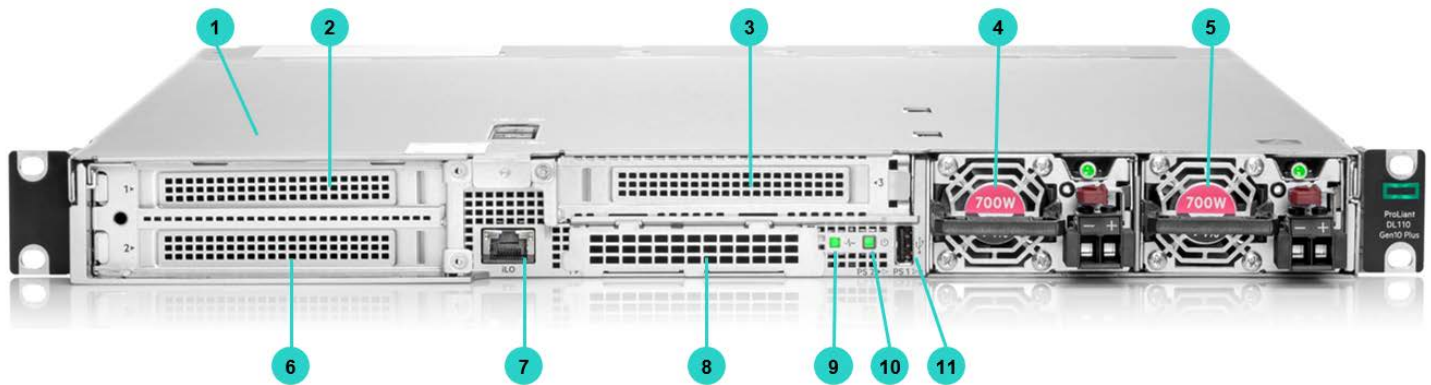


### Overview

#### HPE ProLiant DL110 Gen10 Plus server

Are you ready for 5G? Customized for edge applications requiring high bandwidth and low latency such as 5G cellular processing (vRAN), the HPE ProLiant DL110 Gen10 Plus Telco server is based on open, standards-compliant infrastructure and offers dense I/O capabilities with PCIe Gen4 speed, acceleration, and powerful compute driven by 3rd Generation Intel® Xeon® Scalable Processors. The HPE ProLiant DL110 Gen10 Plus provides a reduced footprint with a compact, short depth, 1U/1P front accessible chassis and ruggedized with NEBS Level 3 compliance for harsh environments. Delivering the trusted HPE ProLiant experience with embedded HPE Integrated Lights-Out (iLO) management and security via HPE Silicon Root of Trust, the HPE ProLiant DL110 Gen10 Plus is ready for Communication Service Provider's 5G deployments.

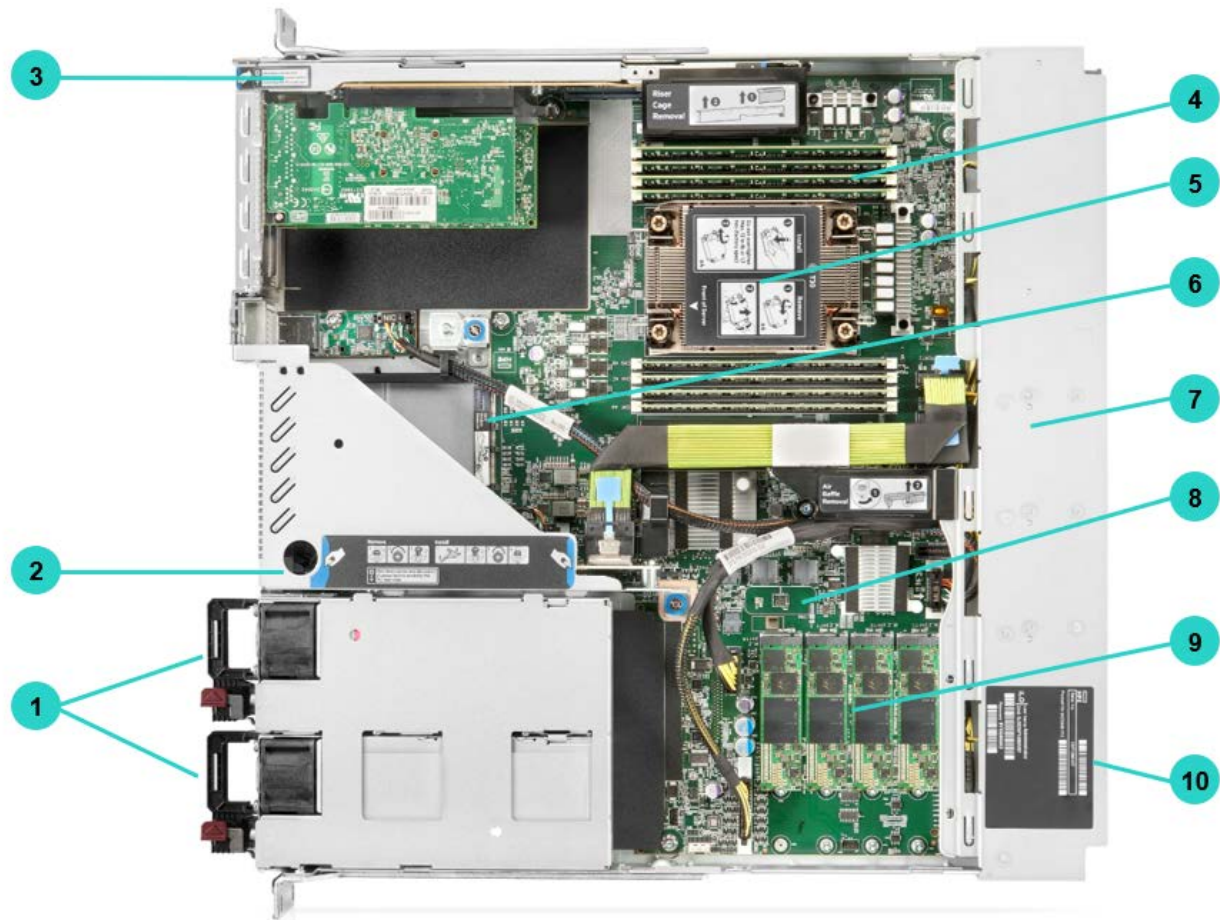


#### Front View

- |    |                                       |     |  |
|----|---------------------------------------|-----|--|
| 1. | Quick removal access panel            | 7.  | iLO Management Port                          |
| 2. | Slot 1 PCIe 4.0 x16 FHHL              | 8.  | OCP 3.0 slot                                 |
| 3. | Slot 3 PCIe 4.0 x16 FHHL <sup>1</sup> | 9.  | Health LED                                   |
| 4. | Flex Slot Power Supply 2              | 10. | Power On/Standby button and system power LED |
| 5. | Flex Slot Power Supply 1              | 11. | iLO Service Port                             |
| 6. | Slot 2 PCIe 4.0 x16 FHHL              |     |  |

**Notes:** <sup>1</sup> Enabled with x16 FHHL Secondary Riser (P41828-B21)

## Overview



## Internal View

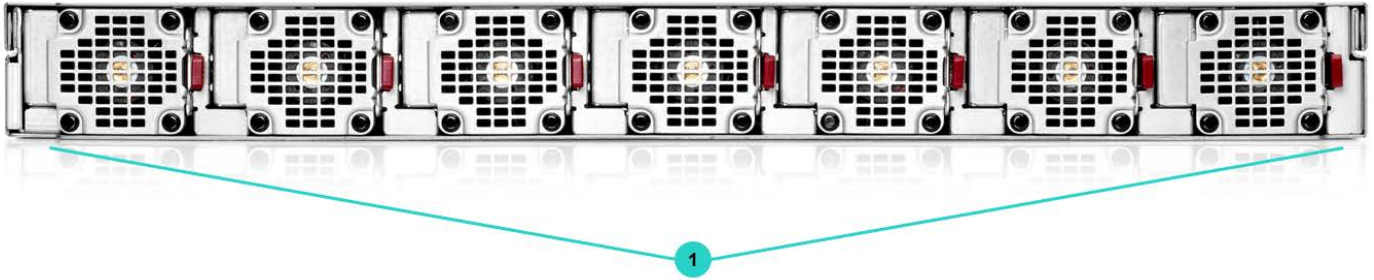
- |  |   |
|--|---|
| 1. Power Supplies <sup>1</sup>                     | 6. x16 OCP connector (supports various NICs up to 200GbE) |
| 2. Secondary x16 FHHL PCIe 4.0 riser (optional)    | 7. Hot plug fans (7)                                      |
| 3. Primary x16/x16 FHHL PCIe 4.0 riser (standard)  | 8. Embedded TPM 2.0                                       |
| 4. DDR4 DIMM slots (Fully populated 8 DIMMs shown) | 9. M.2 SSD slots (4) <sup>2</sup>                         |
| 5. Processor (3rd Gen Intel Xeon Scalable)         | 10. Serial number label                                   |

## Notes:

- <sup>1</sup> Up to 2 for redundant power
- <sup>2</sup> Supports 2280 and 22110 form factor



## Overview



**Rear View**

1. 7 fans, hot plug

---

### What's New

- New! DL110 Gen10 Plus Telco Server
- 3rd Generation Intel® Xeon® Scalable Processors up to 32 Cores/205W
- DDR4 SmartMemory up to 3200 MT/s
- Dense I/O with 3x PCIe 4.0 slots + 1x OCP 3.0 slot
- Security features: iLO5 (Silicon Root of Trust); embedded TPM 2.0

---

### Platform Information

#### Form Factor

- 1U rack

#### Chassis Types

- Front cabled chassis

#### System Fans

- 7 hot plug fans included
- 



## Standard Features

### Processors – Up to 1 of the following

The 2nd digit of the processor model number “x3xx” is used to denote the processor generation (i.e. 3=3rd generation Intel Scalable Series Processors)

For more information regarding Intel Xeon processors, please see the following <http://www.intel.com/xeon>.

This table covers the public Intel offering only.

Intel Xeon processors		
Processor Suffix	Description	Offering
<b>N</b>	NFV/Networking Optimized	SKUs specifically designed for NFV and networking workloads, such as: L3 fwding, 5G UPF, OVS DPDK, VPP FIB router, VPP IPsec, web server/NGINX, vEPC, vBNG, and vCMTS. SKUs have higher base frequency with lower TDPs to enable best performance/Watt
<b>T</b>	10-year use and NEBS friendly	Designed for dual thermal profile to allow the system to continue to operate beyond nominal thermal limits for short term excursion ( <b>N</b> etwork <b>E</b> nvironmental- <b>B</b> uilding <b>S</b> ystem environments). Aimed at long term usage (10-years).
<b>U</b>	1 Socket Optimized	Optimized for single socket (1P) configurations, delivering competitive system perf/\$. Does not support two socket (2P) arrangements.
<b>Y</b>	Speed Select	Intel® SST-PP (performance profile) provides the ability to set a guaranteed base frequency for a specific number of cores, and assign this performance profile to a specific application/workload to guarantee performance requirements. Also enables configuration of settings during runtime and provides additional frequency profile configuration opportunities.

3 <sup>rd</sup> Generation Intel® Xeon® Scalable Processor Family							
Intel Xeon Models	CPU Frequency	Cores	L3 Cache (MB)	Power	UPI	DDR4	Memory per socket
Gold 6338N Processor	2.2GHz	32	48	185W	3 @ 11.2 GT/s	2667 MT/s	6TB
Gold 6330N Processor	2.2GHz	28	42	165W	3 @ 11.2 GT/s	2667 MT/s	6TB
Gold 6330 Processor	2.0GHz	28	42	205W	3 @ 11.2 GT/s	2933 MT/s	6TB
Gold 6314U Processor	2.3GHz	32	48	205W	N/A	3200 MT/s	6TB

#### Notes:

- 8-Channel DDR4 @ 3200/2933 MT/s (Lower DDR4 speeds may be used in segment optimized SKUs)
- Advanced RAS
- SGX 64GB enclave size
- AVX512-2 FMA
- Intel SST-CP (Core Power)- Enables flexibility for workloads that benefit from higher base frequency on a subset of the processor’s cores. While the max turbo frequency across the cores remain constant across the cores, a subset of the cores can be assigned as to run at a higher base frequency than specified, while the other cores run at lower base frequency.
- Intel SST-TF (Turbo Frequency)- Enables flexibility for workloads that benefit from higher turbo frequency on a subset of the processor’s cores. While the base frequency remains constant across the cores, a subset of the cores can be assigned to run at a higher turbo frequency than specified, while the other cores run at lower turbo frequency.
- Intel SST-BF (Base Frequency)- Allows the configuration of a guaranteed higher base frequency, for a specific number of cores, to support those workloads and applications that are not optimized for turbo frequencies.



## Standard Features

### Chipset

Intel C621A Chipset

For more information regarding Intel® chipsets, please see the following URL: <http://www.intel.com/products/server/chipsets/>

### On System Management Chipset

HPE iLO 5 ASIC

Read and learn more in the [iLO QuickSpecs](#).

### Memory

One of the following depending on model.

<b>Type</b>	HPE DDR4 SmartMemory	HPE DDR4 SmartMemory, Registered (RDIMM), Load Reduced (LRDIMM)
<b>DIMM Slots Available</b>	8	8 DIMM slots, 8 channels, 1 DIMM per channel
<b>Maximum capacity (LRDIMM)</b>	1.0TB	8 x 128 GB LRDIMM @ 3200 MT/s
<b>Maximum capacity (RDIMM)</b>	512GB	8 x 64 GB RDIMM @ 3200 MT/s

#### Notes:

- Mixing of RDIMM and LRDIMM memory is not supported.
- For General Server Memory and HPE NVDIMM Population Rules and Guidelines for Gen10 Plus see details here: <https://psnow.ext.hpe.com/doc/a50003886enw>
- To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required.
- For additional information, please see the [HPE DDR4 SmartMemory QuickSpecs](#).

### Memory Protection

For details on the HPE Server Memory Options RAS feature, visit: <http://www.hpe.com/docs/memory-ras-feature>

### Expansion Slots

#### Primary Riser – Ships standard with server

Slots #	Technology	Bus Width	Connector Width	Slot Form Factor
1	PCIe 4.0	X16	X16	Full-height, half-length slot
2	PCIe 4.0	X16	X16	Full-height, half-length slot

#### Notes:

- Bus Width Indicates the number of physical electrical lanes running to the connector.
- The specifications above correspond with the default primary riser.

#### Secondary Riser

Slots #	Technology	Bus Width	Connector Width	Slot Form Factor
3	PCIe 4.0	X16	X16	Full-height, half-length slot

**Notes:** Bus Width Indicates the number of physical electrical lanes running to the connector.

### Graphics

#### HPE iLO 5 on system management memory

- 32 MB Flash
- Shared 512KB NVRAM with BIOS



## Standard Features

### Maximum Internal Storage

Drive	Capacity	Configuration
SATA M.2 SSD	3.84 TB	4 x 960 GB
NVMe M.2 SSD	7.68 TB	4 x 1.92 TB

#### Notes:

- 4x m.2 drives are supported on the Motherboard
- 2280 or 22110 form factor supported

### Internal Storage Devices

- **M.2 SSDs**  
None ship standard

### Power Supply

- HPE ProLiant DL110 Gen10 Plus 700W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit  
**Notes:** Reverse airflow to support front cabled design of DL110

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 and Gen10 Plus 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 required, a different power cord can be selected.

To review the power requirements for your selected system, please use the [HPE Power Advisor Tool](#).

### Storage Controllers

One of the following offerings

#### Software RAID

- **Intel VROC NVMe for HPE ProLiant Gen10 Plus**

##### Notes:

- Intel VROC for HPE ProLiant Gen10 Plus is an enterprise, hybrid Software RAID solution specifically designed for NVMe SSDs connected directly to the CPU. Intel VROC is a software-based solution utilizing Intel CPU to RAID or HBA direct connected drives and supports both Intel® SFF SSDs and HPE SFF SSDs.
- Active health monitoring of NVMe M.2 drives requires use of **SMART tools**
- RAID Support- 0/1/5/10
- Windows, Linux, VMware OS support
- Host Tools- Windows GUI/CLI, Linux CLI
- UEFI Support- HII Utility, OBSE
- Intel VROC NVMe for HPE ProLiant Gen10 Plus will operate in UEFI mode only
- Intel VROC NVMe is off by default and requires licensing, see options for details

- **Intel VROC SATA for HPE ProLiant Gen10 Plus**

##### Notes:

- Requires AMS & iLO 2.42
- RAID Support- 0/1/5/10
- Windows and Linux OS support
- Host Tools- Windows GUI/CLI, Linux CLI
- UEFI Support- HII Utility, OBSE
- iLO Support- IML, Alert, SNMP, AHS
- iLO Redfish- Redfish Read



## Standard Features

- Intel VROC SATA for HPE ProLiant Gen10 Plus will operate in UEFI mode only.
- Intel VROC SATA is off by default and must be enabled
- **Linux in-distro open-source software RAID**  
**Notes:** For Linux users, HPE offers a solution that uses in-distro open-source software to create a two-disk RAID 1 boot volume. For more information visit: <https://downloads.linux.hpe.com/SDR/project/lsrrb/>

## Interfaces

<b>HPE iLO Remote Management Network Port</b>	1 Gb Dedicated
<b>Front iLO Service Port</b>	1 standard

## Operating Systems and Virtualization Software Support for HPE ProLiant DL110 Gen10 Plus Telco Server

### 3<sup>rd</sup> Generation Intel® Xeon® Scalable Processor Family

- Windows Server 2019<sup>1,3</sup> Essentials, Standard, Datacenter
- Red Hat Enterprise Linux (RHEL)<sup>3</sup> 7.9<sup>1</sup>, 8.2, 8.3 (64 bit, includes KVM)
- SUSE Linux Enterprise Server (SLES) 15 SP2<sup>1</sup> (includes KVM & Xen)<sup>2</sup>
- Wind River Studio<sup>3</sup>

#### Notes:

- <sup>1</sup>Minimum required OS
- <sup>2</sup>Tested not certified
- <sup>3</sup>Certification pending
- 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 <http://www.hpe.com/info/ossupport>

## 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 servers have a UEFI Class 2 implementation and support both UEFI Mode (default) and Legacy BIOS Mode.

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

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

- Secure Boot and Secure Start enable for enhanced security
- Embedded UEFI Shell
- Operating system specific functionality
- Mass Configuration Deployment Tool using iLO RESTful API that is Redfish API Conformant
- Support for > 2.2 TB (using GPT) boot drives
- PXE boot support for IPv6 networks
- USB 3.0 Stack
- Workload Profiles for simple performance optimization

### UEFI Boot Mode only:

- TPM 2.0 Support
- iSCSI Software Initiator Support.
- NVMe Boot Support
- HTTP/HTTPs Boot support as a PXE alternative.
- Platform Trust Technology (PTT) can be enabled.
- Boot support for option cards that only support a UEFI option ROM



## Standard Features

### Notes:

- For UEFI Boot Mode, boot environment and OS image installations should be configured properly to support UEFI.
- UEFI FIO Setting (758959-B22) can be selected to configure the system in Legacy mode in the factory for your HPE ProLiant Gen10 Plus Server.

---

## Industry Standard Compliance

- ACPI 6.1 Compliant
- PCIe 4.0 Compliant
- WOL Support
- Microsoft® Logo certifications
- PXE Support
- USB 3.0 Compliant (external iLO service port)
- SMBIOS 3.1
- Redfish API
- IPMI 2.0
- Secure Digital 4.0
- TPM 2.0 Support
- Advanced Encryption Standard (AES)
- Triple Data Encryption 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
  - Notes:** For additional technical, thermal details regarding ambient temperature, humidity, and feature support, please visit <http://www.hpe.com/servers/ashrae>
- EU Lot9
  - Notes:** European Union (EU) eco-design regulations for server and storage products, known as Lot 9, went into effect on March 1st, 2020. Among other requirements, for servers this directive establishes power thresholds for idle state, as well as efficiency and performance in active state which vary among configurations. HPE ProLiant Gen10 Plus servers are compliant with Lot9 requirements.
  - Please visit: <https://www.hpe.com/us/en/about/environment/msds-specs-more.html> for more information regarding HPE Lot 9 conformance.
- UEFI (Unified Extensible Firmware Interface Forum) 2.6
  - Notes:** UEFI is the default for the DL110 Gen10 Plus. Legacy mode can be selected in the field or as a CTO option (758959-B22); some configuration restrictions apply.





## Standard Features

### 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>.

#### UEFI

Configure and boot your servers securely with industry standard Unified Extensible Firmware Interface (UEFI).

Learn more at <http://www.hpe.com/servers/uefi>.

#### Intelligent Provisioning

Hassle free server and OS provisioning for 1 or more servers with Intelligent Provisioning.

Learn more at <http://www.hpe.com/servers/intelligentprovisioning>.

#### 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 <http://www.hpe.com/info/restfulapi>

---

### 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: <http://www.hpe.com/servers/ahsv>.

#### 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).

#### 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, and 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: <http://www.hpe.com/info/ilo/mobileapp>.

#### 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 <http://www.hpe.com/info/resttool>.

#### 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 <http://www.hpe.com/servers/powershell>.

#### 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 <http://www.hpe.com/info/oneview>.



---

## Standard Features

### 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 <http://www.hpe.com/info/hpesim>.

---

### Security

- UEFI Secure Boot and Secure Start support
  - Tamper-free updates – components digitally signed and verified
  - Immutable Silicon Root of Trust
  - Ability to rollback firmware
  - Secure erase of NAND/User data
  - Common Criteria certification
  - Configurable for PCI DSS compliance
  - Embedded TPM (Trusted Platform Module) 2.0
  - Advanced Encryption Standard (AES) and Triple Data Encryption Standard (3DES) on browser
  - Secure Recovery – recover critical firmware to known good state on detection of compromised firmware
- 

### HPE Trusted Platform Module

HPE Trusted Platform Module 2.0 is embedded on the server motherboard and can be enabled and disabled using the BIOS.

**Notes:**The TPM (Trusted Platform Module) is a microcontroller chip that can securely store artifacts used to authenticate the server platform. These artifacts can include passwords, certificates and encryption keys.

---

### 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.

**Notes:** 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/>.

---



---

## Optional Features

### Server Management

#### 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 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, and Gen10 Plus servers.

To learn more visit <http://www.hpe.com/info/oneview>.

#### 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>

---

### Accelerator and GPGPU Information

Hewlett Packard Enterprise supports various accelerators on select HPE ProLiant servers to support different workloads. The accelerators enable seamless integration of GPU computing with HPE ProLiant servers for high-performance computing, large data center graphics, deep learning and virtual desktop deployments. These accelerators deliver all of the standard benefits of GPU computing while enabling maximum reliability and tight integration with system monitoring and management tools such as HPE Insight Cluster Management Utility.

---

### 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. <https://h22174.www2.hpe.com/SimplifiedConfig/Welcome#>

---

### Rack and Power Infrastructure

Learn more about HPE Racks, KVM, PDUs and UPSs at [HPE Rack and Power Infrastructure](#).

---



---

## Service and Support

### HPE Pointnext - Service and Support

**Get the most from your HPE Products.** Get the expertise you need at every step of your IT journey with **HPE Pointnext Services**. We help you lower your risks and overall costs using automation and methodologies that have been tested and refined by HPE experts through thousands of deployments globally. HPE Pointnext **Advisory Services** focus on your business outcomes and goals, partnering with you to design your transformation and build a roadmap tuned to your unique challenges. Our **Professional** and **Operational Services** 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** brings the cloud experience directly to your apps and data wherever they are—the edge, colocations, or your data center. It delivers cloud services for on-premises IT infrastructure specifically tailored to your most demanding workloads. With a pay-per-use, scalable, point-and-click self-service experience that is managed for you, HPE GreenLake accelerates digital transformation in a distributed, edge-to-cloud world.

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

---

### Recommended Services

#### HPE Pointnext Tech Care

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

<https://www.hpe.com/h20195/v2/Getdocument.aspx?docname=a00108652enw>

---

#### HPE Datacenter Care

**HPE Datacenter Care** helps customers 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.

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. Datacenter Care is available as both tailored statement of work and as a packaged service for 3, 4, and 5 year terms.

<https://www.hpe.com/us/en/services/datacenter-hybrid-services.html>



---

## 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://h20195.www2.hpe.com/v2/Getdocument.aspx?docname=5981-9356enw>

#### 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).

#### 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 MSAxxx3PAR 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. <http://www.hpe.com/ww/learn>

---



---

## 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.

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

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

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

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

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

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

---



## Configuration Information

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.

- Factory Integrated Models must start with a CTO Server.
- FIO indicates that this option is only available as a factory installable option.
- Some options may not be integrated at the factory. Contact your local sales representative for additional information.

### Step 1: Base Configuration

<b>CTO Server</b>	HPE ProLiant DL110 Gen10 Plus Front Cabled Telco Configure-to-order Server
<b>SKU Number</b>	P39478-B21
<b>Processor</b>	Not included as standard; 1 supported
<b>Heatsink</b>	Included
<b>DIMM Slots</b>	8-DIMM slots
<b>Storage Controller</b>	Embedded SW RAID with Intel VROC SATA for HPE, choice of Intel VROC NVMe for HPE
<b>PCIe</b>	X16/x16 FHHL riser included
<b>Fans</b>	7- hot plug
<b>Management</b>	HPE iLO with Intelligent Provisioning (standard), iLO Advances and OneView (optional)
<b>USB</b>	iLO Front Service Port
<b>Rail Kit</b>	N/A- Mounting via front ears only

### Step 2: Choose Required Options

Please select one processor required below.

**Notes:** Processors with 185W TDP or higher will require DIMM Blank kit (P43725-B21) to be selected when all DIMM slots are not fully populated

#### Step 2a: Choose Processors

##### Processor Option Kits

##### 3<sup>rd</sup> Generation Intel Xeon-Gold

**Notes:** All SKUs below ship with processor only. Fans and heatsink are included in the CTO server.

Intel Xeon-Gold 6338N 2.2GHz 32-core 185W Processor for HPE	P37603-B21
Intel Xeon-Gold 6330N 2.2GHz 28-core 165W Processor for HPE	P37604-B21
Intel Xeon-Gold 6330 2.0GHz 28-core 205W Processor for HPE	P36927-B21
Intel Xeon-Gold 6314U 2.3GHz 32-core 205W Processor for HPE	P37610-B21

#### 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:

<https://psnow.ext.hpe.com/doc/a50003886enw>

##### Notes:

- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- Quantity of memory DIMMs selected must be 1, 2, 4, 6, or 8
- For additional information, please see the [HPE DDR4 SmartMemory QuickSpecs](#)

##### Registered DIMMs (RDIMMs)

HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P07525-B21
HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06031-B21
HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06029-B21
HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06033-B21
HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P40007-B21
HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit	P06035-B21

## Configuration Information

### Load Reduced DIMMs (LRDIMMs)

HPE 128GB (1x128GB) Quad Rank x4 DDR4-3200 CAS-22-22-22 Load Reduced Smart Memory Kit P06037-B21

### Step 2c: Choose Power Supplies

Select one or two power supplies from below.

#### HPE Flex Slot Power Supplies

HPE ProLiant DL110 Gen10 Plus 700W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit P43150-B21

**Notes:** [Reverse airflow to support front cabled design of DL110](#)

### Step 3: Choose Additional Factory Integratable Options

One of the following from each list may be selected if desired at time of factory integration

#### Factory Instructions and Server Settings

HPE NEBS-compliant FIO Trigger System Setting P40010-B21

HPE Legacy FIO Mode Setting 758959-B22

**Notes:** [Selecting this option will change the default UEFI BIOS setting into Legacy BIOS setting](#)

HPE iLO Common Password FIO Setting P08040-B21

#### Notes:

- Replaces iLO default randomized password by an HPE defined common password. HPE highly recommends changing this password immediately after the initial onboarding process.
- Customers who want to choose their own custom iLO default password should use the [HPE Factory Express Integration Services](#)

#### Software RAID- Intel VROC License

Intel Virtual RAID on CPU Premium FIO Software for HPE R7J57A

#### Notes:

- [Active health monitoring of NVMe M.2 drives requires use of \*\*SMART tools\*\*](#)
- [Requires UEFI, not supported on Legacy Mode](#)

#### HPE Converged Infrastructure Management Software

HPE OneView for ProLiant DL Server including 3yr 24x7 Support FIO Bundle Physical 1-server LTU E5Y43A

HPE OneView w/o iLO including 3yr 24x7 Support 1-server FIO LTU P8B31A

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





## Core Options

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

#### Risers

HPE ProLiant DL110 Gen10 Plus x16 FHHL PCIe Secondary FIO Riser Kit P41828-B21

**Notes:** Factory integrated only. Enables slot 3.

HPE ProLiant DL110 Gen10 Plus x16 FHHL PCIe Secondary Riser Kit P41827-B21

**Notes:** For field upgrade only

#### DDR4 DIMM Blank

HPE ProLiant DL110 Gen10 Plus DDR4 DIMM FIO Blank Kit P43725-B21

**Notes:** Required when processor with 185W or greater TDP is selected and all DIMM slots are not fully populated

### Memory Selection

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

<https://psnow.ext.hpe.com/doc/a50003886enw>

#### Notes:

- The maximum memory speed and capacity is a function of the memory type, memory configuration, and processor model.
- Quantity of memory DIMMs selected must be 1, 2, 4, 6, or 8
- For additional information, please see the [HPE DDR4 SmartMemory QuickSpecs](#)

#### Registered DIMMs (RDIMMs)

HPE 8GB (1x8GB) Single Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P07525-B21

HPE 16GB (1x16GB) Dual Rank x8 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06031-B21

HPE 16GB (1x16GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06029-B21

HPE 32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06033-B21

HPE 32GB (1x32GB) Single Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P40007-B21

HPE 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit P06035-B21

#### Load Reduced DIMMs (LRDIMMs)

HPE 128GB (1x128GB) Quad Rank x4 DDR4-3200 CAS-22-22-22 Load Reduced Smart Memory Kit P06037-B21

### Intel VROC NVMe for HPE

Intel VROC for HPE ProLiant Gen10 Plus with HPE SSDs (E-RTU) R7J57AAE

#### Notes:

- Active health monitoring of NVMe M.2 drives requires use of **SMART tools**
- Requires UEFI, not supported on Legacy Mode
- Similar to Intel VROC NVMe FIO SW for HPE (R7J57A), but intended for field deployments

### HPE Solid State Drives

For SSD selection guidance, please visit <https://ssd.hpe.com/>

#### Read Intensive - 6G SATA - M.2 - Solid State Media (2280 type)

HPE 240GB SATA 6G Read Intensive M.2 2280 5300B SSD P19888-B21

HPE 480GB SATA 6G Read Intensive M.2 2280 5300P SSD P19890-B21

HPE 960GB SATA 6G Read Intensive M.2 2280 5300P SSD P19892-B21

#### Read Intensive-PCIe/NVMe-M.2- Solid State Media (22110 type)

HPE 480GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD P40513-B21

HPE 960GB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD P40514-B21

HPE 1.92TB NVMe Gen3 Mainstream Performance Read Intensive M.2 Multi Vendor SSD P40515-B21



## Core Options

### HPE Networking

**Notes:** The DL110 Gen10 Plus CTO chassis does not come with embedded networking. A PCIe or OCP networking adapter must be selected.

#### 25 Gigabit Ethernet adapters

Intel E810-XXVDA4 Ethernet 10/25Gb 4-port SFP28 Adapter for HPE	P08458-B21
Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P08443-B21
Mellanox MCX512F-ACHT Ethernet 10/25Gb 2-port SFP28 Adapter for HPE	P13188-B21

#### 100 Gigabit Ethernet Adapters

Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 Adapter for HPE	P21112-B21
Mellanox MCX623106AS-CDAT Ethernet 100Gb 2-port QSFP56 Adapter for HPE	P25960-B21

#### 200 Gigabit Ethernet Adapters

Mellanox MCX623105AS-VDAT Ethernet 200Gb 1-port QSFP56 Adapter for HPE	P10180-B21
--	------------

#### OCP adapters

Intel E810-XXVDA2 Ethernet 10/25Gb 2-port SFP28 OCP3 Adapter for HPE	P10106-B21
Intel E810-CQDA2 Ethernet 100Gb 2-port QSFP28 OCP3 Adapter for HPE	P22767-B21

### HPE Power Supplies

HPE ProLiant DL110 Gen10 Plus 700W Flex Slot -48VDC Hot Plug Low Halogen Power Supply Kit	P43150-B21
---	------------

**Notes:** Reverse airflow to support front cabled design of DL110



## Additional Options

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 Converged Infrastructure Management Software

HPE OneView including 3yr 24x7 Support Physical 1-server LTU	E5Y34A
HPE OneView including 3yr 24x7 Support Flexible Quantity E-LTU	E5Y35AAE
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 Flexible Quantity E-LTU	P8B26AAE

**Notes:** Licenses ship without media. The HPE OneView Media Kit can be ordered separately, or can be [downloaded](#).

### HPE Support Services

#### Tech Care

HPE 3 Year Tech Care Essential ProLiant DL110 Gen10 Plus HW Service	H28RLE
HPE 3 Year Tech Care Essential wDMR ProLiant DL110 Gen10 Plus HW Service	H28RME
HPE 5 Year Tech Care Essential ProLiant DL110 Gen10 Plus HW Service	H28TME
HPE 5 Year Tech Care Essential wDMR ProLiant DL110 Gen10 Plus HW Service	H28SQE

### HPE Racks

**Notes:** DL110 does not support factory integration into racks for shipment due to DL110 mounting design.

- 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.



## Additional Options

### HPE Uninterruptible Power Systems (UPS)

- To learn more, please visit the [HPE Uninterruptible Power Systems \(UPS\)](#) web page.
  - Please see the [HPE DirectFlow Three Phase Uninterruptible Power System QuickSpecs](#) 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.
- 

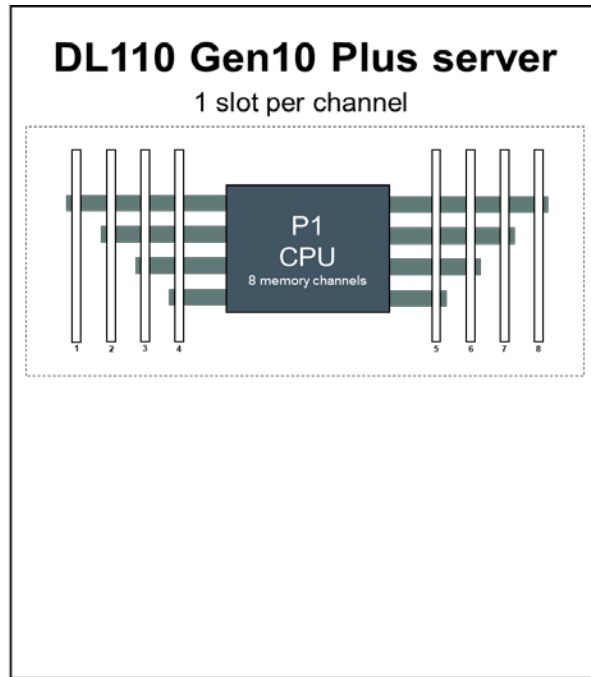
### HPE Rack Options

- Please see the [HPE KVM Switches web page](#) for information on these products and their specifications.
- 



## Memory

### Memory Population guidelines



**DL110 Gen10 Plus CPU  
DIMM population order**

<b>1 DIMM</b>		2						
<b>2 DIMMs</b>		2					7	
<b>4 DIMMs</b>		2		4	5		7	
<b>6 DIMMs</b>	1	2		4	5		7	8
<b>8 DIMMs</b>	1	2	3	4	5	6	7	8

**Notes:** Configurations not listed are not supported and if populated, the server may result in non-optimal memory performance or other unexpected behavior

#### 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.
- Mixing of DIMM types (UDIMM, RDIMM, and LRDIMM) is not supported.
- 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, and the number and model of installed processors qualified on the platform.
- For details on the HPE Server Memory Options Population Rules, visit: <https://psnow.ext.hpe.com/doc/a50003886enw>
- To realize the performance memory capabilities listed in this document, HPE DDR4 SmartMemory is required. For additional information, please see the [HPE DDR4 SmartMemory QuickSpecs](#)



## Technical Specifications

### System Unit

- **Dimensions (Height x Width x Depth)**
  - 4.29 x 44.17 x 43.18 cm
  - 1.69 x 17.39 x 17 in

### Weight (approximate)

- **Minimum:** CTO server with 1x processor, 1x primary riser, 1x Memory DIMM, 1x M.2 SSD, and 1x Power Supply
  - 9.62 kg / 21.21 lbs
- **Maximum:** CTO server with all components installed: 1x processor, 2x risers, 8x Memory DIMMs, 4x M.2 SSDs, and 2x Power Supplies
  - 11.4 kg / 25.4 lbs

---

### Input Requirements (per power supply)

#### Rated Line Voltage

- For 700W (-48VDC): -40 Vdc to -72 Vdc

---

### Relative Humidity (non-condensing)

- **Operating**  
8% to 90% - Relative humidity (Rh), 28°C maximum wet bulb temperature, non-condensing.
- **Non-operating**  
5 to 95% relative humidity (Rh), 38.7°C (101.7°F) maximum wet bulb temperature, non-condensing.

---

### System Inlet Temperature

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

System performance during standard operating support may be reduced if operating with a fan fault or above 30°C (86°F).

- **Extended Ambient Operating 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>

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).



---

## Technical Specifications

### Altitude

- **Operating**  
3050 m (10,000 ft). This value may be limited by the type and number of options installed. Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
  - **Non-operating**  
9144 m (30,000 ft). Maximum allowable altitude change rate is 457 m/min (1500 ft/min).
- 

### Emissions Classification (EMC) – 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>

---

### 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
26-Apr-2021	Version 1	New	New Quick Specs





## Copyright

Make the right purchase decision.  
Contact our presales specialists.



Chat



Email



Call



Get updates



© Copyright 2021 Hewlett Packard Enterprise Development LP. The information contained herein is subject to change without notice. The only warranties for Hewlett Packard Enterprise products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. Hewlett Packard Enterprise shall not be liable for technical or editorial errors or omissions contained herein.

Intel® and Xeon® are registered trademarks of Intel Corporation in the U.S. and other countries. Microsoft®, Windows®, and Windows Server® are U.S. registered trademarks of the Microsoft group of companies.

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

a50002566enw - 16721 - Worldwide - V1 - 26-April-2021