HP ProLiant SL230s/SL250s Gen8 servers

Intelligent, purpose-built servers for the world's most extreme data centers

Data sheet

Computing at the frontier of the possible

The needs of hyperscale environments can be far more demanding than most enterprise data centers. Whether scaling out computing capacity to support massive amounts of online transactions or pushing the boundaries of super-computing, you need to meet the demanding requirements for density, serviceability, and configurability and reliably deliver quality of service at scale.

To meet those extreme demands, the all-new HP ProLiant SL230s and SL250s Gen8 servers are purpose-built to:

- **Double the density**—to help you save on infrastructure cost and ease space constraints in the data center
- **Enhance serviceability**—with nearly full front-access to drastically reduce the number of visits to the hot aisle as well as improve airflow with front cabling
- **Provide greater configurability**—to support additional options for GPUs, storage, and networking

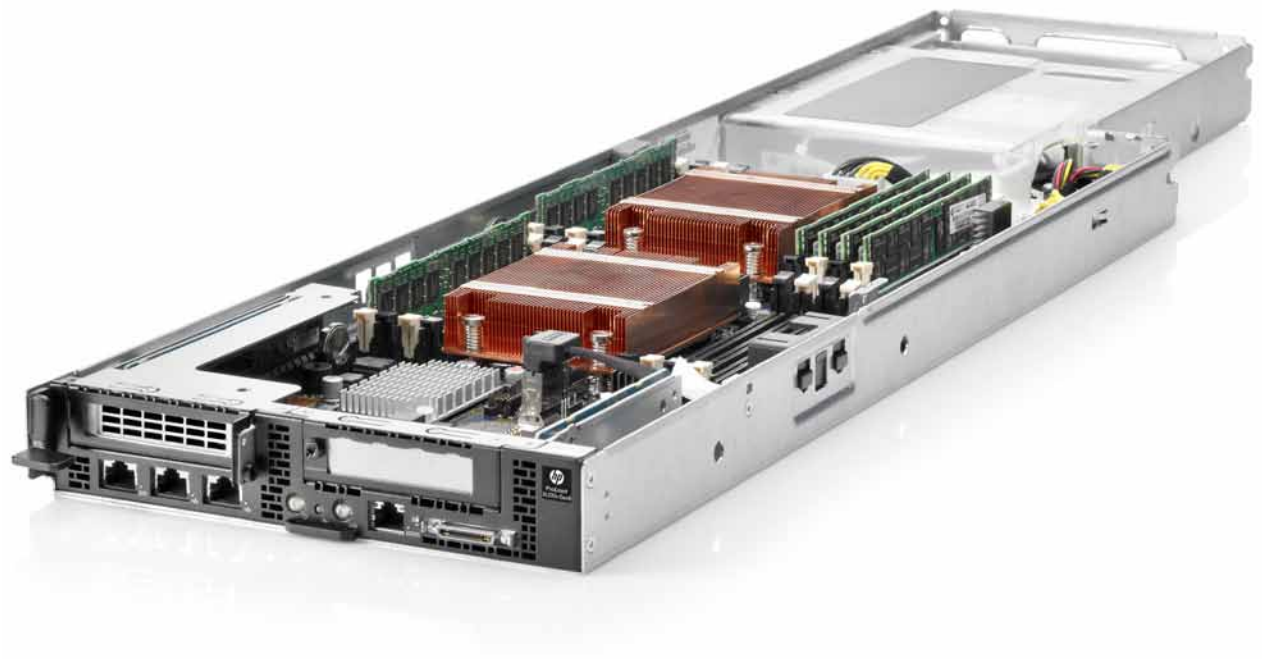
Advanced server technologies

HP ProLiant Gen8 servers feature the most advanced technologies. Higher densities enable server nodes to share power, cooling, and systems management capabilities to drive down operational expense.

HP ProLiant Gen8 servers also employ Active Insight architecture. This provides even greater levels of configurability for high-performance and scale-out deployments to help lower total cost of ownership.

More memory. Advanced automation.
HP exclusive Smart Memory technology provides a 25 percent increase in memory bandwidth to improve performance for certain applications. Further, it increases power efficiency by 10 percent over similar configurations in previous generations of servers.

Delivering on the promise of server lifecycle automation, HP ProLiant Gen8 servers feature the exclusive Active Health System that provides continuous, proactive monitoring for more than 1,600 system parameters to minimize downtime and with zero impact to application performance. In addition to its pre-failure alerting capabilities, Always-On Diagnostics mean that if you do have a failure, our time to resolution is five times faster in diagnosing the root cause.[1]



HP ProLiant SL230s Gen8
Maximum compute and I/O performance for dense HPC environments

HP ProLiant SL250s Gen8
Balanced CPU/GPU for extreme HPC applications

HP delivers innovation at any scale.
HP server technologies accelerate innovation with scalable performance, maximum efficiency, and Instant-On agility. That's why 31 percent of the Top 500 super-computer sites rely on HP servers.[2] We've also been recognized for deploying the world's greenest production super-computer at the Tokyo Institute of Technology.[3]

HP ProLiant SL230s Gen8

The HP ProLiant SL230s Gen8 server delivers a dense, high-performance solution in a 1U half-width tray focused on power efficiency and tailor-made configurability. Up to eight HP ProLiant SL230s Gen8 nodes in a 4U modular form factor can fit into the HP s6500 scalable system.

High performance compute, network flexibility, and a wide range of configurable options
- One PCIe x 16 LP slot for I/O expansion
- One FlexibleLOM networking slot to enable 1GbE, 10GbE, or InfiniBand options
- Integrated Lights-Out 4 (iLO4) management port for increased network security
- Support for two front hot-plug hard drive options

Shared infrastructure and focused serviceability
- Common slot power supplies
- Common slot fans with redundancy option kit
- Front side cabling for reduced service requirements in the rear of the chassis
- I/O accelerator option
- Local or remote manageability options

Lower total cost of ownership and capital expenditures
- Space-saving maximum density of eight nodes, 16 CPUs in 4U
- Shared power and cooling for an optimized and cost-saving solution
- Modular and common infrastructure for ease of change management
- Flexible networking options for future proofing enablement
- Dedicated iLO4 for powerful administration, monitoring, and control

HP ProLiant SL250s Gen8

The HP ProLiant SL250s Gen8 server delivers a balanced compute solution in a 2U half-width tray, focused on high-performance CPU or GPU computing. Up to four HP ProLiant SL250s Gen8 nodes in a 4U modular form factor fit into the HP s6500 scalable system.

High performance compute, network flexibility, and GPU optimization
- One PCIe x 8 LP slot for I/O expansion
- One FlexibleLOM networking slot to enable 1GbE, 10GbE, or InfiniBand options
- Up to three GPU enablement for a maximum of 12 GPUs in a 4U chassis
- Integrated Lights-Out 4 (iLO4) management port for increased network security
- Up to four front hot-plug hard drives and four internal SFF drives

Shared infrastructure and focused serviceability
- Common slot power supplies
- Common slot fans with redundancy option kit
- Front side cabling for reduced service requirements in the rear of the chassis
- Hot-plug hard drive support or internal non-hot-plug option kit
- Local or remote manageability options

Lower total cost of ownership and capital expenditures
- Space saving maximum density of up to four 2U nodes, eight CPUs, and 12 GPUs
- Shared power and cooling for an optimized and cost-saving solution
- Modular and common infrastructure for ease of change management
- Flexible networking options for future proofing enablement

	HP ProLiant SL 230s Gen8	HP ProLiant SL 250s Gen8
		
Drive description	6 SFF SAS/SATA/SSD and/or 2 LFF SAS/SATA and/or SFF **Customer must use the 2 hot-plug drive kit.**	8 SFF SAS/SATA **Customer must use the 4-SFF non-hot-plug drive kit.**
Supported drives	Hot plug 2.5-inch SAS Non-hot plug SFF SAS Non-hot plug 3.5-inch SATA Non-hot plug SSD Non-hot plug 3.5-inch SAS	Hot plug 2.5-inch SAS Hot plug 2.5-inch SATA Hot plug SFF SSD Non-hot plug SFF SAS Non-hot plug SFF SATA
Processor cache	20 MB L3 10 MB L3 5 MB L3	20 MB L3 10 MB L3 5 MB L3
Processor family	Intel® Xeon® E5-2600 family	Intel® Xeon® E5-2600 family
Processor number	1 or 2	1 or 2 One CPU can be utilized so long as no GPU is implemented. 2 CPUs must be used when using a GPU.
Processor core available	2, 4, 6, or 8	2, 4, 6, or 8
Processor speed	3.0 GHz	3.0 GHz
Memory slots	16 DIMM slots maximum	16 DIMM slots maximum
Memory maximum	512 GB	512 GB
Memory type	DDR3 RDIMM or UDIMM	DDR3 RDIMM or UDIMM
Memory protection features	EEC	ECC
Network controller	One 1GbE NC361i ports	One 1GbE NC361i ports
Storage controllers	One LSI 1068 SAS	One LSI 1068 SAS
Expansion slots	One PCIs x16 LP slot maximum	One PCIs x16 LP slot maximum
Remote management software	iLO Standard and HP Systems Insight Manager (SIM)	iLO Standard and HP Systems Insight Manager (SIM)
Form factor chassis	Rack	Rack
System fans features	Hot plug	Hot plug
Power supply type	Standard	Standard
Graphic card	Integrated Matrox G200 video standard	Integrated Matrox G200 video standard
Full configuration form factor	1U, half-width	2U, half-width
Warranty standard statement	Limited Lifetime Warranty	Limited Lifetime Warranty
Warranty (parts-labor-onsite)	1/1/1	1/1/1

HP deploys the fastest campus super-computer

Purdue's Carter Supercomputer, the nation's fastest super-computer dedicated to campus use, was built with collaboration between Purdue, HP, Intel, and Mellanox using advanced server technologies. Carter achieves a 215TF peak and 186.9TF Linoack Rmax to help analyze cancer care data, model future computer chips at an atomic scale, and analyze data from the CERN large hadron collider.

For more information

To learn more about HP ProLiant Servers, contact your HP account manager, channel partner, or go to **www.hp.com/go/proliant**.

[1] Based on internal HP lab testing or calculations

[2] www.top500.org

[3] www.green500.org

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 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. 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 will contact the third-party vendor and create a problem incident on your behalf.

If you are running business critical environments, HP offers Proactive Care or Critical Advantage. These services help you deliver high levels of application availability through proactive service management.

All service options include HP Insight Remote Support for secure remote monitoring, diagnosis, and problem resolution. Also included is the HP Support Center that provides access to the information, tools, and experts to support HP business products.

For more information contact your HP or Authorized Partner sales representative, or visit **http://www.hp.com/services/proliant** or **http://www.hp.com/services/bladesystem**.

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