and Q2P78A)
- HPE StoreEasy 1860 14.4TB SAS Storage (Q2P79B and Q2P79A)

Notes:

- The Microsoft Windows Server IoT 2019 for Storage Standard Edition upgrade kit (physical media is not included) will re-image the operating system and revert the StoreEasy system to a factory default state. User data on the operating system partition will be destroyed in the upgrade process, so backup / migration / restore planning should be executed manually.
- The Microsoft Windows Server IoT 2019 for Storage Standard Edition upgrade kit also contains a new Microsoft Certificate of Authenticity (COA) sticker that must be physically applied to the StoreEasy system as part of the upgrade process (limit one system per upgrade kit).

Description	SKU
HPE StoreEasy Standard Edition Upgrade Kit with Microsoft Windows Server IoT 2019	R7G45B

Technical Specifications

Processors				
HPE StoreEasy 1470	**HPE StoreEasy 1570**	**HPE StoreEasy 1670**	**HPE StoreEasy 1670 Expanded**	**HPE StoreEasy 1870**
Intel® Xeon-Bronze 3408U (1.8GHz/8-core/125W) Processor		**S2A30A, S2A31A, and S2A32A** Intel® Xeon-Bronze 3408U (1.8GHz/8-core/125W) Processor	Intel® Xeon-Silver 4309Y (2.8GHz/8-core/ 105W) Processor	**S2A36A** Intel® Xeon-Bronze 3408U (1.8GHz/8-core/125W) Processor
		S2A34A Intel® Xeon-Gold 5416S (2.0GHz/16-core/150W) Processor		**S2A37A** Intel® Xeon-Gold 5416S (2.0GHz/16-core/150W) Processor

Memory					
	HPE StoreEasy 1470	**HPE StoreEasy 1570**	**HPE StoreEasy 1670**	**HPE StoreEasy 1670 Expanded**	**HPE StoreEasy 1870**
Type	DDR5-4800 CAS-40-39-39 Registered Smart Memory			DDR4-3200 CAS-22-22-22 Registered Smart Memory	DDR5-4800 CAS-40-39-39 Registered Smart Memory
Standard	16GB (1 x 16GB)			32GB (2 x 16GB)	32GB (1 x 32GB)
DIMM Sockets	16	16	16	24 (12 per processor)	16
Maximum	48TB (limit based on operating system license)				

Networking					
	HPE StoreEasy 1470	**HPE StoreEasy 1570**	**HPE StoreEasy 1670**	**HPE StoreEasy 1670 Expanded**	**HPE StoreEasy 1870**
NIC Ports	2	2	4	2	2
Controller	Embedded 1Gb Ethernet 2-port	Embedded 1Gb Ethernet 2-port	BCM 5719 1Gb 4p BASE-T OCP Adptr	BCM 57416 10GbE 2p BASE-T OCP3 Adptr	BCM 57416 10GbE 2p BASE-T OCP3 Adptr

Technical Specifications

HPE StoreEasy 1470

Primary PCIe Riser

Expansion Slots #	Technology	Bus Width	Connector Width	Form Factor	Notes
1 (Primary Riser)	PCIe 5.0	X16	X16	FHHL	Proc 1
2 (Secondary Riser)	PCIe 5.0	X16	X16	FHHL	Proc 1

HPE StoreEasy 1570

PCIe slots

Expansion Slots #	Technology	Bus Width	Connector Width	Form Factor	Notes
1	PCIe 5.0	X16	X16	Full-height, full-length Slot	Proc 1
4	PCIe 5.0	X16	X16	Full-height, Full-length Slot	Proc 1

HPE StoreEasy 1670/1870

Primary PCIe Riser

Expansion Slots #	Technology	Bus Width	Connector Width	Form Factor	Notes
1	PCIe 5.0	x8	X16	Full-height, full-length slot	Proc 1
2	PCIe 5.0	X16	x16	Full-height, full-length slot	Proc 1
3	PCIe 5.0	x8	X16	Full-height, half-length slot	Proc 1

HPE StoreEasy 1670 Expanded

PCIe slots

Expansion Slots #	Technology	Bus Width	Connector Width	Form Factor	Notes
1	PCIe 4.0	x16	x16	Full-height, half-length slot	Proc 1
2	PCIe 4.0	X8	X8	Full-height, half-length slot	Proc 1
3	Power only	Power only	x8	Full-height, half-length slot	
4(secondary)	PCIe 4.0	X16	X16	Full-height, half-length slot	Proc 2
5(secondary)	PCIe 4.0	X8	X8	Full-height, half-length slot	Proc 2
6(Tertiary)	PCIe 4.0	X16	X16	Full-height, half-length slot	Proc 2
7(Tertiary)	PCIe 4.0	X8	X8	Full-height, half-length slot	Proc 2

Technical Specifications

Storage Controller					
	HPE StoreEasy 1470	**HPE StoreEasy 1570**	**HPE StoreEasy 1670**	**HPE StoreEasy 1670 Expanded**	**HPE StoreEasy 1870**
Controller(s)	HPE MR408i-o Gen11 x8 Lanes 4GB Cache OCP SPDM Storage Controller (S2A19A, S2A20A, S2A21A, S2A22A, S2A25A, S2A26A, S2A27A) Embedded 8 SATA ports controller with Intel® VROC Software RAID (S2A23A, S2A24A, S2A28A, S2A29A)		HPE MR416i-o Gen11 x16 Lanes 8GB Cache OCP SPDM Storage Controller; NVMe boot device controller	HPE Smart Array P816i-a SR Gen10 Controller ; NVMe boot device controller	HPE SR932i-p Gen11 x32 Lanes 8GB Wide Cache PCI SPDM Plug-in Storage Controller; NVMe boot device controller
RAID (for data drives)	RAID 0, 1, 5, 6, 10, 50, 60, 1 ADM, 10 ADM (Advanced Data Mirroring) Not all RAID levels recommended or supported on HPE StoreEasy				
Internal SAS connectors	None		16 SAS lanes across 4 x4 internal Mini-SAS ports		
External SAS connectors	None				
Data at Rest Encryption Support	Optional HPE Smart Array SR Secure Encryption E-LTU (SKU Q2F26AAE) with selected models				
Maximum Internal Capacity (raw)	48TB	112TB (with optional 4LFF drive cage and 4 x 20TB HDDs)	320TB (with optional 4LFF mid-chassis cage and 16 x 20TB LFF HDDs)	560TB (with 28 x 20TB LFF HDDs)	76.8TB (with optional 8SFF rear cage 32 x 2.4TB SFF HDDs)
Internal Drive Slots	4 LFF (3.5”) hot-plug bays in front	4 LFF (3.5”) hot-plug bays standard and 4 additional LFF (3.5”) hot-plug bays optional (total of 8 internal LFF bays maximum)	12 LFF (3.5”) hot-plug bays in front and optional 4 LFF hot-plug bays in mid-chassis drive cage (total of 16 internal LFF bays maximum)	24 LFF (3.5”) hot-plug bays in front and 4 LFF hot-plug bays in rear (total of 28 internal LFF bays maximum)	24 SFF (2.5”) hot-plug bays in front and optional upto 8 SFF hot-plug bays with optional drive cages (total of 32SFF internal bays maximum)
Carrier type	Low Profile (LP) LFF				Basic Carrier SFF (BC)
External Storage	Support for external D3X10 Disk Enclosures requires optional Smart Array controller with external port				
Pre-installed Operating System Location	RAID10 partition across the four factory-installed HDDs		NS204 NVMe boot device with RAID 1		

Technical Specifications

Power & Cooling					
Power Supplies	1 x 500 Watts Platinum, hot-plug (2nd redundant power supply optional)	1 x 500 Watts Platinum, hot-plug (2nd redundant power supply optional)	2 x 800 Watts Platinum, hot-plug	2 x 1600 Watts Platinum hot-plug (high-line input 200V - 240V AC only)	2 x 800 Watts Platinum, hot-plug
Power Cords	One high voltage power cords (IEC C13 to C14) standard; two if second power supply added	One 6-foot 10A, C13 Power cord; see notes	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
Notes: – HPE StoreEasy 1470, 1670, 1670 Expanded and 1870 models ship with a standard 6-foot IEC C-13/C-14 jumper cord. This jumper cord is also included with each standard AC power supply option kit. – The HPE StoreEasy 1570 model comes with a standard 6-foot 10A, C13—If you order the optional 2nd power supply you must order also order the power cord. – If different power cords are required for any HPE StoreEasy 1000 model, please check **ProLiant Power Cables** to determine what power cord options are available.					
System Fans	Single processor system includes 7 hot-plug, redundant fans, standard	2 non hot-plug redundant fans, standard	6 hot-plug, high-performance, redundant fans, standard	10 hot-plug, high-performance redundant fans standard	6 hot-plug, high-performance, redundant fans, standard

Additional options

See the corresponding ProLiant and Apollo 4000 QuickSpecs for additional compatible options.

- HPE StoreEasy 1470 (ProLiant DL320 Gen 11)
  https://www.hpe.com/psnow/doc/a50004315enw.pdf
- HPE StoreEasy 1570 (ProLiant ML110 Gen 11)
  https://www.hpe.com/psnow/doc/a00054055enw.pdf
- HPE StoreEasy 1670 (ProLiant DL380 Gen11 LFF)
- HPE StoreEasy 1870 (ProLiant DL380 Gen11 SFF)
  https://www.hpe.com/psnow/doc/a50004307enw.pdf
- HPE StoreEasy 1670 Expanded (Apollo 4200 Gen10 Plus LFF)
  https://www.hpe.com/psnow/doc/a50002573enw.pdf

Notes: Options offered in the HPE ProLiant and Apollo servers listed above will work in respective HPE StoreEasy products if supported on Windows Server 2022 Standard Edition.

Because HPE StoreEasy is a storage system, not every possible option available in the equivalent ProLiant server is listed in the HPE StoreEasy 1000 QuickSpecs. Options that are shown in this document are the most common and recommended ones needed for the primary HPE StoreEasy usage model as a file storage system.

Technical Specifications

HPE StoreEasy 1000 Storage Common System Specifications		
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: **DL380 Gen11 Extended Ambient Temperature Guidelines** 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: **DL380 Gen11 Extended Ambient Temperature Guidelines** System performance may be reduced if operating in the extended ambient operating range or with a fan fault.
	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**	8% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, 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).
Emissions Classification (EMC)	To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center: **http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts**	

Technical Specifications

HPE StoreEasy 1470 Storage		
Dimensions	4.28 x 43.44 x 66.47 cm 1.69 x 17.11 x 26.17 in	
Weight (approximate)	17.70 kg 39.02 lb	Four LFF drives, sixteen DIMMs two PCIe standup cards, two power supplies, one heatsinks, and seven fans.
Input Requirements (per power supply)	Rated Line Voltage	100 to 120 VAC 200 to 240 VAC
	Rated Input Frequency	50 to 60 Hz
	Rated Input Power	< 557 W (at 100 VAC); < 537 W (at 240 VAC)
BTU Rating	Maximum	1902 BTU/hr (at 100 VAC); 1832 BTU/hr (at 240 VAC)
Power Supply Output (per power supply)	Maximum Rated Output Wattage Rating (Watts)	500W (at 100 VAC); 500W (at 240 VAC)
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). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.	
Configuration	**Minimum (Entry)**	**Maximum (Performance)**
Idle		
LWAd	4.7 B	4.7 B
LpAm	36 dBA	36 dBA
Operating		
LWAd	5.3 B	5.3 B
LpAm	36 dBA	36 dBA
Notes: Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.		

Technical Specifications

HPE StoreEasy 1570 Storage		
Tower Dimensions	46.2(H) x 19.5(W) x 58.7(D) cm 18.19(H) x 23.1(D) x 7.68 (W) in	
Tower Weight (approximate)	Maximum:	73.19 lbs (33.2 kg)
Input Requirements (per power supply)	Rated Line Voltage	100 to 120 VAC 200 to 240 VAC
	Rated Input Frequency	50 to 60 Hz
	Rated Input Power	< 557 W (at 100 VAC); < 537 W (at 240 VAC)
BTU Rating	Maximum	1902 BTU/hr (at 100 VAC); 1832 BTU/hr (at 240 VAC)
Power Supply Output (per power supply)	Maximum Rated Output Wattage Rating (Watts)	500W (at 100 VAC); 500W (at 240 VAC)
Acoustic Noise	Listed are the declared A-Weighted sound power levels (L_{WAd}) and declared average bystander position A-Weighted sound pressure levels (L_{pAm}) 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). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.	
Configuration	**Minimum (Entry)**	**Maximum (Performance)**
Idle		
LWAd	3.7 Bels Entry	3.7 Bels Perf
LpAm	22 dBA Entry	22 dBA Perf
Operating		
LWAd	4.2 Bels Entry	4.2 Bels Perf
LpAm	28 dBA Entry	28 dBA Perf
Notes: Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.		

Technical Specifications

HPE StoreEasy 1670 Storage and 1870 Storage			
Dimensions (S2A30A, S2A31A, S2A32A, and S2A34A)	8.75 x 44.8 x 73.25 cm 3.44 x 17.64 x 28.84 in		StoreEasy 1670 (LFF Drives)
	Maximum	37 kg 81.57 lbs	12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x HPE MegaRAID, 2x Risers installed)
Dimensions (S2A36A and S2A37A)	8.75 x 44.8 x 72.7 cm 3.44 x 17.64 x 28.62 in		StoreEasy 1870 (SFF Drives)
	Maximum	33 kg 72.75 lbs	8 SFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x HPE MegaRAID, 2x Risers installed)
Input Requirements (per power supply)	Rated Line Voltage		100 to 120 VAC
			200 to 240 VAC
	Rated Input Frequency		50 to 60 Hz
	Rated Input Power		< 899 W (at 100 VAC); < 864 W (at 240 VAC)
BTU Rating	Maximum		3067 BTU/hr (at 100 VAC); 2949 BTU/hr (at 240 VAC)
Power Supply Output (per power supply)	Maximum Rated Output Wattage Rating (Watts)		800W (at 100 VAC); 800W (at 240 VAC)
Acoustic Noise	Listed are the declared A-Weighted sound power levels (L_{WAd}) and declared average bystander position A-Weighted sound pressure levels (L_{pAm}) 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). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your Hewlett Packard Enterprise representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.		
Configuration	**Minimum (Entry)**		**Maximum (Performance)**
Idle			
LWAd	4.8 B		4.6 B
LpAm	37 dBA		31 dBA
Operating			
LWAd	4.8 B		4.6 B
LpAm	37 dBA		31 dBA
Notes: Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.			

Technical Specifications

HPE StoreEasy 1670 Expanded Storage		
Dimensions	8.75 x 44.80 x 83.79 cm	
	3.44 x 17.63 x 33.00 in	
Weight (approximate)	Maximum	48.35 kg 106.61 lb
Input Requirements (per power supply)	Rated Line Voltage	200 to 240 VAC
	Rated Input Frequency	50 to 60 Hz
	Rated Input Power	< 1734 W (at 200 VAC); < 1725 W (at 240 VAC)
BTU Rating	Maximum	5918 BTU/hr (at 200 VAC); 5884 BTU/hr (at 240 VAC)
Power Supply Output (per power supply)	Rated Steady-State Power	1600W (at 200 VAC); 1600W (at 240 VAC)
Acoustic Noise	Listed are the declared A-Weighted sound power levels (L_{WAd}) and declared average bystander position A-Weighted sound pressure levels (L_{pAm}) 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). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your Hewlett Packard Enterprise representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.	
Configuration	**Minimum (Entry)**	**Maximum (Performance)**
Idle		
LWAd	5.9 B	5.4 B
LpAm	35 dBA	36 dBA
Operating		
LWAd	6.0 B	6.3 B
LpAm	36 dBA	45 dBA

Notes: Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.

Processors				
HPE StoreEasy 1460	**HPE StoreEasy 1560**	**HPE StoreEasy 1660**	**HPE StoreEasy 1660 Expanded**	**HPE StoreEasy 1860**
Intel® Xeon-Bronze 3204 (1.9GHz/6-core/85W) Processor		**R7G22B, R7G23B, R7G24B, and S0E00A** Intel® Xeon-Silver 4309Y (2.8GHz/8-core/105W) Processor	Intel® Xeon-Silver 4208 (2.1GHz/8-core/85W) Processor	**R7G28B** Intel® Xeon-Silver 4309Y (2.8GHz/8-core/ 105W) Processor

Technical Specifications

Memory					
	HPE StoreEasy 1460	**HPE StoreEasy 1560**	**HPE StoreEasy 1660**	**HPE StoreEasy 1660 Expanded**	**HPE StoreEasy 1860**
Type	DDR4-3200 CAS-22-22-22 Registered (RDIMM) Smart Memory (for R7G22B, R7G23B, R7G24B, and R7G28B only) and DDR4-2933 CAS-21-21-21 Registered (RDIMM) Smart Memory (all other SKUs)				
Standard	16GB (1 x 16GB)	16GB (1 x 16GB)	**R7G22B, R7G23B, R7G24B, and S0E00A**	32GB (2 x 16GB)	R7G28B: 32GB (1 x 32GB),
DIMM Sockets	24(12 per processor)	6	32 (16 per processor) for R7G22B, R7G23B, R7G24B, S0E00A)	16	32 (16 per processor) for R7G28B
Maximum	24TB (limit based on operating system license)				

Networking					
	HPE StoreEasy 1460	**HPE StoreEasy 1560**	**HPE StoreEasy 1660**	**HPE StoreEasy 1660 Expanded**	**HPE StoreEasy 1860**
NIC Ports	4	2	2 or 4	2	2 or 4
Controller	1Gb Ethernet 4-port 366FLR FlexLOM	1Gb Ethernet 2-port	R7G22B and R7G23B: HPE Ethernet 1Gb 4 port I350 Base-T OCP3 Adapter S0E00A: Broadcom BCM57416 Ethernet 10Gb 2-port BASE-T OCP3 Adapter for HPE R7G24B: Option to choose. See the StoreEasy 1660 configuration section	1Gb Ethernet 2-port	R7G28B: Option to choose. See the StoreEasy 1860 configuration section.

HPE StoreEasy 1460					
Primary PCIe Riser					
Expansion Slots #	**Technology**	**Bus Width**	**Connector Width**	**Form Factor**	**Notes**
1	PCIe 3.0	X16	X16	Full-height, 3/4-lengthn (up to 9.5in) slot	Proc 1
2	PCIe 3.0	X8	X8	Low-Profile slot	Proc 1
HPE StoreEasy 1460 - Secondary PCIe Riser (optional)					
Expansion Slots #	**Technology**	**Bus Width**	**Connector Width**	**Form Factor**	**Notes**
3	PCIe 3.0	X16	X16	Low Profile or Full-height; 3/4 length (up to 9.5")	Proc 2

Technical Specifications

HPE StoreEasy 1560

PCIe slots

Expansion Slots #	Technology	Bus Width	Connector Width	Form Factor	Notes
1	PCIe 3.0	X16	X16	Full-height, ¾ length (up to 9.5") Slot	Proc 1
2	PCIe 3.0	X4	X8	Full-height, half-length slot	Proc 1
3	PCIe 3.0	x8	x8	Full-height, half-length slot	Proc 1 (occupied by Smart Array P408i-p Controller)
4	PCIe 3.0	X16	X16	Full-height, full-length slot	Proc 1
5	PCIe 3.0	X4	x8	Full-height, half-length slot	PCH

HPE StoreEasy 1660/1860 (R7G22B, R7G23B, R7G24B, R7G28B, S0E00A)

Primary PCIe Riser

Expansion Slots #	Technology	Bus Width	Connector Width	Form Factor	Notes
1	PCIe 4.0	x8	X16	Full-height, full-length slot	Proc 1
2	PCIe 4.0	X16	x16	Full-height, full-length slot	Proc 1
3	PCIe 4.0	x8	X16	Full-height, half-length slot	Proc 1

HPE StoreEasy 1660/1860 (R7G22B, R7G23B, R7G24B, R7G28B, S0E00A)

Secondary PCIe Riser

Expansion Slots #	Technology	Bus Width	Connector Width	Form Factor	Notes
4	PCIe 4.0	x8	X16	Full-height, full-length slot	Proc 2
5	PCIe 4.0	X16	x16	Full-height, full-length slot	Proc 2
6	PCIe 4.0	x8	X16	Full-height, half-length slot	Proc 2

HPE StoreEasy 1660 Expanded -

PCIe slots

Expansion Slots #	Technology	Bus Width	Connector Width	Form Factor	Notes
1	PCIe 3.0	x16	x16	Low profile	Proc 1 (Occupied by M.2 riser card)
2	PCIe 3.0	x24	x24	Low profile	Proc 1
5	PCIe 3.0	x8	x8	Low profile	Proc 2
6	PCIe 3.0	x24	x24	Low profile	Proc 2
7	PCIe 3.0	x16	x16	Low profile	Proc 2

Technical Specifications

Storage Controller					
	HPE StoreEasy 1460	**HPE StoreEasy 1560**	**HPE StoreEasy 1660**	**HPE StoreEasy 1660 Expanded**	**HPE StoreEasy 1860**
Controller(s)	R7G16B, R7G17B, R7G18B, R7G19B, and R7G20B: Embedded S100i controller for S/W RAID		R7G22B, R7G22B, R7G23B, R7G24B, S0E00A and R7G28B SKUs: HPE Broadcom MegaRAID MR416i-a/p x16 Lanes 4GB Cache NVMe/SAS 12G Controller for data drives; HPE Smart Array S100i SR Gen10 SW RAID for OS drives only		
	R7G16A, R7G17A, and R7G18A: HPE Smart HPE Smart Array P408i-a SR Gen10	R7G19A and R7G20A: HPE Smart HPE Smart Array P408i-p SR Gen10			
RAID (for data drives)	RAID 0, 1, 5, 6, 10, 50, 60, 1 ADM, 10 ADM (Advanced Data Mirroring) Not all RAID levels recommended or supported on HPE StoreEasy				
Internal SAS connectors	None		16 SAS lanes across 4 x4 internal Mini-SAS ports		
External SAS connectors	None				
Data at Rest Encryption Support	Optional HPE Smart Array SR Secure Encryption E-LTU (SKU Q2F26AAE)				
Internal Drive Slots	4 LFF (3.5") hot-plug bays in front	4 LFF (3.5") hot-plug bays standard and 4 additional LFF (3.5") hot-plug bays optional (total of 8 internal LFF bays maximum)	12 LFF (3.5") hot-plug bays in front and optional 4 LFF hot-plug bays in mid-chassis drive cage (total of 16 internal LFF bays maximum)	24 LFF (3.5") hot-plug bays in front and 4 LFF hot-plug bays in rear (total of 28 internal LFF bays maximum)	Only for R7G28B: 16 SFF (2.5") hot-plug bays in front and optional upto 16 SFF hot-plug bays with optional drive cages (total of 32SFF internal bays maximum)
Carrier type	Smart Carrier (SC)	Low Profile (LP)	Low Profile (LP) (for R7G22B, R7G23B, R7G24B, S0E00A only) for all SKUs Smart Carrier LFF (SC)	Low Profile (LP)	Basic Carrier SFF (BC) for R7G28B only for other SKUs Smart Carrier SFF (SC)
External Storage	Support for external D3X10 and D6020 Disk Enclosures requires optional Smart Array controller with external port				
Pre-installed Operating System Location	RAID10 partition across the four factory-installed HDDs	RAID10 partition across the four factory-installed HDDs	Mirrored SFF SSDs	Mirrored M.2 SSDs	Mirrored SFF SSDs
Maximum Internal Capacity (raw)	32TB	64TB (with optional 4LFF drive cage and 4 x 12TB HDDs)	288TB (with optional 4LFF mid-chassis cage and 16 x 18TB LFF HDDs)	504TB (with 28 x 18TB LFF HDDs)	76.8TB (with optional 16SFF front and mid cage 32 x 2.4TB SFF HDDs)
					62.4TB (with optional 2SFF rear cage and 26 x 2.4TB SFF HDDs)

Technical Specifications

Power & Cooling					
Power Supplies	1 x 500 Watts Platinum, hot-plug (2nd redundant power supply optional)	1 x 500 Watts Platinum, hot-plug (2nd redundant power supply optional)	2 x 800 Watts Platinum, hot-plug	2 x 1600 Watts Platinum hot-plug (high-line input 200V - 240V AC only)	2 x 800 Watts Platinum, hot-plug
Power Cords	One high voltage power cords (IEC C13 to C14) standard; two if second power supply added	One 6-foot 10A, C13 U.S. Power cord; see notes	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
Notes: – HPE StoreEasy 1460, 1660, 1660 Expanded and 1860 models ship with a standard 6-foot IEC C-13/C-14 jumper cord. This jumper cord is also included with each standard AC power supply option kit. – The HPE StoreEasy 1560 model comes with a standard 6-foot 10A, C13—U.S. power cord (AF556A). If you order the optional 2nd power supply you must order also order AF556A to get the above power cord. – If different power cords are required for any HPE StoreEasy 1000 model, please check **ProLiant Power Cables** to determine what power cord options are available.					
System Fans	Single processor system includes 5 hot-plug, redundant fans, standard Dual processor system includes 7 hot-plug redundant fans	2 non hot-plug redundant fans, standard	6 hot-plug, high-performance, redundant fans, standard	10 hot-plug, high-performance redundant fans standard	6 hot-plug, high-performance, redundant fans, standard

Additional options

See the corresponding ProLiant and Apollo 4000 QuickSpecs for additional compatible options.

- HPE StoreEasy 1460 (ProLiant DL360 Gen 10)
  https://www.hpe.com/psnow/doc/a00008159enw.pdf
- HPE StoreEasy 1560 (ProLiant ML110 Gen 10)
  https://www.hpe.com/psnow/doc/a00021851enw.pdf
- New HPE StoreEasy 1660 (ProLiant DL380 Gen10 Plus LFF) R7G22B, R7G23B, and R7G24B:
- New HPE StoreEasy 1860 (ProLiant DL380 Gen10 Plus SFF) R7G28B:
  https://www.hpe.com/psnow/doc/a50002553enw.pdf
- HPE StoreEasy 1660 Expanded (Apollo 4200 Gen10 LFF)
  https://www.hpe.com/psnow/doc/a00056091enw.pdf

Notes: Options offered in the HPE ProLiant and Apollo servers listed above will work in respective HPE StoreEasy products if supported on Windows Server 2019 Standard Edition.

Because HPE StoreEasy is a storage system, not every possible option available in the equivalent ProLiant server is listed in the HPE StoreEasy 1000 QuickSpecs. Options that are shown in this document are the most common and recommended ones needed for the primary HPE StoreEasy usage model as a file storage system.

Technical Specifications

HPE StoreEasy 1000 Storage Common System Specifications		
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). 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.hpe.com/servers/ashrae**
	Extended Ambient Operating Support	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.hpe.com/servers/ashrae** System performance may be reduced if operating in the extended ambient operating range or with a fan fault.
	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**	8% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, 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). Fine at 38.441889, -105.220891.
	Non-operating	9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
Emissions Classification (EMC)	To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center: **http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts**	

Technical Specifications

HPE StoreEasy 1460 Storage		
Dimensions	4.29 x 43.46 x 74.98 cm 1.69 x 17.11 x 29.5 in	
Weight (approximate)	16.78 kg 37 lb	Four LFF drives, two processors, two power supplies, two heatsinks, and seven fans.
Input Requirements (per power supply)	Rated Line Voltage	100 to 120 VAC 200 to 240 VAC
	Rated Input Frequency	50 to 60 Hz
	Rated Input Power	< 557 W (at 100 VAC); < 537 W (at 240 VAC)
BTU Rating	Maximum	1902 BTU/hr (at 100 VAC); 1832 BTU/hr (at 240 VAC)
Power Supply Output (per power supply)	Maximum Rated Output Wattage Rating (Watts)	500W (at 100 VAC); 500W (at 240 VAC)
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). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.	
Configuration	**Minimum (Entry)**	**Maximum (Performance)**
Idle		
LWAd	5.1 B	5.2 B
LpAm	35 dBA	36 dBA
Operating		
LWAd	5.3 B	5.9 B
LpAm	36 dBA	45 dBA
Notes: Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.		

Technical Specifications

HPE StoreEasy 1560 Storage		
Tower Dimensions	44 x 19.5 x 48.05 cm 17.32 x 7.68 x 18.92 in	
Tower Weight (approximate)	Maximum:	55.0 lbs (25.0 kg)
Input Requirements (per power supply)	Rated Line Voltage	100 to 120 VAC 200 to 240 VAC
	Rated Input Frequency	50 to 60 Hz
	Rated Input Power	< 557 W (at 100 VAC); < 537 W (at 240 VAC)
BTU Rating	Maximum	1902 BTU/hr (at 100 VAC); 1832 BTU/hr (at 240 VAC)
Power Supply Output (per power supply)	Maximum Rated Output Wattage Rating (Watts)	500W (at 100 VAC); 500W (at 240 VAC)
Acoustic Noise	Listed are the declared A-Weighted sound power levels (L_{WAd}) and declared average bystander position A-Weighted sound pressure levels (L_{pAm}) 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). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.	
Configuration	**Minimum (Entry)**	**Maximum (Performance)**
Idle		
LWAd	4.0 Bels Entry	4.0 Bels Perf
LpAm	24.8 dBA Entry	24.1 dBA Perf
Operating		
LWAd	4.0 Bels Entry	4.0 Bels Perf
LpAm	25.1 dBA Entry	24.1 dBA Perf
Notes: Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.		

Technical Specifications

HPE StoreEasy 1660 Storage and 1860 Storage			
Dimensions (R7G22B, R7G23B, and R7G24B)	8.75 x 44.54 x 74.9 cm 3.44 x 17.54 x 29.5 in		StoreEasy 1660 (LFF Drives)
	Maximum	33.99 kg 74.94 lbs	12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x HPE MegaRAID, 2x Risers installed)
Dimensions (R7G28B)	8.75 x 44.54 x 71 cm 3.44 x 17.54 x 28 in		StoreEasy 1860 (SFF Drives)
	Maximum	28.77 kg 63.43 lbs	8 SFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x HPE MegaRAID, 2x Risers installed)
Input Requirements (per power supply)	Rated Line Voltage		100 to 120 VAC
			200 to 240 VAC
	Rated Input Frequency		50 to 60 Hz
	Rated Input Power		< 899 W (at 100 VAC); < 864 W (at 240 VAC)
BTU Rating	Maximum		3067 BTU/hr (at 100 VAC); 2949 BTU/hr (at 240 VAC)
Power Supply Output (per power supply)	Maximum Rated Output Wattage Rating (Watts)		800W (at 100 VAC); 800W (at 240 VAC)
Acoustic Noise	Listed are the declared A-Weighted sound power levels (L_{WAd}) and declared average bystander position A-Weighted sound pressure levels (L_{pAm}) 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). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your Hewlett Packard Enterprise representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.		
Configuration	**Minimum (Entry)**		**Maximum (Performance)**
Idle			
LWAd	4.8 B		4.6 B
LpAm	37 dBA		31 dBA
Operating			
LWAd	4.8 B		4.6 B
LpAm	37 dBA		31 dBA
Notes: Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.			

Technical Specifications

HPE StoreEasy 1660 Expanded Storage		
Dimensions	8.75 x 44.80 x 82.55 cm	
	3.44 x 17.63 x 32.50 in	
Weight (approximate)	Maximum	40.6 kg 89.51 lb
Input Requirements (per power supply)	Rated Line Voltage	200 to 240 VAC
	Rated Input Frequency	50 to 60 Hz
	Rated Input Power	< 1734 W (at 200 VAC); < 1725 W (at 240 VAC)
BTU Rating	Maximum	5918 BTU/hr (at 200 VAC); 5884 BTU/hr (at 240 VAC)
Power Supply Output (per power supply)	Rated Steady-State Power	1600W (at 200 VAC); 1600W (at 240 VAC)
Acoustic Noise	Listed are the declared A-Weighted sound power levels (L_{WAd}) and declared average bystander position A-Weighted sound pressure levels (L_{pAm}) 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). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your Hewlett Packard Enterprise representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.	
Configuration	**Minimum (Entry)**	**Maximum (Performance)**
Idle		
LWAd	5.1 B	5.2 B
LpAm	35 dBA	36 dBA
Operating		
LWAd	5.3 B	5.26 B
LpAm	36 dBA	45 dBA
Notes: Acoustics levels presented here are generated by the test configuration only. Acoustics levels will vary depending on system configuration. Values are subject to change without notification and are for reference only.		

HPE Smart Array

For latest information on **HPE Smart Array Gen10 Controllers for HPE ProLiant DL, ML and Apollo Servers** please refer to their QuickSpecs. (E208i-a,E208i-p,E208e-p,P408i-a,P408i-p,P408e-p,P816i-a)

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Summary of Changes

Date	Version History	Action	Description of Change
03-Jun-2024	Version 46	Changed	Configuration Information section was updated
06-May-2024	Version 45	Changed	Technical Specifications section was updated
18-Mar-2024	Version 44	Changed	Overview, Standard Features, Service and Support, Configuration Information and Technical Specifications sections were updated.
08-Jan-2024	Version 43	Changed	Configuration Information and Technical Specifications sections were updated.
04-Dec-2023	Version 42	Changed	Configuration Information section was updated
13-Nov-2023	Version 41	Changed	Overview and Configuration Information sections were updated. HPE Service Rebranding
06-Nov-2023	Version 40	Changed	Overview and Configuration Information sections were updated
21-Aug-2023	Version 39	Changed	Overview, and Configuration Information sections were updated
10-Jul-2023	Version 38	Changed	Overview, Standard Features, Service and Support, Configuration Information and Technical Specifications sections were updated. Added new StoreEasy 1660 SKU, StoreEasy 1x60 upgrade kit information.
06-Feb-2023	Version 37	Changed	Configuration Information section was updated
21-Nov-2022	Version 36	Changed	Configuration Information section was updated
03-Oct-2022	Version 35	Changed	Configuration Information and Technical Specifications sections were updated.
06-Sep-2022	Version 34	Changed	Overview, Configuration Information and Technical Specifications sections were updated.
18-Jul-2022	Version 33	Changed	Standard Features and Configuration Information sections were updated. SKUs
05-Jul-2022	Version 32	Changed	Added StoreEasy 1460 and 1560 new “B” SKUs
07-Mar-2022	Version 31	Changed	Standard Features, Configuration Information and Technical Specifications sections were updated. Obso SKUs were removed.
07-Feb-2022	Version 30	Changed	Configuration Information and Technical Specifications sections were updated. Obso SKUs were removed.
15-Nov-2021	Version 29	Changed	Overview, Standard Features, Configuration Information and Technical Specifications sections were updated. Obso SKUs were removed.
18-Oct-2021	Version 28	Changed	Service and Support section was updated.
07-Sep-2021	Version 27	Changed	Service and Support and Configuration Information sections were updated.
02-Aug-2021	Version 26	Changed	Standard Features and Configuration Information sections were updated.
06-Jul-2021	Version 25	Changed	Standard Features and Configuration Information sections were updated.
07-Jun-2021	Version 24	Changed	Overview and Configuration Information sections were updated.
04-May-2021	Version 23	Changed	Standard Features section was updated.
06-Apr-2021	Version 22	Changed	Standard Features, Configuration Information and Technical Specifications sections were updated.
01-Mar-2021	Version 21	Changed	Overview, Service and Support, Configuration Information and Technical Specifications sections were updated.
01-Feb-2021	Version 20	Changed	Configuration Information section was updated
07-Dec-2020	Version 19	Changed	Overview, Service and Support, Configuration Information and Technical Specifications sections were updated.
05-Oct-2020	Version 18	Changed	Overview, and Configuration Information sections were updated.
03-Aug-2020	Version 17	Changed	Overview, Standard Features, Features and Benefits, Configuration Information and Service and Support sections were updated.
06-Jul-2020	Version 16	Changed	Overview, Configuration Information and Technical Specifications sections were updated
01-Jun-2020	Version 15	Changed	Overview, Configuration Information and Technical Specifications sections were updated
06-Apr-2020	Version 14	Changed	Configuration Information Section was updated
02-Mar-2020	Version 13	Changed	Overview, Configuration Information and Technical Specifications sections were updated.

Summary of Changes

Date	Version History	Action	Description of Change
02-Dec-2019	Version 12	Changed	Configuration Information section was updated.
07-Oct-2019	Version 11	Changed	Overview and Configuration Information sections were updated
03-Sep-2019	Version 10	Added	Added HPE StoreEasy 1660 Expanded Storage including configuration information.
10-Jun-2019	Version 9	Changed	Overview, Features and Benefits and Configuration Information sections were updated.
06-May-2019	Version 8	Changed	Configuration Information section was updated
04-Mar-2019	Version 7	Changed	Configuration Information Section was updated.
04-Feb-2019	Version 6	Changed	Overview, Standard Features, Features and Benefits, Configuration Information and Service and Support sections were updated.
03-Dec-2018	Version 5	Changed	Standard Features, Configuration Information and Service and Support sections were revised.
04-Jun-2018	Version 4	Changed	Overview, Standard Features, HPE StoreEasy 1660 configuration information, HPE StoreEasy 1860 configuration information, and Technical Specifications were updated.
16-Apr-2018	Version 3	Changed	Optimized: Tailored for file storage and Optional Software were revised.
02-Apr-2018	Version 2	Changed	Overview and multiple SKU description were updated.
05-Mar-2018	Version 1	New	New QuickSpecs.

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

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