



# HPE PROLIANT XL225N GEN10 PLUS 1U NODE CONFIGURE-TO-ORDER SERVER (P21163-B21)

## Apollo 2000 System

### WHAT'S NEW

- Flexible infrastructure offers multiple storage options, eight memory channels, and 3200 MT/s memory, PCIe Gen4, and OS boot with optional dual NVMe M.2 storage on dedicated riser.
- Support for 3rd Generation Intel® Xeon® Scalable processors up to 40C and 270W in the HPE ProLiant XL220n and XL290n Gen10 Plus server.
- Support for the full stack of 2nd and 3rd Generation AMD EPYC™ 7000 Series processors which include the 7Fx2 models and 7003 processors with 3D V-Cache, codenamed "Milan-X."
- Comprehensive manageability including an extensive set of tools for node-to-rack management.
- Direct Liquid Cooling (DLC) option fully integrated, installed, and supported. Plug-n-Play ready to facilitate connection. Unlocks top bin SKUs with increased data center efficiency and power density.

### OVERVIEW

Do you need a density-optimized, scalable system to meet the changing demands of your digital transformation journey? The HPE Apollo 2000 Gen10 Plus System is a shared infrastructure chassis with flexible support for up to 4 ProLiant XL225n Gen10+ servers (AMD) or up to 4 ProLiant XL220n Gen10+ servers (Intel®) or 2 XL290n Gen10+ servers (Intel), helping you increase your rack space density. Server nodes can be serviced without impacting operation of other nodes in the same chassis for increased server up-time. It delivers the flexibility to tailor the system to the precise needs of your demanding high-performance computing (HPC) workloads with the right compute, flexible I/O, and storage options. The system can be deployed with a single server, leaving room to scale as customer's needs grow, bringing the power of supercomputing to data centers of any size. It is ideal for HPC applications in industry verticals like manufacturing, oil and gas, life sciences, and financial services.

### FEATURES

#### System Performance and Improved Efficiency

The HPE Apollo 2000 Gen10 Plus System delivers four times more [1] density than 1U servers - four 1U servers in a 2U chassis.

- The HPE Apollo n2800 Gen10 Plus Chassis, a 24 SFF SAS zoning chassis that allows for allocating of storage devices to specific nodes.

Expanded power capability with 3000W power supplies that deliver N+N power availability.

High-speed infrastructure built on modern industry standard components provides high performance to accelerate application.

Unlock top-bin SKUs and increase your power density with a DLC system that is plug and play at your data center. The system comes pre-filled and ready to connect to facility water. DLC is fully integrated, installed and supported. Choose from either CPU only or CPU/memory cooling options.

The optional dual M.2 storage can be used for OS boot without utilizing a PCIe slot or storage bay. When paired with the HPE Apollo n2400 Gen10 Plus diskless chassis, this is an effective compute solution.

### **Comprehensive Server Security and Management**

The HPE Apollo 2000 Gen10 Plus offers industry standard server with firmware anchored into silicon with HPE iLO 5 and Silicon Root of Trust. The AMD Secure Processor, a dedicated security processor embedded in the AMD EPYC system on a chip (SoC), ties into the Silicon Root of Trust.

Secure recovery restores firmware to last known good state if code is compromised to limit system disruption.

Firmware runtime validation provides a daily firmware check and alert of compromised code so that issues are contained rather than impacting the system.

HPE Performance Cluster Manager is a fully integrated system management software offering administrators every functionality they need to manage their clusters.

Shared infrastructure enables more efficient system management.

### **Flexible Scale-Out Building Blocks**

The HPE Apollo 2000 Gen10 Plus System allows you to scale to many servers for expanding capacity to meet evolving needs.

Provides storage and I/O flexibility to help customize for performance or economy to get to the right compute for the right workload.

Multiple storage chassis options from 0 to 24 SFF SAS/SATA drives and support for NVMe drives. A unique 24 SFF SAS zoning chassis (n2800) that allows allocations of drives to specific nodes.

### **Right Compute and Storage for Every Workload**

The HPE Apollo 2000 Gen10 Plus Server nodes support up to 16 DIMMS per server, multiple networking options including high-speed fabrics, and two PCIe Gen4 slots.

The HPE Apollo n2400 Chassis is a drive-less option that brings efficiency. It is ideal for supporting top bin processors for those applications which don't require storage. It supports five single rotor fans, has an integrated RCM [2] option, and supports up to two power supplies.

The HPE Apollo n2600 Chassis offers multiple backplane options including 0 and 8 SFF SAS/SATA/NVMe for a variety of HPC applications and 24 SFF SAS/SATA drives. Each chassis supports 5 single rotor fans, has an integrated RCM [2] option and supports up to two power supplies.

The HPE Apollo n2800 Chassis offers the ability to flexibly allocate the 24 SFF SAS drive among the different nodes. Each chassis supports 5 single rotor fans, has an integrated RCM [2] option and supports up to two power supplies.



**Technical specifications****HPE ProLiant XL225n Gen10 Plus 1U Node  
Configure-to-order Server**

<b>Product Number</b>	P21163-B21
<b>Memory slots</b>	16 DIMM/server, 8 DIMM/socket
<b>Processor core available</b>	Up to 64 core processor
<b>Processor Name</b>	Up to two 2nd Generation AMD EPYC™ 7000 Series, +240W supported
<b>Processor number</b>	Up to 2 processors per node
<b>Memory, standard</b>	16 DIMM/server, 8 DIMM/socket 2 TB maximum depending on configuration, supports up to 3200 MT/s
<b>Expansion slots</b>	2 x 16 PCIe Gen4, 1 x OCP3.0, 1 x Internal USB
<b>Network controller</b>	HPE iLO Remote Management Network Port shared iLO/1GbE LOM
<b>Form factor</b>	Half-width 1U server tray
<b>Warranty</b>	3/3/2003



For additional technical information, available models and options, please reference the [QuickSpecs](#)

## HPE POINTNEXT SERVICES

[HPE Pointnext Services](#) brings together technology and expertise to help you drive your business forward and prepare for whatever is next.

### Operational Services from HPE Pointnext Services

[HPE Pointnext Tech Care](#) provides fast access to product-specific experts, an AI-driven digital experience, and general technical guidance to help enable constant innovation. We have reimagined IT support from the ground up to deliver faster answers and greater value. By continuously searching for better ways to do things—as opposed to just fixing things that break—HPE Pointnext Tech Care helps you focus on achieving your business goals.

[HPE Pointnext Complete Care](#) is a modular, edge-to-cloud IT environment service that provides a holistic approach to optimizing your entire IT environment, and achieving agreed upon IT outcomes and business goals through a personalized and customer-centric experience. All delivered by an assigned team of HPE Pointnext Services experts.

**HPE Integration and Performance Services** help you customize your experience at any stage of your product lifecycle with a menu of services based on individual needs, workloads, and technologies.

- Advise, design, and transform
- Deploy
- Integrate and migrate
- Operate and improve
- Financial Services
- Greenlake Management Services
- Retire and sanitize
- IT Training and personal development

### Other related services

[HPE Education Services](#) delivers a comprehensive range of services to support your people as they expand their skills required for a digital transformation. Consult your HPE Sales Representative or Authorized Channel Partner of choice for any additional questions and support options.

**Defective Media Retention** is optional and allows you to retain Disk or eligible SSD/Flash Drives replaced by HPE due to malfunction.

## HPE GREENLAKE

[HPE GreenLake](#) is HPE's market-leading IT as-a-Service offering that brings the cloud experience to apps and data everywhere – data centers, multi-clouds, and edges – with one unified operating model. HPE GreenLake delivers public cloud services and infrastructure for workloads on premises, fully managed in a pay per use model.

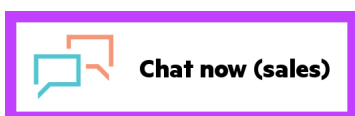
If you are looking for more services, like **IT financing solutions**, please [explore them here](#).

[1] 2U HPE Apollo 2000 Gen10 Plus System chassis can accommodate up to 4 nodes per 2U versus 1 node in 2U with traditional rack mount servers. It can also support up to 2x2U nodes (XL290n) or a mixture of 1x 2U node (XL290) with 2x 1U nodes (XL220n).

[2] Rack Consolidation Module - optional module that allows HPE iLO aggregation at the chassis level and also has the port for the HPE Advanced Power Manager. The RCM consists of two HPE iLO ports for redundancy. It can also be daisy chained to connect to a top of the rack (TOR) management switches.

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