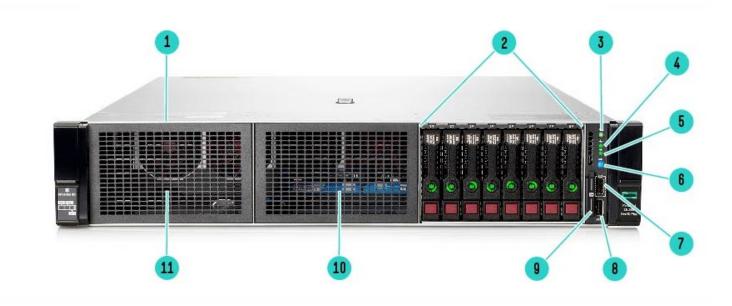
QuickSpecs

Overview

HPE ProLiant DL385 Gen10 Plus Server

The HPE ProLiant DL385 Gen10 Plus Server is redefining price/performance with the new math for virtualized compute. Powered by the latest AMD® EPYC® 7002 Series Processors, the HPE ProLiant DL385 Gen10 Plus Server offers greater processing power, faster memory speeds up to 3200 MT/s. and increased data transfer rates with PCIe Gen4 capabilities.

This 2P, 2U server has been designed with flexibility while delivering a high core count and large memory footprint. Choose this purpose-built platform for virtualization, High Performance Compute and memory centric workloads.



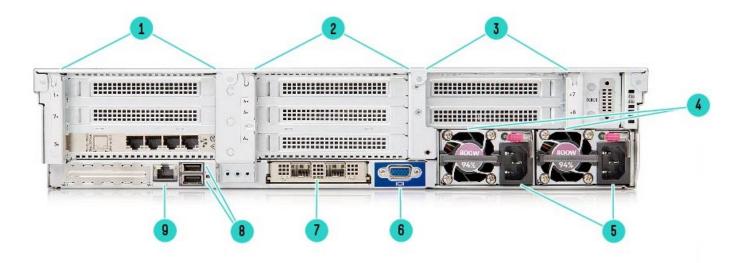
HPE ProLiant DL385 Gen10 Plus 8 SFF Server- Front View

- 1 Quick removal access panel
- 2 Box3: 8SFF SAS/SATA shown
- 3 Power On/Standby button and system power LED button
- 4 Health LED
- 5 NIC Status
- 6 UID Button/LED

- 7 iLO Front Service Port
- 8 USB 3.0
- 9 Serial label pull tag
- 11 Box1: Optional 8SFF SAS/SATA or 8 NVMe (not populated)
- 10 Box2: Optional 8SFF SAS/SATA or 8 NVMe (not populated)



Overview



HPE ProLiant DL385 Gen10 Plus Server - Rear View

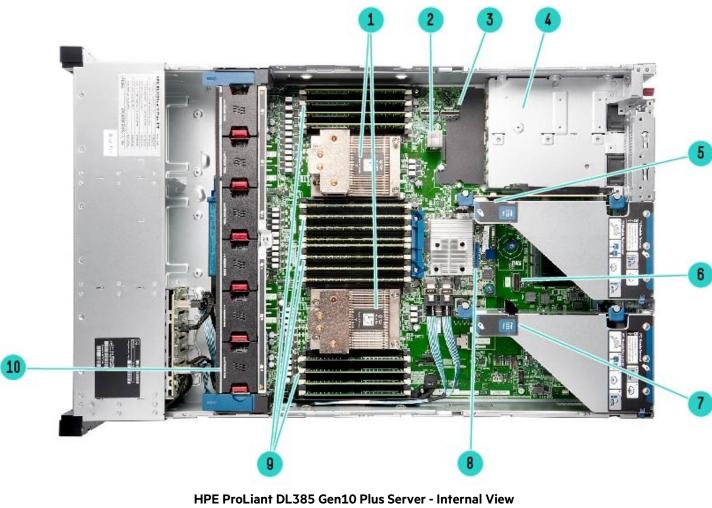
- 1. Primary Riser. PCIe Slots¹
- 2. Optional Secondary Riser. PCle Slots²
- 3. Optional Tertiary Riser, PCIe Slots (Slots 7-8 top to bottom) 8. USB 3.0 connectors (2)
- 4. HPE Flexible Slot Power Supply Bay 1 & 2
- 7. OCP 3.0 Slot

6. VGA Connector

- 9. Dedicated iLO management port
- 5. Power supply power connection. Bay 1 & 2

NOTE¹: Slots 1-3 top to bottom, Slot 3 populated with 4 Port 10 GB NIC) Optional 2SFF rear drives NOTE²: Slots 4-6 top to bottom, requires second riser card, and second processor). Optional 2 SFF rear drives

Overview



8SFF chassis with optional $2^{\text{nd}}\,\text{CPU}$

- 1 Primary & Secondary Processors
- 2 Dual USB Port
- 3 Chassis intrusion detection connector
- 4 Hot Plug redundant HPE Flexible Slot Power supplies
- 5 Optional Secondary & Tertiary Risers

NOTE¹: Shown half populated in 1 DPC

NOTE²: Max Performance fans optional

- 6 OCP x16 Connector
- 7 Primary PCIe riser, standard
- 8 Flexible Smart Array Connector
- 9 DDR4 DIMM slots¹.
- 10 Fan cage shown with 6 standard Hot-plug fans²

- What's New:
 - Supports the latest AMD EPYC 7002 Series processor with double the core density compared to the previous generation and increased memory speeds up to 3200 MT/s.
 - Support for PCIe Gen4, resulting in improved networking speeds.
 - Support for OCP Network Adapters.
 - New SATA Read Intensive SSD drives.
 - New NVMe Read Intensive and Mixed Use SSD drives.
 - Support for PCIe Smart Array controllers for internal and external drives.

Overview

Platform Information

Form Factor

2U rack

Chassis Types

- 8 SFF with optional Universal Media Bay, and optional SFF or NVMe drive bay options
- 24 SFF bay with 4 SFF rear drive bay option to total 28 SFF drives
- 8 LFF with Universal Media Bay, and optional SFF or NVMe drive bay options
- 12 LFF with optional 4 LFF mid-plane and optional 4LFF + 2 SFF rear drive bay to total 20LFF drives + 2 SFF drives
- NOTE: The 4 LFF rear drive box will consume space for the primary and secondary riser.

NOTE: The 8 and 12 LFF chassis also supports the 2 SFF rear drive box which allows for the user to attach a secondary or tertiary riser.

NOTE: The 8 NVMe drive option (P14578-B21) can only be leveraged in the SFF chassis and replaces Box 1, 2 or 3.

NOTE: The Universal Media Bay (P14609-B21) not available with the LFF chassis or the 24 SFF front, and can only be populated in Box 1.

NOTE: The 8 NVMe SFF can be upgraded with additional 8 NVMe SFF drive box to total 16 SFF NVMe drives.

NOTE: The 8 LFF chassis cannot be upgraded to 12 LFF front in the field.

NOTE: 12LFF or more drives require Max performance fan kit (P14608-B21).

NOTE: The 8 LFF chassis ships with 6-standard fans.

NOTE: CPU selection is limited 200W or lower with 4LFF mid-tray selected & DIMM blanks populate empty DIMM slots.

NOTE: If CPU power is >180W then it is required to use 2U Performance Heat sink.

System Fans

Standard – fan types included

- On SFF Chassis only, 1P models ship with 4 standard fans. The second processor option kit contains 2 additional fans.
- The 12 LFF and 24 SFF chassis ship with 6 Max performance fans as standard.
- The 8 LFF chassis ships with 6 standard fans as standard.
- Max performance fan kit is available to meet ambient temperature environments.
- Max performance fan kits are required for rear drives, or >180w Processors SKUs, or if High Performance NVMe drive being used.

Standard Features

Processors Up to 2 of the following depending on model.

NOTE: For more information regarding AMD EPYC processors, please see the

following: https://www.amd.com/en/products/epyc.

| AMD EPYC Processor | Cores | Base Frequency | Max Frequency | Max Memory | Wattage | Cache | Memory |
|--------------------|-------|-------------------|------------------|---------------|---------|-------|----------|
| | | • • | | - | | | / |
| EPYC 7742 | 64 | 2.25GHz | 3.4GHz | 4TB | 225 | 256MB | 3200MT/s |
| EPYC 7702 | 64 | 2.0GHz | 3.35GHz | 4TB | 200 | 256MB | 3200MT/s |
| EPYC 7642 | 48 | 2.3GHz | 3.3GHz | 4TB | 256 | 192MB | 3200MT/s |
| EPYC 7552 | 48 | 2.2GHz | 3.3GHz | 4TB | 200 | 192MB | 3200MT/s |
| EPYC 7502 | 32 | 2.5GHz | 3.35GHz | 4TB | 180 | 128MB | 3200MT/s |
| EPYC 7542 | 32 | 2.9GHz | 3.4GHz | 4TB | 225 | 128MB | 3200MT/s |
| EPYC 7452 | 32 | 2.35GHz | 3.35GHz | 4TB | 155 | 128MB | 3200MT/s |
| EPYC 7402 | 24 | 2.8GHz | 3.35GHz | 4TB | 180 | 128MB | 3200MT/s |
| EPYC 7352 | 24 | 2.3GHz | 3.2GHz | 4TB | 155 | 128MB | 3200MT/s |
| EPYC 7282 | 16 | 2.8GHz | 3.2GHz | 4TB | 120 | 64MB | 3200MT/s |
| EPYC 7302 | 16 | 3.0GHz | 3.3GHz | 4TB | 155 | 128MB | 3200MT/s |
| EPYC 7272 | 12 | 2.9GHz | 3.2GHz | 4TB | 120 | 64MB | 3200MT/s |
| EPYC 7262 | 8 | 3.2GHz | 3.4GHz | 4TB | 155 | 128MB | 3200MT/s |
| EPYC 7252 | 8 | 3.1GHz | 3.2GHz | 4TB | 120 | 64MB | 3200MT/s |

NOTE: All AMD EPYC processors can support up to 4TB of memory each.

Chipset

No chipset - System on Chip (SoC) design.

On System Management Chipset

HPE iLO 5 ASIC NOTE: Read and learn more in the **iLO QuickSpecs**.

Memory

One of the following depending on model **Type:** HPE DDR4 SmartMemory, Registered (RDIMM)

DIMM Slots Available

• 32

– 16 DIMM slots per processor, 8 channels per processor, 2 DIMMs per channel

Maximum capacity (RDIMM)

- 2.0 TB
 - 32 x 64 GB RDIMM @ 3200 MHz

NOTE: The maximum memory speed is limited by the processor selection.

NOTE: When 2DIMMs are populated per channel, memory speed drops to 2933MT/S

Expansion Slots

Primary Riser

NOTE: Bus width indicates the number of physical electrical lanes running to the connector. **NOTE:** There are 3 types of risers supported on Primary Slot

| Primary Riser1 | | | | | |
|----------------|------------|-----------|-----------------|------------------------------|--------|
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 1 | PCIe 4.0 | X8 | X16 | Full-height,full-length slot | Proc 1 |
| 2 | PCIe 4.0 | X16 | X16 | Full-height,full-length slot | Proc 1 |
| 3 | PCIe 4.0 | X8 | X16 | Full-height,half-length slot | Proc 1 |
| Primary Riser2 | | | ' | | |
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 1 | PCIe 4.0 | X16 | X16 | Full-height,full-length slot | Proc 1 |
| 2 | PCIe 4.0 | X16 | X16 | Full-height,full-length slot | Proc 1 |
| 3 | NA | NA | NA | NA | NA |
| Primary Riser3 | | | | | |
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 1** | NA | NA | NA | NA | NA |
| 1 | PCIe 4.0 | X16 | X16 | Full-height,full-length slot | Proc 1 |
| 2 | PCIe 4.0 | X16 | X16 | Full-height,full-length slot | Proc 1 |
| 3 | PCIe 4.0 | X16 | X16 | Full-height,half-length slot | Proc 1 |

NOTE: ** Default Slot1 on the Primary Riser3 is empty and not available. It requires P14600-B21 in conjunction with the Primary Riser3 to add additional x16 PCIe Gen4 in slot1.

Secondary Riser:

NOTE: Bus Width Indicates the number of physical electrical lanes running to the connector. **NOTE**: There are 3 types of risers support on Secondary Slot

| Secondary Riser1 | | | | | |
|------------------|------------|-----------|-----------------|------------------------------|--------|
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 4 | PCIe 4.0 | X8 | X16 | Full-height,full-length slot | Proc 2 |
| 5 | PCIe 4.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 6 | PCle 4.0 | X8 | X16 | Full-height,half-length slot | Proc 2 |
| Secondary Riser2 | I | | | | 1 |
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 4 | PCIe 4.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 5 | PCle 4.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 6 | NA | NA | NA | NA | NA |
| Secondary Riser3 | | | | | |
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 4* | NA | NA | NA | NA | NA |
| 4 | PCIe 4.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 5 | PCle 4.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 6 | PCle 4.0 | X16 | X16 | Full-height,half-length slot | Proc 2 |

NOTE: * Default Slot4 on the Secondary Riser3 is empty and not available. It requires P14600-B21 in conjunction with the Secondary Riser3 to add additional x16 PCIe Gen4 in slot4

Tertiary Riser:

NOTE: Bus Width Indicates the number of physical electrical lanes running to the connector. **NOTE:** There are 2 types of risers support on Tertiary Slot

| Tertiary Riser1 | | | | | |
|-----------------|------------|-----------|-----------------|------------------------------|--------|
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 7 | PCle 4.0 | X16 | X16 | Full-height,full-length slot | Proc 2 |
| 8 | NA | NA | NA | NA | NA |
| Tertiary Riser2 | | | | | |
| Slots # | Technology | Bus Width | Connector Width | Slot Form Factor | Notes |
| 7 | PCIe 4.0 | X8 | X16 | Full-height,full-length slot | Proc 2 |
| 8 | PCle 4.0 | X8 | X16 | Full-height,full-length slot | Proc 2 |

Storage Controllers

The Gen10/Gen10 Plus controller naming framework has been updated to simplify identification as depicted below. For a more detailed breakout of the available Gen10/Gen10 Plus Smart Array controllers visit the **HPE Smart Array Gen10 Controllers Data Sheet**. One of the following depending on model

Essential RAID Controller

- HPE Smart Array E208i-a SR Gen10 Controller
- HPE Smart Array E208i-p SR Gen10 Controller
- HPE Smart Array E208e-p SR Gen10 Controller

Performance RAID Controller

- HPE Smart Array P408i-a SR Gen10 Controller
- HPE Smart Array P408i-p SR Gen10 Controller
- HPE Smart Array P408e-p SR Gen10 Controller
- HPE Smart Array P816i-a SR Gen10 Controller

NOTE: Performance RAID Controllers require the HPE Smart Storage Battery (P01366-B21) which is sold separately.

Internal Storage Devices

• One of the following depending on model

Optical Drive

- Ships standard in Performance Models
- Optional: DVD-ROM, DVD-RW

Hard Drives

• None ship standard

| Maximum Internal Storage | | | | |
|----------------------------|--------------|---|--|--|
| | Capacity | Configuration | | |
| Hot Plug SFF SAS | 67.2TB | $24+4 \times 2.4 \text{ TB}^*$ (with optional rear SFF drive cage) | | |
| Hot Plug SFF SATA | 56.0 TB | 24+4 x 2 TB (with optional rear SFF drive cage) | | |
| Hot Plug LFF SAS | 310.6 TB | 12+4+4 x 14 TB + 2 x 15.3 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear) | | |
| Hot Plug LFF SATA | 310.6 TB | 12+4+4 x 14 TB + 2 x 15.3 TB (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear) | | |
| Hot Plug SFF SAS SSD | 428.4 TB | 24+4 x 15.3 TB (with optional rear SFF drive cage) | | |
| Hot Plug LFF SATA SSD | 49.8 TB | $12+4+4 \times 0.96 \text{ TB} + 2 \times 15.3 \text{ TB}$ (with optional mid –tray and rear LFF drive cage, plus 2 SFF SSD rear) | | |
| Hot Plug SFF SATA SSD | 215 TB | 24+4 x 7.68 TB (with optional 2SFF drive cage) | | |
| Hot Plug SFF NVMe PCIe SSD | 61.44TB NVMe | 16 x 3.84TB NVMe | | |

NOTE: UFF drives are also supported.

Power Supply

- HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit **NOTE:** Available in 94% Power Efficiency.
- HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit NOTE: Available in 94%. Power Efficiency
- HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit NOTE: Available in 96% Power Efficiency NOTE: 200-240VAC power input only.
- HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit NOTE: Available in 94% Power Efficiency NOTE: 277VAC power input.
- HPE 800W Flex Slot 48VDC Hot Plug Low Halogen Power Supply Kit NOTE: Available in 94% Power Efficiency NOTE: -48VDC power input.
- HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit NOTE: Available in 94% Power Efficiency.
 NOTE: 200-240VAC power input only.

HPE Flexible Slot (Flex Slot) Power Supplies share a common electrical and physical design that allows for hot plug, tool-less installation into HPE ProLiant Gen10 Plus Performance Servers. Flex Slot power supplies are certified for high-efficiency operation and offer multiple power output options, allowing users to "right-size" a power supply for specific server configurations. This flexibility helps to reduce power waste, lower overall energy costs, and avoid "trapped" power capacity in the data center.

All pre-configured servers ship with a standard 6-foot IEC C-13/C-14 jumper cord (A0K02A). This jumper cord is also included with each standard AC power supply option kit. If a different power cord is required, please check the **ProLiant Power Cables** web page.

To review the power requirements for your selected system, please use the HPE Power Advisor Tool.

For information on power specifications and technical content visit **HPE Server power supplies**.

| Interfaces | |
|----------------------------------|---|
| Serial | Optional, rear |
| Display Port | 1 standard on both SFF & LFF chassis, rear. |
| VGA Port | Optional via Universal Media Bay, P14609-B21. |
| Network Ports | None. Choice of OCP or stand up card |
| HPE iLO Remote | 1 Gb Dedicated |
| Management Network Port | |
| Front iLO Service Port | 1 standard (Not available on 12 LFF chassis or when SID is ordered, note iLO dongle required, 880123-B21) |
| USB 3.0 | Up to 7 total: 1 front, 2 rear, 2 internal (secure), 2 optional USB 3.0 front via Universal Media Bay, or standard on 8 LFF chassis |
| SID (Systems Insight Display) | Optional |

NOTE: Not shipping as standard. Available as a CTO option or as a field upgrade (P14611-B21).

UEFI

Configure and boot your servers securely with industry standard Unified Extensible Firmware Interface (UEFI). Learn more at <u>http://www.hpe.com/servers/uefi</u>.

Operating Systems and Virtualization Software Support for ProLiant Servers

- Windows Server 2016 (Most Recent Version)
- Windows Server 2019 (Most Recent Version)
- VMware ESXi 6.5 U3
- VMware ESXi 6.7 U3
- SUSE Linux Enterprise Server (SLES) 12 SP4
- SUSE Linux Enterprise Server (SLES) 15 SP1
- Red Hat Enterprise Linux (RHEL)

NOTE: For more information on Hewlett Packard Enterprise Certified and Supported ProLiant Servers for OS and Virtualization Software and latest listing of software drivers available for your server.

https://www.hpe.com/us/en/servers/server-operating-systems.html

Industry Standard Compliance

- ACPI 6.1 Compliant
- PCle 4.0 Compliant
- WOL Support
- Microsoft® Logo certifications
- PXE Support
- VGA/Display Port
 NOTE: This support is on the optional Universal Media Bay.
- USB 3.0 Compliant (internal)
- USB 2.0 Compliant (external ports)
 NOTE: This support is on the optional Universal Media Bay.
- Energy Star
- SMBIOS 3.1
- UEFI 2.6
- Redfish API
- IPMI 2.0
- Secure Digital 2.0
- Advanced Encryption Standard (AES)
- Triple Data Encrytion Standard (3DES)
- SNMP v3
- TLS 1.2
- DMTF Systems Management Architecture for Server Hardware Command Line Protocol (SMASH CLP)
- Active Directory v1.0
- ASHRAE A3/A4

NOTE: For additional technical thermal details regarding ambient temperatures, humidity and features support please visit: http://www.hpe.com/servers/ashrae.

• UEFI (Unified Extensible Firmware Interface Forum)

Graphics

Integrated Video Standard

- Video modes up to 1920 x 1200@60Hz (32 bpp)
- 16MB Video Memory

HPE iLO 5 on system management memory

- 32 MB Flash
- 4 Gbit DDR 3 with ECC protection

HPE Server UEFI/Legacy ROM

Unified Extensible Firmware Interface (UEFI) is an industry standard that provides better manageability and more secured configuration than the legacy ROM while interacting with your server at boot time. HPE ProLiant Gen10 Plus servers have a UEFI Class 2 implementation and support both UEFI Mode (default) and Legacy BIOS Mode.

NOTE: The UEFI System Utilities tool is analogous to the HPE ROM-Based Setup Utility (RBSU) of legacy BIOS. For more information, please visit <u>http://www.hpe.com/servers/uefi</u>.

UEFI enables numerous new capabilities specific to HPE ProLiant servers such as:

- Secure Boot and Secure Start enable for enhanced security
- Operating system specific functionality
- Support for > 2.2 TB (using GPT) boot drives
- USB 3.0 Stack

HPE Server UEFI/Legacy ROM

- Embedded UEFI Shell
- Mass Configuration Deployment Tool using iLO RESTful API that is Redfish API Conformant
- PXE boot support for IPv6 networks

Workload Profiles for simple performance optimization

UEFI Boot Mode only:

- TPM 2.0 Support
- NVMe Boot Support
- iSCSI Software Initiator Support.
- HTTP/HTTPs Boot support as a PXE alternative.
- Boot support for option cards that only support a UEFI option ROM

NOTE: For UEFI Boot Mode, boot environment and OS image installations should be configured properly to support UEFI.

Embedded Management

HPE Integrated Lights-Out (HPE iLO)

Monitor your servers for ongoing management, service alerting, reporting and remote management with HPE iLO. Learn more at **http://www.hpe.com/info/ilo**.

Intelligent Provisioning

Hassle free server and OS provisioning for 1 or more servers with Intelligent Provisioning. Learn more at <u>http://www.hpe.com/servers/intelligentprovisioning</u>.

iLO RESTful API

iLO RESTful API is Redfish API conformance and offers simplified server management automation such as configuration and maintenance tasks based on modern industry standards. Learn more at <u>http://www.hpe.com/info/restfulapi</u>.

Server Utilities

Active Health System

The HPE Active Health System (AHS) is an essential component of the iLO management portfolio that provides continuous, proactive health monitoring of HPE servers. Learn more at **http://www.hpe.com/servers/ahs**.

Active Health System Viewer

Use the Active Health System Viewer, a web-based portal, to easily read AHS logs and speed problem resolution with HPE self-repair recommendations, to learn more visit: <u>http://www.hpe.com/servers/ahsv</u>.

Smart Update

Keep your servers up to date with the HPE Smart Update solution by using Smart Update Manager (SUM) to optimize the firmware and driver updates of the Service Pack for ProLiant (SPP). Learn more at

https://buy.hpe.com/b2c/us/en/enterprise-software/infrastructure-management-software/system-server-managementsoftware/hpe-system-server-software-management-software/smart-update-manager-%28sum%29/p/5182020.

iLO Amplifier Pack

Designed for large enterprise and service provider environments with hundreds of HPE servers, the iLO Amplifier Pack is a free, downloadable open virtual application (OVA) that delivers the power to discover, inventory and update Gen8, Gen9, Gen10 & Gen10 Plus HPE servers at unmatched speed and scale. Use with an iLO Advanced License to unlock full capabilities.

Learn more at http://www.hpe.com/servers/iLOamplifierpack.

HPE iLO Mobile Application

Enables the ability to access, deploy, and manage your server anytime from anywhere from select smartphones and mobile devices. For additional information please visit: <u>http://www.hpe.com/info/ilo/mobileapp</u>.

RESTful Interface Tool

RESTful Interface tool (iLOREST) is a single scripting tool to provision using iLO RESTful API to discover and deploy servers at scale. Learn more at <u>http://www.hpe.com/info/resttool</u>.

Scripting Tools

Provision one to many servers using your own scripts to discover and deploy with Scripting Tool (STK) for Windows and Linux or Scripting Tools for Windows PowerShell. Learn more at <u>http://www.hpe.com/servers/powershell</u>.

HPE OneView Standard

HPE OneView Standard can be used for inventory, health monitoring, alerting, and reporting without additional fees. It can monitor multiple HPE server generations. The user interface is similar to the HPE OneView Advanced version, but the software-defined functionality is not available. Learn more at <u>http://www.hpe.com/info/oneview</u>.

HPE Systems Insight Manager (HPE SIM)

Ideal for environments already using HPE SIM, it allows you to monitor the health of your HPE ProLiant Servers and HPE Integrity Servers. Also provides you with basic support for non-HPE servers. HPE SIM also integrates with Smart Update Manager to provide quick and seamless firmware updates. Learn more at <u>http://www.hpe.com/info/hpesim</u>.

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 Pointnext operational 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 3-Year Parts, 3-Year Labor, 3-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://h17007.www1.hpe.com/us/en/enterprise/servers/warranty/

Security

- UEFI Secure Boot and Secure Start support
- Immutable Silicon Root of Trust
- FIPS 140-2 validation (iLO 5 certification in progress)
- Common Criteria certification (iLO 5 certification in progress)
- Configurable for PCI DSS compliance
- Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser
- Support for Commercial National Security Algorithms (CNSA)
- Tamper-free updates components digitally signed and verified
- Secure Recovery recover critical firmware to known good state on detection of compromised firmware
- Ability to rollback firmware
- Secure erase of NAND/User data
- TPM (Trusted Platform Module) 2.0 option
- Bezel Locking Kit option
- Chassis Intrusion detection option

Optional Features

HPE iLO Advanced

HPE iLO Advanced licenses offer smart remote functionality without compromise, for all HPE ProLiant servers. The license includes the full integrated remote console, virtual keyboard, video, and mouse (KVM), multi-user collaboration, console record and replay, and GUI-based and scripted virtual media and virtual folders. You can also activate the enhanced security and power management functionality.

HPE iLO Advanced Premium Security Edition

HPE iLO Advanced Premium Security Edition for iLO 5 includes iLO Advanced License plus high-end security modes, unique security capabilities, like Automatic FW recovery; Runtime FW verification, and Secure erase. Learn more about HPE iLO Advanced Premium Security Edition at: <u>http://www.hpe.com/servers/ilopremium</u>.

HPE OneView Advanced

HPE OneView brings a new level of automation to infrastructure management by taking a template driven approach to provisioning, updating, and integrating compute, storage, and networking infrastructure. It provides full-featured licenses which can be purchased for managing Gen8, Gen9, Gen10 & Gen10 Plus servers. To learn more visit <u>http://www.hpe.com/info/oneview</u>.

HPE InfoSight for Servers

HPE InfoSight for Servers combines the cloud-based machine learning of InfoSight with the health and performance monitoring of Active Health System (AHS) and iLO to optimize performance and predict and prevent problems. The end result is an intelligent environment that modernizes IT operations and enhances the support experience by predicting and preventing the infrastructure issues that lead to application disruptions, wasted IT staff time and missed business opportunities.

Learn more at https://www.hpe.com/servers/infosight

HPE Insight Cluster Management Utility (CMU)

HPE Insight Cluster Management Utility is a HyperScale management framework that includes software for the centralized provisioning, management and monitoring of nodes and infrastructure. Learn more at <u>http://www.hpe.com/info/cmu</u>.

Rack and Power Infrastructure

The story may end with servers, but it starts with the foundation that makes compute go – and business grow. We've reinvented our entire portfolio of rack and power products to make IT infrastructure more secure, more practical, and more efficient. In other words, we have created a stronger, smarter, and simpler infrastructure to help you get the most out of your IT equipment. As an industry leader, Hewlett Packard Enterprise is uniquely positioned to address the key concerns of power, cooling, cable management and system access.

HPE G2 Advanced and Enterprise Racks are perfect for the server room or today's modern data center with enhanced airflow and thermal management, flexible cable management, and a 10 year Warranty to support higher density computing.

HPE G2 PDUs offer reliable power in flexible form factors that operate at temperatures up to 60°C, include color-coded outlets and load segments and a low-profile design for optimal access to the rack and support for dense rack environments.

HPE Uninterruptible Power Systems are cost-effective power protection for any type workload. Some UPSs include options for remote management and extended runtime modules so you're critical dense data center is covered in power outages.

HPE KVM Solutions include a console and switches designed to work with your server and IT equipment reliably. We've got a costeffective KVM switch for your first rack and multiple connection IP switches with remote management and security capabilities to keep your data center rack up and running.

Learn more about HPE Racks, KVM, PDUs and UPSs at HPE Rack and Power Infrastructure.

One Config Simple (SCE)

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 Hewlett Packard Enterprise Customer Business Center or an Authorized Partner for assistance. <u>https://h22174.www2.hpe.com/SimplifiedConfig/Welcome#</u>

Service and Support

HPE Pointnext - Service and Support

Achieve maximum return from your IT investment

Get the expertise you need at every step of your IT journey with <u>HPE Pointnext Services</u>. We help you lower your risks and costs using proven best practices, automation and methodologies that have been tested and refined by HPE experts through thousands of deployments globally. With <u>Advisory Services</u>, we focus on your business outcomes and goals, partnering with you to design your transformation and build a roadmap tuned to your unique challenges. Our <u>Professional</u> and <u>Operational Services</u> can be leveraged to speed up time-to-production, boost performance and accelerate your business. HPE Pointnext specializes in flawless and on-time implementation, on-budget execution, and creative configurations that get the most out of software and hardware alike

Consume IT on your terms

HPE GreenLake Flex Capacity combines the simplicity, agility, and economics of public cloud with the security and performance benefits of on-premises IT. You determine your own "Right Mix" of Hybrid IT and workload placement without having to use. With its agile pay-per-use service, HPE GreenLake Flex Capacity can help your IT organization:

- Avoid IT expenses stemming from overprovisioning
- Improve time to market by maintaining a safe buffer of capacity, ready for use when you need it
- Keep capacity ahead of demand with regular monitoring—and a simple change order to replenish
- Pay for only the capacity used, not the capacity deployed
- Reduce IT risk with tailored support

Connect your devices:

Unlock all of the benefits of your technology investment by connecting your products to Hewlett Packard Enterprise. Reduce down time, increase diagnostic accuracy and have a single consolidated view of your environment. By connecting, you will receive 24x7monitoring, pre-failure alerts, automatic call logging, and automatic parts dispatch. HPE Proactive Care Service and HPE Datacenter Care Service customers will also benefit from proactive activities to help prevent issues and increase optimization. All of these benefits are already available to you with your server storage and networking products, securely connected to HPE support. Learn more about getting connected at http://www.hpe.com/services/getconnected

Recommended Services

HPE Proactive Care gives customers an enhanced call experience. When your products are connected to HPE, Proactive Care helps prevent problems and maintains IT stability by utilizing personalized proactive reports with recommendations and advice. HPE Proactive Care is available in 3, 4 and 5 year terms with a choice of response levels: Next Business day (NBD), 24x7 with a 4 hour response, and 24x7 with 6 hour call to repair (CTR). This Service combines both reactive support when there is a problem with an enhanced call experience and start to finish case management with proactive reporting and advice. This service also includes collaborative software support for Independent Software Vendors (ISVs), (Red Hat, VMWare, Microsoft, etc.).

https://www.hpe.com/h20195/v2/GetPDF.aspx/4AA3-8855ENW.pdf

HPE Proactive Care Advanced

Incorporates all the deliverables of HPE Proactive Care plus includes personalized support from a local, assigned Account Support Manager who will share best practice advice and personalized recommendations designed to help improve availability and performance to help increase stability and reduce unplanned downtime. Leverage your system's ability to connect to HPE for prefailure alerts, automatic call logging and parts dispatch. For business critical incidents, Proactive Care Advanced offers critical event management to help reduce mean time to resolution. HPE Service Credits are included to redeem for technical and operational services. HPE Proactive Care Advanced is offered in 3, 4, and 5 year terms with a choice of response levels: Next Business day (NBD), 24x7 with a 4 hour response, and 24x7 with 6 hour call to repair (CTR).

https://www.hpe.com/h20195/v2/getdocument.aspx?docname=4AA5-3259ENW

NOTE:*HPE Proactive Care and HPE Proactive Care Advanced require that the customer connect their devices to make the most of these services and receive all the deliverables.

Service and Support

Other related Services

HPE 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.

https://www.hpe.com/h20195/V2/GetPDF.aspx/5981-9356EN.pdf

HPE Installation and Startup Service

Provides for the installation of your HPE hardware according to product specifications including options. The HPE service delivery technician will connect the product to a LAN as appropriate and enable remote support to allow for automatic case creation for hardware failures. Installation and start up services also includes the installation of one supported operating system type (Windows[®] or Linux).

HPE Datacenter Care service

HPE Datacenter Care helps customers to address the pressing needs of IT today and smoothly transform to a more agile cloud-like IT operations model. We help run and monitor your IT by offloading the day to day routine tasks, helping customers be more predictive and proactive, and saving time with one place to call with for all of their IT. Datacenter Care is available as both tailored statement of work and as a packaged service for 3, 4, and 5 year terms.

Partner with an assigned account team backed by local and global experts, access HPE enhanced call experience with priority access, use specialized support for complex, technologies, choose hardware and software support for your devices, implement proactive monitoring to stay ahead of issues, and access HPE IT best practices and IP. HPE Datacenter Care advantage options are available to add to your agreement to give you specialized expertise for performance, security, back up analysis, and much more. https://www.hpe.com/us/en/services/datacenter-hybrid-services.html

DC for Hyperscale

Datacenter Care for Hyperscale is available for Service Providers and HPC customers who use a scale out approach to computing with a high volume homogenous infrastructure and resilient architecture can take advantage of this environment support tailored to their operating model.

HPE 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.

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. HPE products supported through Factory Express include a wide array of servers and storage: HPE Integrity, HPE ProLiant, HPE Apollo, HPE ProLiant Server Blades, HPE BladeSystem, HPE 9000 servers as well as the MSAxxxx3PAR suite, XP, rackable tape libraries and configurable network switches.

HPE Service Credits

HPE Service Credits offers flexible services and technical skills to meet your changing IT demands. With a menu of service that is tailored to suit your needs, you get additional resources and specialist skills to help you maintain peak performance of your IT. Offered as annual credits, you can plan your budgets while proactively responding to your dynamic business.

HPE Education Services

Keep your IT staff trained making sure they have the right skills to deliver on your business outcomes. Book on a class today and learn how to get the most from your technology investment. <u>http://www.hpe.com/ww/learn</u>

Service and Support

HPE Support Center

The HPE Support Center is a personalized online support portal with access to information, tools and experts to support HPE business products. Submit support cases online, chat with HPE experts, access support resources or collaborate with peers. Learn more **http://www.hpe.com/support/hpesc**.

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 HPE warranty, HPE Support Service or HPE contractual support agreement.

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

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

NOTE: HPE ProLiant DL385 Gen10 Plus Server is covered under the HPE Service Contract applied to the HPE ProLiant Server. No separate HPE support services need to be purchased.

Warranty and Support Services will extend to include HPE options configured with your server or storage device. The price of support service is not impacted by configuration details. HPE sourced options that are compatible with your product will be covered under your server support at the same level of coverage allowing you to upgrade freely. Installation for HPE options is available as needed. To keep support costs low for everyone, some high value options will require additional support. Additional support is only required on select high value workload accelerators, fibre switches, InfiniBand and UPS batteries over 12KVA. See the specific high value options that require additional support **here**.

Parts and Materials

Hewllett 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 Packard Enterprise due to malfunction.

Pre-configured Models

| Entry Models | | | |
|--------------------------|---|---|--|
| [SKU Number] | P07594-xx1 | P07595-xx1 | |
| Model Name | HPE ProLiant DL385 Gen10 Plus 7262 3.2GHz | HPE ProLiant DL385 Gen10 Plus 7262 3.2GHz | |
| | 8-core 1P 16GB-R 8LFF 500W PS Server | 8-core 1P 16GB-R 8SFF 500W PS Server | |
| Processor | 7262 (8-Core, 3.2 GHz, 155W) | 7262 (8-Core, 3.2 GHz, 155W) | |
| Number of Processors | One processor | One processor | |
| Memory | 16 GB RDIMM DR 3200 MT/s (1x 16 GB) | 16 GB RDIMM DR 3200 MT/s (1x 16 GB) | |
| Network Controller | HPE 1GbE 4-port OCP3 Adapter plus choice of | HPE 1GbE 4-port OCP3 Adapter plus choice of | |
| | OCP or standup card | OCP or standup card | |
| Storage Controller | E208i-a | E208i-a | |
| | NOTE: 8-Port modular Smart Array. | NOTE: 8-Port modular Smart Array. | |
| Hard Drive | None ship as standard | None ship as standard | |
| Internal Storage | 8 LFF chassis (upgradeable to 12LFF in front + | 8 SFF Chassis (upgradeable to 24 SFF front + | |
| | 4LFF mid + 4LFF rear) | 4SFF rear) | |
| Optical Drive Bay | Optional | Optional | |
| Optical Drive | None ship as standard | None ship as standard | |
| PCI-Express Slots | 3-slots (x8, x16, x8) as standard | 3-slots (x8, x16, x8) as standard | |
| Power Supply | 1x 500W HPE FlexSlot Power Supply | 1x 500W HPE FlexSlot Power Supply | |
| Fans | 6-standard fans | 4-standard fans | |
| Management | Default: HPE iLO Standard with Intelligent Provisi | oning, HPE OneView Standard (requires download) | |
| • | - | PE iLO Advanced Premium Security Edition, HPE | |
| | OneView Advanced | | |
| Energy Star | 3.0 certified | | |
| Form Factor | 2U Rack, LFF Easy Install rails with optional | 2U Rack, SFF Easy Install rails with optional | |
| | CMA | СМА | |
| Warranty | 3-year parts, 3-year labor, 3-year onsite support v | with next business day response. | |

| Base model | |
|--------------------------|--|
| [SKU Number] | P07596-xx1 |
| Model Name | HPE ProLiant DL385 Gen10 Plus 7302 3.0GHz 16-core 1P 32GB-R 8SFF 500W PS Server |
| Processor | 7302 (16-Core, 3.0GHz, 155W) |
| Number of Processors | One processor |
| Memory | 32 GB RDIMM DR 3200 MT/s (2x 16 GB) |
| Network Controller | HPE 10Gb 2-port OCP Adapter |
| Storage Controller | P408i-a/2GB |
| | NOTE: 8-Port modular Smart Array. |
| | NOTE: Smart Storage battery included. |
| Hard Drive | None ship as standard |
| Internal Storage | 8 SFF Chassis (upgradeable to 24 SFF front + 4 SFF rear) |
| Optical Drive Bay | Optional |
| Optical Drive | None ship as standard |
| PCI-Express Slots | 3-slots (x8, x16, x8) as standard |
| Power Supply | 1x 500W HPE FlexSlot Power Supply |
| Fans | 4-standard fans |
| Management | Default: HPE iLO Standard with Intelligent Provisioning, HPE OneView Standard (requires download) Optional (require licenses): HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, HPE OneView Advanced |
| Energy Star | 3.0 certified |
| Form Factor | 2U Rack, SFF Easy Install rails with optional CMA |
| Warranty | 3-year parts, 3-year labor, 3-year onsite support with next business day response. |

Pre-configured Models

| [SKU Number] | P07597-xx1 |
|----------------------|---|
| Model Name | HPE ProLiant DL385 Gen10 Plus 7702 2.0GHz 64-core 1P 32GB-2R 24SFF 800W PS Server |
| Processor | 7702 (64-Core, 2.0GHz, 200W) |
| Number of Processors | One processor |
| Memory | 32 GB RDIMM DR 3200 MT/s (2x 16 GB) |
| Network Controller | HPE 10Gb 2-port SFP+ OCP Adapter |
| Storage Controller | P408i-a/2GB w/Expander |
| | NOTE: 8-Port modular Smart Array. |
| | NOTE: Smart Storage battery included. |
| Hard Drive | None ship as standard |
| Internal Storage | 24 SFF chassis |
| Optical Drive Bay | Optional |
| Optical Drive | None ship as standard |
| PCI-Express Slots | 3-slots (x8, x16, x8) as standard |
| Power Supply | 1x 800W HPE FlexSlot Power Supply |
| Fans | 6 Performance fans |
| Management | Default: HPE iLO Standard with Intelligent Provisioning, HPE OneView Standard (requires download) |
| | Optional (require licenses): HPE iLO Advanced, HPE iLO Advanced Premium Security Edition, HPE |
| | OneView Advanced |
| Energy Star | 3.0 certified |
| Form Factor | 2U Rack, SFF Easy Install with CMA |
| Warranty | 3-year parts, 3-year labor, 3-year onsite support with next business day response. |

Country Code Key

xx1 = B21 Worldwide

NOTE: The -B21 WW SKU is to be ordered in all countries other than Japan.

xx1 = 291 Japan

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 an HPE approved configurator. Contact your local sales representative for information on configurable product offerings and requirements.

- 1. Factory Integrated Models must start with a CTO Server.
- 2. FIO indicates that this option is only available as a factory installable option.
- 3. All Factory Integrated Models will be populated with sufficient hard drive blanks based on the number of initial hard drives ordered with the server.
- 4. Some options may not be integrated at the factory. Contact your local sales representative for additional information.

| CTO Server | HPE ProLiant DL385 Gen10 Plus 8 SFF | HPE ProLiant DL385 Gen10 Plus 12 LFF | HPE ProLiant DL385 Gen10 Plus 8LFF CTO | HPE ProLiant DL385 Gen10 Plus 24 SFF | | | |
|-----------------------|---|---|--|--|--|--|--|
| | CTO Server | CTO Server | Server | CTO Server | | | |
| SKU Number | P14278-B21 | P14280-B21 | P14281-B21 | P14279-B21 | | | |
| Processor | Not included as standard | Not included as standard | Not included as standard | Not included as standard | | | |
| DIMM Slots | 32-DIMM slots** | 32-DIMM slots** | 32-DIMM slots** | 32-DIMM slots** | | | |
| Storage Controller | Choice of HPE modular S | Choice of HPE modular Smart Array and PCIe plug-in controller | | | | | |
| PCle | Three standard in prima | ry riser, upto Eight slots wi | th 2 processors | | | | |
| Drive Cage - included | 8 SFF | 12 LFF | 8LFF | 24 SFF | | | |
| Network Controller | Choice of OCP or stand u | Choice of OCP or stand up card | | | | | |
| Fans | 4-Standard | 6 Performance | 6-Standard | 6-Performance | | | |
| Management | HPE iLO with Intelligent Provisioning (standard), iLO Advanced and OneView (optional) | | | | | | |
| USB | 1x 3.0 standard plus iLo front service port | 1x 3.0 standard plus iLo front service port | 1x 3.0 standard plus iLo front service port | 1x 3.0 standard plus iLo front service port | | | |

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

NOTE: ** 32 DIMM slots require selection of 2 processors

NOTE: HPE offers multiple Trade Agreement Act (TAA) compliant configurations to meet the needs of US Federal Government customers. These products are either manufactured or substantially transformed in a designated country. TAA compliance is only provided when HPE options are included as part of factory integrated orders (CTO).

NOTE: TAA compliant configuration requires HPE DL385 Gen10 Plus TAA FIO Enablement Kit (P14282-B21) **NOTE:** All CTO servers are Energy Star 3.0 compliant.

| CTO Server | 8 SFF CTO Chassis | 24 SFF CTO Chassis | 8 LFF CTO Chassis | 12 LFF CTO Chassis |
|------------------------|-------------------|--------------------|-------------------|--------------------|
| Included Drive Cage | 8 SFF SAS/SATA | 3x 8 SFF SAS/SATA | 8 LFF SAS/SATA | 12 LFF Chassis |
| Universal Media Bay | Optional | Not available | Not available | Not available |
| ODD | Optional | Not available | Optional | Not available |
| 8 SFF Drive Cage | Up to 2 Optional | Not available | Not available | Not available |
| 8 SFF SAS/SATA/NVMe | Not available | Not available | Not available | Not available |
| (Mid- plane) | | | | |
| 8 NVME/SAS Bay | Up to 2 Optional | Not available | Not available | Not available |
| 8 NVME Cage | Up to 2 Optional | Not available | Not available | Not available |
| 2 SFF SAS/SATA (Front) | 1 Optional | Not available | 1 Optional | Not available |
| 2 SFF SAS/SATA (Rear) | 1 Optional | 1 Optional | 1 Optional | 1 Optional |
| 2 NVMe (Front) | 1 Optional | Not available | 1 Optional | Not available |
| 4 LFF Mid-plane | Not available | Not available | 1 Optional | 1 Optional |
| 4 LFF Rear | Not available | Not available | 1 Optional | 1 Optional |

NOTE: This aplies to CTO configurations, field upgrades may differ depending field configuration.

Step 2a: Choose Required Options - Processors (only one of the following unless otherwise noted)

Please select one -L21 processor required below.

For second processor, please select the same processor model with –B21 from Core Options – HPE Processors section. For example: first processor, select P17537-L21 then for second processor, select P17537-B21.

NOTE: 8SFF CTO 1P models ship with 4 standard fans. The second processor option kit contains 2 additional fans. 12 LFF and 24 SFF CTO Servers ship with 6 Max performance fans included; 8 LFF CTO Servers ship with 6 Standard fans included. Max performance fan kit is available to meet ambient temperature environments are required for rear drives or NVMe SFF configurations. NVMe is limited to front install only.

NOTE: Mixing of 2 different processor models are NOT allowed.

NOTE: DDR4 memory speed will depend on the quantity and type of DIMMs installed.

NOTE: Processors with greater than 180W will ship with the High Performance heatsink.

NOTE: Processors with greater than 180W will require the Max Performance fan kit.

| Description | SKU |
|--|------------|
| Processor Option Kits | |
| HPE DL385 Gen10 Plus AMD EPYC 7262 (3.2GHz/8-core/155W) FIO Processor Kit | P17537-L21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7252 (3.1GHz/8-core/120W) FIO Processor Kit | P21730-L21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7272 (2.9GHz/12-core/120W) FIO Processor Kit | P21785-L21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7302 (3.0GHz/16-core/155W) FIO Processor Kit | P17540-L21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7282 (2.8GHz/16-core/120W) FIO Processor Kit | P21727-L21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7352 (2.3Ghz/24-core/155W) FIO Processor Kit | P21724-L21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7402 (2.8GHz/24-core/180W) FIO Processor Kit | P17543-L21 |
| NOTE: Ships with Standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7452 (2.3GHz/32-core/155W) FIO Processor Kit | P21655-L21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7502 (2.5Ghz/32-core/180W) FIO Processor Kit | P21628-L21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7542 (2.9GHz/32core/225W) FIO Processor Kit | P21718-L21 |
| NOTE: Ships with High Performance Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7552 (2.2GHz/48-core/200W) FIO Processor Kit | P21721-L21 |
| NOTE: Ships with High Performance Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7642 (2.3GHz/48-core/225W) FIO Processor Kit | P21663-L21 |
| NOTE: Ships with High Performance Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7742 (2.3GHz/64-core/225W) FIO Processor Kit | P21630-L21 |
| NOTE: Ships with High Performance Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7702 (2.0GHz/64-core/200W) FIO Processor Kit | P17546-L21 |
| NOTE: Ships with High Performance Heatsink. | |

| Chassis config | 25C ambient | 35C ambient |
|---|------------------|------------------|
| 8SFF, 16SFF SAS/SATA with standard fan & standard heat sink | 240W | 240W |
| 8SFF, 16SFF NVMe with Perf fan & Perf heat sink | 240W | 240W |
| 24SFF, >=1SFF NVMe, w/ Perf Fan & Perf heat sink kit | 240W | 240W |
| 12LFF w/ Perf Fan & Perf heat sink kit | 240W | 240W |
| 8LFF w Standard Fan and Standard Heat sink | 240W | 240W |
| 12+4LFF, 12+4+4LFF w Perf Fan & Perf Heat sink kit | 240W | 240W |
| 24+8SFF w/ Perf Fan & Perf Heat sink kit | N/A until Feb'20 | N/A until Feb'20 |

Step 2b: Choose Memory Options

Please select one or more memory from below.

For new Gen10 Plus memory population rule whitepaper and optimal memory performance guidelines, please go

to: www.hpe.com/docs/amd-population-rules-Gen10Plus

For Gen10 Plus memory speed table, please go to: **www.hpe.com/docs/amd-speed-table-Gen10Plus NOTE:** Memory DIMM availability with a server platform is dependent upon completion of certification testing. **NOTE:** The maximum memory speed is a function of the memory type, memory configuration, and processor model.

Registered DIMMs (RDIMMs)

| • | |
|---|--------------------------|
| HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart | P07638-B21 |
| HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart | P07640-B21 |
| HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart | P07642-B21 |
| HPE 32GB (1x32GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart | P07644-B21 |
| HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart | P07646-B21 |
| HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart | P07650-B21 |
| NOTE: Mixing of x4 & x8 memory is not allowed | |
| NOTE: 3200 MT/s memory SKUs offer a transfer rate of 3200 MT/s at 1 DIMM per channel and 2933 MT/s at | |
| 2 DIMMs per channel | |
| Memory Blank Kit | |
| HPE DDR4 DIMM Blank Kit | P07818-B21 |
| NOTE: Required only when configuration includes 4LFF Mid Tray kit and a processor(s) that is 126W and | |
| above. | |
| Step 2c: Choose Power Supplies | |
| Select one or two power supplies from below. | |
| NOTE: Mixing of 2 different power supplies is NOT allowed. | |
| HPE Flex Slot Power Supplies | |
| HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit | 865408-B21 |
| HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit | 0/ E/ E0 B0/ |
| | 865438-B21 |
| HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit | 865438-B21 865414-B21 |

HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit 865434-B21

865428-B21

830272-B21

| NOTE: Select one or more power supplies. NOTE: 1600W Power supplies only support high line voltage (200VAC to 240VAC). | |
|---|-------------|
| 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.hpe.com/info/hppoweradvisor | |
| NOTE: All power supplies in a server should match. Mixing Power Supplies is not supported. NOTE: HPE ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution | |
| Units (PDUs). Visit <u>HPE power cords</u> for a full list of optional power cords. | |
| Step 3: Choose Additional Factory Integratable Options | |
| One of the following from each list may be selected if desired at time of factory integration HPE Unique Options | |
| HPE DL385 Gen10 Plus TAA FIO Enablement Kit | P14282-B21 |
| NOTE: This kit enables TAA compliance. HPE offers multiple Trade Agreement Act (TAA) compliant | F 14202-D21 |
| configurations to meet the needs of US Federal Government customers. These products are either | |
| manufactured or substantially transformed in a designated country. TAA compliance is only provided when | |
| HPE options are included as part of factory integrated orders (CTO) HPE DL38X Gen10 Plus 2LFF Tertiary FIO Riser Kit | P14580-B21 |
| NOTE: Supported only on 8 LFF & 12 LFF Models | 1 14300 021 |
| NOTE: When this option is selected, secondary riser cannot be selected | |
| NOTE: This option occupies tertiary riser slot | |
| HPE DL38X Gen10 Plus x8x16x8 Primary Riser FIO Kit | P14591-B21 |
| NOTE: Supports Full Height, Full-length cards and Full Height, Half- length cards. NOTE: Bus width x8, x16, x8, Connector Width x8, x16, x8. | |
| HPE DL38X Gen10 Plus x16x16 Slot1/2 Riser FIO Kit | P14592-B21 |
| NOTE: Supports Full Height and Full length cards. | |
| NOTE: Bus width x16, x16, Connector Width x16, x16 | |
| NOTE: Slot 1 or 2 in Primary or Secondary location | |
| HPE DL38X Gen10 Plus x16 x16 Slot2/3 Riser FIO Kit | P14599-B21 |
| NOTE: Slot 1 or 2 in Primary or Secondary location NOTE: Supports Full Height and Full length cards. | |
| NOTE: Bus width x16, x16, Connector Width x16, x16 | |
| NOTE: Requires the option HPE Gen10 Plus Slot1 x16 Adder S2/3 Rsr Kit (P14600-B21), to add additional x16 PCIe Gen4 in slot 1 | |
| HPE DL38X Gen10 Plus 8NVMe Balanced FIO Support Bundle | P19358-B21 |
| NOTE: This is a trigger SKU having the below list of options bundled together . This bundle SKU needs to be | 1 17550 DZ1 |
| selected in order to support 8 NVMe Drives with two processors | |
| HPE DL Gen10 Plus 8NVMe CPU1/2 Cable kit (P22829-B21) | |
| HPE DL Gen10 Plus 8SFF x4NVMe/SAS SC Kit (P14578-B21) | |
| HPE DL Gen10 Plus Max Performance Fan (P14608-B21) Requires 2nd Processor | |
| HPE DL385 Gen10 Plus 8NVMe Direct Support FIO Bundle | P22750-B21 |
| NOTE: This is a trigger SKU having the below list of options bundled together . This bundle SKU needs to be | |
| selected in order to support 8 NVMe Drives with one processor only | |
| HPE DL38X Gen10 Plus 8NVMe CPU1 Cable Kit (P22834-B21) HPE DL38X Gen10 Plus AROC to NVMe Adapter Kit (P14602-B21) | |
| HPE DL38X Gen10 Plus AROC to NVMe Adapter Kit (P14602-B21) HPE DL385 Gen10 Plus 8SFF NVMe/SAS Box1-3 Smart Carrier Drive Cage Kit (P14578-B21) | |
| • HPE DL38X Gen10 Plus Max Performance Fan Kit (P14608-B21) | |
| NOTE: This requires only one processor. | |

| HPE DL385 Gen10 Plus 16NVMe Balanced FIO Support Bundle | P22751-B21 |
|---|------------|
| NOTE: This is a trigger SKU having the below options bundled together . This bundle SKU needs to be selected | |
| in order to support 16 NVMe drives | |
| HPE DL38X Gen10 Plus 16NVMe CPU1/2 Cable Kit (P22835-B21) | |
| HPE DL38X Gen10 Plus AROC to NVMe Adapter Kit (P14602-B21) | |
| HPE DL385 Gen10 Plus 8SFF NVMe/SAS Box1-3 Smart Carrier Drive Cage Kit (P14578-B21) | |
| HPE DL38X Gen10 Plus Max Performance Fan Kit (P14608-B21) | |
| NOTE: This requires 2nd Processor to be selected | |
| HPE DL38X Gen10 8 SFF Front Cage Removal FIO Option | 873763-B21 |
| NOTE: This is a factory integrated only option. NOTE: Will remove the Primary 8SFF cage in Box 3 of the 8SFF and replace with a Box blank. | |

Step 4: Choose additional options for Factory Integration from Core and Additional Options sections below

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

| HPE Unique Options | |
|---|--------------|
| HPE DL38X Gen10 Plus Universal Media Bay Kit | P14609-B21 |
| NOTE: The HPE DL385 Gen10 Plus Universal Media bay provides front Display Port and 2xUSB 2.0; plus | |
| support for 2x SFF front drives or 2 NVMe front drives and ODD support (Not included); and can only be located | |
| in Box1 in either an 8 SFF or 8+8 SFF model. | |
| NOTE: This is a 8SFF model option only. | |
| NOTE: This option cannot be ordered when Qty=2 of following options is selected : HPE DL380 Gen10 Box1/2 Cage Bkpln Kit (826691-B21) and HPE DL Gen10 Plus 8SFF x4NVMe/SAS SC Kit (P14578-B21) | |
| HPE DL38X Gen10 Plus System Insight Display Kit | P14611-B21 |
| HPE DL38X Gen10 Plus AROC to NVMe Adapter Kit | P14602-B21 |
| NOTE: Used to support upto 16 NVMe drives with Modular Controller (AROC) | |
| HPE DL38X Gen10 Plus Maximum Performance Fan Kit | P14608-B21 |
| NOTE: For elevated ambient temperature support please see: http://www.hpe.com/servers/ashrae | |
| NOTE: Max Performance fan kit consists of 6 fans, these will need to replace all the standard fans in the unit, | |
| and fill all 6 fan cages. | |
| NOTE: The 12 LFF and 24 SFF models (including field upgrades to 24 SFF) will already include 6 Max | |
| Performance fans. NOTE: The Max Performance fan kit is needed to support certain Passive GPGPU (Graphics cards) | |
| configurations; or ASHRAE operating environments. | |
| HPE DL38X Gen10 Plus High Performance Heat Sink Kit | P14610-B21 |
| NOTE: Processor kits above 180W include a High Performance Heatsink. | 1 1 1010 021 |
| HPE DL385 Gen10 1U High Performance Heat Sink Kit | P19368-B21 |
| NOTE: Required when Mid Tray kit (P14503-B21) is selected and maximum CPU wattage is above 200W and | 1 1/000 221 |
| DIMM blanks populating all unused DIMM slots. | |
| HPE Gen10 Plus Chassis Intrusion Detection Kit | P14604-B21 |
| NOTE: This provides a physical connection from the chassis board and hood and detects any physical intrusion | |
| into the chassis, providing security during the entire supply chain process of shipping, receiving, distribution, | |
| and operation. | |
| HPE DL38X Gen10 12Gb SAS Expander Card Kit with Cables | 870549-B21 |
| NOTE: SAS expander to enable 24 SFF field upgrade | |
| HPE DL38X Gen10 SFF Box1/2 Cage/Backplane Kit | 826691-B21 |
| NOTE: Supports 8 SAS/SAFA SFF drives in Box 1 or 2 to a max of 24 SFF SAS/SATA front | |
| HPE Processors | |
| Processor Option Kits | |
| HPE DL385 Gen10 Plus AMD EPYC 7262 (3.2GHz/8-core/155W) Processor Kit | P17537-B21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7252 (3.1GHz/8-core/120W) Processor Kit | P21730-B21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7272 (2.9GHz/12-core/120W) Processor Kit | P21785-B21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7302 (3.0GHz/16-core/155W) Processor Kit | P17540-B21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7282 (2.8GHz/16-core/120W) Processor Kit | P21727-B21 |
| NOTE: Ships with standard Heatsink. | |
| | |

| HPE DL385 Gen10 Plus AMD EPYC 7352 (2.3GHz/24-core/155W) Processor Kit | P21724-B21 |
|--|-----------------------|
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7402 (2.8GHz/24-core/180W) Processor Kit | P17543-B21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7452 (2.3GHz/32-core/155W) Processor Kit | P21655-B21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7502 (2.5GHz/32-core/180W) Processor Kit | P21628-B21 |
| NOTE: Ships with standard Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7542 (2.9GHz/32-core/225W) Processor Kit | P21718-B21 |
| NOTE: Ships with High Performance Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7552 (2.2GHz/48-core/200W) Processor Kit | P21721-B21 |
| NOTE: Ships with High Performance Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7642 (2.3GHz/48-core/225W) Processor Kit | P21663-B21 |
| NOTE: Ships with High Performance Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7742 (2.2GHz/64-core/225W) Processor Kit | P21630-B21 |
| NOTE: Ships with High Performance Heatsink. | |
| HPE DL385 Gen10 Plus AMD EPYC 7702 (2.0GHz/64-core/200W) Processor Kit | P17546-B21 |
| NOTE: Ships with High Performance Heatsink. | |
| NOTE: DDR4 memory speed will depend on the quantity and type of DIMMs installed. | |
| NOTE: The xxxxxx-L21 is the first processor shipped, the xxxxxx-B21 is the 2nd processor and ships with 2 feature on field installation | 2 additional fans for |
| factory or field installation. NOTE: Processors above 180W use a High Performance Heatsink and the high performance fan kit. | |
| NOTE: Processors with greater than 180W do not include the fans as the selection of processors above 180 [°] | W requires the High |
| Performance fan kit that comes with 6 fans. | |
| | |

Memory Selection

To streamline the configuration process for HPE ProLiant Gen10 Plus servers and to provide the best product availability, Hewllet Packard Enterprise recommends memory from the list located here: **http:hpe.com/products/recommend**. Best product availability is limited to US, Canada, and Latin America at this time.

HPE Memory

Registered DIMMs (RDIMMs)

| HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart | P07638-B21 |
|--|------------|
| HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart | P07640-B21 |
| HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart | P07642-B21 |
| HPE 32GB (1x32GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart | P07644-B21 |
| HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart | P07646-B21 |
| HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart | P07650-B21 |
| | |

NOTE: Memory DIMM availability with a server platform is dependent upon completion of certification testing.

NOTE: The maximum memory speed is a function of the memory type, memory configuration, and processor model.

NOTE: Mixing of x4 & x8 memory is not allowed

NOTE: 3200 MT/s memory SKUs offer a transfer rate of 3200 MT/s at 1 DIMM per channel and 2933 MT/s at 2 DIMMs per channel

HPE Optical Drives

HPE 9.5mm SATA DVD-ROM Optical Drive **NOTE:** HPE DL385 Gen10 Plus Universal Media Bay Kit (P14609-B21) is required for this option on a SFF model. **NOTE:** Supported only on 8 SFF & 8 LFF Models 726536-B21

| HPE 9.5mm SATA DVD-RW Optical Drive | 726537-B21 |
|---|-------------------|
| NOTE: HPE DL385 Gen10 Plus Universal Media Bay Kit (P14609-B21) is required for this option on a SFF | |
| model. | |
| NOTE: Supported only on 8 SFF & 8 LFF Models | 701/00 001 |
| HPE Mobile USB DVD-RW Optical Drive | 701498-B21 |
| HPE Drives | |
| Enterprise - 12G SAS - SFF Drives | |
| HPE 300GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 870753-B21 |
| HPE 300GB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 872475-B21 |
| HPE 600GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 870757-B21 |
| HPE 600GB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 872477-B21 |
| HPE 900GB SAS 12G Enterprise 15K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 870759-B21 |
| HPE 1.2TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty Digitally Signed Firmware HDD | 872479-B21 |
| HPE 1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware HDD | 872481-B21 |
| HPE 2.4TB SAS 12G Enterprise 10K SFF (2.5in) SC 3yr Wty 512e Digitally Signed Firmware HDD | 881457-B21 |
| Midline - 12G SAS - SFF Drives | |
| HPE 1TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty Digitally Signed Firmware HDD | 832514-B21 |
| HPE 2TB SAS 12G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e HDD | 765466-B21 |
| Midline - 12G SAS - LFF Drives | |
| HPE 2TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty Digitally Signed Firmware HDD | 833926-B21 |
| HPE 4TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty Digitally Signed Firmware HDD | 833928-B21 |
| HPE 6TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD | 861746-B21 |
| HPE 8TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e Digitally Signed Firmware HDD | 834031-B21 |
| HPE 10TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty Helium 512e Digitally Signed Firmware HDD | P09149-B21 |
| HPE 10TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty He 512e DS 6-pack FIO HDD | P09799-B21 |
| HPE 12TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty Helium 512e Digitally Signed Firmware HDD | 881781-B21 |
| HPE 14TB SAS 12G Midline 7.2K LFF (3.5in) LP 1yr Wty Helium 512e Digitally Signed Firmware HDD | P09155-B21 |
| Midline - 6G SATA - SFF Drives | |
| HPE 1TB SATA 6G Midline 7.2K SFF (2.5in) SC 1yr Wty Digitally Signed Firmware HDD | 655710-B21 |
| HPE 2TB SATA 6G Midline 7.2K SFF (2.5in) SC 1yr Wty 512e Digitally Signed Firmware HDD | 765455-B21 |
| Midline - 6G SATA - LFF Drives | |
| HPE 1TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty Digitally Signed Firmware HDD | 861686-B21 |
| HPE 2TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty Digitally Signed Firmware HDD | 861681-B21 |
| HPE 4TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty Digitally Signed Firmware HDD | 861683-B21 |
| HPE 6TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e HDD | 861742-B21 |
| HPE 8TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty 512e Digitally Signed Firmware HDD | 834028-B21 |
| HPE 10TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty Helium 512e Digitally Signed Firmware HDD | P09161-B21 |
| HPE 10TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty He 512e DS 6-pack FIO HDD | P09797-B21 |
| HPE 12TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty Helium 512e Digitally Signed Firmware HDD | 881787-B21 |
| HPE 14TB SATA 6G Midline 7.2K LFF (3.5in) LP 1yr Wty Helium 512e Digitally Signed Firmware HDD | P09165-B21 |
| SSD Selection | |
| To streamline the configuration process for HPE ProLiant Gen10 Plus servers and to provide the best product | availability, HPE |
| recommends SSDs from the list located here: <u>http://www.hpe.com/products/recommend</u> . | |
| Read Intensive - 12G SAS - SFF - Solid State Drives | |
| HPE 960GB SAS 12G Read Intensive SEE (2.5in) SC 3vr Wty Digitally Signed Firmware SSD | P06584-B21 |

| HPE 960GB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P06584-B21 |
|--|------------|
| HPE 960GB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04517-B21 |
| HPE 960GB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty SSD | P19903-B21 |
| HPE 1.92TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P06586-B21 |

| HPE 1.92TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04519-B21 |
|--|------------|
| HPE 1.92TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty SSD | P19905-B21 |
| HPE 3.84TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04521-B21 |
| HPE 3.84TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty SSD | P19907-B21 |
| HPE 3.84TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P06588-B21 |
| HPE 7.68TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04523-B21 |
| HPE 7.68TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty SSD | P19909-B21 |
| HPE 7.68TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P06590-B21 |
| HPE 15.3TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P06592-B21 |
| HPE 15.36TB SAS 12G Read Intensive SFF (2.5in) SC 3yr Wty SSD | P19911-B21 |
| Mixed Use - 12G SAS - SFF - Solid State Drives | |
| HPE 400GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04525-B21 |
| HPE 400GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09088-B21 |
| HPE 800GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04527-B21 |
| HPE 800GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09090-B21 |
| HPE 800GB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty SSD | P19913-B21 |
| HPE 1.6TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04533-B21 |
| HPE 1.6TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09092-B21 |
| HPE 1.6TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty SSD | P19915-B21 |
| HPE 3.2TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04537-B21 |
| HPE 3.2TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09094-B21 |
| HPE 3.2TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty SSD | P19917-B21 |
| HPE 6.4TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04539-B21 |
| HPE 6.4TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09096-B21 |
| HPE 6.4TB SAS 12G Mixed Use SFF (2.5in) SC 3yr Wty SSD | P19919-B21 |
| Write Intensive - 12G SAS - SFF - Solid State Drives | |
| HPE 400GB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04541-B21 |
| HPE 400GB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09098-B21 |
| HPE 800GB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04543-B21 |
| HPE 800GB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09100-B21 |
| HPE 1.6TB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09102-B21 |
| HPE 1.6TB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04545-B21 |
| HPE 3.2TB SAS 12G Write Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04547-B21 |
| Mixed Use - 6G SATA - SFF - Solid State Drives | |
| HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P07922-B21 |
| HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Himware 35D | P18432-B21 |
| HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Multi Vendor SSD | P18432-B21 |
| HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P07926-B21 |
| HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Himware 33D HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Multi Vendor SSD | P18434-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P07930-B21 |
| Mixed Use - 6G SATA - SFF - Solid State Drives | F07430-DZT |
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| HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09712-B21 |
| HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P07922-B21 |
| HPE 480GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09712-B21 |
| HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09716-B21 |
| HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P07926-B21 |
| HPE 960GB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09716-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P07930-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Multi Vendor SSD | P18436-B21 |

| HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09722-B21 |
|--|-------------|
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| HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P13662-B21 |
| HPE 1.92TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P09722-B21 |
| HPE 3.84TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P00896-B21 |
| HPE 3.84TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Multi Vendor SSD | P18438-B21 |
| HPE 3.84TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P21517-B21 |
| HPE 3.84TB SATA 6G Mixed Use SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P00896-B21 |
| Read Intensive - 6G SATA - SFF - Solid State Drives | |
| HPE 240GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04556-B21 |
| HPE 240GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | 875503-B21 |
| HPE 240GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04556-B21 |
| HPE 240GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Multi Vendor SSD | P18420-B21 |
| HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P06194-B21 |
| HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Multi Vendor SSD | P18422-B21 |
| HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04560-B21 |
| HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04474-B21 |
| HPE 480GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04560-B21 |
| HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04564-B21 |
| HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P06196-B21 |
| HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04476-B21 |
| HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Multi Vendor SSD | P18424-B21 |
| HPE 960GB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04564-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04566-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P06198-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04478-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Multi Vendor | P18426-B21 |
| HPE 1.92TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04566-B21 |
| HPE 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04480-B21 |
| HPE 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04570-B21 |
| HPE 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P06200-B21 |
| HPE 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Multi Vendor SSD | P18428-B21 |
| HPE 3.84TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04570-B21 |
| HPE 7.68TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Digitally Signed Firmware SSD | P04482-B21 |
| HPE 7.68TB SATA 6G Read Intensive SFF (2.5in) SC 3yr Wty Multi Vendor SSD | P18430-B21 |
| Read Intensive - NVMe - SFF - Solid State Drives | . 10.00 221 |
| HPE 1.92TB NVMe x4 Lanes Performance Read Intensive SFF (2.5in) SC U.3 SSD | P16501-B21 |
| HPE 3.84TB NVMe x4 Lanes Performance Read Intensive SFF (2.5in) SC U.3 SSD | P16503-B21 |
| Mixed Use - NVMe - SFF - Solid State Drives | |
| HPE 1.6TB NVMe High Performance Mixed Use SFF (2.5in) SC 3yr Wty | P16497-B21 |
| HPE 3.2TB NVMe High Performance Mixed Use SFF (2.5in) SC 3yr Wty | P16499-B21 |
| Hard Drive Blank Kits | |
| HPE Large Form Factor Hard Drive Blank Kit | 666986-B21 |
| HPE Small Form Factor Hard Drive Blank Kit | 666987-B21 |
| HPE Tape Backup | 000707-DZ1 |
| For the complete range of tape drives, autoloaders, libraries and media see: | |
| https://www.hpe.com/us/en/storage/storeever-tape-storage.html. | |
| For hardware and software compatibility of Hewlett Packard Enterprise tape backup products | |
| http://www.hpe.com/storage/BLIRAcompatibility | |

http://www.hpe.com/storage/BURAcompatibility

| Hard Drive Kits | |
|--|------------------|
| | |
| HPE DL38X Gen10 Plus 4LFF SAS/SATA Low Profile Mid Tray Drive Cage Kit | P14503-B21 |
| NOTE: Supported with both the 8 and 12 LFF model. NOTE: With this mid-tray only single-wide (8.5-inch cards with connections or less) cards are supported. Full | |
| Length PCIe cards cannot be supported. | |
| NOTE: This drive does support hot-swap drives. | |
| NOTE: This requires Max Performance Fan kit (P14608-B21). | |
| NOTE: Requires DIMM Blank kit (P07818-B21), if this option is selected with processor 200W and above. | |
| HPE DL38X Gen10 Plus 2LFF Primary Riser Kit | P14579-B21 |
| NOTE: Supported only on 8 LFF & 12 LFF Models. | TITOTT DEI |
| NOTE: This option occupies primary riser slot. | |
| | |
| HPE DL385 Gen10 Plus 2SFF NVMe/SAS Smart Carrier Drive Cage Kit | P14505-B21 |
| NOTE: 2SFF NVMe/SAS SC Kit (P14506-B21) and 2 SFF NVMe/SAS Riser Kit (P14505-B21) CANNOT be | |
| selected together. | |
| NOTE: Supports 2 SFF rear in Riser1 or 2 location – max 2 supported SFF model. | |
| NOTE: Supports 2 SFF rear in Riser1 or 2 location in LFF model. | |
| HPE DL385 Gen10 Plus 2SFF NVMe/SAS Smart Carrier Front/Rear Drive Cage Kit | P14506-B21 |
| NOTE: Supports upto 2 SFF drives in 8 SFF, 12 LFF & 24 SFF Models. | |
| NOTE: Max Qty=2 ,allowed on 8 SFF model. NOTE: Only 1 drive cage can be ordered with 12 LFF and 24 SFF models. | |
| NOTE: 8SFF Model with 2 drive cages, requires Universal Media Bay. | |
| HPE DL385 Gen10 Plus 2SFF SAS/SATA Smart Carrier LFF Chassis Drive Cage Kit | P14507-B21 |
| NOTE: Supported only on 8 LFF Model. | 1 14307 021 |
| HPE DL385 Gen10 Plus 8SFF NVMe/SAS Smart Carrier Box 1-3 Drive Cage Kit | P14578-B21 |
| NOTE: Supported only on 8 SFF Model. | F 14370-DZ1 |
| NOTE: Maximum upto 2 drive cages can be selected. | |
| NOTE: If Drive Cage Qty=1 is selected with one processor only, it requires the 8NVMe Direct Support Bundle | |
| (P22750-B21) to be selected. | |
| NOTE: If Drive Cage Qty=1 is selected with two processors, it requires the 8NVMe Direct Support Bundle | |
| (P19358-B21) to be selected. | |
| NOTE: If Qty=2 is selected, it requires 16 NVMe Balanced Support Bundle (P22751-B21) to be selected | |
| Media Bay Kits | |
| HPE DL38X Gen10 Plus Universal Media Bay Kit | P14609-B21 |
| NOTE: The HPE DL385 Gen10 Plus Universal Media bay provides front Display Port and 2xUSB 2.0; plus support | for 2x SFF front |
| drives or 2 NVMe front drives and ODD support (Not included); and can only be located in Box1 in either an 8 | |
| model. | |
| NOTE: This is a 8SFF model option only. | |
| NOTE: This option cannot be ordered when Qty=2 of following options is selected : HPE DL380 Gen10 Box1/2 | . Cage Bkpln Kit |
| (826691-B21) and HPE DL Gen10 Plus 8SFF x4NVMe/SAS SC Kit (P14578-B21). | |
| HPE Storage Options | |
| Emulex Fibre Channel HBAs | |
| HPE StoreFabric SN1200E 16Gb Single Port Fibre Channel Host Bus Adapter | QOL13A |
| HPE StoreFabric SN1200E 16Gb Dual Port Fibre Channel Host Bus Adapter | QOL14A |
| HPE StoreFabric SN1600E 32Gb Single Port Fibre Channel Host Bus Adapter | Q0L11A |
| HPE StoreFabric SN1600E 32Gb Dual Port Fibre Channel Host Bus Adapter | Q0L12A |
| QLogic Fibre Channel HBAs | |
| HPE StoreFabric SN1100Q 16Gb Single Port Fibre Channel Host Bus Adapter | P9D93A |
| HPE StoreFabric SN1100Q 16Gb Dual Port Fibre Channel Host Bus Adapter | P9D94A |
| | |

HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter

HPE SN1610Q 32Gb 1-port Fibre Channel Host Bus Adapter

R2E08A

R2E08A

| HPE SN1610Q 32Gb 2-port Fibre Channel Host Bus Adapter | R2E09A |
|--|--------------|
| HPE Networking | 11220771 |
| 1 Gigabit Ethernet adapters | |
| HPE Ethernet 1Gb 4-port BASE-T I350-T4 Adapter | P21106-B21 |
| 10 Gigabit Ethernet adapters | |
| HPE Ethernet 10Gb 2-port BASE-T QL41132HLRJ Adapter | P08437-B21 |
| HPE Ethernet 10Gb 2-port SFP+ QL41132HLCU Adapter | P21933-B21 |
| HPE Ethernet 10Gb 2-port SFP+ MCX4121A-XCHT Adapter | P21930-B21 |
| HPE Ethernet 10Gb 4-port SFP+ QL41134HLCU Adapter | P10094-B21 |
| 10 Gigabit Ethernet adapters | 1 100/4 021 |
| HPE Ethernet 10/25Gb 4-port SFP28 E810-XXVDA4 Adapter | P08458-B21 |
| HPE Ethernet 10/25Gb 2-port SFP28 MCX512F-ACHT Adapter | P13188-B21 |
| HPE Ethernet 10/25Gb 2-port SFP28 X2522-PLUS Adapter | P21109-B21 |
| NOTE: This NIC option will be restricted to x8 bandwidth | I ZIIO / DZI |
| 100 Gigabit Ethernet adapters | |
| HPE Ethernet 100Gb 2-port QSFP28 E810-CQDA2 Adapter | P21112-B21 |
| HPE Ethernet 100Gb 2-port QSFP28 MCX516A-CCHT Adapter | P21927-B21 |
| NOTE: 4-port adapters go only into Slot 1. | 121,2, 021 |
| 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. Please see the related NIC QuickSpecs for Technical Specifications | |
| and additional information: | |
| http://www.hpe.com/us/en/product-catalog/servers/server-adapters.hits-12.html | |
| OCP Adapters | |
| HPE Ethernet 1Gb 4-port BASE-T I350-T4 OCP3 Adapter | P08449-B21 |
| HPE Ethernet 10Gb 2-port SFP+ QL41132HQCU OCP3 Adapter | P08452-B21 |
| HPE Ethernet 10Gb 2-port BASE-T QL41132HQRJ OCP3 Adapter | P10103-B21 |
| HPE Ethernet 10Gb 2-port SFP+ MCX4621A-ACAB OCP3 Adapter | P11341-B21 |
| NOTE: MCX4621A adapter will be available later, from CQ2'20 onwards | |
| HPE Ethernet 10/25Gb 2-port SFP28 MCX562A-ACAI OCP3 Adapter | P10112-B21 |
| NOTE: MCX562A adapter will be available later, from CQ2'20 onwards | |
| NOTE: OCP adapters do not consume PCIe slot. | |
| NOTE: Only 1 slot is available for OCP adapters. | |
| NOTE: Only SFF OCP adapters below 35W can be supported HPE InfiniBand | |
| | |
| HPE InfiniBand HDR/Ethernet 200Gb 1-port QSFP56 MCX653105A-HDAT PCIe 4 x16 Adapter | P23664-B21 |
| HPE InfiniBand HDR100/Ethernet 100Gb 1-port QSFP56 MCX653105A-ECAT PCIe 4 x16 Adapter HPE InfiniBand HDR100/Ethernet 100Gb 2-port QSFP56 MCX653106A-ECAT PCIe 4 x16 Adapter | P23665-B21 |
| HPE Infinitiand HDR100/Efficitien 100Gb 2-point 05FP50 MCX055100A-ECAT PCIe 4 x10 Adapter HPE I/O Expansion Options | P23666-B21 |
| NOTE: For a Secondary/Tertiary riser the second processor is required | |
| HPE DL38X Gen10 Plus Primary NEBS-compliant Riser Kit | P14575-B21 |
| NOTE: Requires selection of HPE DL38X Gen10 Plus Tertiary NEBS-compliant Riser Kit (P14577-B21) | FI4373-DZI |
| HPE DL38X Gen10 Plus Secondary NEBS-compliant Riser Kit | P14577-B21 |
| NOTE: Requires selection of a 2nd processor | 1 14377 DZ1 |
| HPE DL38X Gen10 Plus x8/x16/x8 Secondary Riser Kit | P14587-B21 |
| NOTE: Requires selection of a 2nd processor | 1 14J0/-DZ1 |
| HPE DL38X Gen10 Plus x16 Tertiary Riser Kit | P14588-B21 |
| NOTE: Requires selection of a 2nd processor | 1 1400-DZT |
| | |

| HPE DL38X Gen10 Plus x16/x16 Slot 1/2 Secondary Riser Kit NOTE: Requires selection of a 2nd processor | P14589-B21 |
|---|---------------------------|
| HPE DL38X Gen10 Plus x16/x16 Slot 2/3 Secondary Riser Kit NOTE: Requires selection of a 2nd processor | P14590-B21 |
| HPE DL38X Gen10 Plus Slot1 x16 Adder for Slot2/3 Riser Kit | P14600-B21 |
| NOTE: Required to add additional x16 PCIe Gen4 lanes for Primary/Secondary Riser3 | |
| HPE PCIe Workload Accelerator Options | |
| HPE 750GB PCIe x4 Lanes Write Intensive HHHL 3yr Wty Digitally Signed Firmware Card | 878038-B21 |
| HPE Cooling Options | |
| HPE DL38X Gen10 Plus Maximum Performance Fan Kit | P14608-B21 |
| NOTE: This kit is required for specific Ambient temperature environments,. | |
| NOTE: Max Performance fan kit consists of 6 fans, these will need to replace all the standard fans in the unit, and f | |
| NOTE: The 12 LFF and 24 SFF models (including field upgrades to 24 SFF) will already include 6 Max Performan | |
| NOTE: The High Performance fan kit is needed to support certain Passive GPGPU (Graphics cards) configurati | ons; or ASHRAE |
| operating environments. | |
| NOTE: For elevated ambient temperature support please see: <u>http://www.hpe.com/servers/ashrae</u> . | |
| HPE Power Supplies | |
| HPE 500W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit | 865408-B21 |
| NOTE: Flex Slot Platinum power supplies support power efficiency of up to 94% and include a standard C-14 | |
| power inlet connector. | |
| HPE 800W Flex Slot Titanium Hot Plug Low Halogen Power Supply Kit | 865438-B21 |
| NOTE: Flex Slot Titanium power supplies support power efficiency of up to 96% and include a standard C-14 | |
| power inlet connector. | |
| HPE 800W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit | 865414-B21 |
| NOTE: Flex Slot Platinum power supplies support power efficiency of up to 94% and include a standard C-14 | |
| power inlet connector. | |
| HPE 800W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit | 865434-B21 |
| NOTE: Flex Slot -48VDC power supplies support power efficiency of up to 94%. | |
| HPE 800W Flex Slot Universal Hot Plug Low Halogen Power Supply Kit | 865428-B21 |
| HPE 1600W Flex Slot Platinum Hot Plug Low Halogen Power Supply Kit | 830272-B21 |
| NOTE: Flex Slot universal power supplies support power efficiency of up to 94% and support both 277VAC/380VI | |
| NOTE: Flex Slot Platinum Plus power supplies support power efficiency of up to 94% and include a C-14 power | r inlet connector |
| that can support HPE Power Discovery Services (blue connector). | and a construction of the |
| NOTE: Prior to making a power supply selection it is highly recommended that the HPE Power Advisor is run to right size power supply for your configuration. The HPE Power Advisor is located at | o determine the |
| right size power supply for your server configuration. The HPE Power Advisor is located at: http://www.hpe.com/info/hppoweradvisor. | |
| NOTE: All power supplies in a server should match. Mixing Power Supplies is not supported. | |
| NOTE: Option kits contain the specified power supply and a PDU IEC cable. | |
| NOTE: 1600W power supplies only support high line voltage. | |
| NOTE: HPE ProLiant servers ship with an IEC-IEC power cord used for rack mounting with Power Distribution | n Units (PDUs). |
| Visit UDE news conductor of antional UDE news condu | |

Visit **HPE power cords** for a full list of optional HPE power cords.

Riser Information*

| Part number | Description Riser pos | • | | | Riser position | | Bus width (Gen4 lanes) | | NVMe Conne | |
|-------------|--|---------|-----------|----------|----------------|----------------|------------------------|-------|----------------|--|
| | | Primary | Secondary | Tertiary | Top slot | Middle Slot | Bottom slot | Ports | Drive count | |
| n/a | This is the default riser in the chassis | D | Ν | N | x8 | x16 | x8 | 0 | 0 | |
| P14591-B21 | HPE DL38X Gen10 Plus x8x16x8 Primary Riser FIO Kit | 0 | N | N | x8 | x16 | x8 | 0 | 0 | |
| P14587-B21 | HPE DL38X Gen10 Plus x8/x16/x8 Secondary Riser Kit | N | 0 | N | x8 | x16 | x8 | 0 | 0 | |
| P14592-B21 | HPE DL38X Gen10 Plus x16x16 Slot1/2 Riser FIO Kit | 0 | N | N | X16 | x16 | 0 | 0 | 0 | |
| P14589-B21 | HPE DL38X Gen10 Plus x16/x16 Slot1/2 Secondary Riser Kit | Ν | 0 | N | X16 | x16 | 0 | 0 | 0 | |
| P14599-B21 | HPE DL38X Gen10 Plus x16 x16 Slot2/3 Riser FIO Kit | 0 | N | N | 0 | x16 | X16 | 0 | 0 | |
| P14590-B21 | HPE DL38X Gen10 Plus x16/x16 Slot2/3 Secondary Riser Kit | N | 0 | N | 0 | x16 | X16 | 0 | 0 | |
| P14600-B21 | HPE DL38X Gen10 Plus Slot1 x16 Adder for Slot2/3 Riser | 0 | 0 | N | x16 | 0 | 0 | 0 | 0 | |
| P14588-B21 | HPE DL38X Gen10 Plus x16 Tertiary Riser Kit | N | N | 0 | x16 | 0 | 0 | 0 | 0 | |
| P14575-B21 | HPE DL38X Gen10 Plus Primary NEBS- compliant Riser Kit | 0 | 0 | N | 0 | 0 | 0 | 0 | 0 | |
| P14577-B21 | HPE DL38X Gen10 Plus Tertiary NEBS- compliant Riser Kit | N | N | 0 | 0 | 0 | 0 | 0 | 0 | |
| P14505-B21 | HPE DL385 Gen10 Plus 2SFF NVMe/SAS Smart Carrier Riser Kit | 0 | 0 | N | 0 | 0 | 0 | 0 | 0 | |
| P14579-B21 | HPE DL38X Gen10 Plus 2LFF Primary Riser Kit | 0 | 0 | N | 0 | 0 | 0 | 0 | 0 | |
| P14580-B21 | HPE DL38X Gen10 Plus 2LFF FIO Riser Kit | Ν | N | 0 | 0 | 0 | 0 | 0 | 0 | |

NOTE:Y = supported; D = default on Chassis; O = optional; N = not supported or slot/connector not present.

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

Embedded Management HPE iLO Advanced

| HPE iLO Advanced Electronic License with 1yr Support on iLO Licensed Features | E6U59ABE |
|--|------------|
| HPE iLO Advanced 1-server License with 1yr Support on iLO Licensed Features | 512485-B21 |
| HPE iLO Advanced Flexible Quantity License with 1yr Support on iLO Licensed Features | 512486-B21 |
| HPE iLO Advanced AKA Tracking License with 1yr Support on iLO Licensed Features | 512487-B21 |
| HPE iLO Advanced Electronic License with 3yr Support on iLO Licensed Features | E6U64ABE |
| HPE iLO Advanced 1-server License with 3yr Support on iLO Licensed Features | BD505A |
| HPE iLO Advanced Flexible Quantity License with 3yr Support on iLO Licensed Features | BD506A |
| HPE iLO Advanced AKA Tracking License with 3yr Support on iLO Licensed Features | BD507A |
| HPE iLO Common Password FIO Setting | P08040-B21 |

HPE Converged Infrastructure Management Software

| HPE OneView Physical Media Kit LTU | E5Y37A |
|--|------------|
| HPE OneView Standard 1yr 9x5 Support Flexible Quantity E-RTU | K6F98AAE |
| HPE OneView including 3yr 24x7 Support Physical 1-server LTU | E5Y34A |
| HPE OneView including 3yr 24x7 Support Track 1-server LTU | E5Y36A |
| HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU | E5Y35AAE |
| HPE OneView Upgrade from Insight Management 3yr 24x7 Support 1-server LTU | F6Q91A |
| HPE OneView w/o iLO including 3yr 24x7 Support 1-server LTU | P8B24A |
| HPE OneView w/o iLO including 3yr 24x7 Support Track 1-server LTU | P8B25A |
| HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU | P8B31A |
| HPE OneView w/o iLO Advance including 3yr 24x7 Support Track 1-server LTU | E5Y40A |
| HPE OneView for ProLiant DL Server including 3yr 24x7 Support FIO Bundle Physical 1-server LTU | E5Y43A |
| HPE OneView for ProLiant DL Server including 3yr 24x7 Support Bundle Track 1-server LTU | E5Y44A |
| HPE OneView Upgrade from Insight Management including 3yr 24x7 Support Flexible Quantity E-LTU | E5Y45AAE |
| HPE OneView w/o iLO including 3yr 24x7 Support Flexible Quantity E-LTU | P8B26AAE |
| NOTE: Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be downloaded | <u>1</u> . |

HPE Security

| HPE Gen10 2U Bezel Kit | 867809-B21 | |
|--|------------|--|
| HPE Bezel Lock Kit | 875519-B21 | |
| HPE Gen10 Plus Chassis Intrusion Detection Kit | P14604-B21 | |
| NOTE: This provides a physical connection from the chassis board and hood and detects any physical intrusion into the chassis, | | |
| providing security during the entire supply chain process of shipping, receiving, distribution, and operation. | | |

HPE Smart Array Controllers

| Class P = Performance RAID Controller E = Essential RAID Controller | < ↓ | P408 | i - a | Co a b | ., |
|---|--|-------------|---|--------------|-----|
| S = Software RAID | Series 200 = \$ 400 = \$\$ 800 = \$\$\$ | # SAS Lanes | Port Type i = Internal Ports e = External Ports ie = Internal & External | c m p | .,, |

HPE 96W Smart Storage Battery (up to 20 Devices) with 145mm Cable Kit NOTE: All performance RAID controllers are supported by the HPE Smart Storage Battery (P01366-B21), which supports multiple devices and is sold separately. HPE Smart Array P816i-a SR Gen10 (16 Internal Lanes/4GB Cache/SmartCache) 12G SAS Modular Controller 804338-B21 **NOTE:** Does not occupy a PCIe expansion slot and includes SmartCache license. NOTE: The P816i-a cable ships in the 12LFF chassis only. HPE Smart Array P408i-a SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS Modular Controller 804331-B21 **NOTE:** Does not occupy a PCIe expansion slot. HPE Smart Array P408i-p SR Gen10 (8 Internal Lanes/2GB Cache) 12G SAS PCIe Plug-in Controller 830824-B21 HPE Smart Array P408e-p SR Gen10 (8 External Lanes/4GB Cache) 12G SAS PCIe Plug-in Controller 804405-B21 **Essential RAID Controllers** HPE Smart Array E208i-p SR Gen10 (8 Internal Lanes/No Cache) 12G SAS PCIe Plug-in Controller 804394-B21 HPE Smart Array E208e-p SR Gen10 (8 External Lanes/No Cache) 12G SAS PCIe Plug-in Controller 804398-B21 HPE Smart Array E208i-a SR Gen10 (8 Internal Lanes/No Cache) 12G SAS Modular Controller 804326-B21 **NOTE:** Does not occupy a PCIe expansion slot. **HPE Cable Options** HPE DL38X Gen10 Plus Rear Serial Cable Kit P14606-B21 HPE DL38X Gen10 Plus 8NVMe CPU1/2 Cable Kit P22829-B21 HPE DL38X Gen10 Plus 8NVMe CPU1 Cable Kit P22834-B21 HPE DL38X Gen10 Plus 16NVMe CPU1/2 Cable Kit P22835-B21 HPE DL38X Gen10 Plus Mini SAS 3 Position Cable P14605-B21

HPE Disk-Based Backup

| HPE RDX 1TB External Disk Backup System | B7B69B |
|---|--------|
| HPE RDX External Docking Station | C8S07B |
| HPE RDX 2TB External Disk Backup System | E7X53B |

HPE Racks

Please see the **HPE Advanced Series Racks QuickSpecs** for information on additional racks options and rack specifications. Please see the **HPE Enterprise Series Racks QuickSpecs** for information on additional racks options and rack specifications. Please see the **HPE Standard Series Racks QuickSpecs** for information on additional racks options and rack specifications.

HPE Power Distribution Units (PDUs)

Please see the **HPE Basic Power Distribution Units (PDU) QuickSpecs** for information on these products and their specifications. Please see the **HPE Metered Power Distribution Units (PDU) QuickSpecs** for information on these products and their specifications. Please see the **HPE Intelligent Power Distribution Unit (PDU) QuickSpecs** for information on these products and their specifications.

Please see the **HPE Metered and Switched Power Distribution Units (PDU) QuickSpecs** for information on these products and their specifications.

HPE Uninterruptible Power Systems (UPS)

To learn more, please visit the HPE Uninterruptible Power Systems (UPS) web page.

Please see the **<u>HPE DirectFlow Three Phase Uninterruptible Power System QuickSpecs</u> for information on these products and their specifications.**

Please see the **HPE Line Interactive Single Phase UPS QuickSpecs** for information on these products and their specifications.

HPE Rack Options

Please see the HPE KVM Switches web page for information on these products and their specifications.

Rail Kits

| Rai | II KITS | |
|-----|---|-------------------|
| NO | TE :Ball bearing and Easy Install rail kits contain telescoping rails which allow for in-rack serviceability. | |
| | assist in the installation of the server into the rack an optional installation tool is available by contacting you presentative (695539-001). | ır local services |
| | TE: Hewlett Packard Enterprise recommends that a minimum of two people are required for all Rack Server insta er to your installation instructions for proper tools and number of people to use for any installation. | allations. Please |
| NO | TE : CTO Models do not ship with rail kits, they need to be ordered seperately | |
| ΗP | E DL38X Gen10 Plus 2U SFF Easy Install Rail Kit | P22018-B21 |
| NO | DTE: Supported on SFF Model only | |
| ΗP | PE DL38X Gen10 Plus 2U LFF Easy Install Rail Kit | P22019-B21 |
| NO | OTE: Supported on LFF Model only | |
| ΗP | E DL38X Gen10 Plus 2U Cable Management Arm for Rail Kit | P22020-B21 |
| ΗP | PE DL38X Gen10 Plus 2U LFF Ball Bearing Rail Kit | P22022-B21 |
| NO | DTE: Supported on SFF Model only | |
| ΗP | PE DL38X Gen10 Plus 2U SFF Ball Bearing Rail Kit | P22021-B21 |
| NO | DTE : Supported on LFF Model only | |
| | | |

HPE USB and SD Options

HPE Enterprise Mainstream Flash Media Kits for Memory Cards

| HPE 8GB Dual microSD Flash USB Drive | 741279-B21 |
|--|------------|
| HPE 32GB microSD Flash Memory Card | 700139-B21 |
| HPE 8GB microSD Flash Memory Card | 726116-B21 |
| HPE 8GB microSD Flash USB Drive | 737953-B21 |
| HPE 32GB microSD RAID 1 USB Boot Drive | P21868-B21 |
| | |

HPE Support Services Installation & Startup Services

HPE Install ProLiant DL38x(p) Service HPE Installation and Startup DL38x(p) Service U4554E U4555E

Proactive Care

| HPE 3 Year Proactive Care 24x7 ProLiant DL385 Gen10 Service | HC2M2E |
|---|--------|
| HPE 3 Year Proactive Care 24x7 with DMR ProLiant DL385 Gen10 Service | HC2M3E |
| HPE 3 Year Proactive Care 24x7 with CDMR ProLiant DL385 Gen10 Service | HC2M4E |
| HPE 3 Year Proactive Care Call-To-Repair ProLiant DL385 Gen10 Service | HC2N1E |
| HPE 3 Year Proactive Care Call-To-Repair 24x7 with DMR ProLiant DL385 Gen10 Service | HC2N2E |
| HPE 3 Year Proactive Care Call-To-Repair with CDMR ProLiant DL385 Gen10 Service | HC2N3E |
| NOTE: For a full listing of Support Services available for this server, please visit https://ssc.hpe.com/ | |

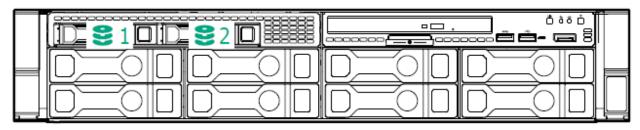
Memory



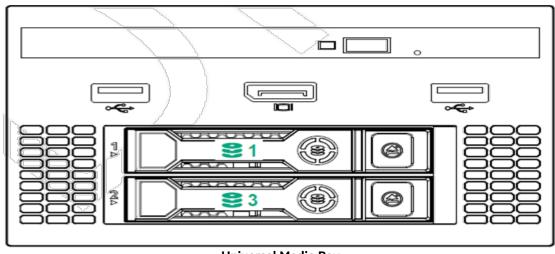
General Memory Population Rules and Guidelines:

- Install DIMMs only if the corresponding processor is installed.
- If only one processor is installed in a two-processor system, only half of the DIMM slots are available.
- To maximize performance, it is recommended to balance the total memory capacity between all installed processors.
- When two processors are installed, balance the DIMMs across the two processors.
- White DIMM slots denote the first slot to be populated in a channel.
- The maximum memory speed is a function of the memory type, memory configuration, and processor model.
- The maximum memory capacity is a function of the number of DIMM slots on the platform, the largest DIMM capacity qualified on the platform, the number and model of installed processors qualified on the platform.
- For details on the HPE Server Memory Options Population Rules, visit: <u>http://www.hpe.com/docs/amd-population-rules</u>
- To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required. For additional information, please see the: <u>HPE DDR4 Smart Memory QuickSpecs</u>
- For details on the HPE Server Memory speed, visit: http://www.hpe.com/docs/amd-speed-tables

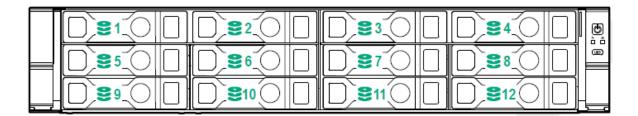
Storage



8LFF chassis with Universal media bay and optional 2SFF and optical drive shown

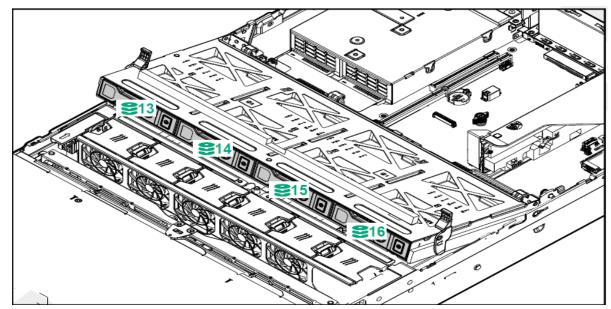


Universal Media Bay

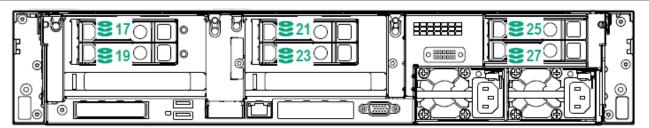


12LFF Front Panel

Storage



Midplane Box (LFF Only)



Rear Panel 4LFF +2SFF

| U. | | 2 | | 0 4 0 | D 00 - 00 0 | 000 6 | 297 | | | 2 | | 4 | 0) 5 🕲 🛛 | 0) 6 | | | | 2 | | | D ()) 5 🕲 [] | 0)) 6 🕲 🛛 | 70 | | | |
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24 SFF Chassis + rear 2 SFF drives

Technical Specifications

System Unit Dimensions

8.73 x 44.54 x 71.1 cm SFF Drives: 3.44 x 17.54 x 28 in 8.73 x 44.54 x 74.9 cm LFF Drives:

3.44 x 17.54 x 29.5 in

Weight (approximate)

Minimum: Minimum: 8 SFF chassis with 1x SFF HDD and 7 HDD blanks, 2x Drive Bay blanks, 1x processor including 15.1 kg / 33.25 lbs with 1 standard heatsink, 1x power supply (plus blank), 1x Smart Array, 1x Riser installed, cables for the above) hard drive

Maximum: 19.7 kg / 43.50 lbs with 24 hard drives

Maximum: 12 LFF hard drives (no rear drives), 2x processors, 2x power supplies, 1x Smart Array, 2x Risers ith 12 installed)

24.7 kg / 54.5 lbs with 12 installed) hard drives Minimum: 17.3 kg / 38.25 lbs with 1 hard drive

Input Requirements (per power supply)

Rated Line Voltage 100 to 120 VAC 200 to 240 VAC

BTU Rating

Maximum

Maximum:

For 800W Power Supply: 3207 BTU/hr (at 100 VAC), 3071 BTU/hr (at 200 VAC), 3112 BTU/hr (at 240 VAC) for China Only For 500W Power Supply: 1979 BTU/hr (at 100 VAC), 1911 BTU/hr (at 200 VAC), 1965 BTU/hr (at 240 VAC) for China Only

Power Supply Output (per power supply)

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

System Inlet Temperature

Standard Operating10° to 35°C (50° to 95°F) at sea level with an altitude derating of 1.0°C per every 305 m (1.8°F per every
1000 ft) above sea level to a maximum of 3050 m (10,000 ft), no direct sustained sunlight. Maximum
rate of change is 20°C/hr (36°F/hr). The upper limit and rate of change may be limited by the type and
number of options installed.

System performance during standard operating support may be reduced if operating with a fan fault or above $30^{\circ}C$ ($86^{\circ}F$).

Technical Specifications

System Inlet Temperature

| Extended Ambient Operating Temperature | For approved hardware configurations, the supported system inlet range is extended to be: 5° to 10°C (41° to 50°F) and 35° to 40°C (95° to 104°F) at sea level with an altitude derating of 1.0°C per every 175 m (1.8°F per every 574 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL: http://www.hpe.com/servers/ashrae For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL: http://www.hpe.com/servers/ashrae For approved hardware configurations, the supported system inlet range is extended to be: 40° to 45°C (104° to 113°F) at sea level with an altitude derating of 1.0°C per every 125 m (1.8°F per every 410 ft) above 900 m (2953 ft) to a maximum of 3050 m (10,000 ft). The approved hardware configurations for this system are listed at the URL: http://www.hpe.com/servers/ashrae |
|---|---|
| | System performance may be reduced if operating in the extended ambient operating range or with a fan fault. |
| Non-operating | -30° to 60°C (-22° to 140°F). Maximum rate of change is 20°C/hr (36°F/hr). |
| Relative Humidity | |
| Operating | 8% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing. |
| (non-condensing) Non- operating | 5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing. |
| Altitude | |
| Operating | 3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min). |
| Non-operating | 9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min). |
| RTC Accuracy | 50 ppm |
| | |

Acoustic Noise

Listed are the declared A-Weighted sound power levels (LWAd) and declared average bystander position A-Weighted sound pressure levels (LpAm) when the product is operating in a 23°C ambient environment. Noise emissions were measured in accordance with ISO 7779 (ECMA 74) and declared in accordance with ISO 9296 (ECMA 109). The listed sound levels apply to standard shipping configurations. Additional options may result in increased sound levels. Please have your HPE representative provide information from the HPE EMESC website for further technical details regarding the configurations listed below.

| Idle | | |
|-----------|--|--|
| LWAd | 5.0 B Entry 5.2 B Base 5.7 B Perf | |
| LpAm | 32 dBA Entry 34 dBA Base 44 dBA Perf | |
| Operating | | |
| LWAd | 5.0 B Entry 5.3 B Base 6.4 B Perf | |
| LpAm | 32 dBA Entry 37 dBA Base 48 dBA Perf | |

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

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

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

Technical Specifications

Emissions Classification (EMC) – Regulatory Information

To view the regulatory information for your product, view the Safety and Compliance Information for Server, Storage, Power, Networking, and Rack Products, available at the Hewlett Packard Enterprise Support Center: http://www.hpe.com/support/Safety-Compliance-EnterpriseProducts

HPE Smart Array

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

Environment-friendly Products and Approach - End-of-life Management and Recycling

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

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

Summary of Changes

| Date | Version History | Action | Description of Change | | | | | |
|------------------|-----------------|--------------------------------|--|--|--|--|--|--|
| 02-Dec-2019 | Version 1 | New | New QuickSpecs. | | | | | |
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| Hewlett Pack | ard | For har | rd drives, $1GB = 1$ billion bytes. Actual formatted capacity is less | | | | | |
| Enterprise | | a0007 | 73549enw - 16497 - Worldwide - V1 - 02-December-2019 | | | | | |