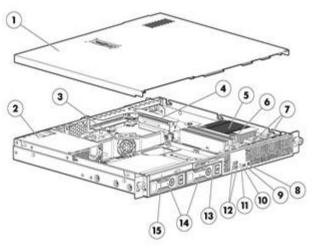
Overview

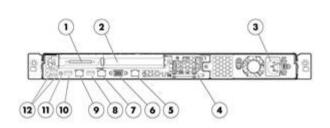
HPE ProLiant DL320e Generation 8 (Gen8) v2

Do you need an entry-level short-depth server utilizing the latest technology to keep you competitive?

The HPE ProLiant DL320e Gen8 v2 Server is an entry-level single processor 1U short depth rack server specifically designed to give you the competitive edge you need. The server supports the latest Intel Xeon E3-1200 v3, PCle 3.0 slots, DDR3 1600 MHz memory, and up to 8 TB internal storage, plus the state of the art HPE iLO Management Engine.

It is ideal for small businesses, chain stores, telecommunications firms, or others that require a low-cost, compact server. The DL320e Gen8 v2 is versatile enough to handle a variety of workloads, including single/dedicated IT services such as networking, security, file/print, and web serving/hosting.





Front View:

- Access Panel
- 2. Power Supply
- 3. Fan Assembly
- 4. PCI Riser Cage
- 5. Processor
- 6. DIMMS
- 7. Fan Assembly
- 8. Power On/Standby button and LED
- 9. UID LED button
- 10. Health LED
- 11. NIC status LED
- 12. 2 USB Connectors
- 13. Serial number/iLO information pull tab
- 14. Hard Drive Bays
- 15. Optical drive

Rear View:

- 1. Expansion slot 2, PCle x8
- 2. Expansion slot 1, PCle x16
- 3. Integrated Power Supply
- 4. T-10/T-15 Torx screwdriver
- 5. NIC1/shared iLO connector
- 6. Video Connector
- 7. NIC Connector 2
- 8. USB 3.0 Connector
- 9. iLO4 Connector
- 10. USB 3.0 Connector
- 11. NIC link LED
- 12. USB2.0 Connectors

What's New

New HDD offering.



Standard Features

NOTE: For the Standard Features shipped in the "Factory Integrated Models", please see the "Configuration Information - Factory Integrated Models" section.

Processor

Entry Processors

One of the following depending on model

Intel® Pentium® G3240 (3.1GHz/2-core/3MB/54W) Processor Intel® Pentium® G3220 (3.0GHz/2-core/3MB/54W) Processor

NOTE: Intel ®Pentium® G3220 processor, performance for 1600MHz memory is

clocked down to 1333MHz.

Intel® Pentium® G3420 (3.2GHz/2-core/3MB/54W) Processor

NOTE: Intel® Pentium® G3420 Processor supports up to 1600MHz DDR3 memory

speeds.

Base Processors

NOTE: All support up to 1600MHz DDR3 memory speeds.

Intel® Core™ i3-4150 (3.5GHz/2-core/3MB/54W, HT) Processor

Intel® Core™ i3-4130 (3.4GHz/2-core/3MB/54W, HT) Processor

Intel® Core™ i3-4130T (2.9GHz/2-core/3MB/35W, HT) Processor

Performance Processors

NOTE: All support up to 1600MHz DDR3 memory speeds.

Intel® Xeon® E3-1220v3 (3.1GHz/4-core/8MB/80W)

Intel® Xeon® E3-1231v3 (3.4GHz/4-core/8MB/80W, HT)

Intel® Xeon® E3-1241v3 (3.5GHz/4-core/8MB/80W, HT)

Intel® Xeon® E3-1271v3 (3.6GHz/4-core/8MB/80W, HT)

Intel® Xeon® E3-1281v3 (3.7GHz/4-core/8MB/82W, HT)

Intel® Xeon® E3-1230v3 (3.3GHz/4-core/8MB/80W, HT)

Intel® Xeon® E3-1230Lv3 (1.8GHz/4-core/8MB/25W, HT)

Intel® Xeon® E3-1240v3 (3.4GHz/4-core/8MB/80W, HT)

Intel® Xeon® E3-1265Lv3 (2.5GHz/4-core/8MB/45W, HT)

Intel® Xeon® E3-1270v3 (3.5GHz/4-core/8MB/80W, HT)

Intel® Xeon® E3-1280v3 (3.6GHz/4-core/8MB/82W, HT)

NOTE: HT indicates that the processor model supports Intel® /Hyper-Threading

Technology (depends on the processor).

NOTE: DDR3 speed is the maximum memory speed of the processor. Actual memory speed may depend on the quantity and type of DIMMs and CPU installed

(options for 1600MHz, 1333MHz).

Cache Memory
One of the following
depending on model

8MB (1x8MB) Level 3

NOTE: For Quad-core processors.

Chipset Intel® C222 Series Chipset

NOTE: For more information regarding Intel® chipsets, please see the following

URL:

http://www.intel.com/products/server/chipsets/.



Standard Features

Upgradeability

Up to 4 DIMM slots available for higher Memory capacity

Up to 4 bay SFF Hot plug Drive Cage; Or 2 bay LFF Hot plug or Non hot plug Drive

Cages

2 PCIe 3.0 expansion slots

Optical Drive Bay

On System
Management
Processor

HPE iLO (Firmware: HPE iLO 4)

NOTE: For more information, visit: http://www.hp.com/go/ilo.

Memory Protection

ECC

Memory
One of the following depending on model

Type HPE SmartMemory

Unbuffered (UDIMM)

DIMM Slots Available 4 DIMMs (2 Channels/ 2 DIMMs per channel)

Maximum Capacity 32GB (4 x 8GB@1600MHz)

(UDIMM)

NOTE: HPE memory from previous generation servers are not fully compatible with

the HPE ProLiant DL320e Gen8 Servers.

NOTE: To realize the performance memory capabilities listed in this document, HPE

SmartMemory is required. For additional information, please see the HPE

SmartMemory QuickSpecs.

NOTE: Depending on the memory configuration and processor model, the memory speed may run at 1600MHz, or 1333MHz. Please see Memory Population Table or the Online Memory Configuration Tool at: http://www.hp.com/go/ddr3memory-

configurator.

Network Controller

HPE Ethernet 1Gb 2-port NC332i Adapter

NOTE: The HPE ProLiant DL320e Gen8 v2 server has an embedded dual-port network adapter. The server can be further upgraded with various networking

products

Expansion Slots	Expansion Slots #	Technology	Bus Width*	Connector Width	Form Factor	Notes
	1	PCle 3.0	x8	x16	Half-length, full-height slot	
	2	PCle 3.0	x4	x8	Low profile slot	

^{*}Indicates the number of physical electrical lanes running to the connector.



Standard Features

HPE Server ROM

HPE ROM (Read Only Memory) is now digitally signed using the HPE Corporate Signing Service. This signature is verified before the flash process starts, reducing accidental programming and preventing malicious efforts to corrupt system ROM.

HPE ROM provides for essential initialization and validation of hardware components before control is passed to the customer-installed operating system. The ROM also provides the capability of booting from various fixed media (HDD, CD-ROM) and removable media (USB), to continue operation to the operating system.

HPE ROM performs very early configuration of the video controller, to allow monitoring of initialization progress via an attached monitor. If configuration or hardware errors are discovered during this early phase of hardware initialization, suitable messages are now displayed on the connected monitor. Additionally, these configuration or hardware errors are logged to the Integrated Management Log (IML) to assist in diagnosis.

The HPE ProLiant ROM is used to configure the following:

- Processor and chipset status registers
- System memory, memory map, and memory initialization
- System hardware configuration (Integrated PCI devices and optional PCIe cards).
- Customer-specific BIOS configuration (using the HPE ROM-Based Setup Utility (RBSU).

NOTE: For further information, please refer to the HPE RBSU (ROM based setup utility) user guide: http://www.hp.com/support/rbsu.

Storage Base Models
Controller
One of the
following
depending
on model

HPE Dynamic Smart Array B120i Controller

NOTE: B120i has the following performance with regards to drive sp 6Gb/s - in 2LFF and 4SFF only with port 0 & 1 installed; 3Gb/s - in 4 with more than 2 drives installed. For full 6 Gb.0/s speed a stand up

card/smart array controller must be used.

NOTE: B120i supports RAID 0/1/10 only. It does not have FBWC su so cannot support advanced RAID (5 onwards). For FBWC, a stand

Smart Array Controller card must be configured.

Performance Models HPE Smart Array P222/512MB FBWC controller

NOTE: P222 can support RAID 0/1/10/5/50. More advanced options

available with Smart Array Advanced Pack 2.0.

NOTE: The DL320e Gen8 v2 can support other advanced controllers as well, depending on model and configuration

NOTE: For set up instructions for HPE Smart Array B120i SATA Controller please refer to the HPE ProLiant DL300 series server user guide.

NOTE: For general information about HPE Smart Array B120i SATA RAID Controller, please visit: http://h18004.www1.hp.com/products/servers/proliantstorage/arraycontrollers/dynamicsmartarray/inde



Standard Features

Internal Storage
Devices

Diskette Drive None
Optical Drive Optional

DVD-RW & DVD-ROM **NOTE**: Slim-type (9.5mm)

Hard Drives Hard Drive Bays None ship standard (Base Models and Performance Models)

4 SFF drive bays or 2 LFF Non hot plug/Hot plug

NOTE: HPE ProLiant DL320e Series servers offer both SFF, and LFF versions in CTO. The Optical Drive bay is available with both models.

NOTE: LFF versions are not an upgradeable option from SFF models, or vice versa, also between Non Hot Plug LFF and Hot Plug LFF.

NOTE: All Pre-configured Models come populated with some hard drive blanks installed. Should the customer need additional hard drive blanks, they can order more using either P/N 666987-B21: HPE SFF Gen8 Hard Drive Blank Kit or P/N 666986-B21: HPE LFF Gen8 Hard Drive Blank Kit. These part numbers for single HDD blanks below are also provided should the customer require replacement HDD blanks for their

server.

Maximum	Internal
Storage	

Hot Plug SFF SAS	4.8TB	4 x 1.2TB
Hot Plug SFF SATA	4.0TB	4 x 1TB
Hot Plug LFF SAS	16.0TB	2 x 8TB
Hot Plug LFF SATA	16.0TB	2 x 8TB
Hot Plug SFF SAS SSD	3.2 TB	4 x 800GB
Hot Plug SFF SATA SSD	3.2 TB	4 x 800GB
Hot Plug LFF SATA SSD	1.6 TB	2 x 800GB
Non-Hot Plug LFF SATA	6TB	2 x 3TB

Interfaces

Video 1 Rear standard video

HPE iLO Remote Management Network Port 1Gb Dedicated

Micro SD slot 1 Internal

NOTE: The Micro SD slot is not a hot-pluggable device.

Customers should not attempt to plug a Micro SD card into the

slot while the server is powered.

USB 2.0 Ports

5 total: 2 rear, 2 front, 1 internal (Optional)

USB 3.0 Ports

2 total: 2 rear



Standard Features

Industry Standard Compliance

ACPI 2.0b Compliant

PCle 3.0 PXE Support WOL Support **USB 2.0 Compliant USB 3.0 Compliant**

Server Power Cords

All Pre-configured Models servers ship with a high voltage server to PDU power cord. NOTE: HPE ProLiant DL servers no longer ship standard with a 12-foot NEMA 5-15P to C13 power cords (227099-001) that allow connection to 110V US wall outlets in a home or office. ProLiant DL servers are primarily connected to PDU's in data center racks so they now ship standard with only a PDU 6-foot C-14 to C13 power cord (142258-001). If a user wishes to power a ProLiant DL server using a110V receptacle (NEMA-15), the 12-foot NEMA 5-15 to C13 power cord must be ordered separately. See Power Cords section for Worldwide Power Cord options.

Power Specifications To review typical system power ratings use the HPE Power Advisor which is available via the online tool located at URL: http://www.hp.com/go/proliant-energy- efficient or http://www.hp.com/go/hppoweradvisor.

> **NOTE:** Power Specification and Technical Content for supported power supplies can be found at: http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111541

Supply

Common Slot Power NOTE: The default power supply for DL320e Gen8v2 server is a 250W Non Hot Plug, Non Redundant (ATX) power supply for all regions.

> A Common Slot 48V DC power supply (750W, 94% efficiency) supporting NEBS compliance is available only for the 4 SFF configuration.

NOTE: Selecting the 750W power supply requires the HPE DL320e Gen8 v2 CS FIO Enablement Kit.

NOTE: Power Specification and Technical Content for supported power supplies can be found at: http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111541

System Fans

2 front fan assemblies and 1 center fan assembly ship standard, non-redundant



Standard Features

Operating Systems and Virtualization Software Support for ProLiant Servers

Microsoft Windows Server
Canonical Ubuntu Server
Red Hat Enterprise Linux (RHEL)
SUSE Linux Enterprise Server (SLES)

VMware

NOTE: For more information on the HPE Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server including how to purchase from Hewlett Packard Enterprise, please visit our OS Support Site at: http://www.hp.com/support/DL320eGen8v2.

Graphics

Integrated Matrox G200 video standard

- 1280 x 1024 (32 bpp)
- 1920 x 1200 (16 bpp)

HPE iLO 4 On System Management Memory

- 16 MB Flash
- 256 MB DDR 3 with ECC (112 MB after ECC and video)

Form Factor
One of the following
depending on model

1U Rack form factor

4 SFF Drive Bay Version:

1.7" (4.32cm) Height x 17.11" (43.46cm) Width x 15.07" (38.30cm) Length

2 LFF Drive Bay Version:

1.7" (4.32cm) Height x 17.11" (43.46cm) Width x 15.07" (38.30cm) Length

On System Management

HPE iLO Management Engine HPE iLO Management Engine is a comprehensive set of embedded management features supporting the complete lifecycle of the server, from initial deployment, through ongoing management, to service alerting and remote support. HPE iLO Management Engine comes standard on all HPE ProLiant Gen8 servers. The HPE iLO Management Engine portfolio includes:

- HPE iLO: The HPE iLO (Integrated Lights-Out) management processor is the core foundation for the HPE iLO Management Engine
- HPE Agentless Management: Provides built in server health monitoring and alerting capability without OS agents, that starts working the moment a power cord and an Ethernet cable are connected.
- HPE Active Health System: Always on, continuous monitoring for increased stability and shorter downtimes; 100% configuration history; Health and service alerts and easy export and upload to Service and Support.
- HPE Intelligent Provisioning: Lets customers provision and configure a single server without any separate media. No more SmartStart CDs or Smart Update



Standard Features

Firmware DVD are needed.

- o To start Intelligent Provisioning:
 - Press the F10 key during the ProLiant Gen8 server boot process (also known as power on self-test or POST).
 - Please go to the Intelligent Provisioning website at http://www.hp.com/go/intelligentprovisioning for additional information and to view usage
 - Use the Service Pack for ProLiant (SPP) at http://www.hp.com/go/spp to get firmware and software updates.
- HPE iLO Mobile App: Enables the ability to access, deploy, and manage your server anytime from anywhere from select smartphones and mobile devices. For additional information please visit: http://www.hp.com/go/ilo/mobileapp

NOTE: For more information, visit: http://www.hp.com/go/ilo or HPE iLO Management Engine technologies whitepaper

HPE Insight Management ProLiant (SPP)

HPE Service Pack for HPE Service Pack for ProLiant (SPP) and HPE Smart Update Manager (HPE SUM) version 5 provide a new, comprehensive approach to firmware and system software maintenance. Together they provide better operating stability and ensure maximum uptime. The SPP will be updated at a predictable cadence, typically coinciding with new HPE server hardware launches. By enabling all firmware to be updated online and integrating firmware and system software updates in one operation HPE SUM and the SPP offer faster updates of individual servers and dramatically faster updates of entire BladeSystem enclosures. Further improving system uptime and stability is the fact that Hewlett Packard Enterprise provides 12 months of support on each Service Pack for ProLiant.

> The user experience around HPE SUM and the SPP has been improved in several ways, starting with the web download. A single web page provides access to a single download containing both the latest version of HPE SUM version 5 and the latest SPP. Optional smaller subsets with only specific types of servers or specific operating systems are offered to save on download time. The HPE SUM application has been re-written to provide a more straightforward, intuitive user interface that guides the user through the steps of discovery, analyses and update, providing comprehensive information on available updates, criticality and interdependencies. This information is also available in reports. By providing the option of multiple local or shared repositories which can be easily updated from hpe.com, HPE SUM provides the tools to optimize stability and consistency throughout the company. While HPE SUM and the SPP will recommend the



Standard Features

combinations of firmware and system software that Hewlett Packard Enterprise has found to be the best practice, the application gives customers the flexibility to set their own specific baseline.

The Service Pack for ProLiant has been rigorously tested with specific attention for interaction between firmware, drivers and agents both within the server as well as in interaction with the BladeSystem enclosure components (Onboard Administrator and Virtual Connect). This testing ensures the highest quality as well as providing the input for HPE SUM to deploy updates taking into account all interdependencies, when determining the correct updates and order of update deployment.

NOTE: The Service Pack for ProLiant (which includes HPE SUM 5) can be downloaded from

http://www.hp.com/go/spp/download. More information can be

found: http://www.hp.com/go/spp and

http://www.hp.com/go/hpsum

Security

Power-on password Administrator's password

Warranty

This product is covered by a global limited warranty and supported by HPE Services and a worldwide network of Hewlett Packard Enterprise Authorized Channel Partners resellers. Hardware diagnostic support and repair is available for three years from date of purchase. Support for software and initial setup is available for 90 days from date of purchase. Enhancements to warranty services are available through HPE Care Pack services or customized service agreements. Hard drives have either a one year or three year warranty; refer to the specific hard drive QuickSpecs for details.

NOTE: Server Warranty includes 1-Year Parts, 1-Year Labor, 1-Year Onsite support with next business day response. Warranty repairs may be accomplished through the use of Customer Self Repair (CSR) parts. These parts fall into two categories: 1) Mandatory CSR parts are designed for easy replacement. A travel and labor charge will result when customers decline to replace a Mandatory CSR part; 2) Optional CSR parts are also designed for easy replacement but may involve added complexity. Customers may choose to have Hewlett Packard Enterprise replace Optional CSR parts at no charge. Additional information regarding worldwide limited warranty and technical support is available at:

http://h18004.www1.hp.com/products/servers/platforms/warranty/index.html



Optional Features

HPE Insight management software

HPE Insight Control

HPE Insight Control, a product option, delivers essential infrastructure management that can help save time and money by making it easy to deploy, migrate, monitor, remote control, and optimize your IT infrastructure through a single, simple management console. HPE Insight Control also supports Location and Power Discovery Services to automate many configuration, asset tracking, and power management tasks to speed implementation and prevent downtime. For more information, see http://www.hp.com/go/insightcontrol.

HPE Insight Control includes one year of 24 x 7 HPE Software Technical Support and Update Service ensuring rapid access to Hewlett Packard Enterprise support staff and proactive delivery of software updates. For more information about this service, see: http://www.hp.com/services/insight.

HPE iLO Essentials

HPE iLO Essentials license ideal for small and medium business customers. The specially created HPE iLO Essentials (a subset of iLO Advanced functionality) saves SMB customers time and money, by ease of remote server set up through the interactive virtual media, lowering operational costs with remote access via the Integrated Remote Console, and faster time to resolution with email-based proactive notifications. With this newly designed HPE iLO Essentials license SMB customers now have the option of a server management package solely design and priced just right for their IT environments. HPE iLO Essentials is available on all HPE ProLiant Gen8 e-series making this an ideal solution for small business owners. For more information, see: http://www.hp.com/qo/iLO/essentials

HPE iLO Advanced

HPE Integrated Lights-Out Advanced License a product option, providing smart remote server management without compromise. iLO Advanced unlocks the full set of remote administration functionality for all HPE ProLiant servers by activating the full Virtual Keyboard Video and Mouse remote console, multi-user collaboration, console record and replay, GUI-based and scripted virtual media and virtual folders, and enhanced security and power management functionality. For more information, see: http://www.hp.com/go/iloadvanced



Optional Features

Storage Software

Whether you need to solve a specific data protection, archiving, or storage command and control challenge, or deliver on strategic consolidation, compliance, or continuity initiatives, look no further than HPE storage software. Our storage software helps you reduce costs, simplify storage infrastructure, protect vital assets and respond faster to business opportunities.

Storage software that gets the job done:

- Data Protection and Recovery Software
 Whether you're a large enterprise or a smaller business, HPE data protection
 and recovery software will cost-effectively protect you against disaster and
 ensure business continuity.
- Data Archive and Migration Software
 The HPE storage software enables you to comply with data retention and retrieval requirements, improve application performance, and reduce costs by efficiently migrating infrequently accessed or less valuable data to lower cost storage.
- Storage Resource Management Software (SRM)
 The HPE storage resource management software reduces operational costs and provides the command and control foundation you need to efficiently manage and visualize your physical and virtual environments.
- Data Replication Software
 Hewlett Packard Enterprise offers array-based and host-based replication
 software for use in disaster recovery, testing, application development and
 reporting.
- Storage Device Management Software
 Maximize your investment in HPE storage and networking with software that
 enables hardware-specific configuration, performance tuning and connectivity
 management.
- HPE StoreVirtual VSA
 With HPE StoreVirtual VSA you can use the power of virtualization to turn a set
 of heterogeneous and disconnected physical disk drives in your servers and
 storage devices into a single pool of logical storage capacity.

NOTE: For more information available Storage Software including QuickSpecs, please see: http://www.hp.com/go/storage/software.

HPE Insight Online

HPE Insight Online is a new addition to the HPE Support Center for one stop, secure access to product and Hewlett Packard Enterprise support information personalized to your IT environment. Insight Online can automatically display devices remotely monitored by HPE Insight Remote Support. With Insight Online's easy navigation you can efficiently track your IT support contracts and device status from anywhere and at anytime. http://www.hp.com/go/insightonline



Optional Features

HPE Proactive Insight experience

Prevent problems with innovative, automated monitoring tools and proactive services. The HPE Proactive Insight experience consist of using Insight Online, Insight Remote Support, and Proactive Care Support Service as one integrated solution. The Proactive Insight experience provides you with expert advice and personalized, cloud-based automated IT support, helping to prevent unplanned down time and solve problems quickly. For more information, visit: http://www.hp.com/go/proactiveinsightexperience

Factory Express
Portfolio for Servers
and Storage

HPE Factory Express offers configuration, customization, integration and deployment services for HPE servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed.

Factory Express offers service packages for simple configuration, racking, installation, complex configuration and design services as well as individual factory services, such as image loading, asset tagging, and custom packaging. Hewlett Packard Enterprise products supported through Factory Express include a wide array of servers and storage: HPE Integrity, HPE ProLiant, HPE ProLiant Server Blades, HPE BladeSystem, HPE 9000 servers as well as the MSAxxxx, VA7xxx, EVA, XP, rackable tape libraries and configurable network switches.

For more information on Factory Express services for your specific server model please contact your sales representative or go to: http://www.hp.com/go/factory-express.

HPE Simple Configurator

SCE is a guided self service tool to help sales and non technical people provide customers with initial configurations in 3 to 5 minutes. You may then send the configuration on for configuration help, or use in your existing ordering processes. If you require "custom" rack configuration or configuration for products not available in SCE, please contact the Hewlett Packard Enterprise Customer Business Center or an Authorized Partner for assistance. http://www.hp.com/products/configurator



Service and Support

Service and Support

HPE Technology Services for Industry Standard Servers and BladeSystem HPE Technology Services delivers confidence, reduces risk and helps customers realize agility and stability. Connect to Hewlett Packard Enterprise to help prevent problems and solve issues faster. Our support technology lets you to tap into the knowledge of millions of devices and thousands of experts to stay informed and in control, anywhere, any time.

Protect your business beyond warranty with HPE Care Pack Services HPE Care Pack Services enable you to order the right service level, length of coverage and response time as you purchase your new server, giving you full entitlement for the term you select.

Optimized Care

Supports maintaining servers at optimum performance availability

HPE Proactive Care with 24x7 coverage, three year Care Pack Service HPE Proactive Care helps prevent problems and stabilize IT by utilizing secure, real-time, predictive analytics and proactive consultations when your products are connected to Hewlett Packard Enterprise. This Care Pack Service combines three years' proactive reporting and advice with our 24x7 coverage and enhanced escalation management, four hour hardware response time and two hour call back for software questions on leading industry standard software running on your HPE ProLiant server. http://h20195.www2.hp.com/v2/GetPDF.aspx/4AA3-8855ENW.pdf

Standard Care

Supports maintaining high level of server availability

Foundation Care 24x7, three-year Care Pack Service

HPE Foundation Care 24x7 connects you to Hewlett Packard Enterprise 24 hours a day, seven days a week for assistance on resolving issues. Hardware onsite response within four hours if needed; collaborative software included in this Care Pack service provides troubleshooting assistance on industry leading software running on your HPE server. Simplify your support experience and make Hewlett Packard Enterprise your first call for hardware or software questions. http://h20195.www2.hp.com/V2/GetDocument.aspx?docname=4AA4-

8876ENW&cc=us&lc=en



Service and Support

Related Services

HPE ProLiant Server Hardware Installation

Provides for the basic hardware installation of HPE branded servers, storage devices and networking options to assist you in bringing your new hardware into operation in a timely and professional manner.

http://h20195.www2.hp.com/V2/GetPDF.aspx/5981-9356EN.pdf

Factory Express for Servers and storage

HPE Factory Express offers configuration, customization, integration and deployment services for HPE servers and storage products. Customers can choose how their factory solutions are built, tested, integrated, shipped and deployed. For more information on Factory Express services for your specific server model please contact your sales representative or go to: http://www.hp.com/go/factory-express.

Data Privacy Services

Protect your data through better media management. HPE Data privacy services help manage and protect sensitive data to reduce the risk of unauthorized access to private information and help meet compliance requirements. Our retention services allow you to keep drives and other devices upon failure, our removal services provide convenient data sanitization and our recovery services allow you to safely retire IT assets and capture any remaining value from the hardware. http://www.hp.com/services/dataprivacy

Additional HPE Care Pack services can be found at: http://www.hp.com/go/cpc

Get connected to Hewlett Packard your support experience

Connecting products to Hewlett Packard Enterprise will help prevent problems with 24x7monitoring, prefailure alerts, automatic call logging, and parts dispatch. With Connected Enterprise to improve products, you can have a dashboard to manage your IT anywhere, anytime, from any device.

HPE Support Center

Personalized online support portal with access to information, tools and experts to support Hewlett Packard Enterprise business products. Submit support cases online, chat with Hewlett Packard Enterprise experts, access support resources or collaborate with peers. Learn more http://www.hp.com/go/hpsc

The HPE Support Center Mobile App* allows you to resolve issues yourself or quickly connect to an agent for live support. Now, you can get access to personalized IT support anywhere, anytime.

HPE Insight Remote Support and HPE Support Center are available at no additional cost with a Hewlett Packard Enterprise warranty, HPE Care Pack or Hewlett Packard Enterprise contractual support agreement.

NOTE: *The HPE Support Center Mobile App is subject to local availability



Service and Support

Parts and Materials

Hewlett Packard Enterprise 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.

The defective media retention service feature option applies only to Disk or eligible SSD/Flash Drives replaced by Hewlett Packard Enterprise due to malfunction.

For more information To learn more on HPE ProLiant servers and HPE BladeSystem servers, please contact your Hewlett Packard Enterprise sales representative or Hewlett Packard Enterprise Authorized Channel Partner. Or visit: http://www.hp.com/services/proliant



Pre-configured Models

NOTE: For the Standard Features shipped in the "Factory Integrated Models", please see the "Configuration Information - Factory Integrated Models" section.

NOTE: Pre-configured models ship with the configurations below. Options can be selected from the Core or Additional options section of this QuickSpecs.

NOTE: Hewlett Packard Enterprise does not allow factory integration of options into pre-configured models. Any additional options purchased will be shipped separately.

NOTE: If you desire a custom configuration please see "Configuration Information - Factory Integrated Models" section of this QuickSpecs.

NOTE: Maximum speed supported depends on the CPU installed. Entry model will support maximum speed of 1600 MHz.

Please see Memory Population Table or the Online Memory Configuration Tool at:

http://www.hp.com/go/ddr3memory-configurator.

NOTE: All Pre-configured Models come populated with some hard drive blanks installed. Should the customer need additional hard drive blanks, they can order more using either P/N 666987-B21: HPE SFF Gen8 Hard Drive Blank Kit or P/N 666986-B21: HPE LFF Gen8 Hard Drive Blank Kit.

NOTE: Not all models are available in all regions. Check with your local country Hewlett Packard Enterprise offices for availability.

Entry Models

HP ProLiant DL320e
Gen8 v2 G3240 1P
2GB-U Non-hot Plug
2 LFF Entry Server
768638-xx1

Processor(s) (1) Intel® Pentium® G3240 (3.1 GHz/2-core/3MB/54W)

Processor

Cache Memory 8MB (1x8MB) Level3

Memory 2GB (1 x 2GB) Unbuffered DIMMs PC3-12800E (1600MHz)

Network Controller HPE Ethernet 1Gb 2-port NC332i Adapter Storage Controller HPE Dynamic Smart Array B120i Controller

NOTE: B120i has the following performance with regards to drive speed: 6Gb/s - in 2LFF and 4SFF only with port 0 & 1 installed; 3Gb/s - in 4SFF with more than 2 drives installed. For full 6 Gb.0/s speed a stand up card/smart array controller

must be used.

NOTE: B120i supports RAID 0/1/10 only. It does not have FBWC support so cannot support advanced RAID (5

onwards). For FBWC, a standup Smart Array Controller card

must be configured.

Hard Drive None ship standard

Internal Storage 2 bay LFF Non Hot Plug Drive Cage; includes 2LFF Hard

Drive blanks

Optical Drive Bay None ships standard

PCI-Express Slots 1 PCle3 x16 and 1 PCle3 x8

Power Supply 250 Watts Non-Hot Plug, Non redundant Power Supply for all

regions

Fans 2 front fan assemblies and 1 center fan assembly ship

standard, non-redundant

Management HPE iLO Management Engine (standard)

Optional: HPE iLO Essentials or HPE Insight Control

Form Factor 1U

Warranty Server Warranty includes 1-Year Parts, 1-Year Labor, 1-Year

Onsite support with next business day response.

NOTE: No rail kits are included with the server. They must be

ordered separately.



Pre-configured Models

Base Models

HP ProLiant DL320e Gen8 v2 E3-1220v3 1P 4GB-U B120i

Server 717170-xx1 Processor(s) (1) Intel® Xeon® E3-1220v3 (3.1GHz/4-core/8MB/80W, HT)

Processor

Cache Memory 8MB (1x8MB) Level3

Memory 4GB (1 x 4GB) Unbuffered DIMMs PC3-12800E (1600MHz)

Network Controller HPE Ethernet 1Gb 2-port NC332i Adapter Storage Controller HPE Dynamic Smart Array B120i Controller

NOTE: B120i has the following performance with regards to drive speed: 6Gb/s - in 2LFF and 4SFF only with port 0 & 1 installed; 3Gb/s - in 4SFF with more than 2 drives installed. For full 6 Gb.0/s speed a stand up card/smart array controller

must be used.

NOTE: B120i supports RAID 0/1/10 only. It does not have FBWC support so cannot support advanced RAID (5

onwards). For FBWC, a standup Smart Array Controller card

must be configured.

Hard Drive None ship standard

Internal Storage 2 bay LFF Hot Plug Drive Cage; includes 1 LFF hard drive

blank

Optical Drive Bay None ships standard

PCI-Express Slots 1 PCIe3 x16 and 1 PCIe3 x8

Power Supply 250 Watts Non-Hot Plug, Non redundant Power Supply for all

regions

Fans 2 front fan assemblies and 1 center fan assembly ship

standard, non-redundant

Management HPE iLO Management Engine (standard)

Optional: HPE iLO Essentials or HPE Insight Control

Form Factor 1U

Warranty Server Warranty includes 1-Year Parts, 1-Year Labor, 1-Year

Onsite support with next business day response.

NOTE: No rail kits are included with the server. They must be

ordered separately.



Pre-configured Models

Performance Models

HP ProLiant DL320e Gen8 v2 E3-1241v3 1P 8GB-U P222 Hot Plug 4 SFF Perf Svr 768645-xx1 Processor(s) (1) Intel® Xeon® E3-1241v3 (3.5GHz/4-core/8MB/80W, HT)

Processor

Cache Memory 8MB (1x8MB) Level3

Memory 8GB (1 x 8GB) Unbuffered DIMMs PC3-12800E (1600MHz)

Network Controller HPE Ethernet 1Gb 2-port NC332i Adapter

Storage Controller HPE Smart Array P222/512MB FBWC Controller Hard Drive None ship standard

Internal Storage 4 bay SFF Hot Plug Drive Cage; includes 3 SFF hard drive

blanks

Optical Drive Bay None ships standard

PCI-Express Slots 1 PCIe3 x16 and 1 PCIe3 x8

Power Supply 250 Watts Non-Hot Plug, Non redundant Power Supply for all

regions

Fans 2 front fan assemblies and 1 center fan assembly ship

standard, non-redundant

Management HPE iLO Management Engine (standard)

Optional: HPE iLO Essentials or HPE Insight Control

Form Factor 1U

Warranty Server Warranty includes 1-Year Parts, 1-Year Labor, 1-Year

Onsite support with next business day response.

NOTE: No rail kits are included with the server. They must be

ordered separately.

Country Code Key

xx = 00 U.S. xx = 20 Brazil xx = 29 Japan xx = 37 APD xx = 42 Europe xx = AA PRC



Configuration Information - Factory Integrated Models

NOTE: This section lists some of the steps required to configure a Factory Integrated Model. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of a Hewlett Packard Enterprise approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

NOTE: Factory Integrated Models must start with a CTO Server.

NOTE: FIO indicates that this option is only available as a factory installable option.

NOTE: All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered with the server.

Step 1: Base Configuration (choose one of the following configurable models)

HPE Models HP ProLiant DL320e Gen8 v2 Non-hot Plug 2 LFF Configure-to-order Server

722313-

B21

Factory Integrated Model ships with:

1U Chassis with 2 LFF Non-Hot Plug Drive Cage

HPE Ethernet 1Gb 2-port NC332i Adapter

HPE iLO Management Engine (standard)

HPE 250W power supply

NOTE: The default power supply for DL320e Gen8 v2 server is either a

250W Non Hot Plug, Non Redundant (ATX) power supply for all regions.

HPE Dynamic Smart Array B120i SATA Controller (RAID 0/1/10)

NOTE: For set up instructions for HPE Dynamic Smart Array B120i SATA

Controller please refer to the HPE ProLiant DL300 series server user guide

NOTE: For general information about HPE Dynamic Smart Array B120i SATA

Controller, please visit:

http://h18004.www1.hp.com/products/servers/proliantstorage/arraycontrollers/

smartarrayb120i/index.html

HP ProLiant DL320e Gen8 v2 Hot Plug 2 LFF Configure-to-order Server

722314-

B21

Factory Integrated Model ships with:

1U Chassis with 2 LFF Hot Plug Drive Cage

HPE Ethernet 1Gb 2-port NC332i Adapter

HPE iLO Management Engine (standard)

HPE Dynamic Smart Array B120i SATA Controller (RAID 0/1/10)

NOTE: For set up instructions for HPE Dynamic Smart Array B120i SATA

Controller please refer to the HPE ProLiant DL300 series server user guide

NOTE: For general information about HPE Dynamic Smart Array B120i SATA

Controller, please visit:

http://h18004.www1.hp.com/products/servers/proliantstorage/arraycontrollers/

smartarrayb120i/index.html

HP ProLiant DL320e Gen8 v2 Hot Plug 4 SFF Configure-to-order Server

722315-

B21

Factory Integrated Model ships with:

1U Chassis with 4 SFF Hot plug Drive Cage

HPE Ethernet 1Gb 2-port NC332i Adapter

HPE iLO Management Engine (standard)

HPE Dynamic Smart Array B120i SATA Controller (RAID 0/1/10)

NOTE: For set up instructions for HPE Dynamic Smart Array B120i SATA

Controller please refer to the HPE ProLiant DL300 series server user guide

NOTE: For general information about HPE Dynamic Smart Array B120i SATA

Controller, please visit:

http://h18004.www1.hp.com/products/servers/proliantstorage/arraycontrollers/



Configuration Information - Factory Integrated Models

smartarrayb120i/index.html

Step 2: Choose Required Options (only one of the following from each list unless otherwise noted)

otherwise noted)			
HPE Processors	Base Processors NOTE: All support up to 1600MHz memory speeds.		
	HP DL320e Gen8 v2 Intel® Core™ i3-4150 (3.5GHz/2-core/3MB/54W) FIO Processor Kit	768916-L21	
	Performance Processors NOTE: All support up to 1600MHz DDR3 memory speeds.		
	HP DL320e Gen8 v2 Intel® Xeon® E3-1281v3 (3.7GHz/4-core/8MB/82W) FIO Processor Kit	768917-L21	
	HP DL320e Gen8 v2 Intel® Xeon® E3-1271v3 (3.6GHz/4-core/8MB/80W) FIO Processor Kit	768918-L21	
	HP DL320e Gen8 v2 Intel® Xeon® E3-1241v3 (3.5GHz/4-core/8MB/80W) FIO Processor Kit	768914-L21	
	HP DL320e Gen8 v2 Intel® Xeon® E3-1231v3 (3.4GHz/4-core/8MB/80W) FIO Processor Kit	768915-L21	
	HP DL320e Gen8 v2 Intel® Xeon® E3-1230Lv3 (1.8GHz/4-core/8MB/25W) FIO Processor Kit	741411-L21	
	HP DL320e Gen8 v2 Intel® Xeon® E3-1220v3 (3.1GHz/4-core/8MB/80W) FIO Processor Kit	718257-L21	
	HP DL320e Gen8 v2 Intel® Xeon® E3-1265Lv3 (2.5GHz/4-core/8MB/45W) FIO Processor Kit	718261-L21	
HPE Memory	NOTE: To realize the performance memory capabilities listed in this document, HPE SmartMemory is required. For additional information, please see the HPE SmartMemory QuickSpecs. NOTE: HPE memory from previous generation servers are not fully compatible with new Active Health features on the DL320e Gen8 v2 Server.		
	Unbuffered with ECC DIMMs (UDIMMs)		
	HP 2GB (1x2GB) Single Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit	713975-B21	
	HP 4GB (1x4GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit	713977-B21	
	HP 8GB (1x8GB) Dual Rank x8 PC3L-12800E (DDR3-1600) Unbuffered CAS-11 Low Voltage Memory Kit	713979-B21	
	Unbuffered with ECC DIMMs (UDIMMs)		
	HP 2GB (1x2GB) Single Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit	669320-B21	
	HP 2GB (1x2GB) Single Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit	647905-B21	
	HP 4GB (1x4GB) Dual Rank x8 PC3-12800E (DDR3-1600) Unbuffered CAS-11 Memory Kit	669322-B21	
	HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) Unbuffered CAS-9 Low Voltage Memory Kit	647907-B21	



647909-B21

636673-B21

QuickSpecs

HP 8GB (1x8GB) Dual Rank x8 PC3-12800E (DDR3-1600) 669324-B21

Unbuffered CAS-11 Memory Kit

HP 8GB (1x8GB) Dual Rank x8 PC3L-10600E (DDR3-1333)

Unbuffered CAS-9 Low Voltage Memory Kit

NOTE: All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the

Online DDR3 Memory Configuration Tool:

http://www.hp.com/go/ddr3memory-configurator. **NOTE:** Depending on the memory configuration and processor model,

1600MHz and 1333MHz memory may operate at a lower speed.

Please see the see the "Memory" section later in this document and

the Online Memory Configuration Tool for details at http://www.hp.com/go/ddr3memory-configurator.

NOTE: For additional memory rules and guidelines, see the "Memory" section later in this document.

NOTE: For more information on ProLiant Energy Efficient Features,

see: http://www.hp.com/go/proliant-energy-efficient

NOTE: PC3L is a low voltage memory.

HPE Power Supplies NOTE: Prior to making a power supply selection it is highly

recommended that the HPE Power Advisor is run to determine the right size power supply for your server configuration. The HPE Power

Advisor is located at: http://www.hp.com/go/hppoweradvisor.

HP DL320e Gen8 v2 250W FIO Power Supply Unit Kit 748334-B21

NOTE: Non redundant Power Supply for all regions

HP 750W Common Slot -48VDC Hot Plug Power Supply Kit

NOTE: Selecting the 750W power supply requires the HPE DL320e

Gen8 v2 CS FIO Enablement Kit

Step 3: Choose Additional Factory Integratable Options

HPE USB Cable Kit HP Gen8 FIO Internal USB Kit 662961-B21

NOTE: Required only if USB Flash Media Drive Key is selected.

HPE Security HP DL320eGen8 v2 Entry Rack Ear FIO Kit 723903-B21

NOTE: DL320e Gen8 v2 ships with thumbscrew ear attachments (BTO and CTO) as standard. The Entry Rack Ear FIO Kit is a Quick Release Ear kit, it also needs to be purchased if you want to have a security bezel installed.

HPE Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-bundle Single Server FIO License.

NOTE: For more rail kit options see "Additional Options" section of

this QuickSpecs.

HPE Insight Software HP Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-

bundle Single Server FIO License

HP Insight Control including 1yr 24x7 Support ProLiant ML/DL/BL-

bundle FIO Electronic License

NOTE: The Electronic software license is available in EMEA only.



C6N36A

C6N36ABE

HPE ProLiant DL320e Generation 8 (Gen8) v2

QuickSpecs

Configuration Information - Factory Integrated Models

Converged Infrastructure Management Software HPE OneView with iLO Advanced - Server hardware required on

same purchase order

HP OneView for ProLiant DL Server incl 3yr 24x7 Supp FIO Bundle

Physical 1 Svr Lic

E5Y43A

Step 4: Choose Additional Options for Factory Integration

NOTE: For additional options, please refer to the "Core Options" and "Additional Options" section below.



Core Options

NOTE: Some options may not be integrated at the factory. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of a Hewlett Packard Enterprise approved configurator. Contact your local sales representative for additional information.

HPE Memory

NOTE: To realize the performance memory capabilities listed in this document, HPE SmartMemory is required. For additional information, please see the <u>HPE SmartMemory QuickSpecs</u>.

NOTE: HPE memory from previous generation servers are not fully

compatible with SmartMemory features in Gen8 Servers.

Unbuffered with ECC DIMMs (UDIMMs)

HP 2GB (1x2GB) Single Rank x8 PC3L-12800E (DDR3-1600) 713975-B21 Unbuffered CAS-11 Low Voltage Memory Kit HP 4GB (1x4GB) Dual Rank x8 PC3L-12800E (DDR3-1600) 713977-B21 Unbuffered CAS-11 Low Voltage Memory Kit

LID OCD (1/OCD) Dual Dank vo DC2L 12000F (DDD2 1600)

HP 8GB (1x8GB) Dual Rank x8 PC3L-12800E (DDR3-1600) 713979-B21 Unbuffered CAS-11 Low Voltage Memory Kit

Unbuffered with ECC DIMMs (UDIMMs)

HP 2GB (1x2GB) Single Rank x8 PC3-12800E (DDR3-1600) 669320-B21

Unbuffered CAS-11 Memory Kit

HP 2GB (1x2GB) Single Rank x8 PC3L-10600E (DDR3-1333) 647905-B21

Unbuffered CAS-9 Low Voltage Memory Kit

HP 4GB (1x4GB) Dual Rank x8 PC3-12800E (DDR3-1600) 669322-B21

Unbuffered CAS-11 Memory Kit

HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) 647907-B21

Unbuffered CAS-9 Low Voltage Memory Kit

HP 8GB (1x8GB) Dual Rank x8 PC3-12800E (DDR3-1600) 669324-B21

Unbuffered CAS-11 Memory Kit

HP 8GB (1x8GB) Dual Rank x8 PC3L-10600E (DDR3-1333) 647909-B21

Unbuffered CAS-9 Low Voltage Memory Kit

NOTE: All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool:

http://www.hp.com/go/ddr3memory-configurator.

NOTE: Kits described as LP include Low Power DIMMs. For more

information on ProLiant Energy Efficient Features, see:

http://www.hp.com/go/proliant-energy-efficient.

NOTE: PC3L is a low voltage memory.

HPE Optical Drives

HP 9.5mm SATA DVD-RW JackBlack Optical Drive 652241-B21
HP 9.5mm SATA DVD-ROM JackBlack Optical Drive 652238-B21

HPE Hard Drives

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

NOTE: Hard drives have either a one year or three year warranty;

refer to the specific hard drive QuickSpecs for details.



12G SAS Hot Plug SmartDrive LFF (3.5-inch) Converter Enterprise Drives	
HP 600GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	765424-B21
HP 450GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	737394-B21
HP 300GB 12G SAS 15K rpm LFF (3.5-inch) SC Converter Enterprise 3yr Warranty Hard Drive	737261-B21
12G SAS Hot Plug with SmartDrive SFF (2.5-inch) Enterprise Drives	
HP 600GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759212-B21
HP 450GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759210-B21
HP 300GB 12G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	759208-B21
12G SAS Hot Plug SFF (2.5-inch) Enterprise Drives	
HP 1.2TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	781518-B21
HP 900GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	785069-B21
HP 600GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	781516-B21
HP 300GB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	785067-B21
12G SAS Hot Plug SFF (2.5-inch) SC 512e Drives	
HP 2TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765466-B21
HP 1TB 12G SAS 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765464-B21
HP 1.8TB 12G SAS 10K rpm SFF (2.5-inch) SC Enterprise 512e 3yr Warranty Hard Drive	791034-B21
HP 600GB 12G SAS 15K rpm SFF (2.5-inch) SC 512e Enterprise 3yr Warranty Hard Drive	748387-B21
12G SAS Hot Plug SFF (2.5-inch) Midline (MDL) Drives	
HPE 1TB 12G SAS 7.2K rpm SFF (2.5in) SC Midline 1yr Warranty Hard Drive	832514-B21
12G SAS Hot Plug LFF (3.5-inch) SC HDD	
HP 8TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793703-B21
HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr Warranty Hard Drive	793699-B21
12G SAS Hot Plug LFF (3.5-inch) Midline (MDL) 512e Drives	
HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765259-B21
HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765257-B21
12G SAS Hot Plug LFF (3.5-inch) SC 512e Performance Drives	



HP 6TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	793671-B21
HP 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	793669-B21
12G SAS Hot Plug LFF (3.5in) 7.2K MDLSC HDD	
HPE 4TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty	
Hard Drive	818367-B21
HPE 2TB 12G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	818365-B21
6G SAS Hot Plug with SmartDrive SFF (2.5-inch) Enterprise Drives	
HP 1.2TB 6G SAS 10K rpm SFF (2.5-inch) SC Dual Port Enterprise 3yr Warranty Hard Drive	718162-B21
HP 900GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652589-B21
HP 600GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652583-B21
HP 450GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652572-B21
HP 300GB 6G SAS 10K rpm SFF (2.5-inch) SC Enterprise 3yr	652564-B21
Warranty Hard Drive HP 300GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr	652611-B21
Warranty Hard Drive	050005 D04
HP 146GB 6G SAS 15K rpm SFF (2.5-inch) SC Enterprise 3yr Warranty Hard Drive	652605-B21
6G SAS Hot Plug SmartDrive SFF (2.5-inch) Midline Drives	
HP 1TB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	652749-B21
HP 500GB 6G SAS 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	652745-B21
6G SAS Hot Plug SmartDrive LFF (3.5-inch) Midline Drives	
HP 4TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	695510-B21
HP 3TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652766-B21
HP 2TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652757-B21
HP 1TB 6G SAS 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	652753-B21
NOTE: Please see the QuickSpecs for Technical Specifications and additional information:	
http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111744	
6G SATA Hot Plug with SmartDrive SFF (2.5-inch) Midline (MDL) Drives	
HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty	655710-B21
Hard Drive	
HP 500GB 6G SATA 7.2K rpm SFF (2.5-inch) SC Midline 1yr Warranty Hard Drive	655708-B21
6G SATA 2.5in WI-PLP SCC SSD	



HP 1.2TB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804680-B21
HP 800GB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804674-B21
HP 400GB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty Solid	804668-B21
State Drive HP 200GB 6G SATA Write Intensive-2 LFF 3.5-in SCC 3yr Wty Solid	804642-B21
State Drive 6G SATA 2.5in MU-PLP SCC SSD	
HP 1.6TB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State	804634-B21
Drive	004034-DZ1
HP 800GB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804628-B21
HP 480GB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	832417-B21
HP 200GB 6G SATA Mixed Use-2 LFF 3.5-in SCC 3yr Wty Solid State	804616-B21
Drive 6G SATA 2.5in RI-PLP SCC SSD	
HP 1.6TB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid	804608-B21
State Drive	004000-DZ I
HP 800GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804602-B21
HP 480GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804596-B21
HP 240GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804590-B21
HP 120GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804584-B21
HP 80GB 6G SATA Read Intensive-2 LFF 3.5-in SCC 3yr Wty Solid State Drive	804578-B21
6G SATA 2.5in WI-PLP SC SSD	
HP 1.2TB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid	804677-B21
State Drive	004077 BZ1
HP 800GB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804671-B21
HP 400GB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804665-B21
HP 200GB 6G SATA Write Intensive-2 SFF 2.5-in SC 3yr Wty Solid	804639-B21
State Drive 6G SATA 2.5in MU-PLP SC SSD	
HP 1.6TB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State	804631-B21
Drive	004031-DZ1
HP 800GB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804625-B21
HP 480GB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State	832414-B21
Drive HP 200GB 6G SATA Mixed Use-2 SFF 2.5-in SC 3yr Wty Solid State	804613-B21
Drive	



6G SATA 2.5in RI-PLP SC SSD	
HP 1.6TB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804605-B21
HP 800GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804599-B21
HP 480GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804593-B21
HP 240GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804587-B21
HP 120GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804581-B21
HP 80GB 6G SATA Read Intensive-2 SFF 2.5-in SC 3yr Wty Solid State Drive	804575-B21
6G SATA Hot Plug MU-3 SFF (2.5-inch) SC Solid State Drives	
HP 1.92TB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	817011-B21
HP 960GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816995-B21
HP 480GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816985-B21
HP 240GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816975-B21
HP 120GB 6G SATA Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816965-B21
6G SATA Hot Plug RI-3 SFF (2.5-inch) SC Solid State Drives	
HP 3.84TB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816929-B21
HP 1.92TB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816919-B21
HP 960GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816909-B21
HP 480GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816899-B21
HP 240GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816889-B21
HP 120GB 6G SATA Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816879-B21
6G SATA Hot Plug LFF (3.5-inch) RI-3 SCC SSD	
HP 3.84TB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr	816933-B21
Wty Solid State Drive	
HP 1.92TB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816923-B21
HP 960GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816913-B21
HP 480GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816903-B21
HP 240GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816893-B21



HP 120GB 6G SATA Read Intensive-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816883-B21
6G SATA Hot Plug LFF (3.5-inch) MU-3 SCC SSD	
HP 1.92TB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty	817015-B21
Solid State Drive	017013-021
HP 960GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816999-B21
HP 480GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty	816989-B21
Solid State Drive	
HP 240GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty Solid State Drive	816979-B21
HP 120GB 6G SATA Mixed Use-3 LFF 3.5-in SC Converter 3yr Wty	816969-B21
Solid State Drive	
6G SATA Hot Plug LFF (3.5-inch) SC 512e Performance Drives	
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr Warranty Hard Drive	793667-B21
HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Performance 1yr	793665-B21
Warranty Hard Drives	793003-021
6G SATA Hot Plug with SmartDrive LFF (3.5-inch) Midline (MDL) Drives	
HP 4TB 6G SATA 7.2k rpm LFF (3.5-inch) SC Midline 1yr Warranty	693687-B21
Hard Drive	
HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	628061-B21
HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty	658079-B21
Hard Drive	
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty Hard Drive	657750-B21
HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 1yr Warranty	658071-B21
Hard Drive	
6G SATA Hot Plug SFF (2.5-inch) SC 512e Drives	
HP 2TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty Hard Drive	765455-B21
HP 1TB 6G SATA 7.2K rpm SFF (2.5-inch) SC 512e 1yr Warranty	765453-B21
Hard Drive	
6G SATA Hot Plug LFF (3.5-inch) Midline (MDL) 512e Drives	
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr	765255-B21
Warranty Hard Drive	765052 D24
HP 4TB 6G SATA 7.2K rpm LFF (3.5-inch) SC Midline 512e 1yr Warranty Hard Drive	765253-B21
6G SATA Hot Plug LFF (3.5-inch) SC HDD	
HP 8TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr	793695-B21
Warranty Hard Drive	
HP 6TB 6G SATA 7.2K rpm LFF (3.5-inch) SC 512e Helium 1yr	793683-B21
Warranty Hard Drive	
6G SATA Non-Hot Plug LFF (3.5-inch) Midline (MDL) Drives	
HP 3TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr	628065-B21
Warranty Hard Drive	



HP 2TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	659339-B21
HP 1TB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	659337-B21
HP 500GB 6G SATA 7.2K rpm LFF (3.5-inch) Non-hot plug Midline 1yr Warranty Hard Drive	659341-B21
NOTE: Please see the QuickSpecs for Technical Specifications and additional information:	
http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111725	
12G SAS Mainstream Endurance Hot Plug SFF (2.5-inch) Enterprise Mainstream H2 Solid State Drives	
HP 400GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779168-B21
HP 200GB 12G SAS Mainstream Endurance SFF 2.5-in ENT Mainstream SC 3yr Wty H2 Solid State Drive	779164-B21
12G SAS Hot Plug SFF (2.5-inch) SC Write Intensive Solid State	
Drives	
HP 400GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802582-B21
HP 200GB 12G SAS Write Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	802578-B21
12G SAS SFF (2.5in) RI-3 SC Solid State Drives	
HPE 3.84TB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816576-B21
HPE 1.92TB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816572-B21
HPE 960GB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816568-B21
HPE 480GB 12G SAS Read Intensive-3 SFF 2.5-in SC 3yr Wty Solid State Drive	816562-B21
12G SAS SFF (2.5in) MU-3 SC Solid State Drives	
HPE 3.2TB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	822567-B21
HPE 1.6TB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	822563-B21
HPE 800GB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	822559-B21
HPE 400GB 12G SAS Mixed Use-3 SFF 2.5-in SC 3yr Wty Solid State Drive	822555-B21
6G SATA Value Endurance Hot Plug LFF (3.5-inch) Enterprise Boot Solid State Drives	
HP 120GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Boot 3yr Wty Solid State Drive	718171-B21
HP 80GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Boot 3yr Wty Solid State Drive	734362-B21
6G SATA Value Endurance Hot Plug SFF (2.5-inch) Enterprise Boot Solid State Drives	
HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Boot 3yr Wty Solid State Drive	717965-B21



HP 80GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Boot 3yr Wty Solid State Drive	734360-B21
6G SATA Value Endurance Hot Plug SFF (2.5-inch) EV Solid State Drives	
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	717971-B21
HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	717969-B21
6G SATA Value Endurance Hot Plug LFF (3.5-inch) SCC EV Solid State Drives	
HP 600GB 6G SATA Value Endurance LFF 3.5-in SC Conveter Enterprise Value 3yr Wty Solid State Drive	739900-B21
HP 300GB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive	739890-B21
6G SATA Value Endurance Hot Plug SFF (2.5-inch) SC EV Solid State Drives	
HP 600GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	739898-B21
HP 300GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	739888-B21
6G SATA Hot Plug LFF Value Endurance (3.5-inch) Converter Enterprise Value G1 Solid State Drives	
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Converter ENT Value 3yr Wty G1 Solid State Drive	756660-B21
6G SATA Hot Plug LFF Value Endurance (3.5-inch) SCC Enterprise Value Solid State Drives	
HP 1.6TB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive	757342-B21
6G SATA Hot Plug SFF Value Endurance (2.5-inch) SC Enterprise Value Solid State Drives	
HP 1.6TB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive	757339-B21
6G SATA Hot Plug SFF Value Endurance (2.5-inch) Enterprise Value G1 Solid State Drives	
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty G1 Solid State Drive	756657-B21
6G SATA Value Endurance Hot Plug LFF (3.5-inch) Enterprise Value Solid State Drives	
HP 480GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	718183-B21
HP 240GB 6G SATA Value Endurance LFF 3.5-in SC Enterprise Value 3yr Wty Solid State Drive	718177-B21
6G SATA Value Endurance Hot Plug SFF (2.5-inch) Enterprise Value M1 Solid State Drive	
HP 480GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764927-B21
HP 240GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764925-B21



Core Options		
	HP 120GB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty M1 Solid State Drive	764923-B21
	6G SATA Hot Plug SFF (2.5-inch) SC Read Intensive Solid State Drives	
	HP 480GB 6G SATA Read Intensive SFF 2.5-in SC 3yr Wty Solid State Drive	789145-B21
	6G SATA Hot Plug LFF (3.5-inch) SC Read Intensive Solid State Drives	
	HP 480GB 6G SATA Read Intensive LFF 3.5-in SC Converter 3yr Wty Solid State Drive	789147-B21
	NOTE: Please see the QuickSpecs for Technical Specifications and additional information:	
	http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04154378 Hard Drive Kits	
	NOTE: All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered	
	with the server. NOTE: The part numbers for single HDD blanks below are provided should the customer require replacement HDD blanks for their server. NOTE: The mixing of standard SAS drives with SAS SSD drives is supported within the server, but limits the RAID configuration to two separate RAID 0 volumes. Mixing of other drives types is not	
	supported. HP Large Form Factor Hard Drive Blank Kit	666986-B21
	HP Small Form Factor Hard Drive Blank Kit	666987-B21
HPE Networking	Gigabit Ethernet Adapters	
The Livetworking	HP NC365T 4-port Ethernet Server Adapter	593722-B21
	HP Ethernet 1Gb 2-port 332T Adapter	615732-B21
	HP Ethernet 1Gb 2-port 361T Adapter	652497-B21
	10 Gigabit Ethernet Adapters NOTE: A minimum of two Gigabytes (2 GB) of server memory is required per each adapter. NOTE: Direct Attach Cable (DAC) for copper environments or fiber transceivers and cables for fiber-optic environments must be purchased separately.	002107 221
	HP NC523SFP 10Gb 2-port Server Adapter	593717-B21
	HP NC552SFP 10Gb 2-port Ethernet Server Adapter	614203-B21
	HP Ethernet 10Gb 2-port 560SFP+ Adapter	665249-B21
	NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://www.hp.com/go/ProLiantNICs .	
	Switches	
	HP PS1810-24G Switch	J9834A
	NOTE: Please see the QuickSpecs for Technical Specifications and additional information: http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111385	



Additional Options

NOTE: Some options may not be integrated at the factory. To ensure only valid configurations are ordered, Hewlett Packard Enterprise recommends the use of a Hewlett Packard Enterprise approved configurator. Contact your local sales representative for additional information.

HPE Insight Software HPE Insight Control

HPE Insight HPE Insight Control

Software HP Insight Control including 1yr 24x7 Technical Support and Updates C6N27A

Single Server License

HP Insight Control including 1yr 24x7 Technical Support and Updates C6N28ABE

Electronic License

NOTE: The Electronic software license is available in EMEA only.

HP Insight Control Server Provisioning Media Kit BD883A

HP Insight Management Media Kit

NOTE: Electronic and Flexible-Quantity licenses can be used to

purchase multiple licenses with a single activation key.

NOTE: Customer will receive a license entitlement certificate. The license entitlement certificate must be redeemed online or via fax in order to obtain the license activation key(s). Includes one year of 24 x 7 HPE Software Technical Support and Update Service.

NOTE: Licenses ship without media. The HPE Insight Control Media

Kit can be ordered separately, or can be downloaded at:

http://www.hp.com/go/insightupdates.

NOTE: For additional license options please see the QuickSpecs at: http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04123391

HPE Integrated Lights-Out (iLO)

HPE Integrated Lights-Out (iLO) Advanced for ProLiant

HP iLO Advanced including 1yr 24x7 Technical Support and Updates E6U59ABE

E-LTU

NOTE: The Electronic software license is available in EMEA only.

HP iLO Advanced including 3yr 24x7 Technical Support and Updates E6U64ABE

E-LTU

NOTE: The Electronic software license is available in EMEA only.

HP iLO Advanced including 1yr 24x7 Technical Support and Updates 512485-B21

Single Server License

HP iLO Advanced 1 Server License with 3yr 24x7 Tech Support and BD505A

Updates

HPE iLO Essentials

HP Integrated Lights-Out Essentials including 3yr 24x7 Technical E6U61ABE

Support and Updates E-LTU

NOTE: The Electronic software license is available in EMEA only.

HP Integrated Lights-Out Essentials including 1yr 24x7 Technical E6U62ABE

Support and Updates E-LTU

NOTE: The Electronic software license is available in EMEA only.

HP Integrated Lights-Out Essentials including 3yr 24x7 Tech Support BD774A

and Updates Single Svr License

HP Integrated Lights-Out Essentials including 1yr 24x7 Tech Support BD775A

and Updates Single Svr License



C6N31A

Additional Options

NOTE: For additional license options please see the QuickSpecs at: http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04154343

NOTE: For more information, visit: http://www.hp.com/go/ilo.

Converged
Infrastructure
Management
Software

HPE OneView

agreement.

HP OneView Media Kit Phys No Lic E5Y37A
HP OneView incl 3yr 24x7 Supp Phys 1 Svr Lic E5Y34A
HP OneView incl 3yr 24x7 Supp Flex Qty E-LTU E5Y35AAE

HPE OneView without iLO Advanced

HPE OneView with iLO Advanced

HP OneView w/o iLO including 3yr 24x7 Support 1 Server LTU

HP OneView w/o iLO including 3yr 24x7 Support Flex Quantity E-LTU P8B26AAE
HP OneView w/o iLO including 3yr 24x7 Support FIO 1 Server LTU P8B31A

NOTE: Please see the QuickSpecs for Technical Specifications and additional information:

http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111367

High Performance Clusters

HPE Cluster Management Utility

HP Insight Cluster Management Utility 1yr 24x7 Flexible License
HP Insight Cluster Management Utility 3yr 24x7 Flexible License
NOTE: These part numbers can be used to purchase one certificate
for multiple licenses and support with a single activation key. Each
license is for one node (server). Customer will receive a printed end
user license agreement and license entitlement certificate via physical
shipment. The license entitlement certificate must be redeemed online
in order to obtain a license key. Customer also will receive a support

HP Insight Cluster Management Utility Media

NOTE: For additional license kits please see the QuickSpecs at http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111735

BD477A

QL803B

BD476A

P8B24A



Additional Options

HPE Security

HP Trusted Platform Module Option

488069-B21

NOTE: The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys. Windows® BitLocker™ Drive Encryption (BitLocker) is a data protection feature available in Windows Server® 2008. BitLocker leverages the enhanced security capabilities of a Trusted Platform Module (TPM) version 1.2. The TPM works with BitLocker to help protect user data and to ensure that a server running Windows Server 2008 has not been tampered with while the system was offline. For more information about TPM, including a white paper, go to: http://www.hp.com/go/TPM.

NOTE: ProLiant OS pre-installed units will come with the partition required for TPM deployment.

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

HP 1U Security Bezel Kit

664918-B21

698532-B21

698531-B21

D7S27AAE

NOTE: The Entry Rack Ear FIO Kit (P/N: 723903-B21) needs to be purchased if a security bezel is installed

HPE Storage Controllers

SAS Controllers

Smart Array P222 Controller

HP Smart Array P222/512 FBWC 6Gb 1-port Int/1-port Ext SAS 631667-B21

Controller

Smart Array P421 Controller

HP Smart Array P421/1GB FBWC 6Gb 2-ports Ext SAS Controller 631673-B21

HP Smart Array P421/2GB FBWC 6Gb 2-ports Ext SAS Controller 631674-B21

Smart Array P431 Controller

HP Smart Array P431/4GB FBWC 12Gb 2-ports Ext SAS Controller

HP Smart Array P431/2GB FBWC 12Gb 2-ports Ext SAS Controller

Optional Upgrades

HP SmartCache No Media 24x7 Technical Support 1 Svr License D7S26A D7S27A

HP SmartCache No Media 24x7 Technical Support Flexible License

HP SmartCache No Media 24x7 Technical Support Electronic License

NOTE: Please see the QuickSpecs for Technical Specifications and

additional information:

http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111474

(Smart Array P222 Controller)

http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111533

(Smart Array P421 Controller)

http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111365

(Smart Array P431 Controller)

Host Bus Adapter

HP H221 PCle 3.0 SAS Host Bus Adapter 729552-B21

HP H222 Host Bus Adapter

650926-B21

NOTE: Please see the QuickSpecs for Technical Specifications and

additional information:



Additional	l Options

http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111475

(HBA 221)

http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111514

(HBA 222)

HPE Networking Switches HP PS1810-24G Switch

J9834A

NOTE: Please see the QuickSpecs for Technical Specifications and

additional information:

http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111385

HPE Disk Backup

NOTE: For the complete range of RDX drives and media see:

http://www.hp.com/go/rdx. For hardware and software compatibility of HPE disk backup products see: http://www.hp.com/storage/SPOCK.

HP RDX 2TB USB3.0 External Disk Backup System
HP RDX+ 1TB External Backup System

HP RDX+ 500GB External Backup System

B7B69B B7B66B

HP RDX+ External Docking System

C8S07B

E7X53B

NOTE: Please see the QuickSpecs for additional part numbers.

Technical Specifications, and additional information:

http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111633

HPE Uninterruptible Power Systems

HPE DirectFlow Three Phase UPS

Power Unit (1U UPS)

NOTE: #0D1 will appear after the part number on the sales order if

HPE factory integration is indicated.

HP R12000 DirectFlow - 1U Rackmount Uninterruptible Power System

HP R12000 DirectFlow - POD 1U Rackmount Uninterruptible Power

AF478A

G9Y75A

System
Input/Output Module Options for 1U UPS

NOTE: Choose one I/O Module per UPS.

NOTE: #0D1 will appear after the part number on the sales order if

HPE factory integration is indicated.

HP 32A 400-415 Volt Three Phase INTL R12000 DirectFlow UPS AF488A

IEC309 Input/Output Module

HP 30A 400-415 Volt Three Phase NA R10000 DirectFlow UPS AF489A

IEC309 Input/Output Module

HP 32A 380 Volt Three Phase China R12000 DirectFlow UPS AF490A

Unterminated Input/Output Module

HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS L22-30 AF491A

Input/Output Module

HP 30A 480 Volt Three Phase NA R12000 DirectFlow UPS IEC309 AF492A

Input/Output Module



Additional Options

HP 30A 400-415 Volt Three Phase NA R12000 DirectFlow UPS IEC309 Input/Output Module	G9Y76A
NOTE: All Input/Output Modules support dual output outlets except the AF484A.	
Power Unit (2U UPS)	
NOTE: #0D1 will appear after the part number on the sales order if HPE factory integration is indicated.	
HP R18000 DirectFlow - 2U Rackmount Uninterruptible Power System	AF479A
Input/Output Module Options for 2U UPS	
NOTE: Choose one I/O Module per UPS.	
NOTE: #0D1 will appear after the part number on the sales order if	
HPE factory integration is indicated. HP 32A 400-415 Volt Three Phase INTL R18000 DirectFlow UPS	AF483A
IEC309 Input/Output Module	AF403A
HP 30A 380 Volt Three Phase China R18000 DirectFlow UPS Unterminated Input/Output Module	AF485A
HP 30A 480 Volt Three Phase NA R18000 DirectFlow UPS IEC309 Input/Output Module	AF486A
HP 30A 480 Volt Three Phase NA R18000 DirectFlow UPS IEC309 Input/Output Module	AF487A
HP 30A 400 Volt Three Phase NA R18000 DirectFlow UPS IEC309 Input/Output Module	D9Q02A
HP 30A 400-415V Three Phase NA R18000 DirectFlow UPS 1:1 IEC309 Input/Output Module	AF484A
NOTE: All Input/Output Modules support dual output outlets except the AF484A.	
Battery Pack Options	
NOTE: Choose up to two Battery Packs per UPS (must be the same). NOTE: #0D1 will appear after the part number on the sales order if HPE factory integration is indicated.	
HP DirectFlow UPS - 1U Rackmount Lithium-ion Battery Pack	AF480A
HP DirectFlow UPS - 3U Rackmount VRLA Battery Pack	AF482A
NOTE: Please see the QuickSpecs for additional information: http://www8.hp.com/h20195/v2/GetHtml.aspx?docname=c04376695	
HPE Rack/Tower UPS	
HPE R/T2200 G4 UPS Models	
HP R/T2200 G4 NA/JP Uninterruptible Power System	J2R00A
HPE R/T3000 G4 UPS Models	
HP R/T3000 G4 Low Voltage NA/JP Uninterruptible Power System	J2R01A
HP R/T3000 G4 High Voltage NA/JP Uninterruptible Power System	J2R02A
HP R/T3000 G4 High Voltage INTL Uninterruptible Power System	J2R04A
HPE Rack Models	
R1500 G4 Models	10000
HP R1500 G4 NA Uninterruptible Power System	J2Q99A
HP R1500 G4 JP/TWN Uninterruptible Power System HP R1500 G4 INTL Uninterruptible Power System	J2R05A J2R03A



Additional Options

R7000

HP R7000 4U 50A High Voltage NA/JP Uninterruptible Power System

AF462A

R5000

Basic PDU

HP R5000 3U L630 High Voltage NA/JP Uninterruptible Power System

AF460A

NOTE: Please see the QuickSpecs for additional information:

http://www8.hp.com/h20195/v2/GetHtml.aspx?docname=c04154342 **NOTE:** For additional information on HPE Uninterruptible Power

Systems please go to: http://www.hp.com/servers/rackups.

NOTE: For additional information on sizing your HPE UPS, please reference: http://www.upssizer.com

NOTE: Please see the UPS and PDU cable matrix's on the HPE Power Protection and Management page. Under Power Cords, click on the "HPE Power Cord Matrix" link. That link will list cable descriptions, requirements, and specifications for UPS and PDU units. Please see the following link:

http://www.hp.com/products/powercords.

HPE Basic Power Distribution Units (PDU)

HPE Basic Power Distribution Unit: 1U/0U Version HP 1.9kVA 120 Volt L5-20 Input (12xNEMA 5-20R) NA/JP Basic PDU H5M54A HP 3.6kVA 200-240 Volt Detachable C20 Input (12xC13) WW Basic H5M56A **PDU** HPE Basic Power Distribution Unit: Half Height Version HP 2.8kVA 120 Volt L5-30 Input (18xNEMA 5-20R) NA/JP Basic PDU H5M55A HP 3.6kVA 200-240 Volt Detachable C20 Input (18xC13) WW Basic H5M57A PDU HP 4.9kVA 208 Volt L6-30 Input (20xC13) NA/JP Basic PDU H5M58A HP 7.3kVA 230 Volt IEC309 32A Input (20xC13) INTL Basic PDU H5M68A HP 8.6kVA 208 Volt L15-30 3-Phase Input (18xC13) NA/JP Basic H5M61A **PDU** HPE Basic Power Distribution Unit: Mid Height Version HP 4.9kVA 208 Volt L6-30 Input (24xC13/6xC19) NA/JP Basic PDU H5M59A HP 7.3kVA 230 Volt IEC309 32A Input (24xC13/6xC19) INTL Basic H5M70A **PDU** HP 8.3kVA 208 Volt CS8265C Input (30xC13/6xC19) NA/JP Basic H5M60A PDU HP 11kVA 230 Volt IEC309 63A Input (30xC13/6xC19) INTL Basic H5M71A PDU HP Hardwired 200-240 Volt Input (30xC13/6xC19) WW Basic PDU H5M75A HP 5.7kVA 208 Volt L21-20 3-Phase Input (24xC13/3xNEMA 5-20R) H5M63A NA/JP Basic PDU HP 8.6kVA 208 Volt L21-30 3-Phase Input (24xC13/3xC19/3xNEMA H5M64A 5-20R) NA/JP Basic PDU HP 8.6kVA 208 Volt L15-30 3-Phase Input (24xC13/6xC19) NA/JP H5M62A



Additional	Options

Additional Options		
	HP 11kVA 400 Volt IEC309 16A 3-Phase Input (30xC13/6xC19) INTL Basic PDU	H5M72A
	HPE Basic Power Distribution Unit: Full Height Version	
	HP 11kVA 400 Volt IEC309 16A 3-Phase Input (36xC13/6xC19) INTL Basic PDU	H5M73A
	HP 11kVA 400 Volt IEC309 30A 3-Phase Input (36xC13/6xC19) NA Basic PDU	H5M67A
	HPE Basic Power Distribution Unit: 480/277 Volt Version	
	HP 800VA - 277V Input / 230V Output NA Rack Mount Transformer	H3X09A
	NOTE: Please see the QuickSpecs for additional information: http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111392	
HPE Metered Power	HPE Remote Monitored Power Distribution Unit: 1U Version	
Distribution Units (PDU)	HP 2.8kVA 120 Volt L5-30 Input (12xNEMA 5-20R)NA/JP Monitored PDU	D9N43A
	HP 3.6kVA 200-240 Volt Detachable C20 Input (12xC13) WW Monitored PDU	D9N46A
	HP 4.9kVA 208 Volt L6-30 Input (12xC13) NA/JP Monitored PDU	D9N44A
	HPE Remote Monitored Power Distribution Unit: Half Height Version	
	HP 3.6kVA 200-240 Volt Detachable C20 Input (16xC13) WW Monitored PDU	D9N45A
	HP 4.9kVA 208 Volt L6-30 Input (12xC13) NA/JP Monitored PDU	G9Z05A
	HP 7.3kVA 230 Volt IEC309 32A Input (12xC13) INTL Monitored PDU	G9Z06A
	HPE Remote Monitored Power Distribution Unit: Mid Height Version	
	HP 4.9kVA 208 Volt L6-30 Input (20xC13/4xC19) NA/JP Monitored PDU	D9N47A
	HP 7.3kVA 230 Volt IEC309 32A Input (20xC13/4xC19) INTL Monitored PDU	D9N48A
	HP 8.6kVA 208 Volt L15-30 3-Phase Input (18xC13/3xC19) NA/JP Monitored PDU	D9N51A
	HP 5.7kVA 208 Volt L21-20 3-Phase Input (18xC13/3xNEMA 5-20R) NA/JP Monitored PDU	D9N52A
	HP 8.6kVA 208 Volt L21-30 3-Phase Input (20xC13/3xC19/3xNEMA 5-20R) NA/JP Monitored PDU	D9N53A
	HP 11kVA 400 Volt IEC309 16A 3-Phase Input (18xC13/3xC19) INTL Monitored PDU	D9N55A
	HPE Remote Monitored Power Distribution Unit: Full Height Version	
	HP 8.3kVA 208 Volt CS8265C Input (30xC13/3xC19) NA Monitored PDU	D9N49A
	HP 7.3kVA 230 Volt IEC309 32A Input (32xC13/4xC19) INTL Monitored PDU	D9N50A
	HP 11kVA 400 Volt IEC309 16A 3-Phase Input (30xC13/3xC19) INTL Monitored PDU	D9N57A
	HP 14.4kVA 208 Volt CS8365C 3-Phase Input (12xC13/12xC19)NA Monitored PDU	D9N58A



MickSpace

QuickSp	HPE ProLiant DL320e Generation	HPE ProLiant DL320e Generation 8 (Gen8) v2		
Additional Options				
	HP 16.6kVA 400 Volt IEC309 30A 3-Phase Input (30xC13/3xC19) NA Monitored PDU	D9N61A		
	HP 17.3kVA 208 Volt IEC309 60A 3-Phase Input (24xC13/3xC19) NA/JP Monitored PDU	D9N54A		
	HP 17.3kVA 208 Volt IEC309 60A 3-Phase Input (12xC13/12xC19) NA/JP Monitored PDU	D9N59A		
	HP 22kVA 400 Volt IEC309 32A 3-Phase Input (12xC13/12xC19) INTL Monitored PDU	D9N60A		
	HP 22kVA 400 Volt IEC309 32A 3-Phase Input (30xC13/3xC19) INTL Monitored PDU	D9N56A		
	HP 16.6kVA 400 Volt IEC309 30A 3-Phase Input (12xC13/12xC19) NA Monitored PDU	D9N62A		
	HP 19.9kVA 480 Volt 3-Phase (30 Outlet) NA Monitored PDU	D9N63A		
	HPE Environmental Sensor for Remote Monitored PDUs			
	HP Environmental Sensor for Remote Monitored and Managed PDUs	E2D53A		
	NOTE: Please see the QuickSpecs for additional information: http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04229509			
HPE Intelligent	iPDU Core Units			
Power Distribution Unit (PDU)	HP 4.9kVA 24A Single Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF520A		
	HP 8.3kVA 40A Single Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF521A		
	HP 8.6kVA 24A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF522A		
	HP 14.4kVA 40A Three Phase NA/JP Intelligent Modular Power Distribution Unit	AF533A		
	HP 17.3kVA 48A Three Phase NA/JP Core Intelligent Modular Power Distribution Unit	AF523A		
	HP 7.3kVA 32A Single Phase INTL Core Intelligent Modular Power Distribution Unit	AF525A		
	HP 11kVA 16A Three Phase INTL Core Intelligent Modular Power Distribution Unit	AF526A		
	HP 22kVA 32A Three Phase INTL Core Intelligent Modular Power Distribution Unit	AF527A		
	HP 17.3kVA 48A 208V Three Phase 12 Outlet Core NA/JP Intelligent	AF535A		



HP 17.3kVA 24A 415V Three Phase 12 Outlet Core NA/JP Intelligent

HP 22kVA 32A 400V Three Phase 12 Outlet Core INTL Intelligent

HP 4.9kVA 24A Single Phase NA/JP Intelligent Modular Power

HP 8.6kVA 24A Three Phase NA/JP Intelligent Modular Power

Power Distribution Unit

Power Distribution Unit

Power Distribution Unit

Distribution Kit

Distribution Kit

iPDU Kits with Standard Extension Bars

AF537A

AF538A

AF531A

AF532A

Additional Options		
	HP 7.3kVA 32A Single Phase INTL Intelligent Modular Power Distribution Kit	AF534A
	iPDU Extension Bars	
	HP 5xC13 Intelligent PDU Extension Bar G2 Kit	AF547A
	HP 5xC13 Outlets Power and UID LEDs Pair Standard Extension Bar	AF528A
	NOTE: Please see the QuickSpecs for Technical Specifications and	
	additional information: http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04123329	
HPE Metered and	Half Height Models	
Switched Power Distribution Units (PDU)	HP 3.6kVA 200-240 Volt Detachable C20 Input (7xC13/1xC19) WW Managed PDU	H8B49A
(. 20)	Full Height Models	
	HP 2.8kVA 120 Volt L5-30 Input (24x NEMA 5-20) NA/JP Managed PDU	H8B48A
	HP 4.9kVA 208 Volt L6-30 Input (20xC13/4xC19) NA/JP Managed PDU	H8B50A
	HP 7.3kVA 200-240 Volt IEC309 32A Input (20xC13/4xC19) INTL Managed PDU	H8B51A
	HP 8.6kVA 208 Volt L15-30 3 Phase Input (18xC13/6xC19) NA/JP Managed PDU	H8B52A
	HP 8.6kVA 208 Volt L21-30 3 Phase Input (20xC13/3xC19/1x NEMA 5-20) NA/JP Managed PDU	H8B53A
	HP 11kVA 400 Volt IEC309 16A 3 Phase Input (21xC13/3xC19) INTL Managed PDU	H8B54A
	HP 14.4kVA 208V CS8365C 3 Phase Input (12xC13/12xC19) NA/JP Managed PDU	H8B55A
	HP 17.3kVA 208V IEC309 60A 3 Phase Input (12xC13/12xC19) NA/JP Managed PDU	H8B56A
	NOTE: Please see the QuickSpecs for Technical Specifications and additional information:	
	http://www8.hp.com/h20195/v2/GetHtml.aspx?docname=c04376673	
HPE Rack Series	HPE Intelligent Series Racks	
	HP 36U 600mm x 1075mm Enterprise Pallet Rack	BW895A
	HP 36U 600mm x 1075mm Enterprise Shock Rack	BW896A
	HP 42U 600mm x 1075mm Enterprise Pallet Rack	BW903A
	HP 42U 600mm x 1075mm Enterprise Shock Rack	BW904A
	HP 47U 600mm x 1075mm Enterprise Pallet Rack	BW911A
	HP 47U 600mm x 1075mm Enterprise Shock Rack	BW912A
	NOTE: Please see the QuickSpecs for Technical Specifications such as height, width, depth, weight, and color:	
	http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04123237	
HPE Rack Options	HPE LCD8500 1U Rackmount Console Kit Models	



Additional Options

HP LCD8500 1U US Rackmount Console Kit	AF630A
HP LCD8500 1U UK Rackmount Console Kit	AF631A
HP LCD8500 1U DE Rackmount Console Kit	AF632A
HP LCD8500 1U FR Rackmount Console Kit	AF633A
HP LCD8500 1U JP Rackmount Console Kit	AF642A
HP LCD8500 1U RU Rackmount Console Kit	AF643A
HP LCD8500 1U INTL Rackmount Console Kit	AF644A
HP LCD8500 1U US TAA Rackmount Console Kit	AF645A
HPE LCD8500 1U Rackmount Console Kit Options	
HP Kit LCD 1.83m Latch Display Port Cable	G7T29A
HP Location Discovery Services LCD8500 Kit	TL052A
NOTE: Please see the QuickSpecs for Technical Specifications and	
additional information:	
http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04154398	
HPE USB Keyboard and Mouse	004044 D04
HP USB BFR with PVC Free US Keyboard/Mouse Kit	631341-B21
HP USB BFR with PVC Free UK Keyboard/Mouse Kit	631344-B21
HP USB BFR with PVC Free FR Keyboard/Mouse Kit	631346-B21
HP USB BFR with PVC Free ES Keyboard/Mouse Kit	631348-B21
HP USB BFR with PVC Free DE Keyboard/Mouse Kit	631358-B21
HP USB BFR with PVC Free JP Keyboard/Mouse Kit	631360-B21
HP USB BFR with PVC Free IT Keyboard/Mouse Kit	631362-B21
HP USB BFR with PVC Free CN Keyboard/Mouse Kit	631364-B21
HP USB BFR with PVC Free AE Keyboard/Mouse Kit	638212-B21
HP USB BFR with PVC Free RU Keyboard/Mouse Kit	638214-B21
HP USB BFR with PVC Free IN Keyboard/Mouse Kit	672097-D63
HP USB BFR with PVC Free AP-Intl Keyboard/Mouse Kit	672097-373
HP USB BFR with PVC Free Intl Keyboard/Mouse Kit	672097-B33
HP USB BFR with PVC Free PT Keyboard/Mouse Kit	672097-133
HP USB BFR with PVC Free TR Keyboard/Mouse Kit	672097-143
HP USB BFR with PVC Free CZ Keyboard/Mouse Kit	672097-223
HP USB BFR with PVC Free FI Keyboard/Mouse Kit	672097-353
HP USB BFR with PVC Free SE Keyboard/Mouse Kit	672097-103
HP USB BFR with PVC Free CH Keyboard/Mouse Kit	672097-113
HP USB BFR with PVC Free KR Keyboard/Mouse Kit	672097-KD3
NOTE: Please see the QuickSpecs for Technical Specifications and	
additional information:	
http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04168349	
HPE Server Console Switches	Λ F651 Λ
HP 0x1x8 G3 KVM Console Switch	AF651A
HP 0x2x16 G3 KVM Console Switch	AF652A
HP TAA 0x2x16 G3 KVM Console Switch	AF653A
HP USB Remote Access Key for G3 KVM Console Switches	AF650A



Additional Options

	NOTE: Please see the QuickSpecs for Technical Specifications and additional information:	
	http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04123433	
	HPE Server Console Switch G2 with Virtual Media & CAC	
	HP 0x2x16 KVM Server Console Switch G2 with Virtual Media CAC Software	AF618A
	HP 0x2x32 KVM Server Console Switch G2 with Virtual Media CAC Software	AF619A
	NOTE: Please see the QuickSpecs for Technical Specifications and additional information:	
	http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04168373 HPE 1x4 USB/PS2 KVM Console Switch	
	HP 1x4 USB/PS2 KVM Console Switch	AF611A
	HP 1x1Ex8 KVM IP Console Switch G2 with Virtual Media CAC Software	AF620A
	HP 2x1Ex16 KVM IP Console Switch G2 with Virtual Media CAC Software	AF621A
	HP 4x1Ex32 KVM IP Console Switch G2 with Virtual Media CAC Software	AF622A
	NOTE: Please see the QuickSpecs for Technical Specifications and additional information:	
	http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04168374 Rail Kits	
	HP 1U Friction Rail Kit	727604-B21
	HP 1U Short Friction Rail Kit	775612-B21
HPE USB and SD Options	HPE Flash Media Kits for USB Drives	707050 004
Ориона	HP 8GB USB Enterprise Mainstream Flash Media Drive Key Kit	737953-B21
	HPE Enterprise Mainstream Flash Media Kits for Memory Cards	726116-B21
	HP 8GB microSD Enterprise Mainstream Flash Media Kit NOTE: Please see the QuickSpecs for Technical Specifications and	/20110-D21
	additional information:	
	http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04123175	



Additional Options

HPE Care Pack Services

Proactive Care

NOTE: Collaborative Support plus Proactive services delivered by the onshore, local language Advanced Solution Center (ASC), end-to-end case ownership from a Technical Solution Specialists and Technical Account Manager who remotely delivers firmware/software revision management, proactive scans and incident trend reports. Recommended for customers running a virtualized infrastructure

and/or customers who desire an enhanced call support experience.

HPE 3 year Proactive Care 24x7 ProLiant DL320e Service **U6F03E** HPE 3 year Proactive Care 24x7 with DMR ProLiant DL320e Service U6F04E HPE 3 year Proactive Care 24x7 with CDMR DL320e Service U9A26E

Foundation Care

HPE 3 year Foundation Care 24x7 DL320e Service U2GH5E HPE 3 year Foundation Care 24x7 wDMR DL320e Service U2GH6E HPE 3 year Foundation Care 24x7 wCDMR DL320e Service U2GH7E

Installation Services

NOTE: Reduce the time required to get your system up and running and help minimize disruptions to your business.

HPE Installation DL320e/DL120 Service U6F51F HPE Startup DL320e/DL120 Service **U6F53E**

NOTE: For more information, customer/resellers can contact: http://www.hp.com/services/carepack



Memory

HPE SmartMemory

New HPE SmartMemory now provides additional protection for your servers. With HPE Authentication it can verify that you have true HPE Qualified Memory in your HPE ProLiant Gen8 server. With HPE SmartMemory your new HPE ProLiant server can take advantage of additional Gen8 enhancements in performance, durability and future manageability support through HPE Active Health System

For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool: http://www.hp.com/go/ddr3memory-configurator

Memory Subsystem Architecture

Intel Processor socket supports 2 channels and 2 DIMMs per channel. Total max. memory up to 32GB DDR3 PC3-12800E1600MHz.

Standard Memory Plus Optional Memory

Up to 32 GB memory is available with the optional installation of 4 x 8GB PC3-12800E UDIMM ECC DDR3 UDIMM Memory kits, operating at 1600MHz when fully populated at 2 DIMMs per Channel in 4 slots.

NOTE: The below chart does not represent all possible memory configurations.

NOTE: For best performance, it is recommended that customer installs memory in identical pairs

General Memory Population Rules and Guidelines:

- The HPE ProLiant DL320e Gen8v2Server has four memory slots
- There are two channels per server with two DIMM slot per channel
- Memory channel A consists of the two (2) DIMMs that are closest to the processor
- Memory channel B consists of the two (2) DIMMs that are furthest from the processor
- Different types of processors have different types of memory support.
- Support for single/dual-rank 1333/1600 MT/s ECC UDIMM (unbuffered DIMMS)
- The server supports up to 32 GB (4 x 8-GB) for Unbuffered DIMMs
- No support for RDIMMs; Non-ECC UDIMMs
- Do not install DIMMs if the processor is not installed
- Populate DIMMs from heaviest load (double-rank) to lightest load (single-rank)
- Always use HPE qualified DIMM

Farthest DIMM (either CHA or CHB) should always be populated first



1600/1333MHz

QuickSpecs

Memory

Memory	ory		S	lot	
	•	DIMM4C	DIMM3A	DIMM2D	DIMM1B
Standard	4 GB	Empty	4 GB	Empty	Empty
(Base Model)					
Standard	8 GB	Empty	8 GB	Empty	Empty
(Performance					
Model)					
Maximum	32 GB	8 GB	8 GB	8 GB	8 GB

Memory Speed by Processor Model

Processor Models Supported Memory Speeds

E3-1220v3, E3-1230v3, E3-1230Lv3, E3-1240v3, E3-1270v3, E3-1280v3, E3-1265Lv3, i3-4130, i3-4130T, G3420, E3-1231v3, E3-1241v3, E3-1271v3, E3-1281v3, i3-4150, G3240

G3220 1333MHz

Following are memory options available from Hewlett Packard Enterprise:

HPE Memory

NOTE: To realize the performance memory capabilities listed in this document, HPE SmartMemory is required. For additional information, please see the HPE SmartMemory QuickSpecs at: http://www8.hp.com/h20195/v2/GetHTML.aspx?docname=c04111535

NOTE: HPE memory from previous generation servers are not fully

compatible with the DL320e Gen8 Server.

Unbuffered with ECC DIMMs (UDIMMs)

 HP 2GB (1x2GB) Single Rank x8 PC3L-12800E (DDR3-1600)
 713975-B21

 Unbuffered CAS-11 Low Voltage Memory Kit

 HP 4GB (1x4GB) Dual Rank x8 PC3L-12800E (DDR3-1600)
 713977-B21

Unbuffered CAS-11 Low Voltage Memory Kit

HP 8GB (1x8GB) Dual Rank x8 PC3L-12800E (DDR3-1600) 713979-B21

Unbuffered CAS-11 Low Voltage Memory Kit Unbuffered with ECC DIMMs (UDIMMs)

HP 2GB (1x2GB) Single Rank x8 PC3-12800E (DDR3-1600) 669320-B21

Unbuffered CAS-11 Memory Kit

HP 2GB (1x2GB) Single Rank x8 PC3L-10600E (DDR3-1333) 647905-B21

Unbuffered CAS-9 Low Voltage Memory Kit

HP 4GB (1x4GB) Dual Rank x8 PC3-12800E (DDR3-1600) 669322-B21

Unbuffered CAS-11 Memory Kit

HP 4GB (1x4GB) Dual Rank x8 PC3L-10600E (DDR3-1333) 647907-B21

Unbuffered CAS-9 Low Voltage Memory Kit

HP 8GB (1x8GB) Dual Rank x8 PC3-12800E (DDR3-1600) 669324-B21

Unbuffered CAS-11 Memory Kit

HP 8GB (1x8GB) Dual Rank x8 PC3L-10600E (DDR3-1333) 647909-B21

Unbuffered CAS-9 Low Voltage Memory Kit

NOTE: All DDR3 memory option kits consist of one DIMM per kit. For detailed memory configuration rules and guidelines, please use the Online DDR3 Memory Configuration Tool:

http://www.hp.com/go/ddr3memory-configurator.

NOTE: Kits described as LP include Low Power DIMMs. For more



HPE ProLiant DL320e Generation 8 (Gen8) v2

QuickSpecs

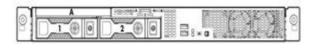
Memory

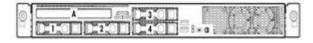
information on ProLiant Energy Efficient Features, see: http://www.hp.com/go/proliant-energy-efficient.

NOTE: PC3L is a low voltage memory.



Storage





- 1 2 2 x 3.5" (LFF) SAS/SATA hard drive bays
 - A Optical Drive Bay: Optional DVD-RW drive
- 1 4 4 x 2.5" (SFF) SAS/SATA hard drive bays
 - A Optical Drive Bay: Optional DVD-RW drive



Technical Specifications

Dimensions (H x W x 4 SFF System Unit 1.7 x 17.11 x 15.07 inches (4.32 x

> D) 43.46 x 38.30 cm)

> > 2 LFF 1.7 x 17.11 x 15.07 inches (4.32 x

> > > 43.46 x 38.30 cm)

90 to 264VAC

Weight (approximate) Maximum 4 SFF - 8.0 kg, 17.64 lb

> (Processor, HDD+ Common Slot power supply with 2 PCI

cards)

Minimum 2 LFF NHP - 7.0 kg, 15.43 lb

(Processor, one NHP hard drive, ATX power supply, without any Power Supply)

Input Requirements Rated Input Voltage

(HPE ProLiant 250 W power supply)

6 Amps (at 100VAC) to 3 Amps (at 200

Maximum Input Current VAC) Rated Input 47 to 63 Hz

Frequency

Power Supply Output Rated Steady-State 250 W (at 100 VAC), (per power supply) Power 250 W (at 200 VAC)

NOTE: 250W Power Supplies have approximately 85% efficiency when operating at

230V,50 Hz (under 50% load conditions).

System Inlet Operating 10° to 35°C (50° to 95°F) at sea level **Temperature**

with an altitude derating of 1.0°C per every 304.8 m (1.8°F per every 1000 ft) above sea level to a maximum of 3048 m (10,000 ft), no direct sustained sunlight. Maximum rate of change is 10°C/hr (18°F/hr). The upper limit may be limited by the type and number of

options installed.

System performance may be reduced if operating with a fan fault or above 30°C

(86°F).

-30° to 60°C (-22° to 140°F). Maximum Non-operating

rate of change is 20°C/hr (36°F/hr).

Relative Humidity (non-condensing)

Operating

10 to 90% relative humidity (Rh), 28°C

(82.4°F) maximum wet bulb temperature, non-condensing.

5 to 95% relative humidity (Rh), 38.7°C Non-operating

> (101.7°F) maximum wet bulb temperature, non-condensing.

Altitude Operating 3048 m (10,000 ft). This value may be

> limited by the type and number of options installed. Maximum allowable

Technical Specifications

altitude change rate is 457 m/min (1500

ft/min).

Non-operating 9144 m (30,000 ft). Maximum allowable

altitude change rate is 457 m/min (1500

ft/min).

Acoustic Noise Listed are the

Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in

accordance with ISO 9296 (ECMA 109).

Idle

LWAd 4.8 B (Base Model)

4.9 B (Performance Model)

LpAm 32 dBA (Base Model)

33 dBA (Performance Model)

Operating

LWAd 4.8 B (Base Model)

5.1 B (Performance Model)

LpAm 32 dBA (Base Model)

35 dBA (Performance Model)

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

NOTE: Values are subject to change without notification and

are for reference only.

NOTE: Performance of system, options, and ancillary equipment will vary depending on the system configuration. **NOTE:** Levels presented do not account for non-Hewlett

Packard Enterprise installed hardware.

Emissions Classification (EMC) FCC Rating Class A

Normative Standards CISPR 22; EN55022; EN55024; FCC

CFR 47, Pt 15; ICES-003; CNS13438; GB9254; K22; K24; EN 61000-3-2; EN 61000-3-3; EN 60950-1; IEC 60950-1

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



Technical Specifications

HPE Dynamic Smart Dimensions

Array B120i Controller Dimensions Embedded

Disk Drive Interface -

Transfer rate

Up to 6Gb/s SATA (Serial ATA)

SATA Connectors 6 internal SATA connectors

Server Interface x4 PCIe 2.0 SATA Speed 6Gb/s SATA links

Cache Memory

Logical Drives

Up to 8 logical volumes (6 physical drives)

Supported

Host Memory Addressing 64-bit, supporting greater than 4GB server memory space

Hot Plug Support Yes

RAID Support RAID 0 (Striping), RAID 1 (Mirroring)

RAID 1+0 (Striping & Mirroring)

HPE Ethernet 1Gb 2-

port NC332i Adapter

Compatibility IEEE 802.3 10Base-T

IEEE 802.3u 100Base-T IEEE 802.3ab 1000Base-T IEEE 802.3az 1000Base-T

NOTE: NC332i is also compliant with the IEEE standard

802.az-2010

Data Transfer Method PCI Express, one lanes (x1)

NOTE: Speed is 5GT/s

Controller BCM5720

Network Transfer 10Base-T (Half and/or Full-Duplex)
Rate 100Base T (Half and/or Full Duple)

100Base-T (Half and/or Full--Duplex)

1000Base-T (Half and/or Full-Duplex)

Connector RJ-45 Cable Support 10Base-T

> 100Base-TX 1000BaseTX



Technical Specifications

Environment-friendly Products and Approach End-of-life Management and Recycling Hewlett Packard Enterprise offers end-of-life Hewlett Packard Enterprise product return, trade-in, and recycling programs in many geographic areas. For trade-in information, please go to: http://www.hp.com/go/green. To recycle your product, please go to: http://www.hp.com/go/green or contact your nearest Hewlett Packard Enterprise sales office. Products returned to Hewlett Packard Enterprise will be recycled, recovered or disposed of in a responsible manner.

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



Summary of Changes

Date	Version History	Action	Description of Change
16-Feb-2016 Fr	From Version 25	Added	New Hard Drives offering was added to HPE Hard
	to 26		Drives section.
		Changed	Additional Options section was revised.
		Removed	Obsolete SKUs were removed from the HPE Hard
			Drives, HPE Tape Backup, HPE Tape Storage
			Systems, and HPE Disk Storage Systems.
17-Dec-2015	From Version 24 to 25	Added	Smart Buy models were added to the NA version.
01-Dec-2015	From Version 23 to 24	Added	New Hard Drives offering was added to HPE Hard Drives section.
		Changed	What's New was updated.
		Removed	Obsolete SKUs were removed from the
			QuickSpecs.
09-Oct-2015	From Version 22 to 23	Removed	Server model 722547-xx1 was removed from Preconfigured Models.
28-Sep-2015	From Version 21	Added	Added new 6Gb SATA Solid State Drives.
•	to 22		Added new HPE OneView management software.
		Removed	Obsolete SKUS were removed from the QuickSpecs.
17-Aug-2015	From Version 20	Added	New optical drive option was added to HPE Optica
	to 21		Drives.
			New Solid State Drives offering was added to HPE
			Hard Drives section.
		Changed	Internal Storage Devices section was revised.
01-Jun-2015	From Version 19	Added	New Hard Drives were added to Core Options.
	to 20	Changed	Maximun Internal Storage was revised.
		Removed	Obsolete SKUs were removed from Configuration
			Information - Factory Integrated Models, Core
			Options, and Additional Options.
23-Apr-2015	From Version 18	Changed	Common Slot Power Supply, Power Supply in Pre-
	to 19		configured Models, Configuration Information -
			Factory Integrated Models, HPE Uninterruptible
			Power Systems, and Technical Specifications wer
			revised.
30-Mar-2015	From Version 17	Added	New Hard Drives added to Core Options.
	to 18	Changed	HPE Care Pack Services was revised.
		Removed	Removed obsolete SKUs from HPE Processors.
01-Mar-2015	From Version 16	Changed	Common Slot Power and Power Supply
	to 17		information was revised in Standard Features, Pre
			Configured Models, and Configuration Information
			 Factory Integrated Models sections.
			Rail Kits was revised in Additional Options section
			Technical Specifications section was revised.
		Removed	HPE Tower UPS SKUs were removed from
			Additional Options section.
09-Feb-2015	From Version 15	Added	New Hard Drives, DirectFlow UPS, Rack and
	to 16		Tower G4 Models, LCD8500 1U Rackmount
			Models and Options were added to the Additional
		1	Options section.
		Changed	What's New was changed to:
		Changed	
		Changed	What's New was changed to:
		Changed	What's New was changed to: Latest 6G SATA Drives, 12G SAS Drives, and 6G

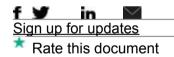
Summary of Changes

ummary of Cha	anges		
			Tower G4 models, and LCD8500 1U Rackmount SKU's Service and Support section was revised.
			HPE Uninterruptible Power Systems, HPE Rack Options, and HPE Care Pack Services in
			Additional Options section were revised.
01-Dec-2014	From Version 14 to 15	Added	HPE 1.6TB 6G SATA Value Endurance SFF 2.5-in SC Enterprise Value 3yr Wty Solid State Drive and HPE 1.6TB 6G SATA Value Endurance LFF 3.5-in SC Converter Enterprise Value 3yr Wty Solid State Drive were added to HPE Hard Drives.
		Changed	HPE Care Pack Services section has been revised.
29-Sep-2014	From Version 13 to 14	Added	New Solid State Drives were added. HPE Managed Power Distribution Units (maPDU) was added to Additional Options.
		Changed	Service and Support section was revised. HPE Hard Drives was revised in Core Options section.
18-Aug-2014	From Version 12 to 13	Added	New Hard Drives were added. HPE Remote mPDUs half height version were added.
		Changed	Standard Features, Configuration Information - Factory Integrated Models, and Technical Specifications sections were revised.
08-July-2014	From Version 11 to 12	Changed	Common Slot Power Supply in Standard Features was revised. Pre-configured Models, and Technical Specifications were revised. HPE Power Supplies, and HPE Security were revised in Configuration Information – Factory Integrated Models.
		Removed	HPE 200GB 6G SAS Mainstream Endurance SFF 2.5-in SC Enterprise Mainstream 3yr Wty Solid State Drive, and 6G SAS SLC Hot Plug SFF (2.5-inch) Enterprise Performance Solid State Drives were removed from Core Options.
10-Jun-2014	From Version 10	Added	768645-xx1 was added to Performance Models.
	to 11	Changed	Entry and Based Models were revised. What's new, Standard Features, Configuration Information, Additional Options, Memory and Technical Specifications were revised.
09-May-2014	From Version 9 to 10	Changed	Service and Support, Memory, Hard Drives, Storage Controllers, Disk Enclosures, and Basic and Remote Monitoring Power Distribution Units were revised.
13-Dec-2013	From Version 7 to 8	Changed	HPE Insight Control including 1yr 24x7 Support ProLiant MI/DL/BL-bundle FIO Electronic License was added to Step 3 in Configuration Information HPE 1.2TB 6G SAS 10k rpm SFF SC Dual Port Enterprise 3yr Warranty Hard Drive was added to Hard Drives HPE SmartCache and HPE H221 PCIe 3.0 SAS Host Bus Adapter were added to Storage



Summary of Changes

			Controllers HPE Basic Power Distribution Units and HPE Remote Monitoring Power Distribution Units were revised in Additional Options HPE Power Distribution Units was removed from Additional Options
30-Sep-2013	From Version 6 to 7	Added	Entry and Base Processors were added Canonical Ubuntu Server was added to Operating Systems and Virtualization Software Support for ProLiant Servers Converged Infrastructure Management Software was added HPE Disk Backup was added to Additional Options HPE Remote Monitoring Power Distribution Units was added to Additional Options
20-Sep-2013	From Version 5 to 6	Changed	HPE Dynamic Smart Array B120i Controller in Technical Specifications was revised.
10-Sep-2013	From Version 4 to 5	Changed	HPE Insight Management, Memory, Hard Drives, Networking, High Performance Clusters, Storage Controllers, HPE Power Distribution Units, and HPE Care Pack Services were revised.
20-Aug-2013	From Version 3 to 4	Changed	Changes made to correct the overview image.
19-Aug-2013	From Version 2 to 3	Changed	Changes made in the North America and Canada versions only.
26-Jul-2013	From Version 1 to 2	Changed	Corrected the second image in the Storage section.



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

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HPE ProLiant DL320e Generation 8 (Gen8) v2



Summary of Changes

