

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

> Running a growing small or medium-sized business is a challenge. You need the same powerful and reliable technology as large companies, but often have to operate on a limited IT budget. This can be a crucial choice for organisations purchasing their first server or looking at an affordable platform with headroom for growth. Sometimes, it seems the only option available are those designed for enterprise companies – products 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 out 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 series offers an affordable and expandable solution.

> 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 prices you can afford. 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 pre-configured 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 certain that your investment is safe. HP Embedded SATA RAID offers basic data protection and Smart Array controllers give you greater enterprise class performance and reliability.

# High efficiency options

In today's computer room or data centre, 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<sup>®</sup> Xeon<sup>®</sup> or AMD Opteron<sup>™</sup> processors up to half of the power consumption
- Low power memory reduce energy consumption up to 15 per cent
- High efficiency power supplies over 90 per cent efficient

### The Lights-Out 100 advantage

HP Lights-Out (LO) 100 offers basic, 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 ML1xx and DL180 servers
- Embedded Lights-Out 100i with Select and Advanced Pack upgrades in DL145, DL160, and DL185 rack servers

# 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 Powerful and simple server trusted by small organisations HP ProLiant ML115 Expandable, affordable server for growing organisations

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

Number of processors	1	1	1–2	
Maximum number of cores	4	2	8	
Processors supported	Quad-Core Intel® Xeon® 3200 series processors	Dual-Core AMD Opteron™ 1200 series processors	Quad-Core Intel® Xeon® 5300 series processors	
	Dual-Core Intel® Xeon® 3000 series processors	Single-Core AMD™ Athlon™ processors	Dual-Core Intel® Xeon® 5200/5100 series processors	
	Dual-Core Intel Core™2 Duo processor			
	Dual-Core Intel Pentium® processor			
	Single-Core Intel Celeron® processors			
Cache	8 MB L2 (1 × 8 MB) (Xeon 3200 series); 4 MB L2 (1 × 4 MB) (Xeon 3000 series); 2 MB L2 (1 × 2 MB) (Core 2); 1 MB L2 (1 × 1 MB) (Pentium 2100 Series);	2 MB L2 (2 × 1 MB)	12 MB L2 (2 x 6 MB) (5400 Series) or 6 MB L2 (1 x 6 MB) (5200 Series)	
Maximum memory	8 GB	8 GB	16 GB	
Drives supported	Up to 4: Non-hot plug LFF SAS 15K 300/146/72 GB	Up to 4: Non-hot plug LFF SAS 15K 300/146/72 GB	Up to 6: Hot plug LFF SAS 15K 300/146 GB	
	Non-hot plug LFF SATA 7.2K 500*/250/160/80 GB	Non-hot plug LFF SATA 7.2K 500*/250/160/GB	Hot plug LFF SAS 10K 72/36 GB	
			Hot plug LFF SATA 7.2K 750/500/250/160/80 GB	
Maximum internal storage	2.0 TB	2.0 TB	6.0 TB SATA 2.4 GB SAS	
Expansion Slots	<ol> <li>(1) 32-bit/33 MHz PCI at 3.3V slot</li> <li>(2) PCI-Express x8 connector with x1 link</li> <li>(1) PCI-Express x8</li> </ol>	(2) 32-bit/33 MHz PCI (1) PCI-Express slots x8 (1) PCI-Express slots x16	(2) PCI-Express x8 (3) PCI-Express x4 (x8 connectors) (1) PCI 33/32 3.3 V	
Form factor	Tower with rack-mount option kit	Tower or shelfable	Tower or 5U 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)	1-year/1-year/1-year; 3-year/1-year/1-year (Asia Pacific region only)	

With LO100, you can manage ProLiant 100 Series servers 24x7 regardless 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. You can bank on the reliability of the remote console for routine and emergency situations to keep your network and servers up and running 24x7, and to increase server availability, regardless of the server's operating condition.

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

# Entry-level

	HP ProLiant DL145 G3 Efficient compute power for high performance environments	HP ProLiant DL160 G5 Concentrated compute power for scale-out applications	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	1–2	1–2
Maximum number of cores	4	8	8	4
Processors supported	Dual-Core AMD Opteron™ 2200 series processors	Quad-Core Intel® Xeon® 5400 series processors	Quad-Core Intel® Xeon® 5400 series processors	Dual-Core AMD Opteron <sup>™</sup> 2200 series processors
		Dual Core Intel® Xeon® 5200 series processors	Dual Core Intel® Xeon® 5200 series processors	
Cache	2 MB L2 per core	12 MB L2 (2 x 6 MB) (5400 Series) or 6 MB L2 (1 x 6 MB) (5200 Series)	12 MB L2 (2 x 6 MB) (5400 Series) or 6 MB L2 (1 x 6 MB) (5200 Series)	2 MB L2 per core
Maximum memory	32 GB	32 GB	16 GB	32 GB
Drives supported	Up to 2: Non-hot plug LFF SATA 7.2K 500*/250/160/80 GB	Up to 4: Hot plug LFF SAS 15K 300/146/72/36 GB	Up to 12: Hot plug LFF SATA 7.2K 80/160/250/500/750 GB	Up to 14: Hot plug LFF SATA 7.2K 80/160/250/500/750 GB
	Hot plug LFF SATA 7.2K 750/500/250/160/80 GB	Hot plug LFF SATA 7.2K 750/500/250/160 GB	Hot plug LFF SAS 15K 36/72/146/300 GB	Hot plug LFF SAS 15K 36/72/146/300 GB
	Hot plug LFF SAS 15K 300/146/36 GB	Non-hot plug LFF SATA 7.2K 500*/250/160 GB		
Maximum internal storage	1.5 TB	3.0 TB SATA, 1.2 TB SAS	9.0 TB SATA, 3.6 TB SAS	10.5 TB SATA, 4.2 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)	(2) PCI-Express x4 (Full) (1) PCI-Express x8 (Low Profile)	<ul><li>(2) PCI-Express x8 (Full)</li><li>(1) PCI-Express x4 (Low Profile)</li></ul>
Form factor	1U rack	1U rack	2U rack	2U rack
Warranty	1-year/1-year	1-year/1-year/1-year	1-year/1-year/1-year	1-year/1-year

New



New

New

"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

#### Why HP ProLiant?

For years, ProLiant servers have helped businesses succeed. Organisations around the globe have taken advantage of 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 brings those same benefits to cost-conscious small and midsize businesses 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 labour-intensive tasks such as software image loading, asset tagging, rack integration, and any needed server customisation, configuration or integration. Factory Express delivers your ProLiant solution ready to go – right out of the box – with a range of pre-defined and pre-priced factory-based solutions and deployment services that support ProLiant servers and infrastructure. For more information on Factory Express, visit <u>www.hp.com/go/factoryexpress</u>.

# 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.

Fully capitalising on your HP ProLiant servers' capabilities requires 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 business needs.

Whether a small or midsize organisation or a large global corporation, HP ProLiant server HP Care Pack support helps you deploy quickly and increase system uptime.

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

**Committed Care**—Cost-effective, guaranteed fix-time hardware support service 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 and to speed more complex interoperability problem resolution

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

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

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To learn more, visit www.hp.com/servers/proliant

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