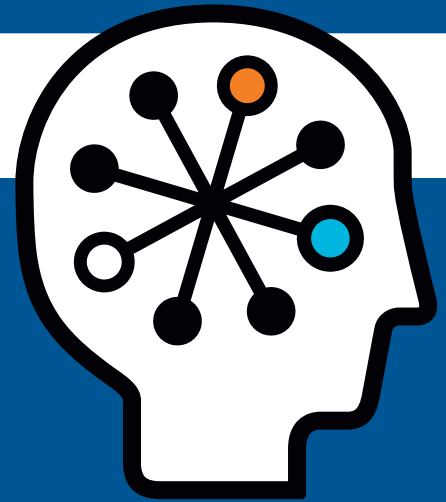




HP ProLiant 100 Series servers

Family data sheet

Simple affordable solutions



Packed with industry-standard technologies, ProLiant 100 Series servers provide ample headroom to accommodate tomorrow's growth.

Running a small or medium-sized business is a challenge. You need the same powerful reliable technology as large companies, but often have to operate on a limited IT budget. This can be a crucial choice for organizations purchasing their first server or looking at an affordable platform with headroom for growth or moving to an efficient rack platform. Sometimes, it seems the only options available are those designed for enterprise companies—products loaded with features you do not need, at prices you cannot begin to consider. HP ProLiant 100 Series servers offer simple and affordable solutions designed to give your growing businesses plenty of flexibility for growth, and confidence that your server infrastructure will not let you down.

Scaling up your large enterprise business and accelerating growth is a challenge too. Whether you are placing servers in branch offices or building out a large server farm or cluster, you need to find a cost-effective solution without sacrificing reliability or performance. The ProLiant 100 Series servers deliver suitable processing power with large, but inexpensive storage for demanding applications like mail and messaging, remote access, Internet content, or high-performance clusters. The ProLiant 100 Series

offers an affordable and expandable solution for office environments in a more secure package.

HP ProLiant 100 Series servers help you face all of these challenges with confidence. These servers are specifically designed to deliver the essential features your business needs, at affordable prices. These features include easy-access chassis, efficient designs, and the choice of tower or rack form factors. Built on industry-standard technology to integrate easily with your existing components, they can come preconfigured to meet your preferences for applications. As a result, they are simple to set up, easy to service, and inexpensive to maintain.

Complete data protection

Regardless of the size of your business, it is crucial to protect your data. Reliable data protection is offered in every HP ProLiant 100 Series server to make sure that your investment is safe. HP Embedded SATA RAID offers basic data protection and Smart Array controllers give you improved enterprise-class performance and reliability.

High efficiency options

In today's computer room or data center, keeping energy cost down without sacrificing performance is a key goal. You can improve your ProLiant rack server's energy efficiency with the following options:

- Low power Intel® Xeon® or AMD Opteron™ processors—up to half of the power consumption
- Low power memory—reduce energy consumption by up to 15 percent
- High efficiency power supplies—over 90 percent efficient

HP ProLiant servers—100 series

Affordable, entry-level rack and tower servers ideal for small to midsize businesses, workgroups, remote sites, and high-performance computing environments

Entry-level



HP ProLiant ML110 G5
Perfect first server for growing businesses: optimized for expansion



HP ProLiant ML115 G5
Perfect first server for growing businesses: essential features

Number of processors	1	1
Maximum number of cores	4	2
Processors supported	Quad-Core Intel® Xeon® 3200 series processors Dual-Core Intel® Xeon® 3100 and 3000 series processors Dual-Core Intel® Core™2 Duo series processors Dual-Core Intel® Pentium® processors Single-Core Intel® Celeron® processors	Dual-Core AMD™ Opteron™ 1200 series processors Dual-Core AMD™ Athlon™ 4400 series processors Single-Core AMD™ Athlon™ 1600 series processors Single-Core AMD™ Sempron™ series processors
Cache	8 MB L2 (Xeon 3200 series) 6 MB L2 (Xeon 3100 series) 4 MB L2 (Xeon 3000 series) 2 MB L2 (Core 2) 1 MB L2 (Pentium) 512 KB L2 (Celeron)	2 MB L2 (Opteron models) 1 MB L2 (Athlon 4450B) 512 KB L2 (Athlon 1640B and Sempron models)
Maximum memory	8 GB	8 GB
Drives supported	Up to 4: Non-hot plug LFF SAS 15K 300/146/72 GB Non-hot plug LFF SATA 7.2K 500/250/160 GB	Up to 4: Non-hot plug LFF SAS 15K 300/146/72 GB Non-hot plug LFF SATA 7.2K 500/250/160/GB
Maximum internal storage	2.0 TB SATA 1.2 TB SAS	2.0 TB SATA 1.2 TB SAS
Expansion slots	(1) PCI 32-bit/33 MHz at 3.3V (2) PCI Express x8 connector with x1 link (1) PCI Express x8 connector with x8 link	(1) PCI 32-bit/33 MHz at 3.3V (1) PCI Express x1 connector with x1 link (1) PCI Express x8 connector with x8 link (1) PCI Express x16 connector with x16 link
Remote management	Lights Out 100c (optional)	Lights Out 100c (optional)
Form factor	Tower with rack-mount option kit	Tower with rack-mount option kit
Warranty	1-year/1-year/1-year; 3-year/1-year/1-year (Asia Pacific region, except Japan)	1-year/1-year/1-year; 3-year/1-year/1-year (Asia Pacific region, except Japan)

Entry-level



HP ProLiant ML150 G5
High value server for small businesses needing power and expandability

New



HP ProLiant DL120 G5
Low cost, entry level rack server

Number of processors	1–2	1
Maximum number of cores	8	4
Processors supported	Quad-Core Intel® Xeon® 5400 series processors Dual-Core Intel® Xeon® 5200 series processors	Quad-Core Intel® Xeon® 3200 series processors Dual-Core Intel® Xeon® 3100 and 3000 series processors Dual-Core Intel® Core™2 Duo series processors Dual-Core Intel® Pentium® processors Single-Core Intel® Celeron® processors
Cache	12 MB L2 (5400 Series) or 6 MB L2 (5200 Series)	8 MB L2 (Xeon 3200 series) 6 MB L2 (Xeon 3100 series) 4 MB L2 (Xeon 3000 series) 2 MB L2 (Core 2) 1 MB L2 (Pentium) 512 KB L2 (Celeron)
Maximum memory	16 GB	8 GB
Drives supported	Up to 8: Hot plug LFF SAS 15K 300/146/172 GB Hot plug LFF SATA 7.2K 750/500/250/160 GB Non-hot plug LFF SATA 300/146/72 GB Non-hot plug LFF SATA 500/250/160 GB	Up to 2: Non-hot plug LFF SAS 15K 300/146/72 GB Non-hot plug LFF SATA 7.2K 500*/250/160/GB
Maximum internal storage	6.0 TB SATA 2.4 GB SAS	1.0 TB
Expansion slots	(2) PCI-Express x8 (3) PCI-Express x4 (x8 connectors) (1) PCI 33/32 3.3 V	(1) PCI-Express x8 slot (1) PCI-Express x4 slot Optional replace PCI-Express x8 with PCI-X 64/133
Remote management	Lights Out100c (optional)	Lights Out100c (optional)
Form factor	Tower or 5U rack	1U rack
Warranty	1-year/1-year/1-year; 3-year/1-year/1-year (Asia Pacific region only)	1-year/1-year/1-year; 3-year/1-year/1-year (Asia Pacific region only)

HP ProLiant servers— 100 series

Affordable, entry-level rack and tower servers ideal for small to midsize businesses, workgroups, remote sites, and high-performance computing environments

Entry-level



HP ProLiant DL165 G5
Efficient compute power for high performance environments



HP ProLiant DL160 G5
Concentrated compute power for scale-out applications

Number of processors	1–2	1–2
Maximum number of cores	8	8
Processors supported	Quad-Core AMD Opteron™ 2300 series processors	Quad-Core Intel® Xeon® 5400 series processors Dual Core Intel® Xeon® 5200 series processors
Cache	512 KB L2/core, 2 MB L3	12 MB L2 (5400 Series) or 6 MB L2 (5200 Series)
Maximum memory	32 GB	32 GB
Drives supported	Up to 4: Hot plug LFF SAS 15K 300/146/72/36 GB Hot plug LFF SATA 7.2K 750/500/250/160 GB Non-hot plug LFF SATA 7.2K 500*/250/160 GB	Up to 4: Hot plug LFF SAS 15K 300/146/72/36 GB Hot plug LFF SATA 7.2K 750/500/250/160 GB Non-hot plug LFF SATA 7.2K 500*/250/160 GB
Maximum internal storage	3.0 TB SATA, 1.2 TB SATA	3.0 TB SATA, 1.2 TB SAS
Expansion slots	(1) PCI-Express x16 (Full) (1) PCI-Express x8 with x4 link (Low Profile)	(1) PCI-Express Gen 2 x16 (Full) (1) PCI-Express Gen 2 x16 (Low Profile)
Remote management	Lights Out100i with upgrades to LO100i Select or Lights Out100i Advanced Pack Licenses	Lights Out100i with upgrades to LO100i Select or Lights Out100i Advanced Pack Licenses
Form factor	1U rack	1U rack
Warranty	1-year/1-year/1-year	1-year/1-year/1-year

**HP ProLiant DL180 G5**

Flexible and reliable value server for growing businesses needing expandability

**HP ProLiant DL185 G5**

High-capacity server ideal for compute intensive and scale-out applications

Number of processors	1–2	1–2
Maximum number of cores	8	4
Processors supported	Quad-Core Intel® Xeon® 5400 series processors Dual Core Intel® Xeon® 5200 series processors	Dual-Core AMD Opteron™ 2200 series processors Quad-Core AMD Opteron™ 2300 series processors
Cache	12 MB L2 (5400 Series) or 6 MB L2 (5200 Series)	2 MB L2 per core (2200 Series) 512 KB L2/core, 2 MB L3 (2300 Series)
Maximum memory	16 GB	32 GB
Drives supported	Up to 12: Hot plug LFF SATA 7.2K 80/160/250/500/750 GB Hot plug LFF SAS 15K 36/72/146/300 GB	Up to 14: Hot plug LFF SATA 7.2K 80/160/250/500/750 GB Hot plug LFF SAS 15K 36/72/146/300 GB
Maximum internal storage	9.0 TB SATA, 3.6 TB SAS	10.5 TB SATA, 4.2 TB SAS
Expansion slots	(2) PCI-Express x4 (Full) (1) PCI-Express x8 (Low Profile)	(2) PCI-Express x8 (Full) (1) PCI-Express x4 (Low Profile)
Remote management	Lights Out100c (optional)	Lights Out100i with upgrades to LO100i Select or Lights Out100i Advanced Pack Licenses
Form factor	2U rack	2U rack
Warranty	1-year/1-year/1-year	1-year/1-year/1-year

Customize your servers with precise options to fit your unique performance and dependability requirements including processors, memory, hard drives, Smart Array controllers, and HP Care Pack services.

The Lights-Out 100 advantage

HP Lights-Out 100 (LO100) offers basic and affordable remote control for ProLiant 100 Series servers. Based on the IPMI and SMASH industry standards, it offers remote access and control of your server and is available as:

- Optional mezzanine card for ProLiant ML110 G5, ML115 G5, and ML150 all generations as well as DL 180, DL120 G5, and DL180 G5 Servers.
- Embedded Lights-Out 100i with Select and Advanced Pack options in DL140 G3, DL145 G3, DL160 G5, DL165 G5, and DL185 G5 rack servers

With LO100, you can manage ProLiant 100 Series servers 24x7. This is regardless of where the server is located—in the same building, across town, or around the globe—through virtual KVM from your LAN or from the Internet, using a standard Web browser or telnet UI. Using the Virtual KVM, you have the power to reboot a ‘hung’ server, flash system BIOS firmware remotely, or diagnose issues without physically visiting the server. This gives you the capability to respond quickly to server issues wherever and whenever they occur. With LO100, using the remote console for routine and emergency situations is cost-effective and helps keep your servers up and running 24x7.

The Lights-Out 100 family is now fully featured and offers one of the best price performances for a remote management tool on entry-level servers. What is more, its software capability is easily upgradeable too.

Why HP ProLiant?

For years, ProLiant servers have helped businesses succeed. Enterprises around the globe have leveraged ProLiant server’s trusted reliability and proven performance to build competitive advantage, improve agility, and increase efficiency.

Today the ProLiant 100 Series family of servers offers the same benefits to cost-conscious small and midsize businesses. This is done by delivering all the essential ProLiant features you want, at a price you can afford. ProLiant 100 Series servers offer essential management, data protection, and reliability features with powerful industry-standard technology that drives down the cost of computing while improving infrastructure flexibility and performance.

HP Factory Express: Get more from your IT investment

While your ProLiant solution is in the HP factory, consider having HP take care of labor-intensive tasks such as software image loading, asset tagging, rack integration, and any needed server customization, configuration or integration. Factory Express delivers your ProLiant solution ready to go—right out-of-the-box—with a portfolio of predefined and pre-priced factory-based solutions and deployment services that support ProLiant servers and infrastructure. For more information on Factory Express, visit www.hp.com/go/factoryexpress

“The HP ProLiant ML115 was the best step up to a real server for the network. Its speed, ease of configuration, and support from HP made the setup and configuration a painless and rewarding experience.”

Dean Calvert, Managing Director,
Calvert Technologies

Financing that puts you in control

HP Financial Services makes acquisition of ProLiant 100 Series servers easy by offering a complete array of leasing and financing options to fit the needs of almost any business. You decide whether you would rather purchase equipment outright, arrange a payment plan, or take advantage of one of our outstanding lease offers. Our goal is to arrange financing that fits your business model, so you can increase the return on your IT investment, reduce risk, and get the most from your HP solution.

For more information

If you would like to learn more about HP ProLiant 100 Series servers, visit www.hp.com/servers/proliant

HP Services

HP Services provide nearly continuous care and support expertise with committed response designed to meet your IT and business needs.

To capitalize fully on your HP ProLiant servers' capabilities, you require a service partner who thoroughly understands your server technology and systems environment. HP Services, one of the industry leaders in provision of multi-vendor support solutions, provide a range of support services designed to meet the varying needs of your business.

Whether a small or midsize organization or a large global corporation, HP ProLiant server HP Care Pack support helps in quick deployment and increase in system uptime.

Extended Care—Minimum recommended service-support offer is designed to provide you with access to expert assistance, whenever needed

Committed Care—Cost-effective, guaranteed fix-time hardware support service is designed to reduce impact of server downtime on your business

Committed Response—Highest recommended service delivering combined hardware and software support to extend HP Services committed response. Also providing faster resolution of more complex interoperability problems

Deployment Services—HP Installation and Start Up services designed to take time, risk, and worry out of the deployment of ProLiant servers. Also to free your IT team to focus on what they do best, meeting your business needs

For more information, visit www.hp.com/services/proliantservices and www.hp.com/go/proliant/carepack

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