



The ideal balance of functionality and affordability

HP ProLiant ML310e Gen8 Server

The HP ProLiant ML310e Gen8 Server is the latest addition to the ProLiant Gen8 portfolio of servers. It is powered by the HP ProActive Insight architecture that provides a wide range of embedded automation and intelligent management features that make all ProLiant Gen8 servers the world's most self-sufficient servers. This new server is ideal for small- to medium-sized businesses (SMBs) that have limited or no in-house IT resources, and are looking for robust, cost-effective servers. With features such as HP Intelligent Provisioning, HP Smart Update, HP SmartMemory, HP SmartDrive, and HP Integrated Lights-Out 4 (HP iLO 4), the ProLiant ML310e Gen8 Server scores high on self-manageability. It intelligently accommodates your changing business needs, providing you the peace of mind to focus on growing your business.

A perfect combination of cost-effectiveness, functionality, and scalability, the ProLiant ML310e Gen8 Server redefines your server experience. The new ProLiant family has over 150 design innovations to its credit, helping you increase your productivity and confidence during setup, upgrade, and maintenance. HP iLO 4 enables remote server management, facilitating easier manageability at reducing costs. Integrated lifecycle automation features such as HP Intelligent Provisioning and HP Active Health System help bring your systems online faster and provide automated monitoring, self-diagnosis, and alerting.

Designed for and rigorously tested with server applications across demanding IT environments such as yours, the ProLiant ML310e Gen8 Server is packaged in a microATX tower chassis that makes common server hardware configuration changes simple and flexible. The ProLiant ML310e Gen8 Server supports the latest Intel® Xeon® E3, Intel Core™ i3, and Pentium® G series processors along with PCI Express Gen3 slots. With DDR3 memory operating at up to 1600 MHz, you get superior system performance and high memory capacity of up to 32 GB. Configuration options for non-hot-plug or hot-plug hard drives, and nonredundant or redundant power supplies—plus a choice from three drive cages—provide you the flexibility to tailor the server for your specific application requirements.

Figure 1. HP ProLiant ML310e Gen8 Server: essential availability and expansion in a one-processor tower server



**HP ProLiant ML310e Gen8
8 SFF model with locking bezel**

**HP ProLiant ML310e Gen8
4 Hot-plug LFF model**

What's new?

- Support up to 4 PCI Express 3.0 and Gen2 I/O slots
- Superior memory capacity and high performance
- 50 percent increase in storage capacity (up to 12 TB compared to 8 TB in previous generations)
- Now standard with HP iLO 4 for enhanced manageability and reduced operational costs

The ProLiant ML310e Gen8 Server is available in three different model configurations:

- Entry model
- Base model
- Performance model (ENERGY STAR®¹)

¹ The HP ProLiant ML310e Gen8 Server offers high ENERGY STAR ratings (as high as up to 92 percent Gold, in terms of power and cooling) as part of one of the most energy-efficient x86 server portfolios in the industry.

Here's a basic side-by-side comparison of the three models:

Table 1. Comparison of entry, base, and performance models of HP ProLiant ML310e Gen8 Servers

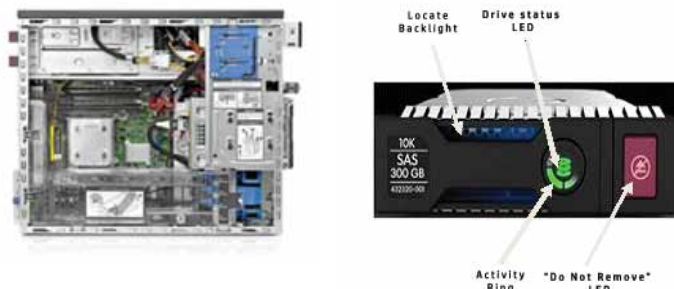
Feature	Entry model	Base model	Performance model
ENERGY STAR	N/A	N/A	Yes
Processor model	Intel Core i3-3220	Intel Xeon E3-1220v2	Intel Xeon E3-1240v2
Processor (up to 1)	3.3 GHz/65 W	3.1 GHz/69 W	3.4 GHz/69 W
Processor cores	2	4	4
Memory	2 GB UDIMM (1x2 GB)	2 GB UDIMM (1x2 GB)	4 GB UDIMM (1x4 GB)
Drive	4 Non-hot-plug LFF Drive Cage 1x500 GB LFF HDD	4 Hot-plug LFF Drive Cage	4 Hot-plug LFF Drive Cage
Array controller	B120i	B120i	B120i
Power supply (1+1 redundant)	350 W Non-hot-plug standard	1x460 W Hot-plug standard	1x460 W Hot-plug standard
DVD-ROM or DVD-RW	DVD-ROM	DVD-ROM	DVD-RW

What does the ProLiant ML310e Gen8 Server do for you?

It grows with your business and goes the extra mile. The ProLiant ML310e Gen8 Server comes with an HDD capacity up to 12 TB of internal storage—with up to eight small form factor (SFF) or four large form factor (LFF) configurations. This provides you the flexibility to configure your server to suit the needs of your growing business. The ENERGY STAR models also enable power-efficient configurations.

- It provides up to 32 GB 1600 MHz DDR3 memory, which aids configuration.
- Optional redundant power supplies provide enhanced dependability and assurance.
- HDD capacity up to 12 TB of internal storage, and up to eight SFF or four LFF configurations, allow plenty of room for your business data growth.
- Four PCI Express slots, including two PCI Express Gen8 slots, result in higher I/O performance.

Figure 2. HP ProLiant ML310e Gen8 Server: flexible configurations and easy serviceability, enabled by tool-less access to all customer serviceable system components



Superior user experience that achieves efficiencies and reduces downtime

The ProLiant ML310e Gen8 Server includes user-inspired features that anticipate needs and eradicate common issues that result in downtime.

- HP iLO 4 provides agentless hardware monitoring and alerting capabilities that start working the moment a power cord and an Ethernet cable are connected to the server.
- HP Active Health System monitors and records changes in the server hardware and system configuration 24x7, to diagnose problems before system failures occur.
- HP Intelligent Provisioning eliminates manual steps to enable faster server deployment and configuration. HP Smart Update Manager dramatically reduces downtime associated with firmware and software updates.
- HP SmartDrive can predict a drive failure and proactively rebuild from a spare, delivering continuous data protection. Additionally, the “Do Not Remove” indicator prevents failures due to accidental or premature removal of drives while they are processing. The new HP SmartDrive carrier offers ease of management, enhanced capacity, and reduced serviceability errors.
- Easy tool-less access to all customer serviceable components enables easy serviceability.

High efficiency for low cost of operation

The ProLiant ML310e Gen8 Server includes features that monitor and significantly improve energy usage.

- The ProLiant ML310e Gen8 Server brings with it support for high-efficiency HP Common Slot Gold power supply—helping you save up to 92 percent power—along with optional hot-plug and redundant power supply.
- First 3D array of temperature sensors (part of HP Thermal Discovery Services) helps precisely control server fans to direct cooling, thereby reducing unnecessary fan power.
- The ENERGY STAR-compliant configurations of the ProLiant ML310e Gen8 Server illustrate the HP commitment to helping customers conserve energy and save money, making HP the top technology company in the 50 Best Global Green Brands 2012.²

² Source: “Best Global Green Brands 2012,” Interbrand, 2012.

Table 2. Technical specifications of the HP ProLiant ML310e Gen8 Server

Drive description	(4) Non-hot-plug LFF SAS/SATA (4) Hot-plug LFF SAS/SATA (8) Hot-plug SFF SAS/SATA/SSD
Supported drives	Non-hot-plug 3.5-inch SATA Non-hot-plug 3.5-inch SAS Hot-plug 3.5-inch SAS Hot-plug 3.5-inch SATA Hot-plug 2.5-inch SAS Hot-plug 2.5-inch SATA Hot-plug SFF 2.5-inch SSD
Processor cache	8 MB L3 3 MB L3 2 MB L3
Processor family	Intel Xeon E3-1200v2 product family Intel Core i3 3220 Intel Pentium Intel Celeron®
Number of processors	1
Processor cores available	4 or 2
Maximum processor speed	3.6 GHz
Memory slots	4 DIMM slots
Memory max	32 GB
Memory type	PC3-12800E UDIMMs DDR3
Memory protection features	Unbuffered ECC ECC
Network controller	(1) 1 Gb 330i Ethernet adapter 2 ports
Storage controllers	(1) HP Smart Array B120i SATA RAID
Expansion slots	4
Management	HP iLO 4 Management Engine, Insight Control
Form factor chassis	Tower
System fans features	2 system fans ship standard; non-hot-plug, nonredundant
Power supply type	Redundant optional
OS support	hp.com/go/ossupport
Warranty standard statement	Global limited warranty
Warranty (parts-labor-onsite)	1-year parts, 1-year labor, 1-year onsite (worldwide) 3-year parts, 1-year labor, 1-year onsite (Brazil)
QuickSpecs URL	http://h18000.www1.hp.com/products/quickspecs/14339_div/14339_div.pdf

HP ProLiant Gen8 servers: the added advantage

HP ProLiant Gen8 servers offer innovations that jump-start business productivity and reduce problem resolution times. Here are some of the feature highlights and corresponding benefits.

Table 3. Highlights of HP ProLiant Gen8 servers

Features	Benefits
One iLO version	Consistent, simple, and easy to manage
HP Smart Storage	More internal storage, resulting in better performance
Embedded provisioning	Simplified server startup, thereby saving time
HP Insight Remote Support	Automated support calls, resulting in more efficiency
HP Active Health System	Faster time to resolution, resulting in lesser downtime
Service pack for HP ProLiant	Predictable, pretested releases, saving time and costs, and reducing risks
Agentless management	Embedded technology, resulting in better performance, and better management insights
HP Remote Access Service and tool-less access to system components	Improved serviceability and access

HP Qualified Options

HP qualification processes screen and test all HP options for the highest quality and performance. For a comprehensive list of all HP supported options, refer to the [HP ProLiant ML310e Gen8 QuickSpecs](#).

HP Factory Express

HP Factory Express provides customization and deployment services along with your storage and server purchases. You can customize hardware to your exact specifications in the factory—helping speed deployment. Visit hp.com/go/factoryexpress.

Customer technical training

We offer a variety of training courses on storage software, networking, archiving, and disk storage systems. Our classes are available in many delivery modalities—from traditional instructor-led courses at one of our 80 training centers worldwide to online and onsite training. Visit hp.com/learn/storage.

HP Financial Services

HP Financial Services provides innovative financing and financial asset management programs to help you acquire, manage, and ultimately retire your HP solutions. Visit hp.com/go/hpfinancialservices.

HP Services

HP Technology Services offers a set of consultancy, deployment, and support solutions designed to meet the lifecycle needs of your IT environments.

Foundation Care: These services deliver scalable support packages for HP industry-standard servers and software. You can choose the type and level of service that is most suitable for your business needs.

HP Collaborative Support: New to this portfolio is HP Collaborative Support. This service offers a single point of contact for server problem diagnosis, hardware problem resolution, and basic software problem diagnosis, fault isolation, and resolution if available to HP. In case the issue is with HP or a supported third-party software product and cannot be resolved by applying known fixes, HP can contact the third-party vendor and create a problem incident on your behalf.

Proactive Care or Critical Advantage: If you are running business-critical environments, you can choose Proactive Care or Critical Advantage. These services help you deliver higher levels of application availability through proactive service management.

All service options include HP Insight Remote Support for secure remote monitoring, diagnosis, and problem resolution. The service options also include the HP Support Center facility to provide access to the information, tools, and experts required to support your HP business products.

For more information, visit hp.com/services/proliant.

Cost-effectiveness and functionality rolled into one

To know more about the server that grows with your business and goes the extra mile, visit hp.com/servers/ml310e-gen8.



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